ALTERNATIVE AGRICULTURE IN MARYLAND:
A Guide to Evaluate Farm-Based Enterprises

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I. INTRODUCTION AND OVERVIEW

Many farmers have become interested in finding new or alternative farm enterprises to either supplement or replace traditional grain and dairy operations in Maryland. Because the trend of traditional farm enterprises--such as row crops and dairy--is for larger operations which specialize in the production of one or a few products, many Maryland farmers find this option to be unsustainable because of limited capital or the lack of suitable farmland. Farmers are beginning to look for new ventures that make use of existing resources to generate additional income.

There are many opportunities for farming entrepreneurs in Maryland. Nearby metropolitan areas offer a vast and diverse marketing opportunity for farm produce, as well as opportunities for recreation and tourism-related businesses. With increasing income and wealth, urban residents have a rapidly growing demand for high quality local products; the popularity of farmers' markets is one indication of this opportunity. Many farmers have already developed profitable and innovative enterprises that capitalize on these markets. Unfortunately, for those that have not developed new or alternative enterprises, the task of choosing new products can be daunting for several reasons.

First, the shear number of enterprises from which to select can be virtually unlimited. A farmer trying to assess the potential profitability of 50, 100 or 200 different enterprises would surely find this task to be overwhelming. This is particularly true in the case of alternative crops when data on production practices, input costs and revenue is scarce. Even when information is available, it may not be comparable across enterprises because it was developed in different geographical areas or with different assumptions.

Second, most alternative enterprises have intensive resource requirements, either in labor, land or capital. In choosing enterprises, farmers need a systematic way to limit their selection to only those enterprises which meet their resource availability. A farmer who has abundant labor (maybe from family members) but lacks the funds for venture capital, may want to look at those enterprises that have intense labor requirements but limited capital requirements. Again, a farmer trying to find those particular enterprises which meets his or her resource needs may be difficult.

Finally, with alternative or nontraditional enterprises, the ability to successfully market and sell the product is tantamount to success. Unlike traditional crops, alternative products usually require more emphasis on marketing. The number of possible market outlets for a specific alternative crop can be numerous and, at the same time, may require the farmer to research and seek-out potential buyers. Also, the potential added costs or income from using alternative market outlets should be explored in detail. Yet again, this is another reason that the venture into alternative enterprises can be time consuming to research and may prove costly if the information used is not adequate.

For these reasons, we have developed this workbook to help farmers overcome some of the time consuming tasks of information collection and allow them to focus on the appropriate enterprises to consider. The cornerstone of this workbook is a complete set of 78 different crop and livestock budgets. These enterprise budgets provide details on the inputs required for production, the cost of the various inputs used, and the income generated from each enterprise. The budgets were developed based on common production practices for Maryland as well as input and output prices which are representative for the region. Having such detailed information should help farmers overcome the first problem of trying to collect data on a large number of possible enterprises. The second important item produced in this workbook is an Enterprise Summary Page. This takes important information from each of the 78 different budgets and summarizes all enterprises on one page. In addition, for each potential enterprise there is a ranking regarding the resource requirements for labor and capital. When combined, the Enterprise Summary Page can provide a quick snapshot of some potentially important enterprises to consider based on certain criteria like profitability or resource requirements.

It must be stressed that this notebook will not necessarily identify profitable alternative enterprises for farmers. A competitive market system provides incentives for producers to shift resources to profitable enterprises until production increases enough that output prices fall and/or specialized input prices increase and profits fall. Thus, profitable alternatives for *many* producers are not likely to be discovered with the analysis reported here. However, a few farmers may make high profits with alternative enterprises through low volume, niche markets that require specialized production and marketing activities. Thus, farmers have to find these niches on their own but the material in this notebook will help farmers in evaluating alternatives. The process of examining profitability of such enterprises and their consistency with the resources on the farm is covered here. In addition, the enterprise budgets included here can be adapted to these special niche situations in many circumstances.

The remainder of this workbook provides details and explanations on how to utilize this information.

II. ENTERPRISE BUDGETS

Overview

Enterprise budgets are a useful tool for making farm management decisions. They provide two important kinds of information regarding the production of a specific crop or livestock product. On the one hand, enterprise budgets can be thought of as a recipe, which dictates all the necessary or important ingredients (inputs) to produce a final product (output). On the other hand, enterprise budgets are also important financial documents, which provide costs, income and profitability numbers for a specific enterprise.

Enterprise budgets are usually stated on a production unit size of one acre in the case of crops or on a per head basis in the case of animal production. This facilitates comparison across numerous enterprises and makes planning for input and capital requirements easier. In constructing a budget, you must have detailed information on output and input prices, as well as the quantities of each. Therefore, an enterprise budget must be adapted for each specific application.

Within each enterprise budget there are four separate categories:

(1) Gross Income;
(2) Variable Costs;
(3) Fixed (overhead) Costs;
(4) Net-Income Matrix.

Gross income is simply the quantity produced on a production unit basis (e.g., pounds per acre) multiplied by the price per unit (e.g., $ per pound). For crop production, output per acre can differ dramatically depending on weather, management and the inputs used. Therefore, the production amount for each budget is the level of production that would be expected in Maryland under normal conditions using the specified inputs. If weather conditions are less than ideal or if different input levels are used, the amount produced may differ substantially from those presented in the budgets. Nonetheless, the budgets should provide useful information about the input requirements as well as the costs of production.

The second important item on an enterprise budget is *variable costs*. Variable costs are defined as inputs that would not be used if production ceased. These include seed, chemicals, fertilizers, labor and interest on operating capital. As mentioned above, the budget provides the input requirement to produce the desired output level under normal growing conditions and good management. These input requirements coincide closely with proscribed management practices for Maryland farming operations and should provide a useful benchmark for production.

The third item is the *fixed/overhead costs* of production. Fixed costs are incurred even with no production. These items traditionally involve costs for equipment and machinery which are used for more than one year in production. Although you may own your own equipment, there is an opportunity cost of utilizing the equipment, which must be included in the cost of production. In addition, land costs fall under the category of fixed/overhead costs. Again, even if you own the land and have no debt, the land could be utilized in some other venture or even cash rented which implies the cost of the land should be included in production costs. Family labor is another fixed input that often involves no cash costs. However, such labor could be used in other farm enterprises, employed off the farm, or used for leisure. All of these activities have a value and therefore an opportunity cost.

The final item in the enterprise budget is the *net-income matrix*. Subtracting variable costs and fixed costs from gross income give net income. However, prices and output levels can vary significantly from year-to-year so it is important to realize how price and output risk may impact the profitability of an enterprise. The net-income matrix shows the net-income for various price and output combinations. For price and output levels, a pessimistic, average and optimistic level is used. However, it should be noted that the range of prices or output levels might be wider than reported in the budgets depending on market conditions.

Methodology

This section describes the methodology and procedures used to create the enterprise budgets for this report. First, existing budgets on a number of different crop and livestock products were collected from the University of Maryland and surrounding land grant

production practices, the prices paid for inputs, and the prices received for outputs. However, these budgets provided a useful starting point to update the budgets for current economic

budgets suitable for Maryland. These steps are:

(1) Update input costs and output prices
(2) Compute the appropriate fixed costs for each operation
(3) Evaluation of production practices.

For variable production costs such as seed, chemical, and fertilizers, current prices were obtained from local farm suppliers. The prices used here may not be the cheapest because we

stated explicitly in the budget and can be easily modified to reflect a different cost. Since many crops utilize the same input, the input price is the same for each enterprise where that input is

Canopy so that comparisons across crop budgets would be consistent.

Output prices were taken from two primary sources. For fruit and vegetable products, in-
Jessup. Maryland wholesale produce market. These prices represent what local distributors and retailers are paying for produce. For field

Statistics service for Central Maryland. Because of the large variation across years for most agricultural prices, a 5-year average price was computed and used as the price of the output sold.

this five-year period. While the prices used in the budget are representative of normal market prices, there can be significant variation depending on current market conditions, the time of the

Fixed Costs

Fixed costs for equipment can be difficult to compute because the costs will differ

and amount of equipment is different for 500 acres of crops when compared to an operation only producing 100 acres. To get around this problem, we utilize custom rates for various field

performed in Maryland. By using custom rates we don't have to define the farm size and they also provide realistic costs for hiring certain services. If equipment is owned and utilized in
acreages,
custom rates may be an upper bound of the true costs of doing specific field operations. For
acreages, custom rates will likely be a lower bound on actual costs. These custom rates also include a labor charge so the cost of family labor does not need to be estimated

As for land costs, even if land is owned outright with no mortgage, there is an implicit cost of utilizing the land. For example, the land could be rented out which is an opportunity cost to you of using the land for production. Therefore, land costs are based on the average rental rate in Maryland. Of course, rental rates can vary significantly depending on land quality and location.

Evaluation of Production Practices

University of Maryland extension specialists evaluated enterprise budgets for which they had knowledge about the production practices. Each specialist examined the budgets and made modifications to assure that the inputs used and the amount of inputs recommended were the most advantageous for the region. In addition, based on the input usage recommendations in the budgets, extension specialists provided educated estimates of the expected output that could be achieved under normal growing conditions.

Of course, there are a number of different ways to grow specific crops or livestock products. Therefore, the budgets presented here should not be thought of as the best way to produce a particular product on every farm situation, but instead as a production benchmark. The availability of certain inputs or management skills may lead to different or even preferred production practices. Therefore, even though these budgets have been developed based on production and economic conditions in Maryland, you should recognize that your own personal production situation may lead to different results either in terms of costs or revenue. These budgets, however, should serve as a useful benchmark for making production decisions.

An Example of Using an Enterprise Budget

To illustrate how an enterprise budget can be used, an example of alfalfa hay production is presented on the following page. First note that this budget is for alfalfa that is being maintained as a stand; thus, no seed or tillage associated with seeding is included. A separate budget would be prepared for first year alfalfa that would include establishment costs and lower output. This budget is for one acre. This particular format includes five columns: the first column has the name of the item on that line, the second the unit measurement of the item, the third the quantity, the fourth the price per unit, and the fifth the total revenue or cost of the item.

The first major section gives the gross income or revenue from the enterprise. On one acre of alfalfa, six tons of hay can be produced with a price of $110 per ton; this makes gross revenue $660. Note that this outcome reflects a normal year and not a drought or high production situation. Using recommended practices in Maryland a good manager would likely achieve this production level.

