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### **EXECUTIVE SUMMARY**

This study was requested by a group of livestock producers in the Gardnerville, NV area, now called the Local Livestock Marketing Group, in an effort to increase the producer share of product revenues through a business entity that is focused on processing and marketing local meat products under a brand name. The creation of a locally produced meat brand offers producers the ability to charge higher prices while maintaining higher quality over non-branded, non-certified products. Branding is a way to differentiate a product and provide higher value through guarantees and simplicity in purchasing. Hence, the purpose of this study is to evaluate the economic feasibility of a producer-owned entity to slaughter, process, and market locally grown, grass-fed meat products in Nevada, as well as gage the interest level of ranchers in northwestern Nevada in forming a business entity to slaughter, process, and market their livestock.

A mail survey of livestock producers was conducted during the fall of 2005, in which 153 producers responded. The results indicate that just over 60% of surveyed livestock producers would be willing to invest money, time, or both in this venture, meaning the business entity may have 91 producer members at its inception. Overall the producer interest in this business and the willingness to invest start-up capital in the business is exciting. There is definitely enough demand for the services of the business to generate the necessary supply of livestock for the business to operate profitably. The location of potential member ranches based on producer survey results indicate that the processing facility should be located in a central location, such as Silver Springs, Nevada,

During the summer of 2006, a survey of residents in Nevada was conducted to gain an understanding of consumer perception and purchasing behavior for meat

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products. Survey respondents rated freshness and taste/flavor as the most important factors in their decision-making process as it pertains to meat purchases. However, 55% of the respondents rated natural grown as extremely or very important meat product attribute, and 36% of respondents rated locally grown as extremely or very important. These individuals constitute a niche market for Nevada grown natural meat products. The highest premiums the consumers in this study were willing to pay centered on high-grade beef products, but all products bearing a grass-fed and locally grown label received high premiums (ranging from \$.02/lb to \$4.33/lb). Across all products the results of this study seem to indicate that the target market for the specialty meat products constitutes younger aged adults (22-35), primarily male, with a higher education level (college graduate) living in northern Nevada. Additionally, the existence of children was important for locally grown labeled products. All product packing, promotion, and distribution decisions should be made with the target market in mind.

The New Generation Cooperative (NGC) seems to provide the most optimal legal situation for the business, as its investment options, distribution of owner's equity, and marketing options best fit the current needs of the livestock producers in Nevada. Using the stock option of ownership in an NGC, each member invests a start-up amount equal to the amount of livestock they plan to provide to the cooperative for slaughter, processing, and marketing. This livestock is purchased at market value, with sales revenues repaying the cost of the livestock, plus a percentage share in the profits at the end of each season paid out to each member. This ensures adequate livestock inputs to maximize production capabilities and provide an initial investment based on ownership, providing an adequate cash flow for start-up operations. Although loans on the entire

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start-up capital requirements were used in the feasibility analysis, it is recommended that the cooperative collect 30% (\$575,843.70) of all start-up costs through the distribution of common stock to the initial investors based on their marketing contacts (their usage of the cooperative's services).

For the first five years, it is recommended that the cooperative focus on retaining its earnings (profits) and establish a cash reserve to weather possible negative economic conditions. These retained earnings offer additional ownership to members, based on the number of shares purchased at the cooperative inception.

### **IV. ECONOMIC FEASIBILITY**

### **Organizational Possibilities**

The following paragraphs describe various business structures that the members of the proposed slaughter/processing facility may want to consider.

## Traditional Cooperative

A cooperative is a business entity that is member-owned, meaning the business is controlled and owned by the same people who utilize its services. The owners of the cooperative finance and operate the business, striving for a mutual benefit by working together. By combining resources, the overall production costs are decreased, and the production capabilities and marketing successes are increased. Cooperatives are run similar to other business entities and usually incorporate under state laws. They require bylaws and a board of directors, who set policy and hire managers to run the day-to-day operations. In addition to the user-owned aspect, two other characteristics make a cooperative different from other business organizations: they are user-controlled, and user-benefited (Rapp and Ely, 1996).

The user-controlled characteristic refers to the election of a board of directors and the ability of common stock holders and/or cooperative members to vote on major organizational issues. User-benefited characteristics include the distribution of resources based on the member's use of the organization. Cooperatives provide a direct cost savings through the purchase of bulk supplies, increases in market access, a distribution of overhead and fixed costs as well as the allocation of profits based on usage to the members.

Cooperative members may finance the start-up and operation costs of the organization through a variety of methods. One option is for members to make a direct financial contribution through a membership fee, or through the sale of common or preferred stock. Another finance method is for the cooperative to withhold a portion of the net earnings from cooperative members for reinvestment back into the organization. Finally, assessment fees can be charged based on the number of units procured from each member, or based on the number of units sold after processing. The advantage of soliciting a direct contribution or utilizing the sale of stock is the upfront cash requirements to purchase capital equipment and building services. Assessment fees and/or net earning withholdings are more beneficial once the cooperative has begun operations and require working capital or future replacement cash.

It is vital to the success of a cooperative that owners stay informed of the business practices. A cooperative is a democratically controlled organization that operates through a majority vote. Members have a monetary interest in the financial well-being of the organization and rely heavily on the education and success of the other member producers. While the pooling of resources helps reduce risk in the market place, judgments and decisions made on one farm can affect the profitability of other cooperative members.

#### *New Generation Cooperative*

The "New Generation Cooperative" (NGC) is similar in structure to traditional cooperatives, but the NGC focuses on marketing niche strategies rather than the traditional cooperative roles, such as production and storage. One of the main focuses of

the NGC is delivery rights, which are tied directly to the initial investment required from each member. The NGC establishes a production volume, and then sells shares based on a delivery commitment from farmers, which stipulates that enough of the NGC's product is produced to fulfill the NGC's capacity requirement. One disadvantage of this system is the inability of the cooperative to encompass new producers, as the production capacity is already maximized at inception. However, delivery rights may be sold or traded to other members of the cooperative and future expansion can allow for the sale of additional delivery rights.

NGCs normally maintain a marketing agreement with the member producers, whereas traditional cooperatives do not. Because NGCs are limited to purchasing products from their members only, they require a much narrower level of quality standards than traditional cooperatives. The process of identity preserved is used to ensure that an acceptable quality product is grown by members, or it can trade lower quality member grain for the higher quality grain needed for processing.

The key advantage to NGCs is the fact that the organization can supply a large amount of its own start-up capital. NCGs can typically generate 30%-50% of their startup capital, lowering long-term private debt commitments and freeing up future profits for larger dividend payments to farmers (Harris, Stefanson, and Fulton, 1996). Additionally, delivery rights ensure a reliable volume of product for the cooperative, while guaranteeing a home for the producer's product. It also allows the cooperative to better react to market conditions.

New generation cooperatives may choose a combination of options, but usually organizations stay within a stock or non-stock form of capital acquisition. Potential

members may feel more comfortable with stock options, as it is a more commonly understood system of capitalization.

