

Business Management Guide for Grazers

Shannon K. Williams and C. Wilson Gray

Why This Guide?

Why another management guide? For grazers? Management-intensive Grazing (MiG) is a specialized method of livestock production. With this guide we will show how to apply general management principles to MiG. We will discuss the basic elements of the management process and describe the budgeting process, which is essential to sound management whether for the coming grass cycle or for reaching longer-term goals. While we know operators by nature prefer the hands-on part of running livestock, management of all aspects of the farm or ranch operation is essential.

Management Process

Sound management is divided into three planning phases:

- Strategic planning—setting goals; deciding organization, mission, comprehensive objectives; inventorying resources.
- Tactical planning—making detailed, short-term decisions on the what, where, how, when, and who and major resource allocations.
- Operational planning—implementing the chosen plan, monitoring progress, and making adjustments to changing conditions.

The Western Integrated Resource Education (WIRE) program looks at the management process as a cycle (figure 1). You start by establishing strategic goals, then you inventory your resources, explore possible enterprises, develop an enterprise plan, develop a flow of resources, implement the plan, monitor and adjust the plan, and then replan as needed.

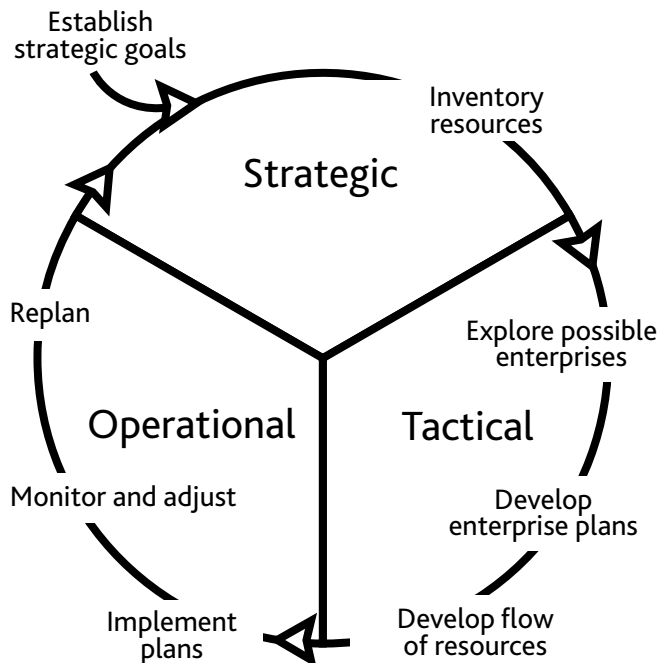


Figure 1. The management process can be viewed as a series of three recurring operations—strategic, tactical, and operational.

Contents

Why this guide?	1
Management process.....	1
Strategic planning	2
Tactical planning	3
Operational planning	8
Resources.....	9
Appendix I: Enterprise budgets.....	10
Appendix II: Management preparedness evaluation.....	12
Appendix III: Goal-setting exercise	16

Strategic Planning

The chicken or the egg? Goals or resource inventory? Which should come first?

Your goals and resource inventory are joined together. You can't have one without the other. They are like salt and pepper, hamburger and French fries, picnics and ants.

Webster's dictionary defines goals as something that you are trying to do or achieve, the end toward which effort is directed or any object of ambition or desire. It defines resources as any source of aid or support, available means, funds or supplies, assets. A person is considered resourceful when they are clever in finding and utilizing resources.

An inventory is an itemized list of property and resources. It is a snapshot in time of the resources that are available to help attain your goals.

Establishing goals

There are five things to consider when setting goals for your operation:

1. Set the right goal or goals.
2. Make the goals official by writing them down and sharing them with those involved in the operation.
3. Create a plan to achieve the goal(s).
4. Keep to the plan.
5. Stay flexible about the goals. Life does have a way of changing our goals.

As you consider goals, discuss them with people in the operation who will be assisting you in achieving them. They will be more inclined to assist you with reaching goals when they have helped in determining them. Remember to develop goals in the six areas of life: family and home, spiritual and ethical, social and cultural, financial and career, physical and health, and mental and educational.

Goals need to be SMART (Specific, Measurable, Attainable, Related, and Tractable). They need to be as specific as possible. If they are not specific, they are hard to evaluate and understand. They need to be measurable. If you can't measure it, you can't evaluate it. The goals need to be attainable. It is good if they are challenging, but guard against goals that are unrealistic. Goals need to be related to other goals, not mutually exclusive. Unrelated goals can be in conflict with each other, making both goals unachievable. Tractable goals are important so they can be monitored over time.

Assigning a cost to goals assists with direction and focus and serves as a standard of measurement for the

goal. Goals need to stay flexible as the weather, market, and life may cause some things to change. Make sure goals do not conflict with each other. Examine the goals to make sure they are realistic and manageable. Remember that saying "yes" to one goal is often saying "no" to something else.

As you write down the goals of your operation remember to include an action, result, timetable and cost. The action says how you are going to do something. The results are what you are going to do. The timetable tells when you are going to do it. The cost says how much the goal will cost to achieve. For example:

Action	Results	Time	Cost
Want to increase	Carrying capacity by 30 head	Within 3 years	\$10,000
Want to take	Family vacation	By next August	\$2,500

As you make plans to achieve your goals, consider what needs to be done to reach the goal. Examine where the operation is currently in regards to the goal. Make a list of possible obstacles and solutions to overcoming them.