The next section is variable costs. Because this budget uses custom rates for machine and labor costs, the only variable costs included are fertilizer, herbicide, and interest on operating capital. Fertilizer and herbicides are straightforward and have entries that can be interpreted similarly to gross income. The lime is an exception; this entry reflects an application of one ton every three years that is amortized over three years at 0.33 ton per year. The interest on operating sum of the four operating inputs listed is $105.29. The usual assumption about operating capital calculate the exact amount of time and interest cost for each input, which usually will not differ invested at this interest rate for six months has a cost of $4.74. Total variable costs listed here are machine operations--fuel, repairs, and labor would be included. Other variable inputs such as treated with an insecticide, which is also not included here.

All are priced at their opportunity costs, which are custom rates for the first two and cash rent for land or hire fieldwork operations. They provide a more general budget than making assumptions of land than interest costs on the land value because land ownership is a complex investment that

Custom rates are priced per acre for the first four machines. Mowing and raking are hauling is from the field to the hay storage area not necessarily to a market place. Total fixed

MARYLAND FARM MANAGEMENT GUIDE CROP BUDGET 1996
ALFALFA HAY, MAINTENANCE

ITEM	**UNIT**	**QUANTITY**	**PRICE**	**TOTAL**
GROSS INCOME				
HAY	TON	6	$110.00	$660.00
TOTAL GROSS INCOME				**$660.00**
VARIABLE COSTS				
FERTILIZER & LIME				
PHOSPHATE	POUND	72	$0.30	$21.60
POTASH	POUND	360	$0.15	$54.00
LIME	TON	0.33	$25.00	$8.25
CROP CHEMICALS				
PURSUIT DG	OUNCE	1.44	$14.89	$21.44
LABOR				
CROP INSURANCE				
MACHINERY VARIABLE COSTS-REPAIRS				
MACHINERY VAR. COSTS-FUEL & LUBE				
CUSTOM HIRE				
OTHER				
INTEREST ON OPERATING CAPITAL	ANNUAL %	0.5	9.00%	$4.74
TOTAL VARIABLE COSTS LISTED ABOVE				**$110.03**
FIXED/OVERHEAD COSTS - SELECT METHOD:	CUSTOM RATE	X	DIRTI-5	
(DO NOT DUPLICATE COSTS LISTED ABOVE)				
FERTILIZER SPREADING	ACRE	1	$6.00	$6.00
PESTICIDE APPLICATION	ACRE	1	$6.00	$6.00
MOWING/CONDITIONING	ACRE	4	$12.00	$48.00
RAKING	ACRE	4	$8.00	$32.00
BALING HAY	BALE	240	$0.60	$144.00
HAUL	BALE	240	$0.30	$72.00
LAND CHARGE	ACRE	1	$50.00	$50.00
OTHER				
TOTAL FIXED COST LISTED ABOVE				**$358.00**
TOTAL VARIABLE AND FIXED COST LISTED ABOVE				$468.03
NET INCOME OVER VARIABLE COSTS LISTED ABOVE				$549.97
NET INCOME OVER VARIABLE & FIXED COSTS LISTED ABOVE				$191.97

			PRICES	
NET INCOME ABOVE VARIABLE AND	YIELDS	$75.00	$110.00	$125.00
FIXED COSTS LISTED ABOVE FOR	3	($243.03)	($138.03)	($93.03)
VARIOUS YIELDS AND PRICES	5	($93.03)	$81.97	$156.97
	7	$56.97	$301.97	$406.97

Total costs are the sum of fixed and variable costs. Net income above variable costs is the return for actually producing this year, as fixed costs would exist even if the machinery, land, and labor were idle. This return must be positive for production to contribute to profits in the short run even if fixed costs are not covered. This point explains why farmers produce when all costs are not covered.

The final section of the budget presents the sensitivity of net income to lower yields and prices. This is referred to as the net-income matrix. With a yield of three tons and a price of $125, net returns above the costs included above is $-93.03, which is a loss. Note that this is still better than not producing, in which the loss would be total fixed costs of $358.

In summary, enterprise budgets provide considerable detail about production, costs and profit for producing a specific product. Their limitation is that they are very specific to particular input use, management, yields and prices. Recall they are for planning purposes to determine potential or likely profits. They also must be adjusted for particular use. You will get some practice in such adjustments now.

Exercise

The sensitivity section of the above alfalfa budget indicates that net income would be -$138.03 if prices were $110 and the yield was 3 tons. This result does not adjust any of the costs as a result of a lower yield. Certainly, harvesting costs would be lower. Also, the operating inputs would be lower if the farmer anticipated a lower yield. Recalculate gross income, variable and fixed costs and net income for this price and yield with fertilizer reduced in half, herbicides eliminated, and only three cuttings of hay. Don't forget to change machine costs, including harvesting costs.

Answer

GROSS INCOME:			
	3 TONS OF HAY @ $110 PER TON		$330
VARIABLE COSTS:			
	PHOSPHATE	36 LB. @$0.30	10.80
	POTASH	180 LB. @ $0.15	27.00
	LIME	0.165 TON @ $25	4.12
TOTAL VARIABLE COST(EXCLUDING INTEREST)			$41.92
MACHINE OPERATIONS:			
	FERTILIZER SPREADING		$6.00
	MOWING—3 TIMES		36.00
	RAKING---3 TIMES		24.00
	BALING---120 BALES		72.00
	HAULING---120 BALES		36.00
LAND CHARGE			50.00
TOTAL FIXED COSTS			$224.00
TOTAL VARIABLE AND FIXED COSTS			$265.92
NET INCOME			$64.08

This net income estimate is much more realistic for a farmer who normally only harvests three tons. This exercise indicates why budgets need to be adapted to specific situations. However, it demonstrates the ease of doing these adjustments when a standard budget is available.

Adaptations for Perennial Crop Enterprises

Perennials have two features that require adaptation of the standard procedure for annual crops. First, there are establishment costs such as plants, machinery and labor, but the flow of output may not begin for several years after the initial investment. For many crops such as hay, either creating special budgets for the establishment year or prorating these costs equally over the life of the crop accommodates this problem.

The second feature of perennial crops is that it usually takes significant time for the crop to mature to peak production levels, but in the interim, costs are incurred for maintenance. Many fruit crops have this characteristic where the farmer must make investment in planting and care for several years, then some production is available for sale, and final a mature plant has a steady production over time. For a farmer to evaluate such a crop, information must be provided on the inputs and outputs from planting to maturity. In this notebook, this information is provided in different columns on a single page. Only the monetary values are provided for the establishment and growing years, but prices and quantities are provided for the mature plants. Thus, the quantities are implicit in the earlier years as the prices are given. The alternative is to provide more detail for each year or series of years with similar input and outputs. However, this procedure does not provide the farmer with as much summary information.

For perennial crops, there is also an additional cost incurred in these early years because of the investment capital for establishment. This investment has an opportunity cost, if not an explicit interest cost, until production begins. These costs are estimated in the perennial budgets at the bottom of each page for the years until maturity. In the second year, an interest charge is calculated for the costs in the first year. This interest is added to the costs from the first and second years for the accumulated costs in year three on which interest is calculated. This process continues until the plant is mature. After production begins, a profit is earned in some cases. These profits are subtracted from the accumulated costs and reduce the accumulated investment. At the beginning of the mature production period, the accumulated costs are amortized over the remaining life by multiplying the accumulated costs by a loan amortization factor for the life of the plant and the opportunity interest rate. These costs appear as an entry for amortization of the establishment cost in the fixed costs for the mature years. Like an amortized loan, these equal costs repay the investment costs (principal on a loan) and the interest charges on the remaining balance.

III. IDENTIFYING COMPATIBLE ENTERPRISES THROUGH RESOURCE INVENTORIES[1]

Before choosing and evaluating specific enterprises to produce on your farm, it is important to understand your current farming situation. Probably the most limiting factor to success is that many farmers choose enterprises that are not compatible with their farm resources. These resources include:

- ♦ **Physical Resources**,
- ♦ **Marketing Resources**,
- ♦ **Management and Labor Resources**,
- ♦ **Financial Resources**.

Before settling on a specific enterprise, you should evaluate your resource base in all of the above areas by doing a resource inventory. This section helps you complete a resource inventory so that you may understand both the limitations and opportunities presented by your current situation. The route to success avoids enterprises which require resources that are lacking and takes advantage of underutilized resources.

Physical Resources

Describe your physical resources in a general way in the Physical Resources inventory on the next page. "Quality" for such items such as land should include pH, general fertility, and soil type. Cooperative Extension can provide a soil fertility test and soil type can be determined from soil maps or surveys. Contact your local Cooperative Extension or Soil Conservation Service (SCS) to obtain soil surveys which describe the type, slope, and other soil features found on your land.

For water quality, tests can be conducted to analyze minerals, bacteria, and the possibility of contamination. Well capacity can be described in a general way, although if gallons per minute can be determined, the evaluation will be stronger. Surface water quality should be evaluated for its turbidity (murkiness), dissolved oxygen content, the presence of weedy aquatic species (cattails, algae, rushes, sedges), and seasonal variation.

Limitations of physical resources such as land include low or high pH (below 6.0 or above 7.2), wet or droughty soils, dominance of weedy species, inaccessibility, and steep or rough terrain. Limitations of machinery include: extreme age, deteriorated or unsafe condition, small size, and obsolete or unusual design. Limitations of water quality include: poor quality, low well capacity, tendency to dry during certain times of the year or inaccessibility.

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[1] Adapted from Farming Alternatives: A Guide to Evaluating the Feasibility of New Farm-Based Enterprises, NRAES-32, by Nancy Grudens Schuck, Wayne Knoblauch, Judy Green, and Mary Saylor; with permission from Cornell's Farming Alternatives Program and NRAES, the Natural Resource, Agriculture, and Engineering Service, Cooperative Extension, 152 Riley-Robb Hall, Ithaca, New York 14853-5701. (607) 255-7654.

To complete the "Underutilized" column ask yourself whether the resource is already being fully utilized. If it is possible to utilize the resource more than is currently being done, place a "yes" in the column or provide more detail about when and how the resource could be better utilized.

