

DEMONSTRATION OF IRRIGATION RETURN FLOW WATER QUALITY
CONTROL IN THE MESILLA VALLEY, NEW MEXICO

by

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ABSTRACT

The objective of this report was to evaluate the economic and water use effects of alternative water management systems for the Mesilla Valley, New Mexico, which could result in reduced irrigation return flows to the Rio Grande. The economic effects of four alternative water management systems for improving irrigation water applications were evaluated. Three periods of time (1967, 1973, and 1976) were included in each alternative that represented below-average (1967), average (1973), and above-average (1976) surface water irrigation supplies. The alternatives evaluated were (1) the implementation of Irrigation Scheduling Service (ISS) into the agricultural sector of the Mesilla Valley for the three periods, (2) the addition of sprinkler irrigation for seed emergence of vegetable crops and incorporation with ISS, (3) trickle irrigation on orchard crops in conjunction with ISS, and (4) the combination of ISS, sprinkler irrigation of vegetable crops, and trickle irrigation of orchard crops.

For the base model the average irrigation water application rate per acre during 1967 was 46 acre-inches (60 percent supplied from groundwater), for 1973 was 47.9 acre-inches (50 percent supplied from groundwater), and for 1976 was 46.9 acre-inches per acre (40 percent supplied from groundwater).

A linear programming model (LP) was designed to reflect existing Mesilla Valley agricultural water management practices for each of the time periods.

The quantity of irrigation return flow (drain flow for the base model was determined by incorporating the irrigation water quantities derived from the LP model into the hydrology model. The irrigation efficiencies for the hydrology model were assumed to be 65 percent for the base period. The drain flows for the base water supply periods were 187,411 acre-feet, 207,593 acre-feet in 1973, and 209,960 acre-feet in 1976. The salt load to the Rio Grande from the irrigation return flows was estimated to be 142,949 tons in 1967, 149,772 tons in 1973, and 149,211 tons in 1976.

The base model net return to land and risk to the Mesilla Valley for 1967 was estimated at approximately \$4.3 million, for 1973 at approximately \$5.7 million, and for 1976 at approximately \$14.9 million.

Economic analysis of alternative water management systems for the Mesilla Valley indicated that Irrigation Scheduling Service (ISS) reduced irrigation water use by 17 to 24 percent while net returns to land and risk increased by 5 to 10 percent. A combination of ISS and sprinkler-irrigation of vegetable crops for seed germination resulted in the highest net returns to land and risk with only additional minor savings in irrigation water use. ISS and trickle irrigation management practices only added marginal water savings above ISS, but net returns would be reduced drastically.

ISS could reduce irrigation return flows to the Rio Grande from 30 to 36 percent and the salt load to the river by 42,600 to 46,700 tons annually. ISS plus sprinkler could reduce irrigation return flows by an additional 3 to 5 percent and the salt load by an additional 4,000 to 7,000 tons annually. ISS and trickle-irrigation could reduce return flows 7 to 16 percent below the ISS alternative and the salt load in the river by 14,000 to 30,700 tons annually.

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ECONOMIC ANALYSIS OF IRRIGATION WATER MANAGEMENT
PRACTICES IN THE MESILLA VALLEY

INTRODUCTION

The quality of irrigation return flow represents a major problem in the western United States. The water of the Upper Rio Grande has been reported as a classic example of water quality degradation. Mineral pollution is the most serious problem in the Upper Rio Grande Basin. The problem is serious because the basin is approaching, or has approached, conditions of full development and utilization of the available water resources. There is a progressive increase in the concentration of total dissolved solids and the percent sodium from the upper to the lower sampling stations in the Upper Rio Grande Basin. The relatively large increase in dissolved solids in the river along the irrigated areas is, to a large extent, due to the concentrating effect of irrigation.

Almost all of the valley land in the Upper Rio Grande Basin has a high water table. Where irrigation exists, drainage canals divert water from the "near-surface aquifers" into the Rio Grande. In the Mesilla Valley, as in many other areas, high equilibrium salinity concentrations are known to exist in the near-surface aquifer. The key to achieving a reduction in salt loading is to lower the groundwater levels. The most effective means for lowering groundwater levels is to reduce the source of groundwater flows, which can be accomplished by reducing seepage losses through lining canals and laterals, or by reducing deep percolation losses resulting from excessive irrigation by improved on-farm water management practices.

