

Ministry of Agriculture, Food, & Fisheries

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# TRANSITION TO CERTIFIED ORGANIC DAIRY (FLUID) PRODUCTION - 75 Milking Cow Herd on 50 Acres

This information is a tool to project costs and returns for B.C. farm enterprises and is a general guide to plan individual farm operations. This sample budget should be used as a guide only. Each farm should develop their own budget to reflect specific production goals, costs and market prices.

Information regarding financial planning and other enterprise budgets may be viewed at the B.C. Ministry of Agriculture, Food and Fisheries website (http://www.agf.gov.bc.ca/busmgmt/).

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## TRANSITION ISSUES

### **Transition Period**

Before any milk or milk products can be sold as certified organic the following is to be noted:

- A mandatory year of transition for the herd within a certification program is required.
- A transition period for field crops and pasture is 36 months from last prohibited input, with a mandatory year of transition within a certification program.

#### Land

- Milking herd must have at least 120 days per year access to grazing land.
- All animals must have free access to pastures paddocks or runways daily, weather permitting.
- Animals cannot graze on land following applications of raw or composted manure until the material has been biologically broken down. The length of time required is dependent on climate and is therefore at the discretion of a certification officer.

#### Feed

- Certified organic feeds are required.
- Non-synthetic trace minerals and vitamins are preferred. Use of synthetic sources is restricted.
- Feed formulations containing antibiotics, drugs, hormones, chemically extracted or genetically engineered components or components that are synthetically preserved or coloured are prohibited.
- Timing issues in transition should be considered. Producing good quality, home grown forages can offset the costs of purchased feed but be aware that the transition period for field crops is 36 months. You may wish to start transition for the field crops before the dairy transition, as milk produced during transition will not yield the price premium paid for certified organic milk. You will also require sufficient pasture for a 120 day period. If you do not have this in place as a conventional producer, there will be additional capital investment required (e.g., fencing/land) when switching to certified organic production. The pasture will also require a 36 month transition period.

#### Labour

• It is estimated that 25 to 30 % more labour is required to manage an organic operation (handling, manure removal/bedding, composting and herd health monitoring).

#### **Herd Health**

- Hormones for reproductive problems are prohibited.
- Cows with continued mastitis problems need to be culled
- Last resort antibiotic treatment of milking animals will result in a minimum 30 day withdrawal period.

### **Equipment Sanitation Protocol**

 Additional purges or flushes may be necessary for both milking and milk delivery equipment.

#### **Financial Return**

- The level of financial return is influenced by the consumption of organic fluid milk by consumers and the organic milk supply on the market.
- The price for organic fluid milk is fairly stable, but may be more susceptible to supply changes than the conventional sector.
- Further market development is required before more product can be successfully introduced locally.

#### Markets

- Currently there are five organic dairy farms in B.C. while there are more than seven hundred conventional B.C. dairy farm. The average size of a conventional dairy farm is approximately 100 milk cows. The size range of organic operations is 10 to 60 milk cows.
- To ship milk in B.C. producers must obtain a
  Certificate of Approval under the Milk Industry
  Act, a Class C Producer licence from the BC
  Milk Marketing Board, and are required to have
  at least 1,500 kg of Total Production Quota
  (TPQ).

- All milk can be shipped (wholesaled) via the board to either an independent processor or to a cooperative processing plant. In some certified organic dairy farms, the dairy farmer is also the processor (cheese and or yoghurt) and the distributor. Additional permits and certification are required for these on-farm processing facilities.
- If wholesaling, the organic producer is subject to additional freight charges above that charged to conventional producers. The farther away from the processor and the smaller the volume shipped/truck, the more costly the freight charges per hectolitre (hl) of milk shipped. Producers must be certified to sell organic milk and milk products. A list of accredited certifying bodies is available from the Certified Organic Association of B.C.

### **RISK FACTORS & STRATEGIES**

#### **Financial Risks**

- The level of investment capital is substantial for both conventional and certified organic dairy production.
- When switching from conventional to organic the stability of returns may be an issue. Pay careful attention to profit margins, expenses, and in particular labour and feed expenses.
- Labour requirements for organic production are higher so you must determine if you can afford the added labour or if you can complete the additional work yourself.
- Dairy producers can also increase income by raising calves (bulls and surplus heifers) as beef animals. Breeding a portion of the milk herd to beef strains, rather than using all dairy, will help to increase the profit margin from such a venture. Potential returns for certified organic beef should be well researched before entering the market.