Worksheet 2-1: Physical Resources

Item	Quantity or Size	Quality or Age	Limitations	Underutilized?
Buildings				
Tillable Land				
Pasture				
Machinery/ Equipment				
Water				
Surface				
Well				
Other				

Marketing Resources

A product is worthless without some way to distribute it; a service is useless without people who will use it; an enterprise idea without a market is doomed. If you are good at marketing, you may be able to create your own market, but the more usual case is to take advantage of markets that are presently available. The Marketing Resources Worksheet provides some background on what to consider before starting a new enterprise.

Information on "Processing" facilities can be determined by contacting the plants in your area. For slaughterhouses, ask about the number of animals they can handle, which types of animals they handle frequently and which types they handle infrequently. Ask if they perform any other services such as sausage making, custom cuts, saving special parts, wrapping, and pick-up or delivery.

Other processing plants include freezing, canning, drying, milling, and tanning facilities. Ask these processors whether they have a minimum volume requirement, whether they use contracts, and to what extent they determine production practices.

Under "Wholesalers" include terminal markets for produce, brokers, distributors, supermarket warehouses, and marketing cooperatives. Under "Direct Market" include farmers markets, roadside stands, restaurants, grocery stores, and other parties who may buy directly from you.

What are the possibilities for on-farm markets? Do you already operate a roadside stand? How suitable is your road frontage and parking space? Can you have access to pick-your-own areas?

Other marketing channels may be available to you, including campgrounds or institutions. Don't forget to note special events or attractions in your area that can be used to your marketing advantage through cooperative advertising or targeting of tourism markets.

Worksheet 2-2: Marketing Resources

Item	Potential Volume	Distance	Limitations	Potential Market (high, medium or low)
Slaughterhouse				
Processors				
Wholesalers				
Direct Market				
On-Farm				
Road Stand				
Existing stand				
Pick-Your-Own				
Other				

Management and Labor Resources

Management resources include those people who will play a decision making or supervisory role in the business. Labor resources include those who will perform manual labor, equipment operation, bookkeeping, or other defined tasks, but who do not decide which tasks need to be done. One person can perform both management and labor tasks. If so, divide his or her labor hours on the Management and Labor Resources Worksheet.

When listing the skills of managers and laborers, don't restrict yourself to traditional agricultural skills. In assessing the skills, consider what management or personal skills will be necessary to produce or market specific products you may be interested in. If your spouse is good with people and would make a good marketer, then write that down.

Labor is split into two sections on the worksheet: on-farm and potential labor pool. On-farm labor includes those people who currently work on the farm while potential labor includes individuals in your area who are available and willing to work. Examples are local agricultural workers, migrant labor, college and high school students or homemakers.

Enter any non-monetary benefits you can provide on the worksheet, such as meals, housing, or free produce. Pay special attention to seasonality in tallying your labor and management resources. List times when present labor crunches occur and when you tend to have slack time that could be put to use with a new enterprise. A very important guideline for selecting a new enterprise is to find one with labor and management requirements that complement your existing time commitments.

Financial Resources

Starting a new enterprise will require some initial investment, perhaps for a new building, breeding stock, equipment, or land. Depending on the type of enterprise and its scale, this investment may be quite substantial. On your copy of the Financial Resources Worksheet, list the financial resources you have available for starting a new enterprise.

Decide on the maximum amount of cash, savings, and credit you are willing to allocate to the new enterprise. Keeping in mind that this investment involves risk, set upper limits now so you are not tempted later to risk more than your are comfortable with.

Worksheet 2-3: Management and Labor Resources

RESOURCE	SEASON(S) AVAILABLE	Hrs/ wk	SKILLS	UNDERUTILIZED?
Management				
On-Farm Labor				
Potential Labor Pool				
Benefits you can offer employees				

Worksheet 2-4: Financial Resources

SOURCE	AMOUNT	COMMENTS
Cash		
Savings		
Credit		
Other		
TOTAL		

Evaluating the Resource Inventory

When you have completed the worksheets, you will have a reasonably good understanding of your resource base, which will be available for starting a new enterprise.

If you have identified some underutilized physical resources, untapped management and labor resources, promising marketing opportunities, **and** significant financial resources, you are in an excellent position to start a new enterprise. However, it is likely that some resource will be over utilized or not readily available that makes decision making a bit harder.

Even if some resources are limited, there are probably some promising opportunities still available. You will simply have to be careful, and as imaginative as possible, about making the very best use of your limited resources.

If the inventory has shown that all your resources--management, labor, land, equipment, and facilities--are used to capacity and no financial resources are available, then you must question whether starting a new enterprise is realistic for your family at this time. A better strategy may be to focus on reducing costs and improving income from your present farm business.

The summary sheets can provide some help in matching your resources with suitable enterprises. Summary sheets are provided for the categories of vegetables, field crops, livestock, and perennials that show the costs and returns for each enterprise as well as a descriptive indicator of labor and capital intensity. For example, if you recognize that labor availability is a problem for your farm, then you may want to consider enterprises that are classified as "low" labor. Similarly, if investment capital is a constraint, you should consider staying away from enterprises which involve high capital costs.

In general, if your marketing resources are limited in terms of possible market outlets, you should not consider vegetable products. Also, in assessing your local market, it is wise to explore a number of possible buyers to assure there will be outlets when your products are ready to sell.

IV. BUSINESS MANAGEMENT CONSIDERATIONS

Account Payments with Retail Stores

Selling to retail stores, which include restaurants and grocery stores, can be an important market for producers. Dealing with retail outlets, however, requires flexibility in billing and collection. Key factors to consider when working with retail stores include:

- Developing a relationship with the managers,
- Providing produce on a dependable schedule,
- Establishing a feasible billing method for both you and the store.

In working with a retail store, it is important to establish a good working relationship with the manager. This includes understanding the supply needs for the store as well as a suitable delivery schedule. In addition, be flexible in working out a payment schedule method, as this will make the buyer more willing to buy your products.

There are several forms of payment methods but the most common forms are: cash on delivery (COD), 15-day payable, and 30-day payable. Cash on delivery is the most beneficial from your perspective but may not be the most practical for you client. Some stores do not have the cash available or the manager is not available when the delivery is made. In these situations you may establish a 15-day or 30-day payment schedule.

To establish this type of account you must agree on a payment method with the store owner or manager. The most common delayed billing method is to have a responsible person sign an invoice stating the produce which is delivered and the quality level of produce. One copy of the invoice remains with the delivery truck, and two copies are kept by the store purchasing the items. The store owner then mails a check with one copy of the invoice to the farmer and retains the other copy for his/her records. Invoices may be produced using one of the many computer programs on the markets.

A delayed payment method is extremely attractive to the buyer because they do not have to alter their accounting practices, they have the freedom to purchase extra produce if the delivery truck is carrying any, and they establish a long term working agreement with the farmer. Store managers purchase many items from distributors with payment plans. By providing this option you allow the store to buy quality local produce, without having to implement new accounting and billing practices. This has been one reason stores use wholesale distributors. You then assume the role of a distributor, and receive distributor prices.

Advantages of Delayed Payment
-accounting practices
-extra purchases
-long-term agreement
-established market

Disadvantages of Delayed Payment
-more planning
-potential for cash flow problems
-default on payment

With an established delivery schedule managers often become dependent on delivery trucks having extra produce when store inventories are low or in anticipation of future store specials. With the delayed payment options the store is given the option to purchase extra produce on the truck if it is available. The last advantage demonstrates to the store that the farmer is dependable, reliable and has an established business. Store managers have many sources to purchase produce. If they are confident you will deliver a quality product on a reliable schedule, they will not look to other sources for that item.

If you decide to use a delayed payment method then you must manage your farm finances to accommodate this. If you need to make loan payments then you should incorporate the time of receiving payments and the time it takes to clear the bank before the farm bills are paid.

Although this requires planning, it may increase sales in the long term because of the convenience to your customers.

Another issue to consider in a delayed payment arrangement is how you will handle payment defaults by the customer. The invoice that is signed should state the terms of the agreement on it. An example of this is:

> *Signature of invoice denotes approval of product and acceptance by buyer. If payment is not made with in 30 days of delivery, interest of 15% will be charged to the account.*

The interest added will compensate the farmer for any late fees incurred. With a signed document stating the terms and conditions of the sale, you have a legal document in the event that you must take legal action against the store. However, you should probably attempt other avenues before legal action is taken since this can be costly to you and will jeopardize your customer relationship.

If a store is not making their payments the most common approach is to first call or send a letter to the manager/owner remind them payment is due and request immediate payment. The next step would be to call the store to inform them that full payment can be made at the next delivery. If payment is still not made all future deliveries should move to the cash on delivery method and contact a collection agency to update the account. There are many collection agencies listed in the yellow pages. Most will collect the bills for a percentage of the amount collected.

V. AGRITOURISM AND NATURAL RESOURCE ENTERPRISES

In addition to normal farming activity, some farmers are turning to agritourism as a source of additional farm income and opportunities. In the United States, travel and tourism output is expected to grow 28 percent between 1997 and 2007. Nature tourism--the fastest growing segment--is averaging a 30 percent annual increase. Since private landowners own 60 percent of the land nationwide, the increasing tourism demand will be difficult to meet unless these private lands are opened. Only a quarter of private rural lands is open for public recreation (283 million acres).

Agritourism in Maryland offers opportunities for farmers because of the close proximity to a large non-farm population. By developing farm and/or resource based activities, you may be able to attract customers to your farm either to purchase farm produce or develop specialized recreational opportunities.

Agritourism is only limited by a landowner's imagination. However, this makes giving a recipe for a successful enterprise difficult. While it may be possible to recommend the level of inputs that will grow a certain yield of corn per acre, no one has found an exact formula to perfect an agritourism enterprise. People need to look for the right approach for their particular situation. Landowners have been unable to find information on costs of the various alternative enterprises, how much are the management costs, how much labor is needed, what is the potential demand, how much to charge, who is their competition, or what will be the bottom line given their resources and location.

Many successful enterprises have made some false starts until they discovered what worked for them. In addition, most are constantly trying new things to increase their profitability or their clientele. Therefore, it is impossible to develop an enterprise budget without answers to the questions above. However, it is possible to provide some insights from successful agritourism providers. This information comes from a number of sources, including discussions with fourteen different operations in Harford and Howard counties, as well as experiences documented in the Northeast.