Goals are the object of ambition or desire. Resources are what you have at a certain point in time. Goals and resources work together to make the operation productive and efficient in a cyclical nature including plan/goals, inventory, analysis, implementation and monitoring progress against your goal(s) (figure 2).

Inventorying resources

Inventorying your resources is important to reaching your goals. You need to inventory the major areas of your operation including natural resources and human, economic, and physical resources (figure 3). The information you gather here will assist you with analyzing alternatives as described in the tactical management section.

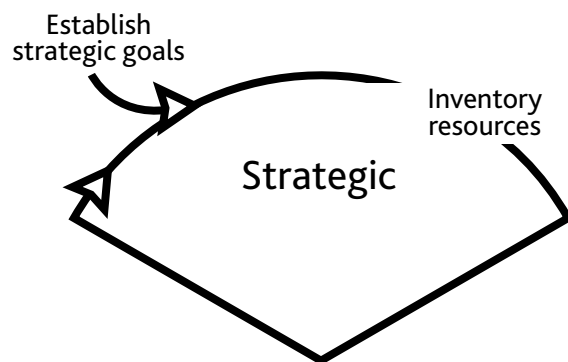


Figure 2. In the strategic phase you determine goals and record the available resources.

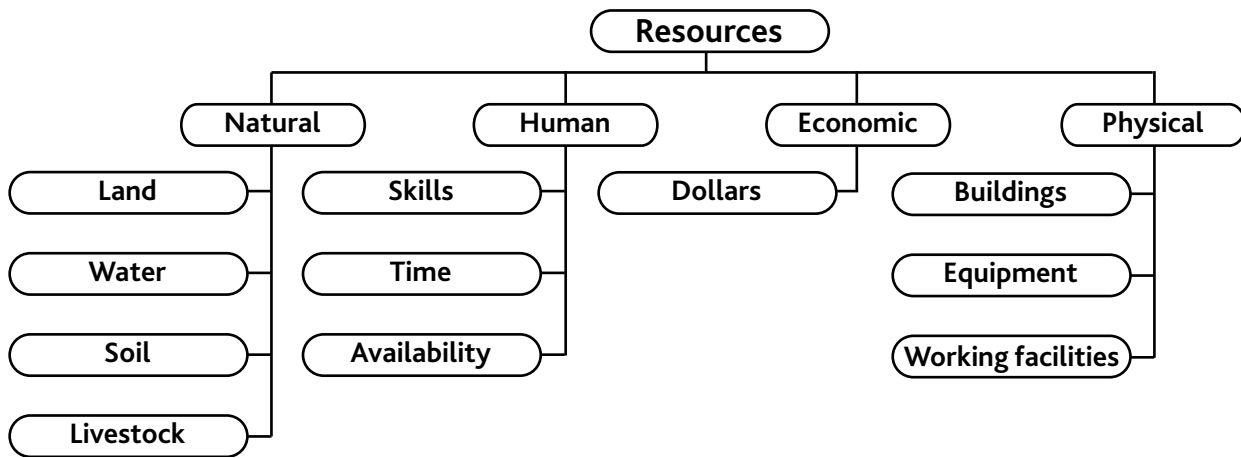


Figure 3. Resources can be categorized in four basic groups—natural, human, economic, and physical.

Natural resources

When inventorying natural resources include the following:

- Land—acres of pasture, hay, grains, weeds, and current production levels
- Water—how many shares, when it is available, and types of irrigation methods
- Soils—types of soils, fertilizer application records, and current soil tests
- Livestock—species, production levels, and ages

Human resources

Human resources are often the most overlooked, yet an owner/manager needs to know what knowledge and skills are necessary to run an efficient operation. What time of year certain skills are required is important, too.

Managers also need to know the skills, experience, motivating incentives, and abilities of the humans involved in the operation:

- Are employees/family members working where their skills are?
- Are they working where they are happiest and giving their best performance?

Economic resources

An economic resource inventory will include a current cash flow statement, the value of assets, and an outline of potential income and expenses. This inventory can change on a regular basis.

Physical resources

A physical resource inventory of the operation is the one inventory that may not change a great deal from

year to year. It should include buildings, working facilities, and equipment.

For buildings, include their locations, primary uses, square footage, repairs needed, and potential improvements. It never hurts to inventory the working facilities—feed yards, stack yards, type and location of chutes, and notes of any needed maintenance. For equipment, record the type, year of purchase, costs to run, and a maintenance schedule.

Tactical Planning

Exploring possible enterprises

Tactical planning deals primarily with an in-depth analysis of alternatives (figure 4). A first step is to lay out all potential enterprises that you are interested in. Then, by following a systematic process, eliminate those which are not feasible, not affordable, or do not fit with the goals and objectives outlined in the strategic planning process.

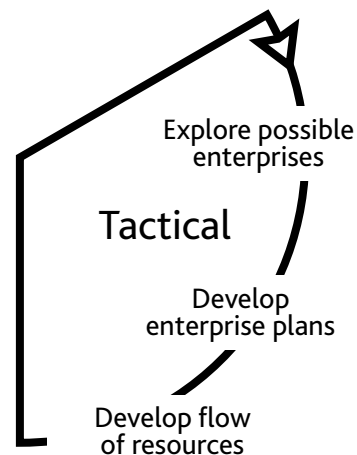


Figure 4. In the tactical phase you explore alternatives, develop enterprise plans, and evaluate resources needed.