The U. S. Senate Select Committee (1961) and a U. S. Water Resources Council Study (1968) reports estimated that the Upper Rio Grande and Pecos Basins were the shortest on water in relation to projected future demands of any basin in the continental United States. The Water Resources Council study identified the major problems as water deficiencies, groundwater storage depletion, and poor water quality because of mineral pollution. The past 15-year average inflow to Elephant Butte Reservoir is only about 65 to 70 percent of the long-term average inflow. Thus, a program for reduction of mineral pollution loading is urgently needed in order to protect existing water uses from mineral quality degradation during low-flow periods, and to prevent the serious restriction of future basin-wide economic development.

The general objective of this project was to demonstrate the effect of alternative water management practices on the improvement of the quality of drainage return flow and soil salinity in the Upper Rio Grande Basin. The project area consisted of a 4-acre site and a 450-acre demonstration site. The feasibility of irrigating at or near 100 percent irrigation efficiency with water of medium salinity (1200 ppm.), while maintaining optimum crop yields over a period of many years, was demonstrated on the 4-acre test site at the New Mexico State University Plant Science Farm. At the 450-acre demonstration site in the Mesilla Valley, a combination of present day irrigation technology was used to show how, through modern water management, the return flow quality and quantity can be improved. In addition, an economic analysis was performed to determine the economic feasibility of the water management practices demonstrated.

The primary purpose of this report is to present findings on the economic impact of the alternative irrigation water management practices on the cropped agriculture economy and the reduction in irrigation return flows to the Rio Grande resulting from the water management alternatives.

PHYSICAL DESCRIPTION OF THE MESILLA VALLEY

The Mesilla Valley is located in Dona Ana County in southern New Mexico. It extends from Seldon Canyon north of Radium Springs, New Mexico, southeasterly to the New Mexico-Texas border. The Rio Grande enters the Mesilla Valley at the junction of Seldon Canyon and flows southeast past Las Cruces and Anthony to El Paso Canyon. The Valley is approximately 60 miles long and about 5 miles wide at the widest point just south of Las Cruces (Figure 1).

The irrigated cropland is located predominantly in the valley floor along the Rio Grande. A small amount of the cropland is located on the mesa on either side of the valley. The major flood plains of the valley converge in the vicinity of Las Cruces and drain into the Rio Grande.

The Mesilla Valley is bounded from north to south on the east side by the San Andres, Organ, and Franklin Mountain ranges and on the west side by mesa highlands. The valley has a relatively smooth alluvial floor and is bordered by steep bluffs about 50 to 100 feet high, composed of loosely cemented sand, silt, clay, and gravel. From the bluffs, sloping plains extend away from the river to the mountains.

The drainage into the valley is primarily from arroyos in the mesa highlands toward the river. Drainage is from northwest to southeast. The valley floor varies in altitude from about 4,050 feet at Seldon Canyon to 3,675 feet at El Paso Canyon. This elevation change represents a gradient of approximately .13 percent.

The Mesilla Valley has a recent valley fill less than 150 feet thick, underlain by the Santa Fe Formation, a mixture of sand and gravel interspersed by numerous clay layers. The valley fill is a relatively fast backfill of an earlier river cut. The backfill and valley floor were completed about 10,000 years ago. The upper fill is fine grain sands and silts, while the lower part of the fill is mainly gravel. All groundwater within the Mesilla Valley is within the valley fill.

The Mesilla Valley climate is semi-arid. It is characterized by low annual precipitation, low humidity, high temperature, and persistent wind movements, particularly in the spring. The summer months are, in general, the wettest ones when tropical air masses from the Gulf of Mexico predominate the area and cause thundershowers. These thundershowers are occasionally accompanied by hail which may cause severe crop damage. The high temperatures and low relative humidity result in rainfall being evaporated or transpired rapidly.

The mean annual temperature in the valley is about 60 degrees Fahrenheit. The winters are usually mild and dry, and temperatures above 100° Fahrenheit are not uncommon in the summer months. The frost-free season in the valley usually begins in mid-April and lasts about 200 days until late October.

