
THE PRODUCTION PLAN

A dairy farm production plan should address all relevant issues around land, buildings and equipment, feed and milk production, herd management, expansion and construction. It will emphasize those areas most important to the dairy farm for the period being planned. The Sample Dairy Farm is undertaking a complex production plan which includes maintaining current forage and milk production and herd health while constructing new facilities and introducing more cattle. The whole plan would be much more detailed than the limited examples shown here. In addition, you might provide information on siting of buildings, soil and water, drainage, detailed information on new technologies being employed, breeding and health protocols, waste management and other environmental concerns. The production plan is highly integrated with the financial plan which follows. There you will find the cash flows and capital purchase and loan schedules which reflect the construction activity and expanded dairy operation being planned.

The examples on the following page show the depreciated assets of the Sample Dairy Farm before the proposed expansion.

1. Land, Buildings and Facilities

In the Sample Dairy Farm case there is a double 4 herring bone parlour, machine shed, hay and ingredient storage building and a bunker silo. Remember that renovations to milk house and parlour must meet current day milk industry regulations. Site aspects are very important. Sufficient land, manure storage and water supply are all critical factors. Generally, substantial renovations may require updating facilities to meet present day municipal and provincial codes.

2. Equipment

The next example describes the Sample Dairy Farm equipment. If you are establishing or expanding a dairy farm, to prepare your equipment requirements you will need to think carefully about how you plan to produce your products. If possible, talk with people already in the same business to see what equipment they use. Or talk to suppliers of equipment and get their feedback on what you will require. When obtaining cost information, be sure that freight, installation, warranty service and taxes are included or excluded from the prices you are quoted. Also check on lead times for delivery once you have placed your order. Start researching your equipment well in advance of the time you will need it to allow enough time to select equipment and suppliers and to place orders.

Milking equipment is key to efficiency, milk quality and herd health. Note that bulk tanks and milking equipment are regulated under the Milk Industry Act and must meet standards

Land, Buildings and Facilities Example

Farm Buildings

DESCRIPTION	CURRENT VALUE
Housing - Milking Herd	78,305
- Replacement Herd	52,203
Hay Storage (not included above)	29,641
Milking Parlour – Insulated Stud Frame	27,500
Bunker Silo	55,811
Manure Pit with roof	40,719
Power and Wiring	3,575
Site Preparation & Paving	5,500
Machine Shed and Shop	11,220
Total Farm Buildings	304,474

Equipment Example

Farm Equipment

DESCRIPTION	CURRENT VALUE
Tractor (100 hp)	36,000
Tractor (70 hp)	26,400
Front End Loader	3,300
Manure Blade	360
Liquid Manure Spreader	9,000
Forage Harvester	18,000
Cornhead for harvester	3,000
Silage Wagon (hy dump)	6,600
Bale Elevator	600
Baler (square bales)	9,000
Bale Wagon	1,200
Mower / Conditioner	10,200
Hay Tedder & Rake	2,400
Silage Wagon(s)	7,800
Plow (3 x 16)	3,600
Disc (10 ft pull type)	9,000
Cultivator (9 ft)	1,200
Feeding Computer	9,000
Corn Planter	3,000
Fertilizer Spreader	1,200
Cattle Rubber (fly control)	300
Milk Tank and Equipment	61,053
Weed Sprayer	2,700
Auxiliary Power	4,200
Fuel Tanks (2)	1,680
Small Tools	3,600
Water Pump, Line, and Irrigation	41,400
P.T.O. Equipment (post pounder etc.)	1,800
Truck & Car	21,000
Total Farm Equipment	299,240

3. Materials and Supplies

For a new operation, you will need to research your material requirements in much the same way as you have your equipment needs. To do this properly, you'll likely need to prepare detailed lists for the products you plan to grow or produce and then calculate the inputs you will need. Keep your supporting information on how you calculated this information on file in the informal business plan for future use. The example illustrates some of the material requirements for the Sample Dairy Farm. You'll also need to know which suppliers you plan to order from, the quantity and costs of an order and the order lead time if needed.

4. Production Targets

Production goals are an essential part to increasing the profitability of a dairy farm. Since the success of attaining these production goals is subject to uncertainty, three sets of projections will be created. They will include:

- a "pessimistic" scenario;
- a "most likely" scenario;
- an "optimistic" scenario.

The example included shows the forage production targets that the Sample Dairy Farm will attempt to reach by following the production strategies of the following section.