Approaches to this analysis will differ depending on the specific circumstances of each operation. A beginning operator will approach the analysis from a different angle than an operator who has been in business for several years or decades.

For example, if the decision by a new operation is to background stocker calves, the market assessment needs to cover source of livestock, market venue(s), and quality attributes desired by the buyer(s). Perhaps for an on-going business like a small dairy the decision might center on how to move from competing with larger commercial dairies to producing a value-added product such as organic or grass-fed milk or a group of products like artisan cheeses, yogurt, or ice cream.

Six factors affect your profitability:

1. Number of production units (head or acres)
2. Production per unit (yield in pounds, pints, hundredweight (cwt), tons, etc.)
3. Operating (direct cash) costs
4. Value per unit (what your production is worth)
5. Enterprise mix (rotations, compatible livestock, etc.)
6. Ownership costs (depreciation, insurance, basic maintenance, taxes, interest on fixed assets)

Which ones do you have control over? These are also tied to the goals you've outlined for your business. Part of the SMART goal program is to put a cost on what it will take to achieve your goals.

When examining alternatives, you should address these six questions:

1. What is an optimal production size?
2. What efficiencies are needed in crop yields, weaning percentages, and quality factors?
3. What would be your cash costs per acre, head, or pound produced?
4. What price is the market likely to offer to you?
5. Can you diversify enterprises or products to reduce risk?
6. What can you do to keep ownership costs at manageable levels?

Developing enterprise plans

To make accurate comparisons between alternatives, you need to determine potential revenues and associated costs. Enterprise plans provide a systematic ap-

proach to organizing cost and revenue data for use in analyzing alternatives and making decisions. Enterprise planning is therefore a powerful planning tool. It can help turn ideas into action, identify opportunities and constraints, and show potential for profitability, and, it is cheaper to farm paper. As the saying goes, "If you can't pencil a profit, you're not likely to plow one."

Several types of budgets are possible; the most appropriate depends on the assessment you want to make. Budget types include enterprise budgets, whole-farm budgets, cash-flow budgets, and partial budgets.

Enterprise budgets. Enterprise budgets show revenues and expenses associated with producing a particular crop or livestock commodity. The enterprise budget is the basic building block for many other types of budgets. This type of budget is commonly developed on a per-acre or per-head basis. If you are looking at alternative enterprises, this budget allows for easier comparisons between them.

The major sections to an enterprise budget are revenue, operating costs, and ownership costs. The budget will also give you anticipated returns over operating costs (gross margin) and net returns above all costs.

Developing this type of budget for alternative commodities allows for direct comparison of gross revenues; operating costs; gross margins; ownership costs; required resources such as equipment, labor, and land; and potential net returns. Enterprise budgets can also be used to develop breakeven prices and yields. This can give you an idea of the potential risk involved in production if things don't work out exactly according to plan.

Appendix 1 contains a pasture budget and a livestock budget. The pasture budget provides a feed cost for the livestock budget.

Basic uses for enterprise budgets include (1) comparing product alternatives such as wheat vs. barley or selling weaned calves vs. retaining them through a background program, (2) providing the information to set up other budgets such as whole-farm, cash-flow, or partial budgets, and (3) providing the data needed for analytical techniques such as long-range financial planning, capital needs planning, and linear programming to optimize resource uses or enterprise combinations.

Evaluating enterprises based on gross margins. Evaluating enterprises based on their gross margins is a good way to compare enterprise profitability. Gross margin is defined as total revenues minus operating costs for a single production unit (acre or animal). Ownership costs are not considered as it is assumed that the operation already has the investment in land and equipment, so the question is more about "What should I produce this year to maintain profitability?"

The objective then is to determine the combination that will contribute the most toward covering ownership costs and contributing to the profitability of the total operation. Since producing only one enterprise is not always the best idea, rotation patterns, disease control, and other factors come into play. Follow a systematic approach to deciding on the best enterprise mixture.

1. Starting with the enterprise with the highest gross margin, allocate it to your plan until you reach the reasonable limit imposed by rotation practice, acres, or some other resource.
2. Take the enterprise with the next highest gross margin and allocate it to your plan in the same way.
3. Repeat this process until all available land or some other resource like labor or machinery has been utilized.
4. If a resource other than land is fully utilized first (e.g., labor), find the enterprise NOT in the plan with the greatest return per unit of this resource. Substitute it in the plan for the enterprise with the lowest return per unit of this resource until a limit is reached. Continue the process until the resource or all land is utilized.
5. Review your plan to be sure no other enterprise substitutions will increase the gross margin from all enterprises (farm gross margin) and to be sure that you have not exceeded any resource limits.
6. See if any underutilized resources could be used in enterprises you haven't yet examined.
7. Recheck your plan for accuracy and to ensure that you haven't exceeded any of the resource limits.

The University of Idaho has software available to develop or modify enterprise budgets. These will also compare gross margins and do a breakeven analysis. The programs are available on the web at <http://web.cals.uidaho.edu/idaohogbiz/> in the tools and software section. Example budgets are also available in the cost of production section.

Whole-farm budgets. As the name implies, whole-farm budgets summarize all financial activities of the operation, showing the “big picture” of whether the operation is financially viable regardless of the contributions of individual enterprises and cost centers. A whole-farm budget is often used to analyze major changes to an operation or compare several alternatives. The basic information to include in a whole-farm budget is total farm income, total operating costs, total ownership costs, and net farm income.