#### **Production Risks**

- Reduced morbidity, mortality, and reproductive failures, along with a well managed feeding program, are essential to ensuring optimum milk production and herd longevity. These elements may pose a major challenge to producers, particularly during the transition period from conventional to organic production. For instance, replacement rates of 25 to 30% are optimum for conventional production. The replacement rates tend to be higher during the transition to organic production, the degree of this replacement is dependent on herd make-up and production practices prior to transition. Some genetic strains are more susceptible to disease and some production practices are not conducive to organic production.
- Cows with continued mastitis problems need to be culled. Alternate methods to deal with infections (e.g., parasites, scours, etc.) have to be developed. Hormones and other conventional treatment options for reproductive problems are not permitted in an organic herd.
- Finding a supply of consistent and well balanced organic feed may be difficult.
   Inconsistencies will affect milk production.

### **Handling Risks**

 All milking and milk storage facilities must operate at optimum levels to maintain high milk quality. The risks are generally no greater for organic than conventional production.
 Adjustments in sanitizing methods may be required during transition depending upon the sanitizing procedure and agents used. In general, additional flushing of milking and milk delivery equipment is the only change in the sanitizing procedure required to comply with organic standards.

#### **Price Risks**

 Milk is a supply managed commodity and price for conventional and transitional milk is fairly stable. The market for certified organic milk and milk products is currently quite small.

#### **Market Risks**

- The market for conventional milk is fairly stable in this supply managed industry. There is no distinct market for transitional organic milk and so producers must continue to ship through the same channels as conventional milk producers.
- To ensure success in the organic marketplace, your product must have a high demand. Be aware of other milk producers and distributors that may impact this market niche. The current overall market for certified organic milk and milk products is growing however the ability of local processors to accept additional supplies is limited. Further market development is required before more product can be successfully introduced locally.

## **KEY SUCCESS FACTORS**

- Site selection and design of barn, storage facilities, and general farm layout.
- Strong marketing skills. Ensure processing and distribution channels are in place. Research your markets thoroughly prior to making any investments.
- Track direct (e.g., forage costs) and indirect expenses as much as possible.
- Implementation of sound disease control (e.g., mastitis), breeding, genetic and feeding programs.
- Level of milk production per cow and cost of feed.

## **SAMPLE ENTERPRISE BUDGET & WORKSHEET**

This sample enterprise budget provided should be viewed as a first approximation only. Use the column "Your Farm," to add, delete and adjust items to reflect your specific production situation.

**Projected Income per Milking Cow** 

Projected Income per Milking Cow	Conventiona	lTransition	Certified			Your
			Organic			Farm
	Year 0	Year 1	Year 2	Year 3	Year 4	
Annual production/cow (hl)	85.00	54.25	59.45	69.45	69.45	
Butterfat	1,539	982	1,076	1,257	1,257	
[3.68 kg/hl *\$4.92/kg * annual production]			-	·		
Protein	2,802	1,789	1,960	2,289	2,289	
[3.29 kg/hl * \$10.02/kg * annual production)						
Other solids	673	430	471	550	550	
[5.54 kg/hl * \$1.43/kg * annual production]						
Organic milk premium			1,783	2,083	2,083	
[\$30/hl *annual organic production]						
Livestock sales (replaced animals)	347	467	347	347	347	
Total Projected Income	\$5,361	\$3,667	\$5,637	\$6,527	\$6,527	
Projected Direct Expenses						Your
per Milking Cow						Farm
	Year 0	Year 1	Year 2	Year 3	Year 4	
Labour /WCB & Benefits	\$229	\$229	\$229	\$229	\$229	
Feed		-				
.concentrate	829	1,266	1,236	1,236	1,236	
forage	940	1,571	1,411	1,411	1,411	
.minerals/salt (free choice)	7	7	7	7	7	
milk replacer & calf starter	59	0	0	0	0	
Bedding	40	80	80	80	80	
Sanitizing Agents	80	80	80	80	80	
Vet, Breeding, Medications	115	115	115	115	115	
Tractor fuel	63	72	72	72	72	
Tractor oil & lube	9	11	11	11	11	
Marketing						
promotions, admin.	107	68	75	88	88	
freight levy 1	170	109	139	139	139	
freight levy 2	19	19	19	19	19	
additional organic freight			89	104	104	
D.H.I.S. fees	56	56	56	56	56	
Utilities Utilities	90	90	90	90	90	
Pasture Irrigation (50 acres)	37	37	37	37	37	
Repair & Maintenance	225	225	225	225	225	
Organic Certification fees	223	20	20	20	20	
Total Direct Expenses	\$3,077	\$4,054	\$3,991	\$4,018	\$4,018	
Contribution Margin		-\$387			1	
Contribution Margin (Gross Income-Direct Expenses)	\$2,284	-\$36/	\$1,646	\$2,509	\$2,509	
[O1088 Income-Direct Expenses]		1				<u> </u>