One caveat is important to mention. Agritourism is unlikely to make any landowner a millionaire. While demand is growing for this type of endeavor, we caution that in none of the businesses we explored did we find that agritourism comprised the bulk of the income. By matching one's skills, preferences and resources to a customer group, one can achieve a decent income (between 15 and 50 percent of one's income) from this type of enterprise, but it is unlikely to replace one's current farming operation totally. Therefore, it is very important to consider an enterprise that is complimentary to one's existing enterprise.

Types of Enterprises

Some of the enterprises currently existing in Maryland include Farm Tours, Petting Zoo, Pumpkin Patch, Corn Maze, Bed and Breakfasts, Horseback Riding, Pick-Your-Own, Christmas Tree Cutting, Cider Press, Homemade Ice Cream, Wine Tasting, Fishing, Hunting, Store, Fruit Stand, and Haunted Houses. Owners evaluated their existing resources, their potential capital and the surrounding areas to determine where their niche may be. Owners that had been previous school teachers found that school or groups field trips were their "comparative advantage," where they have the available skills to provide a unique experience on their farm. Others had interaction with disabled groups which led to their particular operation. Still others found their willingness to open up their house or the availability of an old farmhouse that can be fixed up as a bed and breakfast that permitted the choices they made.

Whatever the enterprise, landowners find that they are trying to achieve one of two different goals: (1) to sell the experience or (2) to use the experience to attract people and sell farm products. For example, some people attract groups by providing free hay rides out to the pumpkin patch and then sell the pumpkins and other farm products. Other owners have found charging a fee for the hayride, the corn maze, and/or the haunted house may be the best approach although they also may sell farm products. Landowners lease out their land to hunting clubs for geese and deer hunting for a season. Others have put in blinds, provided guides, and charge per day or per blind. With wine tasting, people come for the experience. The farmer earns extra income by increasing sales at the location and then in other outlets due to name recognition. Cut your own Christmas tree operations earn their profit on the higher retail price people pay for their trees rather than a wholesale price. Some also attain additional income from sales of crafts, ornaments and other Christmas farm products. Many owners find they can successfully increase their profitability by working toward a combination of both goals.

There is no exact formula to determine how much to charge. However, it is important to consider two points. How much does it cost you to produce this product or activity and what do you think your clientele will pay? Hayrides ranged from free to $3.50 per person (as part of a tour). People could enter the mazes for nothing or for $2.50 at one farm. Some people do not charge the parents who accompany the field trips, while others find charging parents ensures their profitability.

A few of the enterprises have not proven “profitable” once wages are subtracted for the family members, yet they are continued. Some growers find that even without a profit, the enterprise provides cash at a time when cash flow is very low. Others have found that the enterprise provides year round employment for their workers. Spouses often take over the enterprise and find it sufficient to keep them employed on the farm.

Some growers discovered the real reward comes from teaching the general public about agriculture. Whether it's showing a child that eggs don’t come out of a box or demonstrating the complexity of the farming system to an adult, the landowner contributes to a better understanding of the farming sector to people who will one day make policy decisions affecting the future of agriculture. As fewer and fewer people participate directly in agricultural enterprises, the education of the general public can be very important to increasing political support. Another side benefit for landowners is the new friendships and connections. Some families or groups return to the farm year after year permitting lasting bonds to be formed.

Demand

Before starting any new product line, one needs to evaluate whether a demand exists. In Maryland, agritourism opportunities exist and, in fact, most local agritourism providers believe they have reached capacity and could not handle additional customers that still exist. Basic statistics confirm the U.S. public’s desire for more outdoor recreation activities. For the more than three-quarters of Americans who live in an urban setting, going to a rural area is a novel and interesting experience. People want to observe and experience everyday farm life as well as special events, such as harvest or wool festivals. The number of forest visitors has been increasing annually as people go to rural areas for hunting and non-hunting wildlife experiences. More Americans participate in outdoor recreation than own a pet, tend a garden or go to professional sports games combined. It is estimated that 77 percent of American's observe, photograph or feed wildlife every year. In their 1991 survey, the Fish and Wildlife Service found that expenditures by wildlife enthusiasts total more than $14.5 billion a year. In the U.S., nature tourists spend more than $7.5 billion annually on travel alone. Many of these people would consider visiting a farm or a forest setting for their recreational experience.

Who are these Customers?

Landowners can appeal to several target audiences. On a broad scale, more Americans want and can afford a quality recreational experience. Evaluating the demographic structure of the general population as well as your local communities can help define the appropriate audience. For example, as a result of falling birth rates and rising life expectancy, the U.S.

population's age structure is shifting. The average U.S. worker lives 11 years beyond the standard retirement age of 65. As Senior citizens have grown in number, their demand for recreational activities has increased. Locally, Baltimore County has one of the largest senior citizen populations in the country.

Another target clientele group--the Baby Boomers--has reached the age of peak earnings and expenditures. They often have large disposable incomes and the desire to use their leisure efficiently. Travel Trends found that more Americans chose "leisure" over work as the most important thing in their lives. In addition, the Baby Boomers' children demand recreation opportunities. They and their parents seek "immersion" experiences which provide recreation and educational possibilities.

Another significant demographic trend is the decline in the traditional family with an increase in the number of single headed households with children living with one parent and visiting the other. For these visits, the parent often searches for appealing activities. Many of these parents seek recreational situations to maximize quality time with their children. Preschools, elementary schools, boy and girl scouts and other groups are often looking for educational experiences for field trips. For these groups and more, agritourism constitutes an affordable recreational activity. And it can appeal to many age groups.

Also looking at different types of recreational groups, one may discover a niche market complementary to one's land. One group that has proven its willingness to pay for recreational access is hunters[2]. Hunters pay for uncrowded conditions and what they perceive to be a safer location. Hunters and non-hunters prefer location close to their homes. Proximity to a wilderness area or state park may increase the number of animals available and make hunting on the land more attractive. Landowners who work to increase or maintain animal numbers through habitat maintenance and leaving crops in the field for food can charge a premium for quality hunting. Eastern Shore landowners earn $2,000 to $20,000 to lease their farms for winter geese hunting.[3] Deer hunting leases range form $500 to $2000 for a farm depending on its location and the number of deer.

Recently a Maryland mountain biking group sought amendments to recreational legislation to remove barriers to their using private land for recreation. They are looking for new locations to ride as public parks become crowded and trail regulation increases. Bird watching has become increasingly popular and these people are seeking new venues for their pass-time. Again, many of these groups have sufficient disposable income to pay for recreational access to pursue their sports.

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2 On the other hand, hunter numbers have not been increasing. Landowners need to consider if investments in hunting blinds, wildlife habitat, etc . . . will pay off over time?

3 For the last few years, no hunting for migratory geese season has been permitted; landowners have had to suffer this loss of income.

Critical Factors

Customer Interaction

The three most critical factors in the success of an agritourism enterprise are social skills, aesthetics (scenic and clean) and location (Hilchey, 1993). Although all three factors are crucial for success, probably the most important is social skills. Having the patience, desire and ability to deal with the customers cannot be stressed enough. In few other types of enterprises does interaction with customers achieve the importance it does in a tourist business. People are spending their leisure time with you and they want to have a pleasant time. They are coming for an "experience," and part of that may include meeting and talking to a real farmer. They will want to ask questions. These questions may be invasive, i.e., asking very personal questions. Other questions may be very challenging. One farmer finds people are always concerned about how animals are treated and whether the animals are having a nice life. Or they may question the use of chemicals. Or even accuse you as a farmer of being an "environmental foe." Some people will display incredible ignorance. And people may complain about normal farm smells and dust. Therefore, one must be willing and able to deal with all types of people in a friendly, welcoming manner.

If the visitors will be spending time with employees rather than with the owners, it is the employees' behavior that will determine a visitor's perception of the enterprise. Thus, the owners have to ensure a people friendly person in this post.

Aesthetics

People want to see a clean and neat farm. Owners spend time repairing the farm and making it look nice. This may mean repainting the barn a few years earlier than they would have normally done or developing nice signage. Several have put in parking lots for the cars, some have used grass, and others gravel. They keep fences in repair and improve the signs to reflect their logos and their new enterprise. Trash containers are needed through the pertinent areas to keep litter down. People also need bathrooms which must be sanitary and clean. Some growers depend on port-a-potties. Others have found their clientele want a real bathroom and made the investment in constructing one for guest use. Nice flowerbeds or decorations also add to the flavor and attractiveness of the farm. Some owners have added outdoor lights for security and safety reasons.

Location

As people seek activities closer to home, location can be very important in determining the target group. People will generally travel one to 1.5 hours for an afternoon activity. The geographic market segment is within 50-60 miles. In Maryland, this encompasses a large number of people. In the Baltimore region alone, there are 2.4 million people!

Most owners found the majority of their clients come from the Baltimore area with about 20-25 percent coming from the surrounding Washington, D.C. area. People must be able to get to the farm, however, and most of the visitors will not be use to country roads. Detailed maps need to be designed which indicate both distances and landmarks. In addition, if permitted, road signs directing people to the facility will be helpful.

Marketing

Marketing is a skill needed to make this type of enterprise successful. A landowner must find a way to publicize the business and/or cooperate with others to inform the clientele. The general public does not look to private provision of recreational activities as a rule. Recreation suppliers say that marketing is the most important component of the tourism sector. Landowners need to determine what is the appropriate target audience, find information providers for that group such as newsletters, associations, and trade magazines. Several enterprises advertise in local newspapers although they are unsure how successful that has been. Christmas tree farms annual publish a “Choose and Cut” directory which is inserted into all major newspapers such as the Baltimore Sun and Washington Post.

Many landowners develop a brochure describing their offerings and leave them in the tourist office, at state fairs, in supermarkets, as well as hotels and motels. This is especially helpful if it contains a good map. These brochures as well as any advertisements should reflect the farm and the experience. You are not seeking to attract someone who wants an amusement park, so do not advertise to that type of group. Farmers have also attempted direct mail when a mailing list of the target audience can be produced while some send out reminders each year to previous customers. Word of mouth has been the most successful for most private recreation providers. This requires that people enjoy their experience so they tell others and return themselves. Again, this emphasizes the importance of customer relations. Other means of publicity include local festivals or events.