Making physical production plans is the first step in developing a whole-farm plan. If the operation is oriented toward livestock, the livestock plan should be developed first, then develop a cropping plan which will provide sufficient feed of adequate quality to support the livestock. Additional crop ground can then be considered for other crops planned for sale and to meet rotational needs. If your operation is crops only, then focus the planning on crops that are highest in value, meet your overall goals, and address your rotational considerations.

Once the production plan is developed the operating expenses to produce the crop and livestock need to be developed. Fertilizer, seed, purchased feed, fuel, labor, and other farm expenses need to be accounted for in an accurate manner. Interest on operating loans or feeder livestock loans should be considered part of the production costs since these are typically short-term borrowings. If enterprise budgets have been developed, costs can be taken from them. If you are doing an annual budget for planning or lending purposes, updating the previous year's expenses is often a good way to get the needed information. Be sure to include your ownership costs—those that go on regardless of production levels—such as property taxes, insurance, depreciation, and interest on equipment, buildings and improvements, breeding stock, and real estate debt as well.

Next, develop anticipated revenues. Contract prices for commodities are easiest. If you are working with a lender, they often will have commodity prices that they prefer clients to use when developing financial plans. Other sources include USDA's Economic Research Service, the Livestock Marketing Information Center, and state Extension services. Some commodity and farm organizations may also provide this type of information. It is important to use realistic pricing when developing budgets. “Blue sky” expectations will only lead to problems and possible failure of the plan.

The difference between your revenues and costs, with certain adjustments, is your anticipated net farm income. This is an important measure lenders will want to see. Adjustments account for depreciation, interest, and changes in inventory of such items as feed or fertilizer on hand. Net farm income is a projection of profitability for the farm.

Cash-flow budgets. Cash-flow budgets show all cash inflows and outflows from all sources. In short, the cash-flow budget is a picture of activity the farm's checking account may encounter during the year. Its purpose is to show whether the operation will generate sufficient income to cover expense repayments including operating lines and other borrowings.

There are two basic ways to set up a cash-flow budget. One is to use prior-year records, adjusting for changes

in costs and quantities, to project income and expenses for the coming year. Another method, if major changes are contemplated, is to put together a more detailed budget. This cash flow budget would include more detailed information on production, feed needs, other expenses, and sales.

The cash flow budget can also be used to determine the amount of operating capital needed and the timing/repayment of operating lines. It is often part of the usual bank loan application for operating or other credit needs.

Partial budgets. As the name implies, partial budgets are used to consider partial changes in the operation. Examples of analysis by partial budgeting include (1) enterprise substitution, for example, wheat for silage or cow-calf for stocker calves; (2) changes in input levels, such as in equipment (no-till versus conventional), feed rations, or levels of fertilizer applied; (3) changes in size or scale, like acquiring additional ground or increasing or decreasing herd size. A particular analysis might combine two or all three of these changes.

The partial budget includes factors that might increase income—added revenues plus reduced expenses—and factors that might reduce income—added expenses and reduced revenues. Each group is totaled and the difference determined. If increases in income are greater than decreases in income, the proposed change is feasible. Otherwise it's back to the drawing board. An example is shown in appendix 1.

Determining the flow of your resources

An important part of tactical planning is making use of the resources at hand and acquiring the use of resources not currently available, when feasible, to make the plan work. The enterprise planning/budgeting process discussed previously will help determine which resources you have that can be committed to the plan. It will also assist with determining what resources are needed to complete the plan so that you can determine the feasibility of acquiring them. The gross margin evaluation discussed above also aids in determining the best way to utilize resources in the operation. Evaluating the best way to redirect resource flows of labor, machinery, crops, and livestock is an important part of the management process.

Tactical planning requires consideration of many issues:

- Existing environment
- Operational resources to meet goals
- Available expertise
- Alternative solutions
- Budget and time constraints
- Support issues
- Risk assessment
- Leasing land, equipment, or livestock
- Market assessment: what should I market versus want to market
- Market planning, or satisfying customers, at a profit

Marketing what you raise

Marketing is an important but often frustrating management area for many producers. Marketing is more than hauling grain to the elevator or calves to the auction. As you develop your marketing plan, remember that marketing is an integral part of your entire business. A marketing plan is a means to reduce price risk. It is not a separate component. Your marketing decisions will affect the rest of the business. Therefore, you need to understand what the impact of various marketing decisions will be before you make them.

Too often marketing decisions are left to chance or are an afterthought. A good marketing plan can allow you to better control important decisions such as when and how to market your commodity.

A marketing plan is a written plan that clearly delineates what is to be done in the marketing program. It includes (1) who carries the responsibility for action and (2) provisions for action if the market does not behave as expected or some other unexpected development occurs.

Key points to keep in mind when developing your marketing plan.

- Find one or two reliable sources of market information that you understand, and learn how to use them.
- Learn what different types of pricing alternatives are available through the commodity market.
- Estimate the break-even price for your commodity. Unless you have an idea of how much it costs you to produce your commodity, a profitable marketing opportunity is tough to recognize.
- Be aware that your marketing plan must be consistent with your marketing attitude toward risk.
- Although your plan should be simple and consistent, be flexible about considering new ideas for marketing.
- Choose a set of guidelines to follow that seem to you to be based on common sense. Consistently follow those guidelines when making marketing decisions. Trying to “top the market” is not really

practical. Turning points are only seen in the rearview mirror.