## CALCULATION OF PROJECTED NET INCOME

To assess net income, **indirect expenses** must be subtracted from income. Indirect expenses do not vary with the level of output and are typically associated with inputs used in more than one enterprise and must be allocated appropriately (prorated) between enterprises.

Projected Income			
<b>Less Projected Direct 1</b>	Expenses	-	
= Projected Contributi	on Margin	=	
<b>Less Projected Indirec</b>	t Expenses		
-	Depreciation (e.g., buildings and equipment)	-	
	Interest	-	
	Other Indirect Expenses (e.g., operator labour)	-	
= Projected Net Incom	e		

### SENSITIVITY ANALYSIS

Profitability of dairy operations is influenced by milk production per cow and feed costs. The following tables illustrate the changes in the contribution margin (projected income minus projected direct expenses) as production and feed costs vary.

**Organic** 

Conventional		
	Production/	Contribution
	Cow (hl)	Margin/cow*
85% Target	72.25	\$1,576
Target	85.00	\$2,284
115% Target	97.75	\$2,992

	Production/ Cow (hl)	Contribution Margin/cow*
85% Target	59.03	\$1,634
Target	69.45	\$2,509
115% Target	79.86	\$3,383

	Feed (\$/tonne)	Contribution
		Margin/cow*
85% Target	\$213	\$2,408
Target	\$250	\$2,284
115% Target	\$288	\$2,160

	Feed (\$/tonne)	Contribution
		Margin/cow*
85% Target	\$383	\$2,694
Target	\$450	\$2,509
115% Target	\$518	\$2,323

<sup>\*</sup> Contribution Margin (Projected Income less Direct Expenses)

#### **CASH FLOW TIMING**

The table below indicates the monthly flow of income and direct expenses. A complete Projected Cash Flow should include indirect expenses, capital sales and purchases, loans and personal expenses.

Cash flow is fairly regular on most dairy operations with income and expenses spread uniformly throughout the year. Somewhat higher production can result in the spring and somewhat higher expenses can be incurred during the winter months (e.g., due to inclement weather conditions). The following table illustrates the monthly flow of income and direct expenses. It assumes milk is sent to a processor (e.g., producer does not act as the processor).

	J	F	M	A	M	J	J	A	S	0	N	D
% Income	8	8	9	9	9	9	8	8	8	8	8	8
% Expenses	9	9	8	8	8	8	8	8	8	8	9	9

## **CAPITAL REPLACEMENT COSTS**

	Conventional	Certified	
		Organic	
	Amount	Amount	Net Change*
Total Production Quota (TPQ)*	\$1,337,220	\$1,092,514	-\$244,706
Herd Value	208,800	208,800	0
Buildings	300,000	300,000	0
Tractors	45,000	45,000	0
Implements	31,000	31,000	0
Vehicle(s)	20,000	20,000	0
Milk house/parlour/equip.	150,000	150,000	0
Feed augers/loaders	4,000	4,000	0
Small tools and equip.	7,000	7,000	0
Generator	5,000	5,000	0
Pasture fencing/irrigation	26,562	\$26,562	0
Total	\$2,108,020	\$1,863,314	-\$244,706

<sup>\*</sup> TPQ calculated based on the values from the table below ( Source: B.C. Milk Marketing Board; average of \$57.75 unused and \$54.44 used.)