Capitalizing refers to the amount of money needed to begin operations and the mechanism for acquiring the cash. Important decisions include whether the cooperative will issue stock or non-stock options (i.e. membership dues), borrow from traditional financial institutions, and determine minimal rates of return for its members. The goal is to provide enough working capital to begin and maintain operations while sustaining manageable debt levels for the organization and making the investment affordable to prospective members.

Ownership certificates come is a variety of forms, including common stock, preferred stock, membership certificates, and capital certificates. In terms of cooperatives, common stocks are shares of the cooperative representing membership/ownership in the cooperative and are accompanied by voting rights. Common stock can be divided into classes, each carrying different voting privileges and assessed different values. Those with more privileges are more expensive to purchase. Cooperatives usually do not pay interest on common stock issued. Preferred stock is nonvoting stock that can be issued to both members and nonmembers of the cooperative. The proceeds from the purchase of preferred stocks are usually used for capital investment and. As with common stock, preferred stock can be divided into classes, each with a different value receiving different scales of interest payments. Preferred stock owners receive interest for their investment, and are usually given their interest dividends before the distribution of profits to common stock holders. If the organization ceased to exist, preferred stock holders are compensated first.

If the members of a cooperative decide that they do not want to offer stock, membership is derived through membership certificates. Voting rights accompany membership certificates, which are issued once membership dues are paid. Usually memberships and capital certificates are insured, but are non-interest bearing. Capital certificates are similar to preferred stock, but are not issued as stock. They are sold in a variety of denominations and do not have accompanying voting rights. Interest may or may not be paid to capital certificate holders, but nonmembers may purchase the certificates.

NGCs require a marketing contract, making all members producers. In an NGC, preferred stock and/or capital certificates are generally not offered. After the cooperative has begun operation, members continue their investment by providing additional risk capital. This can be accomplished in a variety of ways. The cooperative may retain a portion of earnings as an additional investment into the organization. This can be done in two ways: through the payment or retention of a per-unit fee for each member, or through the retention on the overall cooperatives net earnings. Either way, the equity investment is credited to the members' equity accounts and held as a liability on the cooperatives balance sheet.

## Cooperative Legal Considerations

The legal considerations cooperatives must consider include the drafting of articles of incorporation, creating bylaws, membership applications, creating and maintaining marketing and purchase agreements, and revolving fund certificates. While the Capper-Volstead Act of 1922 and the Farm Credit Act of 1971 have aided

cooperatives in their ability to work together in the handling, processing and marketing of their goods, and allows them to borrow jointly, cooperatives are still subject to numerous antitrust laws and are responsible for all tax codes relating to their enterprise.

Articles of incorporation give the cooperative a distinct legal standing. It limits personal liability for debt incurred by the cooperative, excluding the amount of their initial investment. The articles of incorporation also describe the nature of the business entity, its location, the proposed duration of the association, and the names of the principle parties involved. Once drafted, the articles are filed with the Secretary of State, activating the cooperative.

Bylaws define how the cooperative will conduct business. The bylaws describe membership requirements and list the rights and responsibilities of the cooperative's members. They also discuss voting procedures and the board structure that will govern the cooperative.

Membership applications are composed of five main parts: the applicant's statement addressing membership; the signature of the applicant; a statement of cooperative acceptance; signatures of the board president and secretary; and a statement of the duties and intent of the prospective member. A membership certificate may be issued to each member as evidence of entitlements to the organization.

Marketing and purchasing agreements set the standard of quality acceptable to the cooperative. They also state how the proceeds of the cooperative will be distributed, once deductions for operating and capital expenditures have been taken. Often marketing and purchasing agreements are required when seeking outside financial backing.

The revolving funds certificate is a written receipt for capital investments and retained earnings that will eventually be revolved or redeemed. These investments may be deductions based on a per-unit of production, reinvested earnings, or original capital subscription, if not issued in stock form. All legal documents should be written with the help of a lawyer to ensure state provisions are addressed. Appendix A contains the name and contact information for several agricultural lawyers located in Nevada.

Investing risk capital is the responsibility of all members. The amount of risk capital invested is an important decision for the cooperative's members to consider. It must cover a large portion of the start-up and operational costs, so that outside investors feel comfortable that the membership will work to make the operation successful. Members must also invest enough capital to give them a financial stake in the success of the enterprise.

Most private loan institutions will require the cooperative members to assume at least 50% of the capital risk, but it may take many years for the members to acquire this percentage. Long-term credit is available through federal and state sponsored credit programs. Sources of facility loans include: USDA Rural Development; Cobank; St. Paul Bank for Cooperatives; and National Cooperative Bank. Many commercial banks and credit unions have local programs for small business start-up, such as Bank of the West. Cooperatives can apply for short-term loans to cover operating costs during the first year of operation. These are acquired through the Farm Credit System and the National Cooperative Bank (Rapp and Ely, 1996).

# C Corporation

The C corporation is the traditional form of corporation, which is a business entity that provides limited liability to its owners and shareholders, meaning the personal assets of the owners and shareholders are protected from the financial issues of the corporation (Legalzoom.com, 2006). Unlike a sole proprietorship or partnership, a corporation exists as a separate legal entity, and therefore is taxed separately from its directors and shareholders. When a C corporation goes public, it may have an unlimited number of shareholders (who are the legal owners of the corporation), who do not have to be residents or citizens of the United States.

The C corporation is managed by a board of directors elected by the corporation's shareholders and makes policy decisions on the corporation's behalf, while the officers and employees of the corporation conduct the business dealings of the entity. As mentioned, the directors, employees, and shareholders of the corporation are not personally liable for the corporation's debts. However, it is the responsibility of the directors and officers to ensure that certain formalities are observed on the corporation's behalf. This includes formalities such as annual meetings, appointment of officers and election of directors, and issuance of stock. Perhaps the largest responsibility of the corporation is to maintain enough capital to protect the corporation from any business debts. In the event that these formalities are not observed, shareholders may be held personally liable for corporate debts.

## S Corporation

S corporations are C corporations that have elected to file for S corporation tax status. Filing as an S corporation combines the limited liability of the C corporation with the tax status of the sole proprietorship or partnership. The main difference between C corporations and S corporations (and also the major advantage to S corporations) is the tax treatment. While C corporations are subject to double taxation, S corporations are granted "pass through" taxation because all of the corporation's profits are passed on to the shareholders in the form of dividends, so there is no taxation at the corporate level. Another advantage to the S corporation is that the corporation's directors may pass business losses through to their personal income tax return. The biggest disadvantage of the S corporation is the restrictions that are placed on shareholders: an S corporation may not have more than 100 shareholders, who must be citizens or residents of the United States.

## *Limited Liability Company*

As the name implies, a limited liability company (LLC) is a business ownership structure that provides limited liability to its owners, called members. The main differences between the LLC and the corporate structure are that the LLC is more flexible and less formal than the corporation, and the two entities are subject to different tax laws. An LLC can also serve as the general partner in a limited partnership, giving the individual owners protection from liability, financial or otherwise.