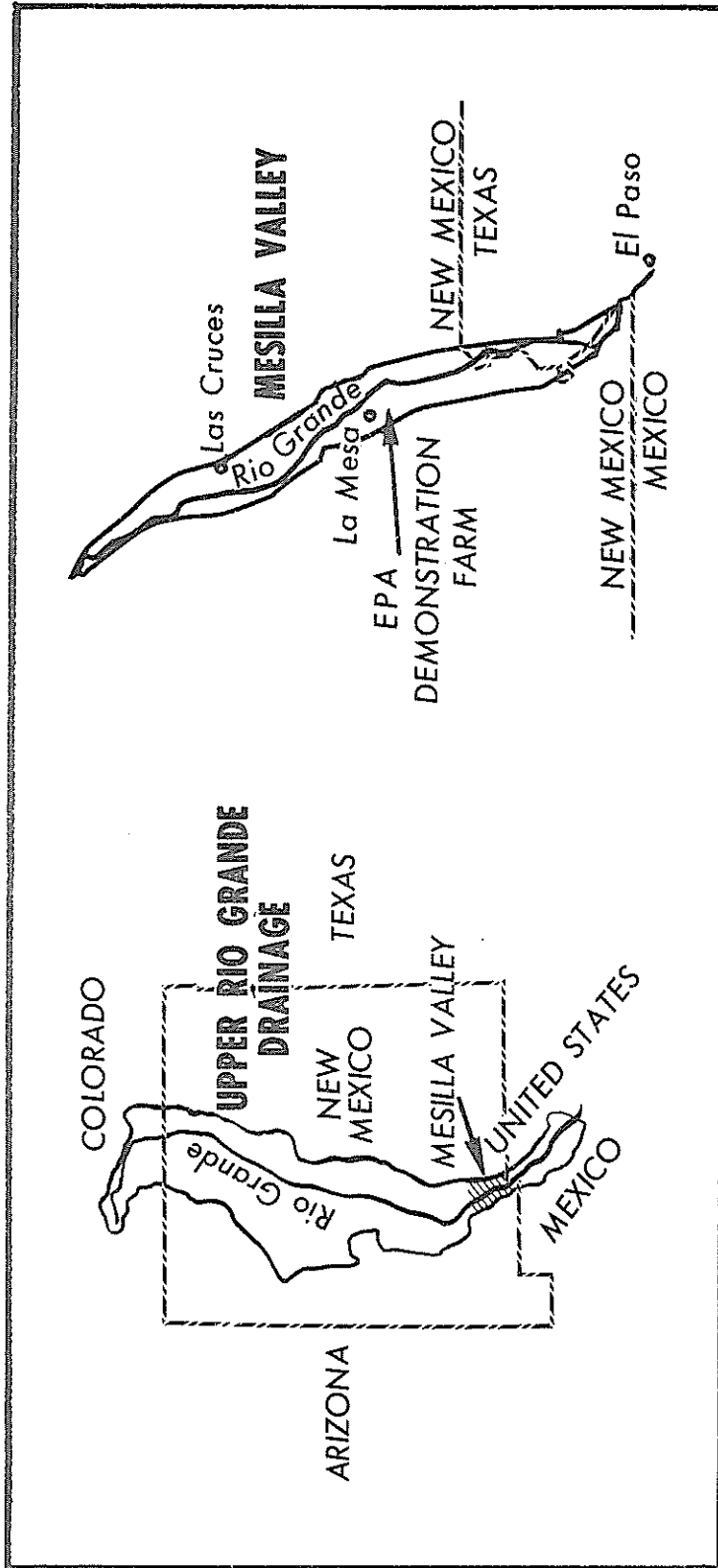


Figure 1. Location of the Mesilla Valley within the Upper Rio Grande Drainage Basin.

Soils

The soils of the Mesilla Valley fall into two distinct divisions--the alluvial section, or the Rio Grande Valley fill, and the narrow margin of upland area of the piedmont slopes. Most of the soil material in the valley floor is alluvial deposit laid down by the Rio Grande. A large portion of this fill has been transported great distances. With no perennial streams and numerous drainage ways, little material from the valley slopes is transported to the valley floor in any one year.

The soils of the Rio Grande flood plain in the Mesilla Valley are of the Glendale-Harkey-Brazito association (USDA, SCS; 1977). These soils are brownish-gray to pale brown and are underlain by alluvial sediments ranging in texture from coarse sandy loam to stratified loams. The principal soil classes are Glendale clay loam, Harkey loam, and the Anthony-Vinton loam (Table 1). Harkey brown loam and Anthony-Vinton loam are characterized as slight to moderately stratified, with thin layers of heavy-textured materials in the subsoil. These soils have very slow to rapid moisture penetration rates and some accumulations of alkali. They occupy the nearly level to gently sloping areas throughout the Mesilla Valley. The Glendale clay loam soils are the most extensive of this association in the valley, occurring in large areas along the river channel in the northern part of the valley and in narrow belts in the southern portion of the valley.