	Production		B.F.	Rate*	Value
	hl per cow	hl per herd	(kg/hl)	(\$/kg B.F.)	(\$)
conventional	85	6375	3.68	\$57	\$1,337,220
transition & certified organic	69	5208.4	3.68	\$57	\$1,092,514

## **ESTIMATED HOURS OF LABOUR REQUIRED (Annual)**

	Conventional	Conventional Transition		Certified Organic			
Task Completed	Year 0	Year 1	Year 2	Year 3	Year 4		
Feeding	728	728	728	728	728		
Milking	1,456	1,456	1,456	1,456	1,456		
General Maintenance	120	120	120	120	120		
Manure spreading	120	120	120	120	120		
Bedding/manure removal	1,460	2,190	2,190	2,190	2,190		
Composting	0	156	156	156	156		
Herd health/treat/breed	252	384	384	384	384		
Total	4,136	5,154	5,154	5,154	5,154		

### **BUDGET ASSUMPTIONS**

The following assumptions were made in preparing the sample budget:

#### 1. General Farm Information

The operation is a well managed 75 milking cow dairy farm. All feedstuffs, excluding pasture forage, are purchased. Manure is spread onto neighbouring crop land. Milk is collected every second day and delivered to a processor.

#### 2. Herd Information

- a. Herd Size: 75 milking cows
- **b. Calving Interval:** The budget is based on an calving interval of 14 months for conventional, transition and certified organic dairy production allowing for a 87 cow herd to maintain 75 milkers (75 complete lactations per year). Note the interval may vary between production type based on factors such as management and rules of organic certification.
- c. Age at First Breeding: 15-16 months for conventional, transition and certified organic dairy production.
- **d. Replacement Rates:** 30% conventional; 40% transition; and 30% certified organic.
- **e. Herd Numbers** These represent the number of animals used to determine direct expenses to maintain a 75 cow milking herd. The number of heifer calves and the number of bred and open heifers represent the number of heifers needed to replace the milk cows being culled (e.g., If 30% of the milking herd is culled then need 30% x 87 total cows = 26 replacement heifers). Most producers will hold back more heifer calves than noted in the chart below. The extra heifers are sold off later or retained to replace poor producers. Bull calves are generally sold at 7 days old. Production costs and sales of these animals are not accounted for in this sample budget.

	milkers	dry cows	bred	open	heifer
			Heifers	heifers	calves*
conventional:	75	12	18	8	26
transition:	75	12	25	10	35
certified organic:	75	12	18	8	26

- **3. Bedding:** In this budget, it was assumed that the bedding needed on a conventional dairy farm is roughly 1/2 that needed on an organic farm. This factor may vary from farm to farm depending on management and the manure handling system.
- **4. Replacement Rates:** Replacement rates are generally higher in transitional organic herds than in conventional herds. Initially, cows with continued mastitis problems and reproductive disorders need to be culled from the herd. Once the problem cows have been removed, replacement rates should be about the same as in conventional herds and sometimes lower, depending on the philosophies of the producer. This budget assumes 40% replacement for transition herds and 30% replacement for conventional and certified organic herds.

#### 5. Veterinary Fees

The final costs are generally assumed to be about the same for conventional and organic dairy operations. However, variability in the individual costs can arise when comparing conventional and organic production. For example, without the option of using hormone treatments, etc, reproductive disorders may be more of a problem in organic herds until the difficult breeders have been culled. Therefore, the number of services/cow required may be higher in the transitional and recently certified organic herds than in conventional herds. Since most disease treatment options are prohibited in an organic herd, the cost of medications may be lower for certified organic herds than for conventional herds.

### 6. Marketing

Milk production per cow in organic herds is generally lower than that of conventional herds. With limited treatment options, most organic producers tend to accept lower annual milk production in exchange for reduced morbidity.

## a. Milk Production/Volume Shipped Per Cow

This budget assumes calves in the organic production system are fed an average milk intake of 160 litres/calf over 42 days, while calves in the conventional system are fed milk replacer. Note the actual amount of days and milk fed to calves will differ based on management decisions in either method.

	Production	Consumed	Volume	Vol. shipped
		by Calves*	Shipped	
	(L)	(L)	(L)	hl
conventional	8,500		8,500	85.00
transition	5,500	75	5,425	54.25
first year certified organic	6,000	55	5,945	59.45
second year certified organic	7,000	55	6,945	69.45
third year certified organic	7,000	55	6,945	69.45

### b. Returns for Conventional and Transitional Organic Milk:

butterfat [3.68 kg/hl *\$4.92/kg * annual produ		
protein	[3.29 kg/hl * \$10.02/kg * annual production]	
other solids	[5.54 kg/hl * \$1.43/kg * annual production]	

## c. Returns for Certified Organic Milk

Calculated with the same multiple component price structure as above plus a \$0.30/l (\$30/hl) premium.