Some of the advantages of the LLC are the operating flexibility they provide, including the fact that a board of directors is not required as with corporations, and there

is currently no requirement in Nevada for an annual meeting of the shareholders. As with S corporations, LLCs are also free from double taxation because the LLC members report their share of profits or losses on their personal income taxes. The LLC is not taxed at the business entity level. The final advantage to the LLC is the limited liability the entity provides to its members. Disadvantages of the LLC are that they do not require an operating agreement, the lack of which may lead to management issues, and the fact that while the LLC isn't subject to double taxation, it may be taxed at a higher rate than a corporation.

# **Owner Investment**

Ownership options that can be exchanged between members within the cooperative are referred to as exchangeability. Redemption refers to the expectation that member ownership will be redeemed under specific conditions, such as retirement or death. Investment amounts should be determined by comparative usage requirements. Producers interested in owning more than their usage percentage can purchase additional preferred stock or capital certificates.

Cooperatives must maintain financial reserves to tie them over during periods of reduced production or environmental recession. These reserves can be earmarked for specific spending, such as debt reduction, facility improvements, or operational growth. Reserves also provide peace of mind for members, allowing the cooperative to weather hard times without the need for additional investment by members.

After reserves have been established, the cooperative needs to develop a system to repay investors their initial cash outlays. Usually a percentage of operating revenues are

dedicated for the repayment of owner equity and the purchase of stock or certificates of outgoing members. This can be done in two ways: either a payment amount is determined based on the input of each member; or the resources are pooled and distributed based on the percentage share owned in the cooperative. Both systems require a delayed payment for initial livestock inputs, so that the cooperative pays for the initial livestock and repays profits after the meat has been successfully sold.

With traditional cooperatives, the initial investments are very low, often less than \$100. Ownership is offered through the issuance of capital certificates and not stock options. Traditional cooperatives are generally more restrictive than other ownership types in allowing exchanges. This is usually done through the sale of certificates between members at the board of director's discretion. Traditional cooperatives usually have an established par value for certificates that is determined at the time of buy-in. Traditional cooperatives allow new members to join at any time, so a par value must be established.

Traditional cooperatives use a set price system for profit distribution. Based on the number of certificates owned or the amount of meat produced, the cooperative will disperse profits as flat fees at the close of the business cycle.

Members in new generation cooperatives typically invest \$10,000 - \$12,000 to purchase marketing rights (Coltrain, Barton, and Boland, 2001). NGCs do not normally establish a par value, so ownership stocks are valued at market price. It is highly correlated to the expected profitability of the organization; so certificate sales are usually done through a flat fee. Since NGCs are exchangeable, redemption obligations are not required.

NGCs commonly use the pooling system. In the pooling system, a pool is opened at the start of the production period, with payments made as meat is sold. An initial payment can be arranged at delivery time, with additional progress payments made until the pool is closed and the final margins are determined. The amount of profit distribution is directly tied to the amount of meat generated by each member and is tied to the producer's contract.

For investor-owned firms, stock certificates are purchased, with the stock value based directly on the profitability of the organization, and profits are distributed through dividends. The value of a stock certificate is based on the future anticipated profitability of the enterprise. Stock sales and exchanges can occur through an open market, and nonproducers can buy-in to the cooperative.

# Loans

There are a variety of credit and loan options for start-up businesses. Short-term loans known as development loans are used for start-up and input costs for new businesses. Typically development loans are interest payment only loans for the first three years, and then the cooperative has seven years to repay the principle. The life of the loan is 10 years, and regular inspections occur to insure that the loan is used for input purchases only. Other short-term loans run for three to five years and can be used for the purchase of capital equipment, start-up costs and operational costs. Equipment loans, or lease lines, can be issued for capital equipment under \$1 million. These are five-year lines of credit, where loan funds are accessed only when equipment is purchased.

American AgCredit provides intermediate-loans for land purchase, building improvements, and for the purchase of processing equipment. They provide long-term loans for packing and storage facilities, and real estate purchase and improvement.

Bank of the West requires cooperative members/stockholders to hold 51% of the investment risk; however, there are exceptions for start-up organizations. A new business may be able to hold 30% of the investment risk, meaning 70% of the start-up capital is borrowed, if the cooperative agrees to distribute no more than 20% of the gross profits. All remaining profit must be reinvested into the business in order for the owner investment to increase to 51%. Copies of the bylaws and marketing and purchase agreements must accompany the credit application.

# **Business Plan Financials**

This section of the study addresses financial analyses and recommends an optimal solution to slaughtering and processing animals. Based on research, the analysis performed, and estimated returns on investment, this study recommends operating two mobile slaughter units with a localized processing plant.



**Mobile Slaughter Unit** 

This section also details start-up costs and outlines the current slaughter demand as well as the distributed slaughter schedule to maximize the use of two mobile units. Financial forecasts are detailed for two mobile slaughter units and the processing facility.

I able 4.19: 1st Y ear Fo	ear Forecasted	Financial	als										
			casted	Financials - Yea	- Year 1 - Mobile Slaughter Units and Processing Facility	laughter Unit	s and Process	sing Facility					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
			102 110										
(	315,781 \$	315,781	315,781										3,789,367
		100/2	10017 61 133										34,212 733 502
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	170.158 \$			170.158 \$	170.158 \$	170.158 \$	170.158 \$	170.158 \$	170.158 \$	170.158 \$	170.158 \$	170.158 \$	2.041.894
Salaries- Processing Facility													
		6,008	6,008										72,100
(1)		6,953	6,953										83,441
		3,500	3,500										42,000
loyees (1)		1,787	1,/8/										21,440
		2,064	2,064										24, /68
I axes/Benefits	2,737 \$	2, 737 \$	2,737 \$	2,737 \$	2,737 \$	2,737 \$	2,737 \$	2,737 \$	2,737 \$	2,737 \$	2,737 \$	2,737 \$	32,847
I otal Processing Facility Salaries		23,050	23,050										2/6,596
Salaries- Mobile Slaughter Units													
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I otal Mobile Slaughter Units Salaries \$ Total Salaries	19,484 \$ 42.533 \$	19,484 \$ 42.533 \$	19,484 \$ 42,533 \$	19,484 \$ 42.533 \$	19,484 \$ 42.533 \$	19,484 \$ 42.533 \$	19,484 \$ 42.533 \$	19,484 \$ 42.533 \$	19,484 \$ 42.533 \$	19,484 \$ 42.533 \$	19,484 \$ 42.533 \$	19,484 \$ 42.533 \$	233,803 510,399
Expenses													
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Payment		15,273	15,273										183,277
		150	150	150	150		150	150	150		150	150	1,800
plies		500	500								500 \$	500 \$	6,000
		100	100								100 \$		1,200
Taxes (3.0316)			'										45,651
Utilities \$	1,000 \$			1,000 \$	1,000 \$	1,000 \$	1,000 \$	1,000 \$	1,000 \$	1,000 \$	1,000 \$	1,000 \$	12,000
Total Processing Facility Expenses \$	57,906 \$	17,848	17,848			17,848 \$			- 8				337,541
Mobile Slaughter Unit Expenses													
_		100	100					100 \$			100 \$	100 \$	1,200
		200	200		200 \$				200 \$				2,400
	400 \$	400	400	400 \$		400 \$	400 \$	400 \$		400 \$	400 \$		4,800
hter Units										<del>6</del> 9 -			3,800
ent Repairs		150	150										1,800
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8		229	229			229 \$	229 \$					229 \$	2,750
Total Mobile Slaughter Unit Expenses \$		11,003	11,003				11,003 \$						180,338
	113,409 \$	28,851	28,851	40,264 \$	28,851 \$		40,264 \$	28,851 \$	28,851 \$	40,264 \$	28,851 \$	81,820 \$	517,879
Operating Profit/(Loss) \$		98,773	98,773				87,361 \$					45,805 \$	1,013,615

Table 4.19: 1st Year Forecasted Financials

# 5-Year Financial Forecast

The table below (Table 4.20) depicts the total revenue, cost of goods, labor, expenses, and gross profit (loss) for both the mobile slaughter units and processing facility for the first five years. Year-to-year changes were calculated at a 5% increase.