- Once you have completed the marketing year it is a good idea to evaluate your marketing program. Ask yourself whether your marketing program achieved your goals and objectives, and whether you need to modify your plan for next year. Make any changes you feel are necessary.

Seasonality of prices. Livestock prices vary by the time of year. This is a reflection of seasonal variation in availability for differing classes of livestock. For example, most culling of cows for soundness, nonbreeding, or other qualities is done in the fall in the intermountain area. Since these cows are culled at the end of the grazing season operators like to market them relatively soon to avoid accumulating any more expense in a “retired” asset. Thus, cull cow prices decline from September through November as these cows head to market (figure 5). Cull prices are highest between January and March, when relatively few culls are being marketed. Seasonal patterns also exist for other classes of livestock such as different weight groups of steers, heifers, and fed cattle.

One common alternative for pasturing is to place calves in the spring, put on economic grass gains, and sell those calves in the fall. Pricewise, two things may happen to the markets for those calves. First, recall our discussion on seasonal variation. Prices will tend to be higher in the spring and lower in the fall based on the supply of calves and the demand for them.

Second, as the calves gain weight, they will move from one price category to another. In the spring, calves weighing 500 pounds are purchased and put on pasture for 120 days. If they gain an average of 2 pounds per day, they will average 740 pounds in the fall. This will move them from a higher price category to a lower price category, or what is usually referred to as the buy/sell margin.

The buy/sell margin for grass cattle is defined as the per-hundredweight difference between the purchase price and the selling price of grass cattle. The margin is calculated by subtracting the selling price of calves coming off grass from the purchase price of calves being placed on grass.

In nearly all cases the purchase price is higher than the selling price so the buy/sell margin is typically negative (figure 6). A negative buy/sell margin means that a cattleman will normally lose money on the original weight purchased. As discussed above, market differences between weight classes ensure that the original weight will be priced lower at sale time for the animals going on grass. The extent of this marketing loss is the buy/sell margin. Therefore, if a profit is to be realized

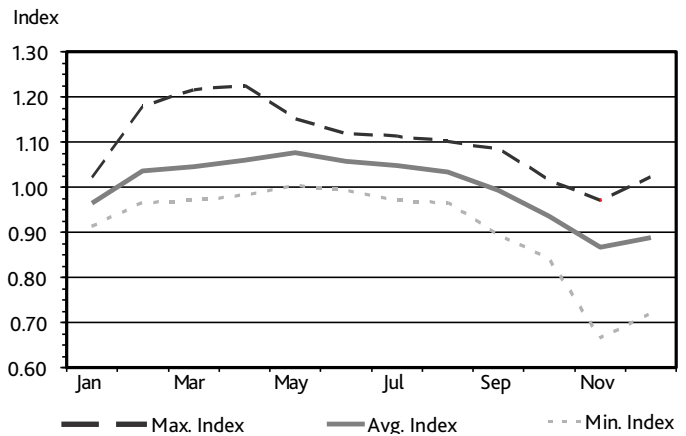


Figure 5. Seasonal price index for utility cows, southern plains, 2001–2011. Source: Livestock Marketing Information Center; data source USDA AMS, compiled and analyzed by LMIC.

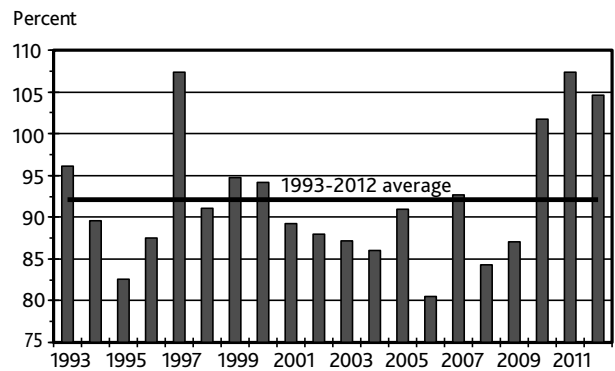


Figure 6. Buy/sell margin for 700–800 pounds steers. March price as a percentage of the previous November price for 500–600 pound steer. Source: Livestock Marketing Information Center; data source USDA AMS, compiled and analyzed by LMIC

from running cattle on pasture, the profit from the pounds gained must be larger than the marketing loss from the negative buy/sell margin (or loss on the pounds originally bought).

As an example, you buy 500-pound steers for \$1.50 per pound in May. They gain 2 pounds per day and are sold at 740 pounds in September. The 9-year average buy/sell margin is a negative \$14.23 per cwt. The standard deviation is \$8.42. That means that in 7 of 10 years the margin will be between –\$22.66 and –\$5.81. Projected fall prices are \$125–\$135 for 700- to 800-pound calves. This suggests a negative \$15 to \$25 buy/sell margin. Using \$130 as a price point, that implies a loss of about \$100 per head due to the buy/sell margin:

Sell 500 lb at \$130/cwt = \$650.00

Buy 500 lb at \$150/cwt = \$750.00

Buy/sell gross margin = –\$100

As we discussed above, the profits will have to come from the gain put on the animals during the pasture season. The 240 pounds of gain less the cost of gain has to recover the \$100 buy/sell negative margin:

$$240 \text{ pounds} \times \$130/\text{cwt} = \$312 - \$100 \text{ buy/sell} = \$212.$$

The breakeven cost of gain is \$0.883 per pound (\$212 divided by 240 pounds). If you can put gain on for less, you'll make a profit. Knowing your costs is critical, not just feed but also for labor, equipment, watering, and other expenses.