The soils of the highland areas above the valley floor are of the Bluepoint-Calizo-Yturbide associations. The surface layer is generally sandy loam to gravelly loam underlain by sand and gravelly sandy loam. The principal soil type occurring in these areas is the Bluepoint loamy sand (Maker, et al., 1971). This soil forms a belt along the slopes adjacent to the valley floor. It is characterized by very rapid permeability, low fertility, and low waterholding capacity.

Water Conveyance System

The irrigation water conveyance system of the Mesilla Valley consists of an intricate network of primary canals branching into numerous primary and secondary laterals (Figures 2a and 2b). The primary canals are the Leasburg canal which originates at the Leasburg Dam and the East and West Side canals which originate at the Mesilla Dam. The Leasburg canal branches into three primary laterals--the Picacho which crosses the river to serve the west side between Leasburg and Mesilla Dam before emptying in the river channel, and the Las Cruces and Mesilla laterals that branch into numerous secondary laterals to serve the east side before either emptying into the river channel or the East Side canal.

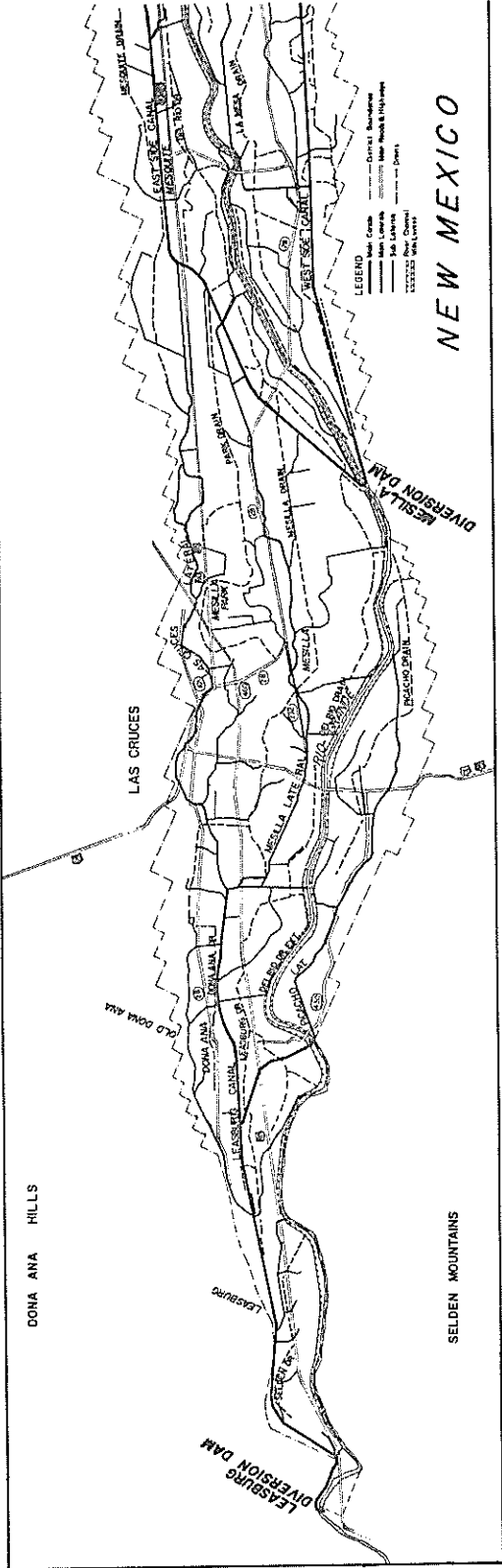
The East Side canal branches into two primary laterals which empty into the river channel below Anthony, New Mexico-Texas. The primary laterals of the East Side canal are the Anthony and the Three Saints laterals which branch into numerous secondary laterals to serve the lands on the east side of the river channel between the Mesilla Dam and La Tuna Detention Farm. The West Side canal branches into two primary laterals, the La Union East and the La Union West. These three, the main canal and the two primary laterals, break into numerous secondary canals supplying the area on the west side of the river between Mesilla Dam and El Paso Dam with surface-irrigation water. A portion of the La Union East lateral crosses the river channel at Borderland to serve lands on the east side of the river.