			Forecasted F or Units & Pro		ncials sing Facilitie	s					
	Year		Year 2		Year 3		Year 4		Year 5		Total
Processing Facility Revenue											
Beef	3,789,367		3,978,835		4,177,777		4,386,666		4,605,999		20,938,644
Pork	34,212		35,923		37,719		39,605		41,585		189,042
Sheep/Lamb	733,592		770,272		808,785		849,224		891,686		4,053,558
Total Retail Revenue			4,785,029	\$	5,024,281	\$	5,275,495	\$	5,539,269	\$	25,181,245
Less Cost of Goods	\$ 2,515,277		2,641,041	•	2,773,093	•	2,911,747	•	3,057,335		13,898,492
Gross Revenue	1 7 7		2,143,989	\$	2,251,188	\$	2,363,747	\$	2,481,935	\$	11,282,752
Salaries- Processing Facility											
Plant Manager (1)	72,100		75,705		79,490		83,465		87,638		398,398
Product/Brand Marketing Manager (1)	83,441		87,613		91,994		96,593		101,423		461,064
Butcher (1)	42,000		44,100		46,305		48,620		51,051		232,077
Seasonal Employees (1)	21,440		22,512		23,638		24,819		26,060		118,470
Office Staff (1)	24,768		26,006		27,307		28,672		30,106		136,859
Taxes/Benefits	32,847		34,490		36,214		38,025		39,926		181,501
Total Processing Facility Salaries			290,426	\$	304,947	\$	320,195	\$	336,204	\$	1,528,368
Salaries- Mobile Slaughter Units											
Butcher (2)	60,112		63,118		66,273		69,587		73,067		332,157
Driver/Assistant (2)	50,752		53,290		55,954		58,752		61,689		280,437
HACCP Inspector (2)	92,443		97,065		101,918		107,014		112,365		510,806
Taxes/Benefits	30,496		32,021		33,622		35,303		37,068		168,510
Total Mobile Slaughter Units Salaries			245,493	\$		\$	270,656	¢	284,189	\$	1,291,909
Total Salaries	\$ 510,399		535,919	\$	562,715		590,851			\$	
Total Salaries	\$ 510,395	φ	555,919	φ	562,715	ş	590,051	φ	620,393	φ	2,820,278
Processing Facility Expenses	2 600		2 700		2.060		4 467		4 976		10 900
Accounting and Legal	3,600		3,780		3,969		4,167		4,376		19,892
Bank Charges	300		315		331		347		365		1,658
Business License	145		152		160		168		176		801
Depreciation-Building	38,611		40,542		42,569		44,697		46,932		213,350
Depreciation-Furniture and Fixtures	3,636		3,818		4,009		4,209		4,420		20,091
Depreciation-Equipment	6,921		7,267		7,631		8,012		8,413		38,245
Equipment Replacement and Repairs	1,100		1,155		1,213		1,273		1,337		6,078
Insurance: Builders Risk	10,000		10,500		11,025		11,576		12,155		55,256
Insurance: Workers Compensation	15,000		15,750		16,538		17,364		18,233		82,884
Insurance: General Liability	2,500		2,625		2,756		2,894		3,039		13,814
Insurance: Business Personal Property	1,000		1,050		1,103		1,158		1,216		5,526
Janitorial	4,800		5,040		5,292		5,557		5,834		26,523
Loan P&I Payment	183,277		192,441		202,063		212,167		222,775		1,012,724
Office Supplies	1,800		1,890		1,985		2,084		2,188		9,946
Packaging Supplies	6,000		6,300		6,615		6,946		7,293		33,154
Postage	1,200		1,260		1,323		1,389		1,459		6,631
Property Taxes (3.0316)	45,651		47,933		50,330		52,846		55,489		252,249
Utilities	12,000		12,600		13,230		13,892		14,586		66,308
Total Processing Facility Expenses	\$ 337,541	\$	354,419	\$	372,139	\$	390,746	\$	410,284	\$	1,865,130
Mobile Slaughter Unit Expenses											
Accounting and Legal	1,200		1,260		1,323		1,389		1,459		6,631
Cell Phones	2,400		2,520		2,646		2,778		2,917		13,262
Consumable Supplies	4,800		5,040		5,292		5,557		5,834		26,523
Depreciation-Slaughter Units	3,800		3,990		4,190		4,399		4,619		20,997
Equipment Repairs	1,800		1,890		1,985		2,084		2,188		9,946
Fuel/Oil	55,008		57,758		60,646		63,679		66,863		303,954
Insurance: Business Auto and Trailers	25,000		26,250		27,563		28,941		30,388		138,141
Insurance: Workers Compensation	15,000		15,750		16,538		17,364		18,233		82,884
Insurance: General Liability	2,500		2,625		2,756		2,894		3,039		13,814
Loan P&I Payment	62,879		66,023		69,324		72,791		76,430		347,448
Miscellaneous	1,200		1,260		1,323		1,389		1,459		6,631
Tax and License	2,000		2,100		2,205		2,315		2,431		11,051
Truck Maintenance	2,750		2,888		3,032		3,184		3,343		15,198
Total Mobile Slaughter Unit Expenses	\$ 180,338	\$	189,355		198,822		208,763		219,202	\$	996,480
Total Expenses			543,773 1,064,296	\$ \$	570,962 1,117,511		599,510 1,173,387		629,485 1,232,056	\$	2,861,609 5,600,865
Operating Profit/(Loss)											

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# Sensitivity Analysis

The following 4 tables depict the 5-year financial forecasts with differing revenue scenarios.