Operational Planning

Operational planning deals primarily with the implementation phase of the planning process (figure 7). This is either the hard part—setting things in motion, or the easy part, the “hands-on” role of the whole process. Whether hard or easy is partly attitude and partly the plan you've put together. Operational planning turns strategy into reality, usually over a 1- to 2-year time horizon. It is normally tightly integrated with the annual budget process.

Implementing plans

In the process of goal setting, developing budgets, analyzing alternatives, and putting together your plan you've done much toward completing the elements of a business plan. If obtaining financing is a part of the plan, you have a tool to use in presenting your idea to a lender. Sound planning and analysis can often make a difference to potential lenders when they are deciding whether to lend money for a particular venture.

It is also important to “stay on track” with your plan, goals, and benchmarks for progress. Sometimes people get sidetracked and start including other items—and spending more money—or spending time on things that are not a part of the larger plan. That can be detrimental to achieving the end objectives.

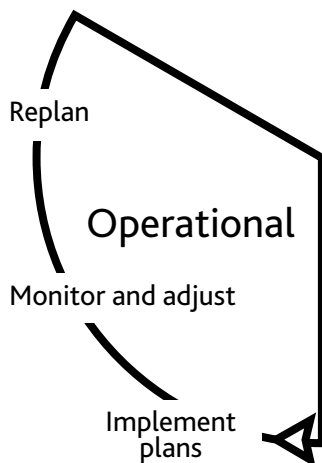


Figure 7. In the operational phase, plans are implemented, monitored against the SMART goals, and revised as needed

Monitoring progress

If you have outlined your SMART goals properly, you can check your progress against them. If one goal is to increase carrying capacity by 30 head and you have several benchmarks for that (reseeding a pasture, putting in a high tensile power fence perimeter on the pasture, repairing the irrigation system, etc.) you can check which and when those are accomplished. This will help you to remain focused on the plan and not become sidetracked with interesting but wasteful things that come up.

Making adjustments

Making adjustments sooner is normally better than later. As has been said, the best laid plans oft go awry. If things are not progressing on schedule first see if bottleneck(s) can be reduced. Revisions to the schedule or method of implementation may be needed in some cases. An ability to adapt is important to overall success. If slowdowns or problems are spotted early, the changes needed to get back on track are typically less onerous.

Appendix 2 contains a management preparedness quiz and appendix 3 a goal-setting exercise. Their purpose is to provide food for thought on just where your operation stands in terms of the areas covered in this publication.

Resources

Websites

Idaho AgBiz Farm Management & Marketing
<http://web.cals.uidaho.edu/idahoagbiz/>

Economic Research Service
<http://www.ers.usda.gov/>

Livestock Marketing Information Center
<http://www.lmic.info/>

Lost Rivers Grazing Academy
<https://www.facebook.com/LostRiversGrazingAcademy>

State Extension services
<http://www.extension.uidaho.edu/>

Value Added Ag Toolbox
<http://www.valueaddedag.org/>

Risk Management Tools
<http://www.rightrisk.org/>

AgManager.info
<http://agmanager.org>

Ag Lease 101
<http://aglease101.org/>

Rural Tax Education
<http://ruraltax.org/>

AgPlan
<https://www.agplan.umn.edu/>

Ag Risk and Farm Management Library
<http://www.agrisk.umn.edu/default.aspx>

American Grazing Lands Services LLC
<http://americangrazinglands.com>

Further Readings

Smathers, R. L. 1992. *Understanding Budgets and the Budgeting Process*. Current Information Series 945. University of Idaho Extension, Moscow.
<http://www.cals.uidaho.edu/edComm/pdf/CIS/CIS0945.pdf>

Carkner, R. 2000. *Using Enterprise Budgets To Make Decisions About Your Farm*. Pacific Northwest Extension Publication 535. Washington State University, Pullman.
<http://cru.cahe.wsu.edu/CEPublications/PNW0535/PNW0535.pdf>

Guenther, J. F., and B. B. Davis. 1992. *A Primer On Costs*. Current Information Series 949. University of Idaho Extension, Moscow.
<http://www.cals.uidaho.edu/edComm/pdf/CIS/CIS0949.pdf>

Castle, E. N., M. H. Becker, and A. G. Nelson. 1987. *Farm Business Management: The Decision Making Process*, 3rd ed. Macmillan Publishing Company, New York.

Klair, K. 1998. *Strategically Positioning the Farm Business*. Presented at the Integrated Risk Management Education Sessions, November 1988.
<http://www.agrisk.umn.edu/Library/Display.aspx?RecID=1074>

Authors — Shannon K. Williams, Extension Educator, University of Idaho Extension, Lemhi County, and **C. Wilson Gray**, District Extension Economist, University of Idaho Extension, Twin Falls Research and Extension Center

Appendix 1. Enterprise Budgets

The three budgets shown here are the pasture budget—a main source of feed for the livestock enterprise, a cow-calf budget utilizing MiG rotational grazing with the pasture costs as a feed cost to the cattle, and a partial budget showing the means to analyze the feasibility of adding stockers for a short time to fully utilize spring forage when the rate of forage growth might be too high for the cow-calf operation to fully utilize all the available forage. The stocker addition would make use of the forage and provide additional income.