Labor

Labor is often a limiting factor in farming and the same holds true for agritourism enterprises. At peak times, it is not unusual to spend 70 to 75 man-hours per week with preparation and customer time. Therefore, one would preferably engage in this part of the operation at a less labor intensive time of the year. Some landowners kept off farm jobs until the activities became sustaining and contributed sufficiently to the family’s income. If the owner is a full-time farmer, managing this additional enterprise may be difficult. Many of the landowners that engage in agritourism find “pinch-hitters,” or people who will come in on short notice for a period of time. Other operators hire high school or college students for the summer or for Christmas time but have problems when these students must leave for school before the season ends. In the initial stages, the owners depend on family labor. Owners have asked their regular farm labor to lend a hand from time-to-time. If a farm laborer begins to spend his or her time in the “tourist” side of the farm, the labor laws under which they are covered change. The removal of most exemptions that are given to agricultural labor probably will not alter the employment relationship. Other exemptions may become binding in certain seasons and economic circumstances.

Safety and Security

While having visitors to one's farm may be pleasant and increase farm income, growers must be aware there can be several drawbacks. Agritourism providers have experienced problems with trash, vandalism, trespassing, mistreatment of animals, and nuisance complaints. A few landowners mentioned a loss of privacy, calls at anytime of day or night, and limited security (theft of their home or farm equipment). These farmers stress the need to be pro-active to avoid these types of behavior. A separate phone number which can be turned off during off-hours can prevent late night or family time interruptions. Landowners have started locking their homes while visitors are present as well as sheds and barns that contain equipment. Locking up off-limits buildings is a good idea to avoid potential injuries or damage to equipment. Many have found new fences were needed to keep visitors in acceptable areas and signage was crucial to keep people out of certain places. Trash cans at strategic locations help with the litter problem. Animals may need to be kept away from the clientele's area.

Three types of "dangerous" customers have been recognized. One has no common sense. The other is one with no farm experience who may not recognize something is a hazard. Another is one whose curiosity leads him/her to off-limit places. These customers expect a certain degree of safety will be provided regardless of their behavior. Therefore, the farmers must anticipate what may cause problems to prevent them from occurring. Potential nuisances include an unfriendly animal, a ditch, a rickety fence, or an appealing hayloft. Some items must be removed such as the barn cleaner and the chain to prevent accidents from straying adults. One grower constructed a special barn to keep the crop chemicals and a storage barn for the crop equipment.

Farmers have also had to get creative to overcome visitors' interference with the day to day operations on the farm. Some practices have been shifted to different times or days to prevent possible conflict with the visitors. Since many visitors do not know how to treat the farm animals, there must be constant instruction to ensure both the safety of the animals as well as the customers. Customers have expressed discomfort with common farm odors. Animal owners have found they needed additional ventilation of farm buildings and had to clean up after the animals on a constant basis. Bed and breakfast owners have found their clientele lack knowledge on rural life leading to some disappointment. For example, one guest left when he found the farmhouse did not have a porch light on all night.

Some farms have taken more precautions than others. Several have added more lights to reduce vandalism and theft. Others have hired a security service to patrol the property. One also hires an additional employee to monitor the customers during busy times.

Liability

In most cases, a farmer's standard comprehensive personal liability policy (FCPL) will not cover claims arising from recreational use. This type of policy covers injuries and property damage resulting from farming activities but excludes coverage for other business pursuits. While farming or agricultural activities may not be clearly spelled out in the policies, agritourism may not be considered "farming." Therefore, all prospective agritourism providers are recommended to have a long and very detailed discussion with their insurance agent to ensure that the agent understands exactly what they plan to do and then recommends the right coverage. If the agent says the current policy covers the activity, it is recommended that the landowner get this in writing. In some cases a rider on the farm policy granting additional liability coverage for the particular activity will be sufficient.

If one's insurance agent does not provide such insurance or is quite expensive, there are some specialty insurance companies such as Outdoor Underwriters, Inc. or Davis-Garvin Agency, Inc., that may be more helpful. Some organizations, such as the Christmas Tree Association[4] or the Forest Landowners Association, provide insurance for their members so this may be an avenue to explore.

Recreational Statutes

A few people with whom we spoke mentioned limited liability under Maryland's recreational statutes. The legislation strives to encourage landowners of undeveloped land to permit access for sport and recreational activities by providing immunity from liability. These laws cover particular activities and release the landowners from the responsibility to keep the premises safe for outdoor activities. The landowner of course remains liable "for willful or malicious failure to guard or warn against dangerous conditions." However, these statutes have limited applicability to agritourism enterprises. In particular, they only apply if the owner does not charge a fee for access and provides access to the general public (not just friends and family). In addition, since the statutes define only certain types of recreation, in some cases it's hard to determine if a particular activity is covered. Questions as to what constitutes a fee have also arisen. For example, if someone gives the landowner part of the deer meat after hunting for free on the property, is that a fee? In addition, they only apply if the activity is recreational. In one court case, the family contended that since it was a school field trip, it was educational rather than recreational. In that particular case, the family lost the case which is a concern for those providing educational formats or farm tours.

These statues also do not prohibit a landowner from being sued. While none of the agritourism businesses in Maryland that we spoke to have been sued, one person mentioned a neighbor who was also doing this type of enterprise had been sued twice. A landowner should develop guidelines and rules for the use of the land, but as mentioned above some people aren't perfect guests. Even if limited liability is granted, visitors can still file suit against the landowner. People can and do sue even when the case has no merit. The lack of merit does not decrease the time and trouble the property owner incurs. In these cases, an insurance company may decide to settle out of court then may hike the premiums or cancel the policy

[4]The National Christmas Tree Grower's Association sells liability insurance to its members. Membership costs $75.00 year. For choose and cut growers, the insurance cost ranges from $285 to $363.

Other Regulations

Other regulations must also be considered before developing an agritourism enterprise. For example, what is the zoning on the property? Under current zoning, can the farmer set up a bed and breakfast or a restaurant without asking for a variance? Making a large investment that then can never be used has happened to people so it is important to explore your situation before starting. In addition, can you set up a small road-side stand, can it include crafts as well as farm produce? What about putting in a parking lot? The building codes of the county will also come into play as the general public comes onto your farm and you renovate. There are rules for plumbing as well as electrical requirement. Certain fire codes must be followed. If any food is to be served or prepared, health and food safety regulations will apply. A small store will need a vendor's license and will be required to collect sales tax. A bed and breakfast operation will require a hotel license. In addition, if animals will be included in the offering as a petting zoo, the owner will need to apply to the U.S. Department of Agriculture's Animal and Plant Health Inspection Service for a Zoo permit. Other concerns that may arise include Safe Drinking Water Act which applies if 25 or more people are consuming the water on the farm. Restrooms may fall under the Clean Water Act. Accessibility for disabled customers must be considered.

Final Thoughts on Agritourism

Agritourism offers additional opportunities to earn on-farm income. The large and affluent population in Maryland offers many opportunities for innovative farmers who can attract this clientele to their farm. However, there are many obstacles and regulations that must be overcome to successfully manage such an enterprise. For further information, consult the list of references provided below.

References

Proceeding of the Natural Resources Income Opportunities on Private Lands Conference, Hagerstown, Maryland, April, 1998 available from University of Maryland Cooperative Extension Service.

Hilchey, Duncan, Agritourism in New York State: Opportunities and Challenges in Farm-Based Recreation and Hospitality, Farming Alternatives Program, Department of Rural Sociology, Warren Hall, Cornel University, Ithaca, NY (607) 255-9832.

Kays, Jonathan, Recreational Access and Landowner Liability in Maryland: Guidelines for Managing Free or Fee Access. Bulletin 357. University of Maryland Cooperative Extension Service.

VI. MARKETING ALTERNATIVE PRODUCTS

Before you begin a new enterprise, you must "find your market." This should be a constant reminder that unless you have a market for a product, you shouldn't produce it. To find a market requires that you know who will buy your product or use your service, how to sell to those buyers, how much they are likely to purchase, and what price they are likely to pay.

Simply stated, you must understand your market. For new or alternative enterprises, good marketing skills are crucial for success.

To begin to think about marketing, one must also consider the potential marketing options available to sell or distribute the product or service. If you already raise traditional farm commodities, you are probably familiar with selling through cooperatives, processors, dealers, or auctioneers. Also, in the case of most farm commodities, once you make that transaction, the middlemen performs most of the marketing. While some of these options are available for alternative enterprises, most successful operators have taken a more active role in the total marketing process, from marketing research, promotion, distribution, and sales.

By actively marketing a crop or product, a farmer can keep some of the profit margin that would otherwise go to a middleman. In many cases, this marketing margin may be greater than the margin for directly producing the product, thereby making it a very worthwhile endeavor for the farmer. Also, as a producer, you usually have little control over the price received. By taking an active role in marketing the product or service you maintain much more control over quality, image, and price.

Active marketing is important for any new enterprise, whether conventional or nontraditional. However, it is easy to underestimate the time commitment, skills, and costs associated with successful marketing. As you investigate marketing options, focus on those that are most promising, but don't restrict yourself to one single market. Know about and be prepared to utilize several different marketing options. Such knowledge and flexibility may be the key to the survival and success of your new enterprise.

Examples of Marketing Options

- Selling directly to restaurants
- Selling at a local farmers' market
- Selling via a pick-your-own program
- Offering frozen meats
- Joining or forming a marketing cooperative
- Operating a roadside farm stand or retail shop
- Selling directly to supermarkets or supermarket warehouses
- Marketing by telephone
- Developing your own label or brand name
- Selling at special events e.g., fairs or festivals
- Finding other producers whose products you can market
- Selling wholesale to a distributor, broker, or processor
- Marketing through a catalog
- Developing a tourist attraction on your farm

EFFECTIVELY SELLING IN THE MARKET OUTLET YOU CHOOSE

Farmers Markets, Roadside Farm Stand, Special Events, and Pick Your Own:

These market outlets command a high price because the buyer is not only purchasing the food item but also the experience the market provides. The most common reasons people make the extra trip to these markets, instead of purchasing the food at a grocery store are: high quality, nutrition concerns, fresher flavor, and supporting the local farmers. Recognizing these factors when you go to produce and market your products will help you achieve higher prices and develop loyal customers who will return to your stand. Understanding your buyers interest will increase your business.

In general farmers markets and stands have developed a reputation for high quality, fresh, flavorful produce which attracts buyers. Once at the market, the buyers look for the stands which provide the attractive produce and friendly vendors. The buyers spend the majority of their week in offices and want to enjoy the experience of shopping for food items. Most have a concern for the local farmer and the wholesome image associated with farmers' lifestyle. They consider shopping at farmers markets supporting and participating with the farmers. To capitalize on these aspects you have to create a particular atmosphere. The following aspects must be considered.