- (1) Increase in retail meat pricing by 10% (Table 4.21)
- (2) Decrease in retail meat pricing by 10% (Table 4.22)
- (3) Increase in the number of animals slaughtered by 10% (Table 4.23)
- (4) Decrease in the number of animals slaughtered by 10% (Table 4.24)

# Table 4.21: Increase in Retail Meat Pricing by 10%

	Mobile			orecasted Fi Units & Pro		cials sing Facilities	3					
	Year			Year 2		Year 3		Year 4		Year 5		Total
Processing Facility Revenue												
Beef		1,627		4,369,708		4,588,194		4,817,603		5,058,483		22,995,615
Pork		7,633		39,515		41,491		43,565		45,743		207,947
Sheep/Lamb		8,182		848,591		891,021		935,572		982,350		4,465,716
Total Retail Revenue		7,442	\$	5,257,814	\$	5,520,705	\$	5,796,740	\$	6,086,577	\$	27,669,278
Less Cost of Goods		5,277		2,641,041		2,773,093		2,911,747		3,057,335		13,898,492
Gross Revenue	\$ 2,49	2,165	\$	2,616,773	\$	2,747,612	\$	2,884,993	\$	3,029,242	\$	13,770,786
Salaries- Processing Facility												
Plant Manager (1)	7	2,100		75,705		79,490		83,465		87,638		398,398
Product/Brand Marketing Manager (1)		3,441		87,613		91,994		96,593		101,423		461,064
Butcher (1)		2,000		44,100		46,305		48,620		51,051		232,077
Seasonal Employees (1)		1,440		22,512		23,638		24,819		26,060		118,470
Office Staff (1)		4,768		26,006		27,307		28,672		30,106		136,859
Taxes/Benefits		2,847		34,490		36,214		38,025		39,926		181,501
Total Processing Facility Salaries		6,596	\$	290,426	\$	304,947	\$	320,195	\$	336,204	\$	1,528,368
Salaries- Mobile Slaughter Units	~			00.440		00.070		00 507		70.007		000 457
Butcher (2)		0,112		63,118		66,273		69,587		73,067		332,157
Driver/Assistant (2)		0,752		53,290		55,954		58,752		61,689		280,437
HACCP Inspector (2)		2,443		97,065		101,918		107,014		112,365		510,806
Taxes/Benefits		0,496	•	32,021	•	33,622	•	35,303	•	37,068	•	168,510
Total Mobile Slaughter Units Salaries Total Salaries		3,803 0,399	\$ \$	245,493 535,919	\$ \$	257,768 562,715		270,656 590,851		284,189 620,393	\$	1,291,909 2,820,278
Total Salaries	\$ 51	0,399	φ	555,919	φ	562,715	φ	590,651	ð	620,393	φ	2,020,270
Processing Facility Expenses												
Accounting and Legal	:	3,600		3,780		3,969		4,167		4,376		19,892
Bank Charges		300		315		331		347		365		1,658
Business License		145		152		160		168		176		801
Depreciation-Building	3	8,611		40,542		42,569		44,697		46,932		213,350
Depreciation-Furniture and Fixtures		3,636		3,818		4,009		4,209		4,420		20,091
Depreciation-Equipment		6,921		7,267		7,630		8,012		8,413		38,243
Equipment Replacement and Repairs		1,100		1,155		1,213		1,273		1,337		6,078
Insurance: Builders Risk		0,000		10,500		11,025		11,576		12,155		55,256
Insurance: Workers Compensation		5,000		15,750		16,538		17,364		18,233		82,884
Insurance: General Liability		2,500		2,625		2,756		2,894		3,039		13,814
Insurance: Business Personal Property		1,000		1,050		1,103		1,158		1,216		5,526
Janitorial		4,800		5,040		5,292		5,557		5,834		26,523
Loan P&I Payment		3,277		192,441		202,063		212,167		222,775		1,012,724
Office Supplies		1,800		1,890		1,985		2,084		2,188		9,946
Packaging Supplies		6,000		6,300		6,615		6,946		7,293		33,154
Postage		1,200		1,260		1,323		1,389		1,459		6,631
Property Taxes (3.0316)		5,651		47,933		50,330		52,846		55,489		252,249
Utilities		2,000	¢	12,600		13,230		13,892	•	14,586	¢	66,308
Total Processing Facility Expenses	\$ 33	7,541	\$	354,418	\$	372,139	\$	390,746	\$	410,283	\$	1,865,128
Mobile Slaughter Unit Expenses												
Accounting and Legal		1,200		1,260		1,323		1,389		1,459		6,631
Cell Phones		2,400		2,520		2,646		2,778		2,917		13,262
Consumable Supplies		4,800		5,040		5,292		5,557		5,834		26,523
Depreciation-Slaughter Units		3,800		3,990		4,190		4,399		4,619		20,997
Equipment Repairs		1,800		1,890		1,985		2,084		2,188		9,946
Fuel/Oil		5,008		57,758		60,646		63,679		66,863		303,954
Insurance: Business Auto and Trailers	2	5,000		26,250		27,563		28,941		30,388		138,141
Insurance: Workers Compensation		5,000		15,750		16,538		17,364		18,233		82,884
Insurance: General Liability		2,500		2,625		2,756		2,894		3,039		13,814
Loan P&I Payment		2,879		66,023		69,324		72,791		76,430		347,448
Miscellaneous		1,200		1,260		1,323		1,389		1,459		6,631
Tax and License	:	2,000		2,100		2,205		2,315		2,431		11,051
Truck Maintenance		2,750		2,888		3,032		3,184		3,343		15,198
Total Mobile Slaughter Unit Expenses		D,338	\$	189,355	\$	,	\$	208,763	\$	219,202	\$	996,480
		7 0 70	•		•		*		\$	000 405	*	0 004 005
Total Expenses Operating Profit/(Loss)		7,879 3,887	\$ \$	543,773 1,537,081	\$ \$	570,961 1,613,936	\$	599,509 1,694,632		629,485 1,779,364	\$ \$	2,861,607 8,088,900