The enterprise budgets are set up as outlined previously. Gross revenues are followed by a section on operating costs—those expenses which are directly related to the enterprise. Costs here might be irrigation,

veterinary services, trucking, and labor. The section on ownership costs covers expenses which would be incurred regardless of whether production takes place. Items like depreciation, taxes, and insurance fall into this category.

Budget 3 shows the basic format for a partial budget analysis as outlined previously. Positives include additional income and reduced costs. Negatives would be reduced income and increased costs. For this example not every section has a charge, which is typical of this type analysis where small changes are examined for their feasibility. The net result then shows whether the proposed change will likely be profitable, assuming that all items have been accounted for in a realistic way.

Budget 1. Pasture enterprise, 155 acres, pivot irrigated

	Quantity per acre	Units	\$/Unit	Value per acre	Total value
VALUE OF PRODUCTION					
MiG pasture	18	AUM	\$20.00	\$360.00	\$55,800.00
<i>Gross returns</i>				\$360.00	\$55,800.00
OPERATING COSTS					
Irrigation					
Irrigation power	1	acre	\$21.53	\$21.53	\$3,337.15
Labor (irrigation)	1	acre	\$11.85	\$11.85	\$1,836.75
Water assessment				\$0.00	\$0.00
Irrigation operation and maintenance	1	acre	\$18.63	\$18.63	\$2,887.65
Fencing	1	acre	\$0.50	\$0.50	\$77.50
Labor—other	0.3	hour	\$9.00	\$2.70	\$418.50
Fuel				\$0.00	\$0.00
Spot spray		quart		\$0.00	\$0.00
Operating interest (5.50 %)	\$55.21	\$	0.055	\$1.52	\$235.33
<i>Total operating costs</i>				\$56.73	\$8,792.88
<i>Operating cost per AUM</i>				\$3.15	
<i>Net returns above operating costs</i>				\$303.27	\$47,007.12
OWNERSHIP COSTS					
Building depreciation		acre		\$0.00	\$0.00
Building interest		acre		\$0.00	\$0.00
Building taxes, repairs, insurance, misc		acre		\$0.00	\$0.00
Machinery depreciation	1	acre	\$65.92	\$65.92	\$10,217.60
Machinery interest		acre		\$0.00	\$0.00
Machinery taxes, housing, insurance, licenses, misc		acre		\$0.00	\$0.00
Property taxes	1	acre	1.0460%	\$0.01	\$1.62
Land charge (opportunity cost)	750	Int/AC*	5.5000%	\$41.25	\$6,393.75
Farm overhead expenses	56.73	% Op Cost**	2.5000%	\$1.42	\$219.82
<i>Total ownership costs</i>				\$108.60	\$16,832.79
<i>Ownership cost per AUM</i>				\$6.03	
TOTAL COSTS				\$165.33	\$25,625.68
TOTAL COST PER AUM				\$9.18	
NET RETURNS				\$194.67	\$30,174.32

Note: Items with zero value are left in the budget for reference as some operators may have expenses in those categories.

*Interest charge per acre.

**Percent of operating costs.

Budget 2. Cow-calf enterprise, 8-day grazing rotation, 165 head.^a

	Production or weight per animal	Units	Total number of head or units	Price/cost per unit	Value per herd unit	Total value	Per acre
VALUE OF PRODUCTION							
Steer calves	5.5	cwt	0.45	\$150.00	\$371.25	\$61,256.25	\$393.53
Heifer calves	5	cwt	0.216	\$140.00	\$151.20	\$24,948.00	\$160.27
Cull sales	1	head	1	\$121.75	\$121.75	\$20,088.75	\$129.06
<i>Gross returns</i>					\$644.20	\$106,293.00	\$682.85
OPERATING COSTS							
Stocker or replacement purchase	0	cwt	1	\$0.00	\$0.00	\$0.00	\$0.00
Mineral		pound	22	\$0.07	\$1.54	\$254.10	\$1.63
Veterinary costs		head	1	\$18.00	\$18.00	\$2,970.00	\$19.08
Trucking		head	1	\$12.00	\$12.00	\$1,980.00	\$12.72
Selling costs		head	1	\$17.85	\$17.85	\$2,945.25	\$18.92
Winter feed		head	1	\$143.42	\$143.42	\$23,664.30	\$152.03
Pasture operating charge		head-acre	1.06	\$56.73	\$53.52	\$8,830.34	\$56.73
Death loss (%)		%	\$644.20	\$0.01	\$6.44	\$1,062.93	\$6.83
Repairs			1	\$0.00	\$0.00	\$0.00	\$0.00
Fuel & lube			1	\$25.00	\$25.00	\$4,125.00	\$26.50
Interest on livestock purchase			\$0.00	\$0.06	\$0.00	\$0.00	\$0.00
Operating interest		%	\$277.77	\$0.07	\$9.86	\$1,626.09	\$10.45
<i>Total operating costs</i>					\$287.62	\$47,458.02	\$304.88
<i>Net returns above operating costs</i>					\$356.58	\$58,834.98	\$377.97
OWNERSHIP COSTS							
Machinery, equipment, vehicle depreciation, interest, taxes, insurance		head	1	\$14.00	\$14.00	\$2,310.00	\$14.84
Housing & improvements			1	\$35.00	\$35.00	\$5,775.00	\$37.10
Purchased livestock			1	\$9.00	\$9.00	\$1,485.00	\$9.54
Pasture ownership		acre/head	1.06	\$108.60	\$102.45	\$16,904.72	\$108.60
Farm overhead expenses		head	1	\$7.00	\$7.00	\$1,155.00	\$7.42
<i>Total ownership costs</i>					\$167.45	\$27,629.72	\$177.50
TOTAL COSTS					\$455.08	\$75,087.73	\$482.38
NET RETURNS					\$189.12	\$31,205.27	\$200.47
BREAK-EVEN PRICE (STEERS)						\$105.96/cwt	
BREAK-EVEN PRICE (HEIFERS)						\$98.90/cwt	