- **Display** of your product. Buyers will be attracted to your stand because of the quality and uniqueness of your display. Using tablecloths, arranging your produce considering the colors of each commodity, keeping produce clean and well stocked will attract people to your stand. The products should be easy to reach, with prices and labels in clear sight but not interfering with appearance of the produce. Provide sturdy, easy to carry bags or containers for the produce sold. Extra boxes and baskets are helpful for those who buy many items. Trash, boxes, and surplus produce should be kept out of sight. These minor aspects all demonstrate a level of care and quality in your business and produce.

- **Quality of Produce** is the basis for the buyers visiting the market. The higher the quality the more a customer will pay for the produce. Watering down your produce and selling the most resent harvest will attract more customers. Clean produce is always preferred. The produce should be displayed and stored with care to avoid bruising. Perishable items can be a great loss to any business if they have do be thrown out due to poor handling.

- **Wholesome image** is communicated by friendly greeting and brief conversations with the customers. This is a day to enjoy for the customers. They are not just purchasing the groceries for the week. Many buyers like to hear about your farm and what it is like living on a farm. Having your family participate in the marketing and customer service shows your family values and work ethic.

- **Pricing** is another key factor in success. Unlike other market outlets where the lowest price sells the most, the buyers at the farmers markets are willing to pay more for your product (product meaning the produce and atmosphere). Prices should be based on production costs, transportation costs and marketing costs. The prices among the stands will vary and while competition is important, your production costs should play a key role in setting the price for your items. In determining cost you must include the fees for your stall, cost of stand, signs, bags, and your time at the market. Customers are buying more that just the produce and the extra effort and presentation may provide a larger number of customers and a high price.

These concepts may be simple and seem secondary, however, these market outlets bring higher prices because of these minor aspects. Success in these markets depends highly on the attention paid to the small details. The customers you are selling to want more than just quality food, they want to share in the experience of farm life.

Many farmers markets and specialty events have waiting lists for participants. Contact the Maryland Department of Agriculture 1-800-492-5590 extension 5770 for registration information, location of markets and dates markets are open. The Maryland Farmers' Market Directory may be found on the internet at:

http://www.mda.state.md.us/market/fmd.htm.

Neighboring states also have Farmer's Market Programs; Pennsylvania's may be contacted at 1-800-417-9499, extension 25.

Roadside Stands

Establishing a roadside stand has many of the same advantages as participating in a farmers market and many of the same marketing concepts mentioned above apply. Along with the display, quality, and image, you have a few more issues to address before beginning your stand. These include selecting a site, establishing hours of operation, researching parking areas, and providing adequate cover if the weather is harsh.

Roadside stands offer convenience for the customer. Therefore, site selection is a key factor. In **selecting a site** you should look for an area with ample space to set-up tables for displays, make sure it is easily accessible for the customers, and has a high volume of traffic. If you are thinking of establishing a stand on a busy road, the speed in which the cars pass and the distance they have to see your sign before the stand must be considered. Difficulty in pulling over or limited time or space to slow down in order to stop will lessen the number of customers you will have. A stand that sits on a long stretch of road in clear site of the on coming traffic is the best option.

Roadside stands traditionally attract people in transit and not people who are doing their normal grocery shopping. Usually, customers will visit roadside stands on their way home from work or possibly while they are out doing other shopping. One way to maintain a loyal customer base is by having regular **hours of operation**. The key to establishing hours is to recognize the hours with the highest volume of traffic and the amount of time you can man the stand. If you are able to staff the stand all day you will have higher sales but it may not be worth the time spent away from the farm. Recognizing the key hours of operation, the time of day you sell the most and spending the rest of the day on your farm will maximize your time.

If you are going to develop a roadside stand, it is important to check into the **zoning and permit** requirements for your area. Each county in Maryland requires permits for roadside stands. Although you can check with your local county, you should probably start with the Planning and Zoning Department and the Consumer Public Information Office. If you live in a county other than the one you wish to establish your stand, you need a permit from the county where you will set up the stand.

SELLING TO SUPERMARKETS, GROCERY STORES AND DISTRIBUTORS

Selling to supermarkets, grocery stores, and distributors provides an avenue to sell a large volume of produce. The produce can be delivered without much effort in packaging except for grading. This may be advantageous for your business but the prices you receive will be low. The distributor/grocery store manager has an advantage because of the number of farmers selling to them. If there is an abundance of an item they may lower the price and only purchase your top quality produce. In this situation you are directly competing against the farmers in the area. To find locate distribution sites for the crops you are growing and the general prices they pay, contact the Maryland Department of Agriculture or the Department of Agriculture in Pennsylvania if you live within reasonable travel distance.

Supermarket prices may be a little higher because you are delivering the produce to their door and will receive the price they normally pay a distributor. If you decide to sell to supermarkets and grocery stores there are a few steps you need to consider. You should consider the type of store, a large chain, small local store or large regional store. The area in which you would like to deliver is also important. The more rural areas have lower prices and the quality is not as high. This applies particularly to the region near Pennsylvania. The large number of farms and Amish population lowers the prices. Also the supermarkets in near metropolitan areas are providing to a clientele who demand higher quality and will pay a higher price.

SELLING TO RESTAURANTS

Specialty Chefs and Restaurant Managers:

Many chefs and local restaurants realize the ease and benefits in purchasing locally grown items. Maryland is a small state, which has the advantage of limited distance between metropolitan areas and farms. This is the perfect environment for a farmer to sell to restaurants. Chefs and restaurant managers focus on two aspects in buying local produce: (1) the quality of the produce and (2) the ability to get specialty crops.

Not all restaurants are interested in taking the risks to purchase locally. Some restaurants rank costs and availability over quality. They have standard menus, which change infrequently and market to a clientele who want moderate food at a moderate price. Selling to this type of restaurant could prove to be time consuming and not profitable. The restaurants that cater to high-income clientele, searching for excellent food, an exciting atmosphere, and variety are likely offer the best outlet for superior quality were farmers would have the most success.

The direct connection between farmer and restaurants has proven to be extremely successful from both aspects. As a farmer, you provide a service to the restaurant and they will pay higher prices for it. To be successful in this market, you should follow the steps below. To accomplish these steps successfully you may need to acquire new skills or hire someone part-time to work with you until the skills are developed.

- **Identify the restaurants**
- **Prepare a package of what you can offer including:**
  - **-time of delivery**
  - **-quality and variety of produce**
  - **-customer service attributes**
  - **-billing method**
- **Set-up on-site visits and present package**
- **Follow-up calls to discuss meetings**
- **Quality check phone calls and visits**

The first step in establishing this market is for the farmer to **identify the restaurants** with these characteristics. This can be done through current food and restaurant magazines (available at bookstores and newspaper stands), reading food critic articles in the larger newspapers, and searching the internet. All publications mention the name of the restaurant, owner/manager or chef, and where it is located. Determining the size of restaurants and the clientele they serve will assist you in selecting your prospects. Size or type of restaurant can determine classifications of restaurants. Although size is important, the type of restaurant is a better parameter to select your potential clients. The main categories of restaurants are chain restaurants, ethnic restaurants, home-cooking restaurants, and high-end specialty restaurants. There advantages and disadvantages of each:

Chain restaurants usually use a distributor and have a corporate office to work through. The quality of food is good but they depend on high volume, moderate quality, and moderate prices for success. Selecting this group would offer you a large group to sell to but the price will be similar to wholesale.

Ethnic Restaurants have a specialized menu and are more selective in the quality of ingredients they use. They are servicing a group of people who are willing to pay slightly higher prices for a unique type of meal. This market will demand high quality but usually pay higher prices; specialty products are also important in this market. Usually, these are not chain restaurants so you would have to service one restaurant at a time which may limit your sales volume. To be worthwhile, it is best to establish a number of different clients to sell all of your produce.

Home-cooking Restaurants are abundant and easy to establish a business relationship with. They do not have the corporate structure of the chain restaurants but they do have the volume. They also have the ability to change their menu if there is an abundant amount of one product. However, the quality and prices are in the moderate range, which means they do not pay high prices for produce. This should be considered when spending the extra time and expense to market to these restaurants.

Fine-Dining Restaurants are located in more urban areas, providing a dining experience for people who value high quality food and are willing to pay higher prices. These restaurants have flexible menus and are interested in high quality produce and a large variety. Growing unusual produce specific to their chef's requirements may prove profitable even if the volume is low. The managers/chefs selecting the produce will probably closely inspect the produce and demand high quality. This may cause a high amount of wasted produce but the prices paid should offset this cost. These restaurants can be easily identified by the ratings given by critics. The four and five star restaurants are the most likely candidates.

Once potential customers are identified, you have to decide what products you will offer as well as the price of each. In selecting the items you should recognize the type of food prepared, the ingredients they may need, and the best variety currently available. Your price range should include marketing costs, transportation costs, and grading costs. Possible seasonal differences and quantity discounts should be discuss and reflected in your prices.

The third step is to **contact the chef or manager** and plan a meeting with her or him. This meeting should discuss delivery schedule, payment method, as well as the types of produce, quality, varieties, packaging and production process. Samples of your product can help promote a business and would be a great way for the restaurant to determine the quality of your product.

Preparation of a Product and Service Package:

To successfully provide produce to these restaurants you must prepare a "package" to demonstrate to the manager why he/she should take the risk to purchase from the farmer not the distributor. The "package" you are providing is not just the fruits, vegetables and herbs, but the convenience, flexible delivery, billing methods, and direct contact with the grower. This is best accomplished by bringing in samples, describing the production practices used, and understanding the managers concerns for providing his customers with good quality at a reasonable price.

Product:

It is your job to demonstrate how your produce is superior or more readily available. Describe the variety of vegetables or the high quality of flavor, extended shelf life, ease in cooking with the variety, the season it is available (particularly if it is available early or late in the season). Knowledge of the produce and it varieties will help the owner/chef recognize the level of quality of your skills as a producer. The number of items you can provide and the flexibility of growing a specific item they may need are also issues you should consider in your product.

Pricing:

To sell to this clientele you should price your produce to give the manager a range. You will need to recognize and describe the variations in price due to volume and time of year. Prices need to include the extra time in marketing and the uniqueness of the variety. The best way to price an item is to compare the wholesale prices and the cost of the special service you are providing.