#### d. Fees & Levies

Administration, promotions and freight levies are outlined as follows:

	7 1	
•	B.C. Milk Marketing Board Administration	\$0.16/hl
•	Dairy Farmers of Canada promotion (butterfat skim-off)	\$0.15/hl
•	Dairy Farmers of Canada promotion (manufactured milk)	\$0.39/hl
•	Dairy Products Promotion Fund (in-quota milk only)	\$0.57/hl
•	Promotions/Administration total	\$1.26/hl
•	Freight levy 1 (regional average*)	\$2.00/h1
•	Freight levy 2	\$8.00 per pick-up
•	Organic producers additional average freight charges	\$1.50/hl

\*regional average calculated from B.C. Milk Marketing Board rates from 8 regions ranging from \$1.46/hl to \$2.51/hl. In addition to the levies that are assigned to conventional producers, organic producers must pay charges to cover the extra costs of shipping to the processor. Since milk cannot be bulked shipped with other milk and the distances to the organic milk processors are generally farther away than for conventional producers, the cost/hl of shipping organic milk is higher. Organic producer-processors do not have this shipping cost, but they have additional costs of marketing and shipping their processed products.

**e.** Livestock Sales: This represents culled (replaced) animals only; assume average sale price is \$1,000 per animal. This value varies based on market acceptance and conditions.

#### 7. Ration Information:

## a. Ration of conventional dairy herd\*:

Heifer calves	18 kg/calf total milk replacer fed over 42 days; free choice 18% calf starter (not
(0 to weaned)	measurable)
Heifer calves	2 kg/animal/day 18% calf starter; grass hay free choice (7.5 kg/day average); 231
(wean to 9 months):	days.
Heifer calves	1 kg/animal/day 16% dairy ration; grass hay free choice (7.5 kg/day average); 92
(9-12 months):	days.
Open & Bred heifers	15 kg DM/animal/day grass as hay, silage or pasture; 365 days.
(>12 months):	
Dry cows:	15 kg DM/animal/day grass-legume as hay, silage or pasture; 61 days.
Milking cows:	9 kg/animal/day 16% organic dairy ration; 15 kg/animal/day grass hay; 365 days.

<sup>\*</sup>Minerals are included in the concentrate (dairy ration) and supplied free choice.

## b. Ration of transitional to certified organic dairy herd\*,\*\*:

Heifer calves	160 litres milk/calf fed over 42 days; free choice 16% organic dairy ration			
(0 to weaned)	(not measurable)			
Heifer calves	2 kg/animal/day 16% organic dairy ration; grass hay free choice			
(wean to 9 months):	(7.5 kg/day average.); 231 days.			
Heifer calves (	1 kg/animal/day 16% organic dairy ration; grass hay free choice			
9-12 months):	(7.5 kg/day average); 92 days.			
Open & Bred heifers	15 kg DM/animal/day grass as hay, silage or pasture*; 365 days.			
(>12 months):				
Dry cows:	15 kg DM/animal/day grass-legume as hay, silage or pasture*; 61 days.			
Milking cows:	7 kg/animal/day 16% organic dairy ration; 15 kg/animal/day grass hay, silage or			
	pasture*; 365 days.			

<sup>\*</sup>Minerals are included in the concentrate (dairy ration) and supplied free choice.

#### c. Pasture & Feed

Amount of feedstuffs are calculated using feed intakes for heifers, dry cows and milking cows. All feed costs are expressed in \$/kg of dry matter. The following table represents amounts for milkers, dry cows and replacement heifers.

	16% dairy ration		grass forages*		minerals **		iodized salt**	
	(tonnes)	(\$/tonne)	(tonnes)	(\$/tonne)	(kg)	(\$/kg)	(kg)	(\$/kg)
Conventional	248.77	\$250	470.21	\$150	500	\$0.90	500	\$0.22
Transitional	211.02	\$450	523.51	\$225	500	\$0.90	500	\$0.22
Certified Organic - yr. 1 to yr.3	206.03	\$450	470.21	\$225	500	\$0.90	500	\$0.22

<sup>\*</sup>amount of grass forages adjusted for 120 days pasture access; pasture assumed to supply 25% of total forage intake.