^a Budget assumes four cells grazed 8 days each and 32 days to rotate through the four cells. In 180 days each cell is grazed five times.

Budget 3. Partial budget to analyze grazing additional steers in spring. A positive net impact means the proposed change is profitable. A negative net impact means the proposed change is not economic.

1 Additional income	\$/Unit	# Units	Subtotal	3 Reduced income	\$/Unit	# Units	Subtotal
Rent pasture to stockers	\$25.00	20	\$500.00	None			
40 head of 500# stockers for 2 months. Equivalent to 20 AUs per month							
Total additional income			\$500.00	Total reduced income			\$0.00
2 Reduced costs	\$/Unit	# Units	Subtotal	4 Increased costs	\$/Unit	# Units	Subtotal
None				Labor	\$10.00	2	\$20.00
				Livestock labor increase of 2 hours at \$10.00/hr			
				Portable fence	\$129.00	1	\$129.00
				Additional portable fence reel and posts for leader-follower grazing			
Total Reduced Costs			\$0.00	Total increased costs			\$149.00
NET IMPACT		(1 + 2) - (3 + 4)	\$351.00				
VALUE PER HEAD			\$8.78				

Appendix 2. Management Preparedness Evaluation

Mission statement for your operation

1-2 paragraphs outlining your business philosophy and goal(s)

Describing your business

1. *Our operation is formally set up as*

- ? Corporation
- ? Partnership
- ? Sole proprietorship
- ? Danged if we know!

2. *Ours is a*

- ? New business
- ? Ongoing business
- ? Ongoing, but new to us
- ? Other _____

3. *Our product is:*

And it is unique because:

4. *Why will you be a profitable business in the coming year(s)?*

5. *What are your business goals?*

6. *What are your personal goals?*

What is your end product?

1. *What are you selling?*

2. *What benefits are you selling?*

3. *Why is your product unique?*

Market

1. *Who buys from you?*

2. *How would you characterize your markets—growing, steady, or declining?*

3. *Have you segmented your markets? How?*

4. *What social, political, regulatory, economic, and technological changes are taking place that could impact your industry, your market or your market's perception of and desire for your products?*

Competition

1. *Who are your nearest direct competitors?*

2. *Who are your indirect competitors?*

3. *How are those businesses similar to yours? How do they differ?*

4. *What have you learned from them? Their operations? Their advertising?*

Product development plan

1. *Are you considering developing any other products? Other services?*

2. *What is your timeline for development and introduction of them?*

Marketing plan

- 1. Who actually buys from you (wholesalers, distributors, business, consumers) and how does this impact your marketing plan?*
- 2. How do you price your production?*
- 3. How will you attract and hold your target market and increase your market share?*
- 4. Are you planning to enter or leave any markets?*
- 5. Where is your operation located? Why is this a desirable area for your business?*

Sales plan

- 1. Who handles the sales of production in your business?*
- 2. Do you have established annual sales goals?*

Operations plan

- 1. How do you organize the flow of work through our operation? (This is especially important if several people are doing different parts of an overall job.)*
- 2. How do you assure that all tasks are performed? Performed on time?*
- 3. How will you monitor quality?*
- 4. How will you keep costs under control?*

Personnel plan

- 1. What are your current personnel needs?*
- 2. What skills will your employees need in the near future? In three years?*
- 3. What are your plans for hiring and training personnel?*

Management plan

- 1. How does your background/business experience help you on the operation? What are your weakest areas and how do you compensate for them?*
- 2. Who is on your management team?*
- 3. What are their strengths and weaknesses?*
- 4. What are their duties? Are those duties clearly defined?*
- 5. What additional resources are available to your business in the management area?*

Uses and anticipated effects of a loan (additional investment)

- 1. How will the loan make your business more profitable?*
- 2. Will you buy or lease your equipment, vehicles, and location?*
- 3. Do you really need this money? Or, can you make do without?*

Financial

- 1. Have you completed your financial projections? (current balance sheet, income statement, and cash flow for 3 years).*
- 2. Will you need additional cash? Where will you secure it?*
- 3. Have you shown, in realistic terms, that your business will be profitable?*

Executive manager's analysis sheet

Answer true or false.

- Our business plan is not written down so that we can maintain maximum flexibility.
- Our business was the model for the "Survivor" TV series.
- We have a unique product to sell and emphasize its qualities to buyers.
- We know whom our ultimate customer is, and produce to meet that demand.
- We have a strategy for protecting the price we get for our product.
- Our present location is the best for our type of business.
- All our employees know what is expected of their jobs and performance.
- "I" am the management team.
- We only borrow money when it will make the operation more profitable.
- Our business has a plan to remain (become) profitable over the next 3–5 years.