	Мо			orecasted Fi Units & Pro		cials sing Facilities	5					
		Year 1		Year 2		Year 3		Year 4		Year 5		Total
Processing Facility Revenue		0 404 007		0.575.040		0 750 077		0.044.075		4 400 750		40.044.504
Beef Pork		3,404,967		3,575,216		3,753,977		3,941,675		4,138,759		18,814,594
		30,791 661,240		32,330 694,302		33,947 729,017		35,644 765,468		37,426 803,741		170,138 3,653,768
Sheep/Lamb Total Retail Revenue	\$	4,096,998	¢	4,301,848	¢	4,516,940	¢	4,742,787	¢	4,979,927	¢	22,638,500
Less Cost of Goods	•	2,515,277	Ψ	2,641,041	Ψ	2,773,093	Ψ	2,911,747	Ψ	3,057,335	Ψ	13,898,492
Gross Revenue		1,581,721	\$	1,660,807	\$	1,743,848	\$	1,831,040	\$	1,922,592	\$	8,740,008
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Salaries- Processing Facility												
Plant Manager (1)		72,100		75,705		79,490		83,465		87,638		398,398
Product/Brand Marketing Manager (1)		83,441		87,613		91,994		96,593		101,423		461,064
Butcher (1)		42,000		44,100		46,305		48,620		51,051		232,077
Seasonal Employees (1)		21,440		22,512		23,638 27,307		24,819		26,060		118,470
Office Staff (1) Taxes/Benefits		24,768 32,847		26,006 34,490		36,214		28,672 38,025		30,106 39,926		136,859 181,501
Total Processing Facility Salaries	¢	276,596	¢	<b>290,426</b>	¢	<b>304,947</b>	¢	320,195	¢	336,204	\$	1,528,368
	Ψ	210,000	Ŷ	230,420	Ŷ	004,047	Ŷ	020,100	Ŷ	000,204	Ŷ	1,020,000
Salaries- Mobile Slaughter Units												
Butcher (2)		60,112		63,118		66,273		69,587		73,067		332,157
Driver/Assistant (2)		50,752		53,290		55,954		58,752		61,689		280,437
HACCP Inspector (2)		92,443		97,065		101,918		107,014		112,365		510,806
Taxes/Benefits	•	30,496	•	32,021	•	33,622	•	35,303	•	37,068	•	168,510
Total Mobile Slaughter Units Salaries Total Salaries	\$	233,803 510,399	\$	245,493		257,768		270,656			\$	1,291,909
i otai Salaries	Þ	510,399	Þ	535,919	Þ	562,715	Þ	590,851	\$	620,393	Þ	2,820,278
Processing Facility Expenses												
Accounting and Legal		3,600		3,780		3,969		4,167		4,376		19,892
Bank Charges		300		315		331		347		365		1,658
Business License		145		152		160		168		176		801
Depreciation-Building		38,611		40,542		42,569		44,697		46,932		213,350
Depreciation-Furniture and Fixtures		3,636		3,818		4,009		4,209		4,420		20,091
Depreciation-Equipment		6,921		7,267		7,630		8,012		8,413		38,243
Equipment Replacement and Repairs		1,100		1,155		1,213		1,273		1,337		6,078
Insurance: Builders Risk		10,000		10,500		11,025		11,576		12,155		55,256
Insurance: Workers Compensation		15,000 2,500		15,750 2,625		16,538 2,756		17,364 2,894		18,233		82,884 13,814
Insurance: General Liability Insurance: Business Personal Property		1,000		1,050		1,103		1,158		3,039 1,216		5,526
Janitorial		4,800		5,040		5,292		5,557		5,834		26,523
Loan P&I Payment		183,277		192,441		202,063		212,167		222,775		1,012,724
Office Supplies		1,800		1,890		1,985		2,084		2,188		9,946
Packaging Supplies		6,000		6,300		6,615		6,946		7,293		33,154
Postage		1,200		1,260		1,323		1,389		1,459		6,631
Property Taxes (3.0316)		45,651		47,933		50,330		52,846		55,489		252,249
Utilities		12,000		12,600		13,230		13,892		14,586		66,308
Total Processing Facility Expenses	\$	337,541	\$	354,418	\$	372,139	\$	390,746	\$	410,283	\$	1,865,128
Mobile Slaughter Unit Expenses												
Accounting and Legal		1,200		1,260		1,323		1,389		1,459		6,631
Cell Phones		2,400		2,520		2,646		2,778		2,917		13,262
Consumable Supplies		4,800		5,040		5,292		5,557		5,834		26,523
Depreciation-Slaughter Units		3,800		3,990		4,190		4,399		4,619		20,997
Equipment Repairs		1,800		1,890		1,985		2,084		2,188		9,946
Fuel/Oil		55,008		57,758		60,646		63,679		66,863		303,954
Insurance: Business Auto and Trailers		25,000		26,250		27,563		28,941		30,388		138,141
Insurance: Workers Compensation		15,000		15,750		16,538		17,364		18,233		82,884
Insurance: General Liability		2,500		2,625		2,756		2,894		3,039		13,814
Loan P&I Payment		62,879		66,023		69,324		72,791		76,430		347,448
Miscellaneous Tax and License		1,200 2,000		1,260 2,100		1,323 2,205		1,389 2,315		1,459		6,631
Tax and License Truck Maintenance		2,000		2,100		2,205		2,315		2,431 3,343		11,051 15,198
Total Mobile Slaughter Unit Expenses	\$	180,338	\$	2,000 189,355	\$	198,822	\$	208,763	\$	219,202	\$	996,480
Total Expenses		517,879	\$	543,773		570,961		599,509	\$	629,485		2,861,607
Operating Profit/(Loss)		553,443		581,115		610,171		640,680		672,714		3,058,123
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Table 4.23: Increase in	the Number of Animals	Slaughtered by 10%
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	М			orecasted Fi Units & Proe		sing Facilities	5					
		Year 1		Year 2		Year 3		Year 4		Year 5		Total
Processing Facility Revenue												
Beef		4,161,627		4,369,708		4,588,194		4,817,603		5,058,483		22,995,615
Pork		37,633		39,515		41,491		43,565		45,743		207,947
Sheep/Lamb		808,182		848,591		891,021		935,572		982,350		4,465,716
Total Retail Revenue	\$	5,007,442	\$	5,257,814	\$	5,520,705		5,796,740	\$	6,086,577	\$	27,669,278
Less Cost of Goods	\$	2,766,804		2,905,145		3,050,402		3,202,922		3,363,068		15,288,341
Gross Revenue	\$	2,240,637	\$	2,352,669	\$	2,470,303	\$	2,593,818	\$	2,723,509	\$	12,380,936
Colorian Dranoscing Conjility												
Salaries- Processing Facility Plant Manager (1)		72,100		75,705		79,490		83,465		87,638		398,398
Product/Brand Marketing Manager (1)		83,441		87,613		91,994		96,593		101,423		461,064
Butcher (1)		42,000		44,100		46,305		48,620		51,051		232,077
Seasonal Employees (1)		21,440		22,512		23,638		24,819		26,060		118,470
Office Staff (1)		24,768		26.006		27,307		28,672		30,106		136,859
Taxes/Benefits		32,847		34,490		36,214		38,025		39,926		181,501
Total Processing Facility Salaries	\$	276,596	\$	290,426	\$	304,947	\$	320,195	\$	336,204	\$	1,528,368
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Salaries- Mobile Slaughter Units												
Butcher (2)		60,112		63,118		66,273		69,587		73,067		332,157
Driver/Assistant (2)		50,752		53,290		55,954		58,752		61,689		280,437
HACCP Inspector (2)		92,443		97,065		101,918		107,014		112,365		510,806
Taxes/Benefits		30,496		32,021		33,622		35,303		37,068		168,510
Total Mobile Slaughter Units Salaries	\$	233,803	\$	245,493		257,768		270,656		284,189	\$	1,291,909
Total Salaries	\$	510,399	\$	535,919	\$	562,715	\$	590,851	\$	620,393	\$	2,820,278
Dressesing Facility Expenses												
Processing Facility Expenses		3,600		3,780		3,969		4,167		4,376		19,892
Accounting and Legal Bank Charges		3,000		3,780		3,909		347		4,370		1,658
Business License		145		152		160		168		176		801
Depreciation-Building		38,611		40,542		42,569		44,697		46,932		213,350
Depreciation-Furniture and Fixtures		3,636		3,818		4,009		4,209		4,420		20,091
Depreciation-Equipment		6,921		7,267		7,630		8,012		8,413		38,243
Equipment Replacement and Repairs		1,100		1,155		1,213		1,273		1,337		6,078
Insurance: Builders Risk		10,000		10,500		11,025		11,576		12,155		55,256
Insurance: Workers Compensation		15,000		15,750		16,538		17,364		18,233		82,884
Insurance: General Liability		2,500		2,625		2,756		2,894		3,039		13,814
Insurance: Business Personal Property		1,000		1,050		1,103		1,158		1,216		5,526
Janitorial		4,800		5,040		5,292		5,557		5,834		26,523
Loan P&I Payment		183,277		192,441		202,063		212,167		222,775		1,012,724
Office Supplies		1,800		1,890		1,985		2,084		2,188		9,946
Packaging Supplies		6,000		6,300		6,615		6,946		7,293		33,154
Postage		1,200		1,260		1,323		1,389		1,459		6,631
Property Taxes (3.0316)		45,651		47,933		50,330		52,846		55,489		252,249
Utilities	•	12,000	•	12,600	•	13,230	•	13,892	•	14,586	•	66,308
Total Processing Facility Expenses	\$	337,541	\$	354,418	\$	372,139	\$	390,746	\$	410,283	\$	1,865,128
Mobile Slaughter Unit Expenses												
Accounting and Legal		1,200		1,260		1,323		1,389		1,459		6,631
Cell Phones		2,400		2,520		2,646		2,778		2,917		13,262
Consumable Supplies		4,800		5,040		5,292		5,557		5,834		26,523
Depreciation-Slaughter Units		3,800		3,990		4,190		4,399		4,619		20,997
Equipment Repairs		1,800		1,890		1,985		2,084		2,188		9,946
Fuel/Oil		55,008		57,758		60,646		63,679		66,863		303,954
Insurance: Business Auto and Trailers		25,000		26,250		27,563		28,941		30,388		138,141
Insurance: Workers Compensation		15,000		15,750		16,538		17,364		18,233		82,884
Insurance: General Liability		2,500		2,625		2,756		2,894		3,039		13,814
Loan P&I Payment		62,879		66,023		69,324		72,791		76,430		347,448
Miscellaneous		1,200		1,260		1,323		1,389		1,459		6,631
Tax and License		2,000		2,100		2,205		2,315		2,431		11,051
Truck Maintenance		2,750		2,888		3,032		3,184		3,343		15,198
Total Mobile Slaughter Unit Expenses			\$	189,355		198,822		208,763		219,202		996,480
		E17 970	\$	543,773		570,961	<u>د</u>	EUO EOO	\$	629,485	5	2,861,607
Total Expenses Operating Profit/(Loss)		517,879 1,212,359	\$	1,272,977		1,336,626	-	599,509 1,403,458		1,473,630		6,699,051