TABLE 1. SOILS OF THE MESILLA VALLEY, NEW MEXICO

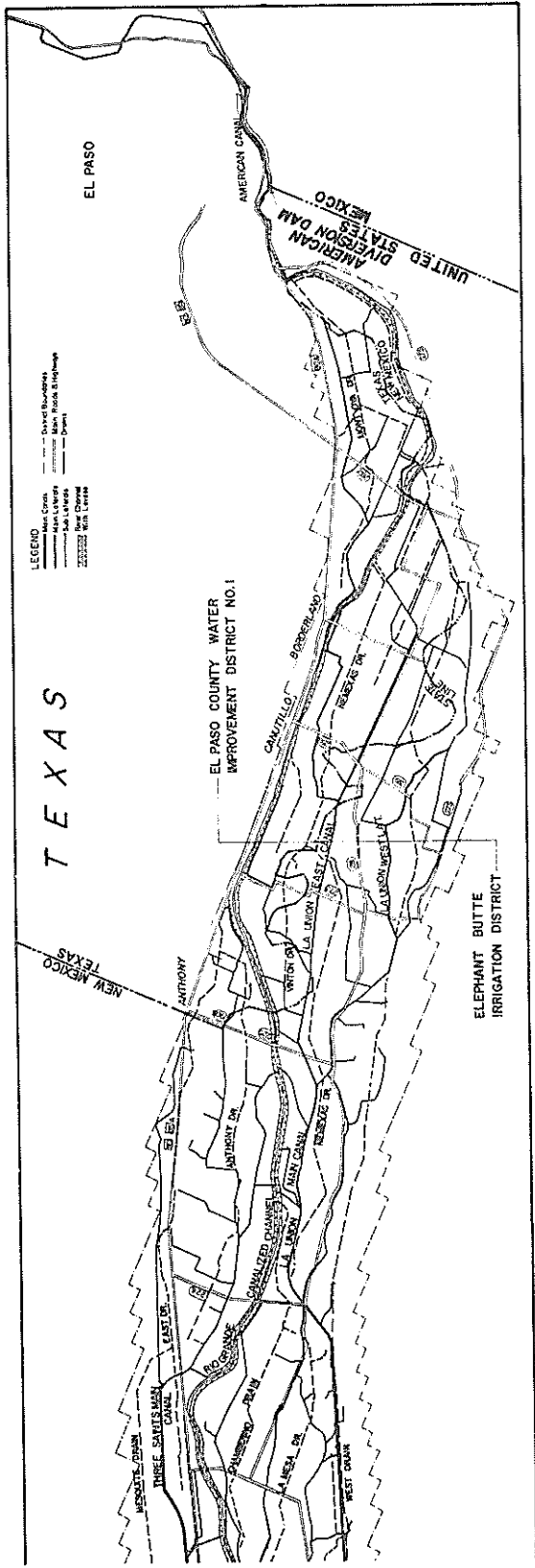
Soil Class	Estimated Acres [*] in Soil Survey (acres)	Estimated Percent in Mesilla Valley (percent)
Agua loam	8,319	6.87
Agua clay loam	652	0.54
Agua variant soils, moderately wet	619	0.51
Agua variant and Belen variant soils	1,864	1.54
Anapra silt loam	601	0.51
Anapra clay loam	7,131	5.89
Anthony-Vinton fine sandy loam	5,788	4.78
Anthony-Vinton loam	6,715	5.55
Anthony-Vinton clay loam	2,058	1.70
Armijo loam	200	0.16
Armijo clay loam	3,566	2.94
Armijo clay	3,387	2.80
Belen loam	213	0.18
Belen clay loam	2,380	1.96
Belen clay	8,350	6.90
Belen variant soils	370	0.30
Brazito loamy fine sand	6,722	5.55
Brazito very fine sandy loam, thick surface	6,677	5.52
Glendale loam	7,821	6.46
Glendale clay loam	19,996	16.52
Glendale clay loam, alkali	595	0.49
Harkey fine sandy loam	586	0.48
Harkey loam	18,691	15.44
Harkey loam, saline and alkali	297	0.24
Harkey clay loam	7,462	6.16

^{*} Acreages include Rincon Valley (4,295 acres) portion of Elephant Butte Irrigation District.