Materials and Supplies Example

Description	Annual Requirement	Total Cost (\$)	Suppliers	Order Lead Time
Crop Supplies		17,000	Growers Co-op	pickup
Feed Grain	450 tonnes	100,000	Top Feeds	1/2 day
Minerals and Supplements	-	12,000	Top Feeds	1 day
Fuel/Oil	23,000 litres	11,500	Valley Oil	1-2 days

Target Forage Production Example

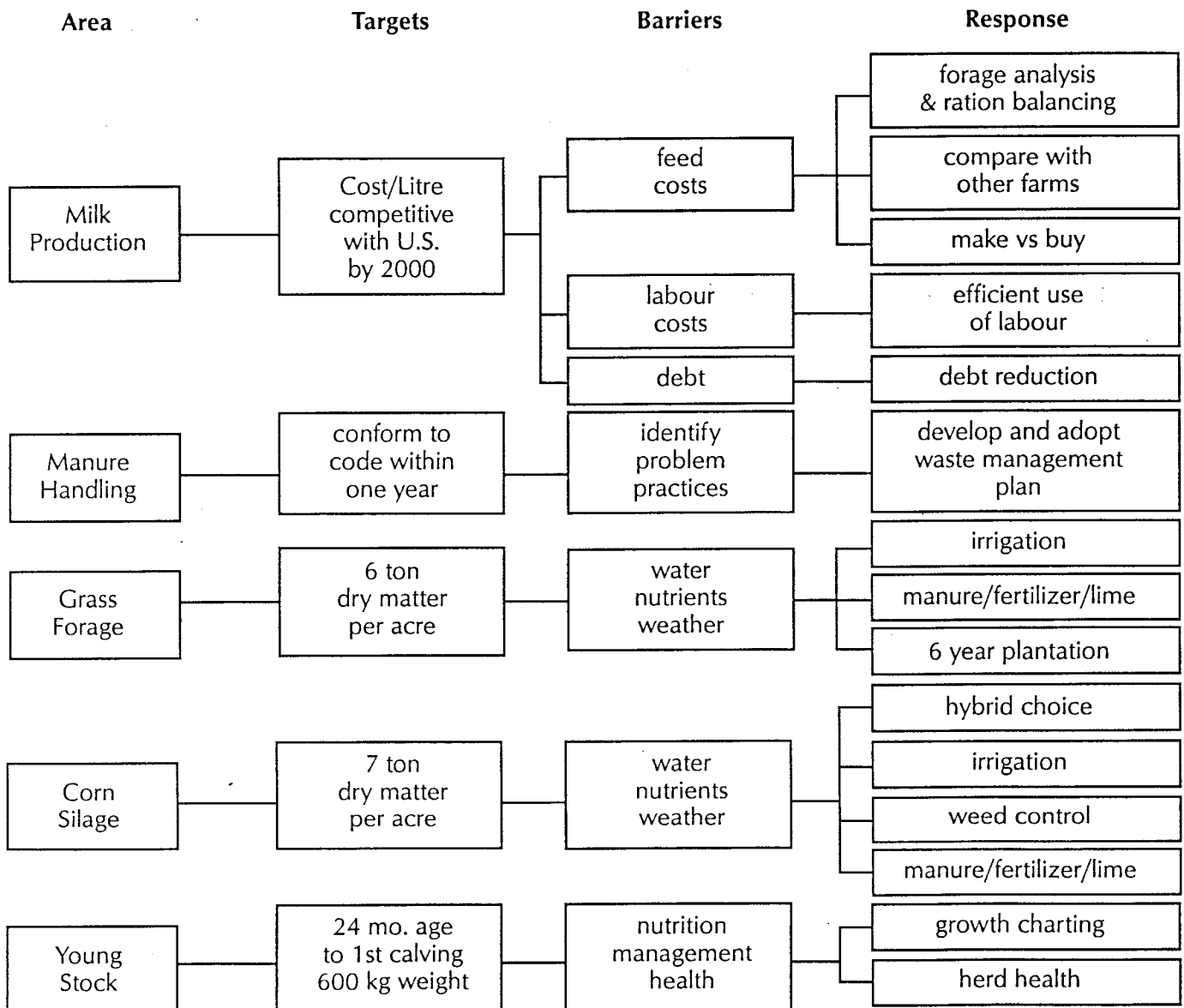
Production Forecasts for Next Three Years

	Optimistic			Pessimistic			Most Likely		
	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3
Grass Forage (dry matter) tons per acre	6	7	7	4	5	5	5	6	6
Corn Silage (dry matter) tons per acre	8	8	8	6	6	6	7	7	7

5. Production Strategies

You will need to carefully research and thoroughly understand the product you are planning to produce, the production system you will be using as well as how to avoid potential problems. This information can then be used to develop plans to optimize yields and profits through appropriate production and labour management activities. The following flow chart shows the strategies that the Sample Dairy Farm will use to reach their production goals. The most likely scenario values are the figures in this chart.

Production Strategies Example



6. Construction Schedule

When new construction or major changes are planned, a construction schedule outlining the necessary steps as well as expected starting and completion dates is useful. Attention should be given to permits and licensing, contracts, as well as delivery and manufacturing schedules. Also, schedule the times when raw materials will have to be ordered and when production and sales are expected to start.

Construction Schedule Example

Construction Schedule		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Site Plan		x																								
Contractor/Permits			x	x																						
Plans to Architect				x	x	x																				
Equipment Dealers						x	x																			
Power/Gas/Water							x	x	x																	
Site Preparations										x																
Footings/Walls											x	x	x	x												
Sand fill Addition														x	x											
Electrician/Plumber															x	x	x	x	x	x	x	x	x	x	x	x
Barn Construction																x	x	x	x	x	x	x	x	x	x	x
Floors/Trusses/Curbs																			x	x	x					
Metal cladding																					x	x				
Stalls/Bins																						x	x			
Install new milk tank																									x	
Move Cows																									x	x