<sup>\*\*</sup>Bred and milking animals in certified organic production systems require at least 120 days of access to pasture.

<sup>\*\*</sup>minerals & iodized salt: amount fed free choice only; amounts added to the dairy ration are included in the cost of the dairy ration.

The 26 heifer calves in conventional system require 468 kg of milk replacer at a cost of \$2.40/kg and 12 tonnes of calf starter at a cost of \$277/tonne.

Certified organic dairy producers are required to provide a minimum of 120 days access to certified organic pasture. The transition period for pasture is 36 months. Producers may consider starting the pasture transition 24 months prior to the dairy transition, in order to maintain a 1 year transition for milk production. Extra costs (e.g., fencing) may be associated with the pasture requirement, if the producer did not have pasture facilities as a conventional operator. This budget assumes a 50 acre perimeter fenced pasture will cost approximately \$1,562 for fencing materials. Irrigation is budgeted as \$55/acre or \$37/cow. Investment capital for irrigation system is assumed at \$25,000.

#### 8. Labour

It is assumed in this budget that an additional 25 to 30 % more labour is required to complete tasks such as manure removal/bedding and herd health monitoring. Prevention is vital to control mastitis and other diseases, since treatment options are limited. Therefore it is important to spend more time on providing a clean environment for the cows. Additional labour may also be required for composting manure, if the organic operation does not use a liquid manure system.

For the following tasks there <u>are no</u> differences between conventional, transition and certified organic production.

Feeding:	2 hrs/day x 7 days/wk x 52 wks;	728	hrs/yr;	\$10/hr
Milking:	4 hrs/day x 7 days/wk x 52 wks;	1456	hrs/yr;	\$10/hr
Manure spreading:	8 hrs/day x 15 days;	120	hrs/yr;	
General Maintenance:	10 hr/mos	120	hrs/yr;	

For the following tasks there <u>are</u> differences between conventional, transition and certified organic production.

Bedding/manure removal:	4 hrs/day;	1456	hrs/yr;	conventional
	6 hrs/day;	2190	hrs/yr;	transition & c.o.
Composting manure:	3 hrs/wk;	156	hrs/yr;	transition & c.o.
Herd health/treat/breed:	21 hrs/mth;	252	hrs/yr;	conventional
	32 hrs/mth;	384	hrs/yr;	transition & c.o.

The amount of **hired labour** is highly variable on dairy operations. This sample budget assumes 6 hrs/day x 5 days/wk x 50 wks (1,500 hrs/yr) of hired labour. The remainder is completed by the owner/operator.

#### 9. Certification Fees:

To maintain a certified organic status, a farm must be registered with a certified organic or recognized association and have semi-annual inspections completed of all farming operations. Fees can vary considerably depending on the degree of production, length of semi-annual inspection and the certifying body. Certification Fees include membership fees for certifying body, Certified Organic Association of B.C. (COABC) fees, and farm inspection fees. These fees vary greatly according to the certifying body, the level of farm production and the time it takes to complete farm inspections. This budget assumes a total farm certification fee of \$1500/year (\$20/cow equivalent).

## 10. Dairy Herd Improvement Service (D.H.I.S.) Fees:

Based on a 10 times/year 24 hour AM/PM test regime. Fees are calculated as follows:

semi-annual herd fee:	\$100 x 2;	\$200.00
call fee:	\$69.14/call x 10 calls;	\$691.40
test fee:	\$2.90/cow x 75 cows x 10;	\$2,175.00
hourly rate:	\$28.25/hr x 2 hrs x 20 milkings;	\$1,130.00
total herd fee:		\$4,196.40
fee/cow:		\$55.95

## 11. Equipment Maintenance:

### a. Fuel Costs

Fuel costs are assumed as the number of tractor hours x 8 L/hr fuel consumption x \$0.50/L fuel cost.