Source: USDA, Soil Conservation Service, "Soil Survey of Dona Ana County, New Mexico", Advance copy, April 1977.



a.



b.

Figure 2. Irrigation conveyance system for the Mesilla Valley.

A portion of the water released is diverted to the Rincon Division at Percha Dam with the remainder flowing down the river channel through the Rincon Valley to be diverted later in the Mesilla and El Paso Divisions. A portion of the water diverted for the Rincon and Mesilla Divisions is returned by drains and wasteways to continue its flow into the El Paso Division of the Rio Grande Project.

Surface water for the Mesilla Division is diverted by the Leasburg Dam into the Leasburg canal, and by the Mesilla Dam into the East and West Side canals. The Leasburg Dam is located at the head of the Mesilla Valley, and the Mesilla Dam (Figure 2a) is located southwest of Las Cruces. Portions of the surface waters diverted for the Rincon Division that are returned to the river channel by drains and wasteways are diverted again at Leasburg Dam. Also, portions of surface waters diverted at the Leasburg Dam that are returned to the river are diverted again at the Mesilla Dam. In addition, water diverted at Leasburg Dam may be added to the East Side canal diversions from the Mesilla Dam (Figures 2a and 2b).

Drainage System

The drains of the Mesilla Valley are a maze of intricately woven open ditches designed to carry excess groundwater away from the cropland into the river channel. The drains are also presented in Figures 2a and 2b. These drains are the primary subjects of studies to reduce irrigation return flows.

Surface Water

Irrigation water in the Mesilla Valley comes from surface and groundwater sources. The surface water is supplied by the Elephant Butte Irrigation District (EBID) through the facilities of Elephant Butte and Caballo Reservoirs with supplementary supplies being provided by district-owned wells. Groundwater is supplied by individual wells and is used as a supplemental source in most cases, except for lands located outside of the district boundaries where it is the only source of irrigation water. Pumpage is the primary source of irrigation water for approximately 4,790 acres.

Surface Water Quantity--

The quantity of surface water has not been a major limitation to irrigated agriculture in the Mesilla Valley since the drought in 1954-56. There have been three other years of shortages in 1964, 1972 and 1978.

The quantity of surface water released to project lands varies widely from year to year, depending upon the amount of storage in Elephant Butte and Caballo Reservoirs. Beginning in 1938, water released for irrigation of Rio Grande Project lands originated from Caballo Reservoir. Prior to 1938, surface waters for irrigation were released from Elephant Butte Reservoir.

The annual diversions and average diversions at the two dams in the Mesilla Valley are reported in Table 2 for the period 1938-1976, as well as the average total diversions for this period. The average total diversions from both dams for the 38-year period was 374,812 acre-feet. The minimum diversion was 177,910 acre-feet in the middle of the drought of 1954-56. The maximum diversion was in 1945 with 547,930 acre-feet.

Table 2. Gross annual diversions of irrigation water from the Rio Grande in the Mesilla Valley, for the period 1938 through 1976

Year	Mesilla Dam			Total
	Leasburg Canal*	East Side Canal**	West Side Canal†	
----- acre-feet -----				
1938	150,960	78,880	202,630	432,470
1939	164,810	90,640	222,433	477,883
1940	154,790	81,386	199,680	435,856
1941	139,130	73,097	182,460	394,687
1942	192,450	95,060	237,650	525,160
1943	219,940	90,810	226,350	537,100
1944	204,340	88,390	215,050	507,780
1945	218,140	97,890	231,900	547,930
1946	205,700	86,750	211,100	503,550
1947	192,680	78,730	200,110	471,520
1948	183,800	83,370	201,880	469,050
1949	188,720	88,440	205,200	482,360
1950	194,010	83,008	196,264	473,282
1951	100,350	50,860	126,470	277,680
1952	100,943	56,250	132,690	289,883
1953	100,664	55,600	139,590	295,854
1954	50,509	37,391	90,010	177,910
1955	35,497	23,551	80,778	139,826
1956	35,340	28,002	84,270	147,612
1957	121,847	35,459	124,036	281,342
1958	162,954	69,788	179,560	412,302
1959	162,450	76,228	165,530	404,208
1960	155,772	77,640	173,490	406,902
1961	124,973	66,615	161,080	352,668
1962	147,965	77,422	171,496	396,883
1963	136,562	67,756	160,430	361,748
1964	78,194	19,242	81,150	178,586
1965	79,884	42,710	109,280	231,874
1966	124,145	56,770	140,948	321,863
1967	122,902	59,088	132,653	314,643
1968	149,711	68,416	166,170	384,297
1969	169,205	71,650	202,160	443,015
1970	164,650	72,056	190,110	426,816
1971	131,808	58,572	154,612	344,992
1972	86,666	35,341	93,364	215,371
1973	121,636	66,665	176,370	364,671
1974	142,709	71,679	189,425	403,813
1975	90,573	69,722	184,303	344,598
1976	146,199	82,845	207,866	436,910
Average	139,835	67,021	167,963	374,819