	M			orecasted Fi Units & Pro		sing Facilities	5					
		Year 1		Year 2		Year 3	-	Year 4		Year 5		Total
Processing Facility Revenue												
Beef		3,404,967		3,575,216		3,753,977		3,941,675		4,138,759		18,814,594
Pork		30,791		32,330		33,947		35,644		37,426		170,138
Sheep/Lamb		661,240		694,302		729,017		765,468		803,741		3,653,768
Total Retail Revenue	\$	4,096,998	\$	4,301,848		4,516,940	\$	4,742,787	\$	4,979,927	\$	22,638,500
Less Cost of Goods	\$	2,263,749		2,376,937		2,495,783		2,620,573		2,751,601		12,508,643
Gross Revenue	\$	1,833,249	\$	1,924,911	\$	2,021,157	\$	2,122,215	\$	2,228,325	\$	10,129,857
Salaries- Processing Facility												
Plant Manager (1)		72,100		75,705		79,490		83,465		87,638		398,398
Product/Brand Marketing Manager (1)		83,441		87,613		91,994		96,593		101,423		461,064
Butcher (1)		42,000		44,100		46,305		48,620		51,051		232,077
Seasonal Employees (1)		21,440		22,512		23,638		24,819		26,060		118,470
Office Staff (1)		24,768		26,006		27,307		28,672		30,106		136,859
Taxes/Benefits		32,847		34,490		36,214		38,025		39,926		181,501
Total Processing Facility Salaries	\$	276,596	\$	290,426	\$	304,947	\$	320,195	\$	336,204	\$	1,528,368
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Salaries- Mobile Slaughter Units												
Butcher (2)		60,112		63,118		66,273		69,587		73,067		332,157
Driver/Assistant (2)		50,752		53,290		55,954		58,752		61,689		280,437
HACCP Inspector (2)		92,443		97,065		101,918		107,014		112,365		510,806
Taxes/Benefits		30,496		32,021		33,622		35,303		37,068		168,510
Total Mobile Slaughter Units Salaries	\$	233,803		245,493		257,768		270,656		284,189		1,291,909
Total Salaries	\$	510,399	\$	535,919	\$	562,715	\$	590,851	\$	620,393	\$	2,820,278
Processing Fraility Francess												
Processing Facility Expenses Accounting and Legal		3,600		3,780		3,969		4,167		4,376		19,892
Bank Charges		3,000		3,780		3,909		4,107		4,370		1,658
Business License		145		152		160		168		176		801
Depreciation-Building		38,611		40,542		42,569		44,697		46,932		213,350
Depreciation-Furniture and Fixtures		3,636		3,818		4,009		4,209		4,420		20,091
Depreciation-Equipment		6,921		7,267		7,630		8,012		8,413		38,243
Equipment Replacement and Repairs		1,100		1,155		1,213		1,273		1,337		6,078
Insurance: Builders Risk		10,000		10,500		11,025		11,576		12,155		55,256
Insurance: Workers Compensation		15,000		15,750		16,538		17,364		18,233		82,884
Insurance: General Liability		2,500		2,625		2,756		2,894		3,039		13,814
Insurance: Business Personal Property		1,000		1,050		1,103		1,158		1,216		5,526
Janitorial		4,800		5,040		5,292		5,557		5,834		26,523
Loan P&I Payment		183,277		192,441		202,063		212,167		222,775		1,012,724
Office Supplies		1,800		1,890		1,985		2,084		2,188		9,946
Packaging Supplies		6,000		6,300		6,615		6,946		7,293		33,154
Postage		1,200		1,260		1,323		1,389		1,459		6,631
Property Taxes (3.0316)		45,651		47,933		50,330		52,846		55,489		252,249
Utilities		12,000		12,600		13,230		13,892		14,586		66,308
Total Processing Facility Expenses	\$	337,541	\$	354,418	\$	372,139	\$	390,746	\$	410,283	\$	1,865,128
Nakila Olavaktan Unit Evananaa												
Mobile Slaughter Unit Expenses		1,200		1 060		1,323		1,389		1 460		6,631
Accounting and Legal Cell Phones		2,400		1,260						1,459 2,917		13,262
Consumable Supplies		2,400 4,800		2,520 5,040		2,646 5,292		2,778 5,557		2,917 5,834		26,523
Depreciation-Slaughter Units		4,800		3,990		4,190		4,399		4,619		20,923
Equipment Repairs		1,800		1,890		1,985		2,084		2,188		9,946
Fuel/Oil		55,008		57,758		60,646		63,679		66,863		303,954
Insurance: Business Auto and Trailers		25,000		26,250		27,563		28,941		30,388		138,141
Insurance: Workers Compensation		15,000		15,750		16,538		17,364		18,233		82,884
Insurance: General Liability		2,500		2,625		2,756		2,894		3,039		13,814
Loan P&I Payment		62,879		66,023		69,324		72,791		76,430		347,448
Miscellaneous		1,200		1,260		1,323		1,389		1,459		6,631
Tax and License		2,000		2,100		2,205		2,315		2,431		11,051
Truck Maintenance		2,750		2,888		3,032		3,184		3,343		15,198
Total Mobile Slaughter Unit Expenses	\$	180,338	\$	189,355	\$	198,822	\$	208,763	\$	219,202	\$	996,480
• •			\$									
Total Expenses	\$	517,879	φ	543,773	Þ	570,961	Þ	599,509	\$	629,485	\$	2,861,607
Total Expenses Operating Profit/(Loss)		804,971		543,773 845,219		887,480		599,509 931,854		629,465 978,447		2,861,607 4,447,972