Delivery Schedule:

Determine the time you will be able to provide your produce and the amount and quality during the different seasons. The more information you provide the easier it is for the manager to purchase from you. If you can provide a high quality item at a specific time they will order from you and not from a distributor.

Billing method:

The type of billing may be important to the restaurant due to their cash flow and business practices. Billing methods are described in section IV.

Setting up an Initial Meeting

The initial meeting can be initiated by telephone or in person. Spending a few days traveling to the restaurants in the area, introducing yourself and asking when they have time to discuss possible options for providing produce for them may be the best method of scheduling a business meeting. A phone call may accomplish the same thing but normally an in person introduction is more effective. The method requires more time and effort but demonstrates to the restaurant owner that you are extremely interested in working with his restaurant and he is not just another person on a long list you have. Like any other business each client likes to know they are a priority and they will be served the best.

To do this, you should stop by the restaurant during the late morning hours or just after lunch is served. This is the time most managers/chefs are available and willing to talk to people. This introduction should be brief (a few minutes), informing them of who you are, what you would like to discuss in the future and scheduling a time. Be prepared to decide on a time and day and schedule a time most convenient for your customer. If you are not successful in setting a date, a follow-up call will help you establish a working relationship with them.

Quality Check Calls and Visits:

After you have presented your “package” and have started delivering produce, calling the manager for a quality check is extremely effective. The manager may agree to purchase only a few items at first to see the quality of your produce and delivery. The quality check allows the manager to express their satisfaction and order more from you. The quality checks may be done over the phone or in person. Both methods are equally effective.

DEVELOPING A BRAND NAME AND MARKETING THROUGH A CATALOG

Selling through a catalog or developing a brand name takes marketing skills, time to develop an image, and willingness to spend time in the office. The prices for catalog items are high because you are selling a gift not just a box of fruit or vegetables. Catalog items save the buyer time, imagination, and delivery and are willing to pay for these services. If you, as a farmer are willing to provide these services you can profit greatly. You have the produce and now need to develop it into a gift.

There are two ways basic ways to enter this market. One is to begin you own catalog which would entail developing a mailing list, designing a catalog, creating a large amount of products to enter in the catalog, photographing items, pricing items and establishing billing arrangements with credit card companies. You may want to eliminate some of these tasks by submitting a few products to some existing catalogs. To accomplish this you should collect catalogs and decide which ones would best market your items. Each catalog has the company name and contact information in them. Prepare the items you want to sell, photograph them in attractive displays, determine a price and mail the photos to the director of the catalog with a letter detailing the quality of your produce, the availability of the items, and the best time and method for contacting you. You may want to mention why you selected their catalog to market to. The letter should also state that you would contact them in a few days to discuss the possibility of doing business with them.

To price your items consider all the steps in preparing and selling them, not only the production costs. Costs include: seed and inputs to raise crop, time and work harvesting and packaging, delivery charges, cost of materials and labor preparing labels, and time spend contacting and working with catalog company. There may be additional costs if your items are more elaborate than a basket or box of fruit. This may include small flower arrangements or other gifts in the baskets, prepared fruits/foods, or fruits packaged in fine wooden crates.

Developing a Name Brand

Developing a name brand provides another opportunity to sell your product but a name-brand takes a good marketing skills as well as a lot of time. This outlet for selling your produce is really creating a new product with what you have grown. It has been successful in Maryland as some stores and local markets carry items prepared by farmers and restaurants. To enter this market you will have to create a product that has superior quality and uniqueness. Jams, jellies, baked goods, sauces, and dressings are all example of this type of marketing. If you are interested in this, your focus will be on the processing of the good, not on growing the ingredients. Some of the name brand began as a way to sell the produce they grew and found it to be less expensive to purchase the ingredients instead. However, it may be an effective way to sell bruised or damaged produce you have grown.

To market the brand name you should review the steps to marketing your produce. The advantage to this type of product would be the shelf life of the item. With this advantage you can produce it when the season demands but market it all year.

VII. WHOLE FARM MANAGEMENT

Before deciding on a new enterprise, you need to understand how it will effect your farming operation as a whole. How will the new operation impact your physical resources, your labor needs, and your cash flow? A production plan and cash flow plan can help you develop a business plan for your farm.

Developing a Production Plan

To build a production plan involves evaluating the profit potential for each enterprise and recognizing the constraints associated with each enterprise. The first step is to review the enterprises you are interested in and their **potential profit** using the summary sheets and the budgets. Review the summary sheet comparing the enterprises you like. List the top 10 enterprises. Marketing costs and labor can be factored in at this point but the budgets are based on wholesale prices. Therefore marketing you prospective product at a high price may prove to be more profitable but there are more costs involved. This exercise will not factor in marketing in selecting an enterprise.

With the top ten list, review **the resources** needed to produce and market the new enterprise. Do you have the physical resources to convert a portion of your land to another crop? Do you have the machinery/equipment? Do you have the labor to produce the new crop? The budgets provide the number of labor hours for the production of the enterprises. If any of the enterprises are not viable, cross them off you list. The labor hours do not include the management involved. Do you have adequate management resources?

Cash Flow Planning

The best way to maintain the liquidity reserve is through *cash flow planning*. The tool used in this process is the *Cash Flow Statement*. It records the timing and magnitude of cash inflows and outflows that occur over a given accounting period, normally one year. The accounting period is broken down into smaller time periods, usually months. Two Cash Flow Statements are normally kept for each accounting period - projected and actual. The projected Cash Flow Statement is completed at the beginning of the accounting period and projects expected cash inflows and outflows for the period to estimate the liquidity reserve or ending cash balance for each month. If the ending cash balance is short in any month, plans for borrowing or setting up a line of credit can be made.

As the accounting period progresses, an actual Cash Flow Statement is kept to record cash transactions as they take place. The actual Cash Flow Statement can then be compared to the projected Cash Flow Statement to see if things are going as planned and to devise remedies for solving previously unforeseen problems or taking advantage of opportunities not anticipated. At the end of the accounting period, the actual Cash Flow Statement can be used to estimate the projected Cash Flow Statement for the next accounting period. The formats of Cash Flow

Statements vary but most contain similar information. An example projected Cash Flow Statement is shown in Figure 2. A blank Cash Flow Statement is also included for your use.

The example projected Cash Flow Statement summarizes monthly cash inflows and outflows for the Whitmer Farm for one year. The first column lists the transactions. The second column summarizes the total cash inflows and outflows for the previous year. The next twelve columns project the monthly cash inflows and outflows for the coming year. The last column totals the monthly projections. The main entries include: Cash Inflows, Cash Operating Expenses, Other Cash Outflows, Cash Flow Summary, and Loan Balances End of Period.

Definitions:

Cash Inflows

Crop, livestock and livestock product sales are the primary source of cash into the farm business and are critical to maintaining the liquidity reserve of the farm business. Some enterprises such as dairy generate a relatively even flow of cash into the farm business over the year. Other enterprises like corn or feeder livestock result in sporadic cash inflows as sales are lumped into relatively few transactions during the course of the production period.

Other farm Receipts often constitute a substantial cash inflow to the farm business. Typical items include payments from participation in government commodity programs, income from custom work performed and co-op dividends.

Non-farm Receipts include items such as income from an off-farm job, cash infusion from non-farm savings and investments, interest earned on non-farm investments and capital provided by outside investors.

Sale of Capital Assets include the sporadic cash inflows from the sale of land, buildings, machinery, breeding livestock, and tools.

Borrowed Money is illustrated in Figure 1 as a cash inflow entering the liquidity reserve from the side rather than the top. It is often considered a residual source of cash used to maintain the liquidity reserve when cash outflows exceed the sometimes sporadic inflows of the four sources mentioned above. Borrowed money can take the form of short term loans to cover operating costs, intermediate term loans for assets such as machinery and livestock or long term loans such as farm mortgages on land and buildings.

Cash Outflows

Production expenses constitute a relatively large draw on the liquidity reserve. These expenses include seed, fertilizer, chemicals, feed, hired labor, repairs and so forth. Failure to maintain the liquidity reserve to meet these expenses can result in an immediate decrease in the farm production or greater interest expense if paid from emergency borrowing.

Capital expenditures include cash outlays for replacing and adding machinery and breeding livestock, and purchasing of land and buildings. These outlays are important for maintaining and increasing the growth of the farm business. These cash outflows are sporadic and often involve large amounts of money. Consequently, careful planning is needed to insure the liquidity reserve to meet these expenditures.

Loan payments on borrowed money can be made during times when cash inflows from non-borrowed sources exceed cash outflows. This needs to be considered when formulating loan payment schedules.

Family Living Expenditures are sometimes overlooked as being secondary to the other cash outflows. In actuality certain basic family living expenses must be covered as indicated by the fact that money earmarked for other uses in the farm business sometimes finds its way into the family budget.

Steps in using the cash flow statement

The following section uses the Whitmer farm as an example to set us a statement. Read through the description and complete the blank for with the information from your farm.

Cash Inflows

The Whitmer farm produces corn and soybeans. Some of the corn is used to feed purchased feeder pigs. The remaining corn and soybeans are sold. The farm receives subsidy payments from participation in the government commodity programs. The owner is also employed in a part time off-farm job during the winter. The cash inflow section shows that last year the Whitmer's generated $139,510 (line 7) from these various sources. The total projected cash inflow for the year is estimated at $146,770 (line 7).

Cash Operating Expenses

The cash operating expenses last year totaled $85,390 (line 21). Expenses are projected for the coming year based on last year's figures, expected price changes and any changes in production that are expected for the coming year. The total cash operating expenses for the year are projected to be $89,600 (line 21).

Other Cash Outflows

In March, the Whitmer's plan to replace a tractor. With a trade in allowance on the old tractor, the cash "boot" of the new tractor will be $29,700 (line 22). The Whitmer family projects family withdrawals to be $1,300 a month (line 23). Taxes of $4,200 (line 24) are projected to be paid in March. On lines 25 and 26, intermediate loan principal and interest payments are listed for April and October. Principal and interest on the farm mortgage is paid in February and listed on lines 27 and 28. These cash outflows are totaled with cash operating expenses on line 29. The total cash outflow including cash operating expenses for the year is projected to be $163,705, compared to $117,305 for last year.