The number of tractor hours for conventional production are:					
scraping manure/bedding:	2 hrs/day x 355 days;	710	hrs/yr		
spreading manure:	8 hrs/day x 15 days; 120 hrs total	120	hrs/yr		
feeding:	1 hr/day x 355 days;	355	hrs/yr		
total tractor hours:		1185	hrs/yr		
The number of tractor hours for transition and certified organic production are:					
scraping manure/bedding:	2 hrs/day x 355 days;	710	hrs/yr		
composting manure:	organic - 3 hrs/wk x 52 wk:	156	hrs/yr		
spreading manure:	8 hrs/day x 15 days; 120 hrs total	120	hrs/yr		
feeding:	1 hr/day x 355 days;	355	hrs/yr		
total tractor hours:		1341	hrs/yr		

- **b. Repair & Maintenance, Oil & Lube: Assumed at 15% of fuel costs:** These are assumed at 3% of the total Investment Capital Replacement Costs less (Herd Value + TPQ)
- **12. Herd value:** Assumed as \$1,800/cow for milkers/dry; \$1,500/bred heifer; \$1200/open heifer; \$600/ heifer calf (0-12 months average). Note the value for herd replacement will need to be updated based on current market conditions.

#### **Points to Ponder**

There are a number of factors beyond the financial ones given in this sample enterprise budget to consider when switching from conventional to organic production. One of the key elements is managing through the transition process, as this period is usually the most daunting and risky for farmers switching to organic production. You need to assess the related obstacles that may have to be dealt with during this period. Items that may be issues include accessing added capital and finances, finding adequate time and people to meet the increased labour commitment, locating sufficient equipment and production inputs, meeting certification requirements, accessing information and advice with respect to organic dairy production and managing market changes.

With a large number of variables affecting the outcome of making this change in your farm business, good planning is important. In this regard, the financial factors addressed in this budget need to be integrated with your overall farm business plan, including setting both business and personal goals and objectives related to organic production. The better you can articulate your plan and how you will manage risks associated with all these factors will increase your ability to deal with the personal challenges and issues that the transition period may bring. This would include monitoring the plan and making adjustments as required to keep on track. Establishing a support network with other organic producers would also be of value in helping to address some of these factors and to cope with the associated stress.

Your commitment to the business plan and outcome in meeting the goal of going to organic dairy production will increase the likelihood of success. There are numerous business planning resources available in Section B of the Organics Community on the Ministry's InfoBasket website at http://www.infobasket.gov.bc.ca

#### ADDITIONAL INFORMATION:

- BCMAFF Infobasket Organic Community http://www.infobasket.gov.bc.ca/
- COABC.2001. <u>BC Certified Organic Production Operation Policies and Farm Management Standards</u> http://www.certifiedorganic.bc.ca/Standards
- BCMAFF. <u>BC Dairy Talk: Organic Dairy Farming Frequently Asked Questions.</u> Agdex 410 (2000-01) http://www.agf.gov.bc.ca/busmgmt/
- BCMAFF. Planning for Profit: <u>Dairy Fraser Valley. 100 Cow Dairy Operation.</u> Summer 2001 http://www.agf.gov.bc.ca/busmgmt/
- BCMAFF. <u>Preparing a Business Plan: A Guide for Agricultural Producers Dairy Producers Example</u> http://www.agf.gov.bc.ca/busmgmt/
- Environment Canada & Manitoba Agriculture. 1992. <u>Getting Started in Organic Farming</u> http://www.gks.com/library/transition.html
- BC Milk Marketing Board http://www.milk-bc.com
- Canadian Dairy Statistics http://www.dairyinfo.agr.ca
- Certified Organic Association of B.C., 8A 100 Kalamalka Lake Rd., Vernon, B.C. V1T 9G1 Ph: (250) 260-4429 email: coabc@bcgrizzly.com
- BC Certified Organic Industry Information http://www.certifiedorganic.bc.ca

#### **BUDGET DATA SOURCES:**

- Yields, prices: producers, BCMMB (consolidated order, Jan. 2001)
- Labour: producers
- WCB/benefits: Canada Customs & Revenue Agency
- Feed costs/amounts: producers, Unifeed/Armstrong, Ron Barker, Ag Canada pub.1439/E. Dairy Husbandry in Canada.
- Bedding costs/amounts: producers
- Sanitizing agents costs: producers
- Vet, breeding, medications: producers
- Tractor fuel: producers, John Deere Equipment/Kelowna (fuel consumption rates)
- Oil& Lube: standard BCMAFF reference %.
- Marketing: producers, BCMMB
- DHIS fees: Richard Boersma DHIS rep.
- Utilities: producers, BCMAFF 2001 Planning for Profit Dairy budget
- Organic certification fees: producers, Rochelle Eisen

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