* Diversion at Leasburg dam to the east side of Rio Grande.

** Diversion at Mesilla dam to the east side of Rio Grande.

† Diversion at Mesilla dam to the west side of Rio Grande.

Source: United States Department of the Interior, Bureau of Reclamation, El Paso Office, unpublished data sheets, 1938-77, 34 pp.

The diversions were the gross annual diversions in the Mesilla Unit of the Rio Grande Project, a portion of which was returned to the river by way of drains and wasteways to be diverted again. Therefore, a portion of the diversion at the Mesilla Dam includes a portion of the diversion from Leasburg Dam. Approximately 45 percent of the gross annual diversions of water by the three diversion dams in the Mesilla Valley were delivered to farms in the valley. The balance was El Paso Valley carriage, canal wastage, seepage, and other unaccounted for losses.

Monthly surface water deliveries to lands in the Mesilla Division of the Elephant Butte Irrigation District are presented in Table 3. These deliveries were calculated from information from the Bureau of Reclamation (1960-1975) and were the net deliveries to the farm (El Paso carriage, canal wastage, seepage, and other unaccounted for losses have been deducted). The average annual delivery to farms was 155,408 acre-feet. Based on the 1976 acreage, the Mesilla Division of the Elephant Butte Irrigation District averaged about 2.7 acre-feet per cropped acre.

Surface water, however, does not represent the full supply of water necessary for the irrigation requirements of the crops produced in the Mesilla Division. Although the surface water is generally of better quality, it is necessary to pump some groundwater to meet the irrigation requirements. The groundwater pumpage will be discussed later in the section dealing with groundwater quantity and quality.

Surface Water Quality--

Records of chemical analysis of the river at El Paso in 1966 and 1967 (USGS, 1974) indicated that the quality of the surface water varied generally with the quantity of water flowing in the river, becoming of poorer quality with small flows and better with larger flows. During the February to October period 1974, the quality of the river averaged about 920 micromhos of specific conductance and the river flow averaged 570 m³/sec. During the April to September period 1975, the quality of the river flow averaged 875 micromhos of specific conductance and the river flow averaged 670 m³/sec.

In 1974, the U. S. Geological Survey reported in Water Resources Data for New Mexico that chemical quality of water in the Rio Grande increased in dissolved solids content by nearly 41 percent between Leasburg, New Mexico, and El Paso, Texas. The surface water of the Rio Grande increased in concentration of dissolved solids downstream from Caballo Dam to El Paso, with the major increases being in silica, calcium, sodium, sulfate, chloride, and boron. Records of the chemical quality of the surface water diverted at the Mesilla Dam were not available, but the surface water is assumed to be lower in quality than when it passed the Leasburg Dam and higher in quality than at El Paso.

The quality of surface water in the Mesilla Valley is not considered a limitation for crop production except in the southern portion below Anthony, New Mexico. In this area, the problem of lower quality surface water is compounded by the existence of poor quality groundwater.

Groundwater

Groundwater in the Mesilla Valley is used 1) to supplement surface water for agricultural use; 2) for municipal use in Las Cruces, Anthony, and numerous small villages; 3) for industry, and 4) for rural domestic use.