Cash Flow Summary

The cash flow summary is important in that it projects the liquidity reserve for the coming year to determine when cash surpluses and shortfalls might take place. New borrowings and loan payments are then made to maintain a liquidity reserve -- ending cash balance -- for each month. The Whitmer's wish to maintain a liquidity reserve of at least $1,500 at all times. The cash flow summary shows how they maintain this reserve (many farm managers have a line of credit to reduce the liquidity reserve or maintain the liquidity reserve in an interest bearing account).

The Whitmer's begin with a January cash balance of $1,500 (line 30) which was the ending cash balance from the previous December. They have cash inflows of $15,200 for January (line 7) and cash outflows of $3,200 (line 29). The difference of $12,000 is listed on line 31. When added to the beginning balance, this creates a cash surplus of $13,500 (line 32). The Whitmer's have an operating loan balance from the previous year and have decided to use the cash surplus to pay off the $11,250 principal and $450 interest on this loan. This will leave them with a $1,800 ending cash balance for January (line 38) which becomes the beginning cash balance for February.

In February, the difference in cash inflows and outflows is $10,520. Adding this to the $1,800 beginning cash balance results in a February ending cash balance of $12,320. The Whitmer's know that in March they will have a cash shortfall so they plan to hold the entire $12,320 to help with this shortfall. In March, cash outflows are projected to exceed cash inflows by $37,545, mainly because of the purchase of the new tractor. The Whitmer's plan to meet this shortfall by using the surplus from February along with taking out a machinery loan for $27,500 (line 34). This will leave an ending cash balance of $2,275.

The Whitmer's project their April through June cash outflows to exceed cash inflows. They plan to maintain the $1,500 ending cash balance each month by increasing the operating loan. Sale of market hogs in July will create a cash surplus for July and August. Another cash deficit in September, will be covered by an increase in the operating loan. A cash surplus from crop sales in October will be used to reduce the operating loan and carry the Whitmers through November and December. They end the year with an ending cash balance of $1,500.

Lines 33 - 35 list new borrowings for operating, intermediate and long term loans. Lines 36 and 37 list payments of operating loan principal and interest. The question is sometimes asked why principal and interest payments for intermediate and long term loans are included in the "Other Cash Outflows" section rather than the "Cash Flow Summary" section. The reason for this is that intermediate and long term loan payments are usually scheduled for specific months when the loans are made while operating loan payments remain flexible. In fact, using the "Cash Flow Summary" in the cash flow statement is the best way to schedule operating loan payments. The operating loan acts as the primary tool for maintaining the level of cash reserve. For farms that operate on equity capital rather than operating loans, the cash flow statement determines when cash surpluses are available for alternative uses.

Loan Balances End of Period

The final section of the Cash Flow Statement is the Loan Balances End of Period. This section keeps a running total of operating, intermediate and long term loan principal balances. On the Whitmer farm, loan principal balances at the end of the previous year were $11,250 (line 39) for operating loans, $17,000 (line 40) for intermediate loans and $88,700 (line 41) for long term loans. These balances are projected to fluctuate through the coming year as payments are made and new money is borrowed. For example, the operating loan balance is decreased in January by subtracting the loan payment of $11,250 and adding any additional borrowings (in the example there are none). These calculations continue for each successive month. On the Whitmer farm the operating loan balance increases April through June and also in September. In October it is reduced below the January starting level. Intermediate and long-term loan balances are projected to fluctuate through the year. The intermediate loan balance ends almost twice as high as the beginning balance because of the tractor purchase. The long term loan balance ends at a lower level than the beginning balance.

Hints for Cash Flow Planning

The above example projected a Cash Flow Statement for the coming year. As the year progresses, the Whitmer's will fill out an actual cash flow statement for each month listing inflows, cash operating expenses and other cash outflows. They will then fill out the cash flow summary section showing actual loan balances in the Loan Balances End of Period section. The actual Cash Flow Statement can then be compared back to their projections to improve the management of the farm. In this way, the actual Cash Flow Statement from this year can be used to project the cash flow statement for next year. By doing this, the Whitmer's will always know that they have a cash reserve and will not be surprised by cash shortfalls.

Projecting a Cash Flow Statement for the first time is sometimes difficult. Farm records are the first place to look for information needed to complete the Cash Flow Statement (see fact sheet 542 <u>Developing and Improving Your Farm Records</u>). Last year's actual entries from farm records, tax forms or checkbook registers are useful sources of information. Good crop and livestock budgets provide necessary information for projecting future cash flows (see fact sheet 545 <u>Enterprise Budgeting in Farm Management Decision Making</u>).

It is also important to consider changes in the farm business that are expected to take place the coming year such as crop rotations, new livestock enterprises or sales and purchases of capital assets. Your first cash flow projection may not be as accurate as you would like, but it will provide important planning information. As cash flow statements are regularly developed, projections in future years will become more accurate. In filling out cash flow statements it's useful to get several copies of the Cash Flow Statement form.

CASH FLOW BUDGET

	Last year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
CASH INFLOWS														
1. Crop Sales														
2. Livestock & livestock product sales														
3. Government payments														
4. Capital sales														
5. Other farm income														
6. Non-farm income														
7. Total cash inflow (lines 1 through 6)														
CASH OPERATING EXPENSES														
8. Livestock & other purchased for resale														
9. Breeding fees, Veterinary, medicine														
10. Custom hire (machine work)														
11. Feed														
12. Fertilizer, lime, chemicals														
13. Freight, trucking, marketing, storage														
14. Gasoline, fuel, oil														
15. Insurance, taxes														
16. Labor hired and associated costs														
17. Rent or lease														
18. Repairs and maintenance														
19. Seeds and plants purchased														
20. Utilities														
21. Supplies and other expenses														
22. Total cash operating expenses (8-21)														
OTHER CASH OUTFLOWS														
23. Capital purchases														
24. Family living														
25. Other withdrawals & income taxes														
26. Scheduled loan principal payments(non-operating)														
27. Scheduled loan interest payments(non-operating)														
28. Total other cash outflows (23-27)														
CASH FLOW SUMMARY														
29. Beginning cash balance														
30. Cash inflows (line 7)														
31. Cash outflows (line 22 + 28)														
32. Cash difference (line 29 + 30 - 31)														
33. New loans (non-operating)														
34. New operating loans														
35. Operating loan principal payments														
36. Operating loan interest payments														
37. End cash balance (line 32+33+34-35-36)														
LOAN BALANCES														
38. Operating (previous line 39+33-35)														
39. Non-operating (38+33-26)														

Whitmer Cash Flow	Last year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
CASH INFLOWS														
1. Crop Sales	98,210		15,500								78,500	12,000		106,000
2. Livestock & livestock product sales	23,414	14,400						10,350						24,750
3. Government payments	12,786		6,700	2,280							3,840			12,820
4. Capital sales														0
5. Other farm income														0
6. Non-farm income	2,800	800	800	800									800	3,200
7. Total cash inflow (lines 1 through 6)	137,210	15,200	23,000	3,080	0	0	0	10,350	0	0	82,340	12,000	800	146,770
CASH OPERATING EXPENSES														
8. Livestock & other purchased for resale	9,165			3,825						5,750				9,575
9. Breeding fees, Veterinary, medicine	250	50		50		50		50		50		50		300
10. Custom hire (machine work)	10,500											10,500		10,500
11. Feed	3,750	800		600		800		700		800		1,100		4,800
12. Fertilizer, lime, chemicals	25,800					21,500	5,500							27,000
13. Freight, trucking, marketing, storage														
14. Gasoline, fuel, oil	4,025	350		350		350	450		500	500	900	500	250	4,150
15. Insurance, taxes	3,625					950				1,725	950			3,625
16. Labor hired and associated costs	1,080					450	300				400			1,150
17. Rent or lease	13,500											13,500		13,500
18. Repairs and maintenance	2,740	100	100	300	300	500	500	200	200	300	400	200	100	3,200
19. Seeds and plants purchased	7,100				5,000	2,500								7,500
20. Utilities	1,740	200	200	150	150	150	150	150	150	150	150	200	200	2,000
21. Supplies and other expenses	2,115	400	150	150	150	150	150	400	150	150	150	150	150	2,300
22. Total cash operating expenses (8-21)	85,390	1,900	450	5,425	5,600	27,400	7,050	1,500	1,000	9,425	2,950	26,200	700	89,600
OTHER CASH OUTFLOWS														
23. Capital purchases	16,730			29,700										29,700
24. Family living	14,400	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	15,600
25. Other withdrawals & income taxes	3,950			4,200										4,200
26. Scheduled loan principal payments(non-operating)	6,350		2,900		1,850						8,250			13,000
27. Scheduled loan interest payments(non-operating)	9,690		7,830		875						2,900			11,605
28. Total other cash outflows (23-27)	51,120	1,300	12,030	35,200	4,025	1,300	1,300	1,300	1,300	1,300	12,450	1,300	1,300	74,105
CASH FLOW SUMMARY														
29. Beginning cash balance	1,500	1,500	1,800	12,320	2,275	1,500	1,500	1,500	9,050	6,750	1,500	18,200	2,700	1,500
30. Cash inflows (line 7)	137,210	15,200	23,000	3,080	0	0	0	10,350	0	0	82,340	12,000	800	146,770
31. Cash outflows (line 22 + 28)	136,510	3,200	12,480	40,625	9,625	28,700	8,350	2,800	2,300	10,725	15,400	27,500	2,000	163,705
32. Cash difference (line 29 + 30 - 31)	2,200	13,500	12,320	(25,225)	(7,350)	(27,200)	(6,850)	9,050	6,750	(3,975)	68,440	2,700	1,500	(15,435)
33. New loans (non-operating)	0			27,500										27,500
34. New operating loans	46,250				8,850	28,700	8,350			5,475				51,375
35. Operating loan principal payments	44,850	11,250									47,890			59,140
36. Operating loan interest payments	2,100	450									2,350			2,800
37. End cash balance (line 32+33+34-35-36)	1,500	1,800	12,320	2,275	1,500	1,500	1,500	9,050	6,750	1,500	18,200	2,700	1,500	1,500
LOAN BALANCES														
38. Operating (previous line 39+33-35)	11,250	0	0	0	8,850	37,550	45,900	45,900	45,900	51,375	3,485	3,485	3,485	
39. Non-operating (previous line 38+33-26)	105,700	105,700	102,800	130,300	128,450	128,450	128,450	128,450	128,450	128,450	120,200	120,200	120,200	