# Table 4.24: Decrease in the Number of Animals Slaughtered by 10%

### **VI. SUMMARY AND RECOMMENDATIONS**

The purpose of this study is to evaluate the economic feasibility of a producer-owned entity to slaughter, process, and market locally grown, grass-fed meat products in Nevada. Additionally, a primarily goal of this study is to gage the interest level of ranchers in northwestern Nevada in forming a business entity to slaughter, process, and market their livestock. The following provides a summary of the study findings, as well as recommendations that interested ranchers may wish to consider at they move forward.

# **Producer Participation/Interest**

A mail survey of agricultural producers was conducted during the fall of 2005 in which 153 of the 800 surveys mailed were returned and considered complete and usable for an overall response rate of 20%. However, this represents nearly 70% of total livestock producers in northern Nevada. The results of this study indicate that just over 60% of surveyed livestock producers would be willing to invest money, time, or both in this venture, meaning the business entity may have 91 producer members at its inception. According to the production information provided by survey respondents, the potential slaughter/processing/packing business should have the capacity to handle 2,433 cattle on an annual basis (203 cattle/month), 4,262 sheep annually (356/month), and 136 pigs annually (11/month).

The producer respondents indicated a heavy need for slaughter services in the spring and the fall each year, which would create under use of facilities in some months and over capacity demand for facilities in other months. However, the respondents indicated the potential for altering their current calving schedule to smooth out the use of facilities across months. Additionally, the maximum capacity of the two mobile units only allowed for the slaughter of 10

pigs, 168 cattle, and 296 sheep on a monthly basis. Hence, the total animals slaughtered has been reduced by 10% from the findings of the study mentioned in the previous paragraph. It is recommended that owner ranchers be provided incentives to alter their calving, and hence slaughtering schedule, to make full, but not over use of facilities.

Overall the producer interest in this business and the willingness to invest start-up capital in the business is exciting. There is definitely enough demand for the services of the business to generate the necessary supply of livestock for the business to operate profitably; assuming product marketing is managed successfully. The location of potential member ranches based on producer survey results indicate that the processing facility should be located in a central location, such as Silver Springs, Nevada, approximately 35 miles east of Carson City and 26 miles west of Fallon. This central location accommodates the Lahontan Valley, where 28% of ranchers reside (according to survey response); is close to Yerington (32 miles), where an additional 13% of ranchers reside; and is 51 miles from the Carson Valley, where 16% of the ranchers reside. The two mobile slaughter units would be housed at this facility as well, but would travel out to member ranches to perform slaughter services. It is imperative that the USDA guidelines and approval process for meat processing plants be consulted (Federal Register, 1997).

### **Potential Markets**

During the summer of 2006, a survey of residents in Nevada was conducted to gain an understanding of consumer perception and purchasing behavior for meat products. The survey was mailed to a random sampling of 5200 residents representing all regions of the state. A total

of 542 of the returned surveys were considered complete and viable for use in the study, for a response rate of 10.4%.

Survey respondents rated freshness and taste/flavor as the most important factors in their decision-making process as it pertains to meat purchases. However, 55% of the respondents rated natural grown as extremely or very important meat product attribute, and 36% of respondents rated locally grown as extremely or very important. These individuals constitute a niche market for Nevada grown natural meat products. The highest premiums the consumers in this study were willing to pay centered on high-grade beef products, but all products bearing a grass-fed and locally grown label received high premiums (ranging from \$.02/lb to \$4.33/lb). This indicates that the use of these two labels together will bring a higher premium over the labels individually. Additionally, at least 65% of the consumers were willing to pay a premium for the labeled products discussed.

Across all products the results of this study seem to indicate that the target market for the specialty meat products constitutes younger aged adults (22-35), primarily male, with a higher education level (college graduate) living in northern Nevada. Additionally, the existence of children was important for locally grown labeled products. All product packing, promotion, and distribution decisions should be made with the target market in mind.

Based on the analysis presented in Section V of this study, it is recommended that the business establish purchasing contracts (for at least 50% of total meat production) with specialty food stores and gourmet restaurants in the Great Basin region of Nevada, as well as provide the ability to transact sales through their own website. It is also recommended that the products be marketed under one brand name with local and grass-fed or natural labeling, and should feature the family owned ranching members. Promotional and advertising materials should include

descriptions of owner ranches, ranching philosophy, etc. This process will also take the burden of sales and marketing off of member ranchers and will be expedited through the marketing/brand manager employed by the business.

### **Financial/Business Recommendations**

The New Generation Cooperative (NGC) seems to provide the most optimal legal situation for the business, as its investment options, distribution of owner's equity, and marketing options best fit the current needs of the livestock producers in Nevada. The double taxation of C corporations, the maximum membership requirements of S corporations, and the financial pass-through of an LLC make these forms of business organization less than optimal.

Using the stock option of ownership in an NGC, each member invests a start-up amount equal to the amount of livestock they plan to provide to the cooperative for slaughter, processing, and marketing. This livestock is purchased at market value (see section IV for more information), with sales revenues repaying the cost of the livestock, plus a percentage share in the profits at the end of each season paid out to each member. This ensures adequate livestock inputs to maximize production capabilities and provide an initial investment based on ownership, providing an adequate cash flow for start-up operations. Although loans on the entire start-up capital requirements were used in the feasibility analysis, it is recommended that the cooperative collect 30% (\$575,843.70) of all start-up costs through the distribution of common stock to the initial investors based on their marketing contacts (their usage of the cooperative's services). As 91 of the producers said they would be willing to invest in the business, a liberal estimate of potential start-up capital is \$375,500.00 (40 producers at \$5000 each, plus 51 producers at \$2500 each). The remaining \$200,000.00 would need to come from grants or outside investors. Short-

term loans can be used to cover first year's operation costs, and long-term loans can be used to finance any additional capital investments required. It may also be advisable for the cooperative to apply for a USDA-RD value-added production grant to help finance first year operation costs. According to the current year grant specifications, the cooperative could apply for up to \$150,000.00, as long as it is able to secure an equal amount through member investment or loans from non-federal sources (USDA-RD, 2005).

For the first five years, it is recommended that the cooperative focus on retaining its earnings (profits) and establish a cash reserve to weather possible negative economic conditions (see the sensitivity analysis in section IV). These retained earnings offer additional ownership to members, based on the number of shares purchased at the cooperative inception. Livestock producers will require full payment for their livestock at market value in order to maintain their ranch, and hence these payments must be made annually.