Table 3. Monthly deliveries* of surface water to the lands in the Mesilla Division, Elephant Butte Irrigation District, New Mexico, 1960-1975

Year	Month												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
1960	41	17	25,949	26,882	16,355	27,983	29,322	43,314	31,324	857	231	78	202,353
1961	--	75	17,127	25,757	11,906	20,145	31,826	32,183	21,245	1,257	267	--	161,788
1962	38	73	23,143	34,370	14,436	35,667	41,666	42,308	21,827	756	111	59	214,463
1963	85	--	30,233	26,196	9,551	18,207	31,697	28,840	15,017	204	129	47	160,206
1964	43	--	2,266	6,988	171	2,300	4,296	6,160	7,753	5	--	--	29,982
1965	--	--	32	8,663	85	16,469	33,279	36,123	25,040	959	--	26	120,676
1966	--	--	10,731	31,199	13,935	18,744	26,247	34,546	22,519	1,234	194	--	159,349
1967	42	--	33,322	8,428	5,831	7,763	16,718	20,419	20,062	809	299		113,693
1968	90	140	21,653	13,308	7,446	18,985	22,076	31,485	17,198	856	238	--	133,475
1969	--	--	33,737	15,501	11,269	28,256	36,869	49,485	14,102	1,088	263	0	190,570
1970	--	--	32,541	22,254	19,974	26,188	42,859	39,856	24,166	1,056	204	--	209,098
1971	--	--	27,281	11,323	7,366	13,791	23,800	25,516	11,212	191	--	--	120,480
1972	--	--	20,173	6,904	1,848	1,767	13,037	11,649	3,182	40	--	--	58,600
1973	--	--	18,684	21,083	15,371	25,121	30,241	41,561	31,999	1,532	--	--	185,682
1974	--	--	32,655	24,209	20,835	32,993	28,039	32,154	20,122	95	0	0	191,102
1975	--	691	21,634	21,898	21,158	26,469	36,017	35,292	20,169	3,737	--	--	187,065
1976	4,039	7,972	26,730	27,060	27,291	25,719	28,877	35,543	19,243	875	--	--	203,349
Average	258	527	22,276	19,581	11,996	20,461	28,064	32,115	19,219	885	11	--	155,408

* Amount of water delivered to the farm headgates; excludes canal wastage, seepage, and other unaccounted for losses, (calculated from monthly per acre deliveries and annual irrigated acreage).

Source: United States Department of the Interior, Bureau of Reclamation, El Paso Office, unpublished data sheets, 1960-75, 10 pp.

There are about 4,791 cultivated acres in the Mesilla Valley dependent entirely on groundwater for irrigation, and about 87 percent of the approximately 75,000 cultivated acres within the Elephant Butte Irrigation District in 1976 used groundwater as a supplemental source. The irrigation wells in the valley vary in depth, but most are from 50 to 100 feet in depth and water quality is poor in comparison to the surface water. Recently, some large wells have been completed down to 300 feet or more. The depth of irrigation wells is greatly affected by the depth of the water table in the valley. The amount of water in storage in the valley fill and the amount of pumpage is not well known. The pumpage varies from year to year inversely with usable precipitation and the supply of surface water.

Groundwater Sources--

The primary groundwater sources are water seepage from the river, canals, laterals, and irrigation water applied to the lands, precipitation, runoff from arroyos from the mesas to the valley, and groundwater flow from the mesa lands bordering the valley.

Groundwater Quality--

The groundwater quality in the Mesilla Valley varies by location. The quality generally decreases with distance down the valley (Gelhar and McLin, 1979). The greatest concentrations in TDS are in the southern portion of the valley (see Figure 3). The quality of water is usually better with increased depth. Fresh water exists within the Santa Fe group sub-stratum below ground level to a depth of about 1,200 feet extending from near the northern end of the Mesilla Valley generally south to Canutillo (King, 1969). The Santa Fe group generally has water quality with electrical conductivity of about $.57 \times 10^3$ mmhos/cm. South of Canutillo, the water from the Santa Fe group increases in mineral content until it becomes unfit for most uses. This increase in mineral content of the water in the Santa Fe group from north to south in the valley is thought to be due to incomplete flushing of ancient playa lake sediments and to the increased mineral concentrations of the groundwater in the upper horizons by evapotranspiration (Leggat, 1964).

Most of the groundwater used for irrigation in the Mesilla Valley is shallow groundwater. This water is of relatively good quality (less than 3000 ppm TSD) throughout most of the valley but contains more dissolved solids than the water in the underlying Santa Fe group. South of Canutillo, the shallow wells, while having a high concentration of dissolved solids, are of better quality than the water of the Santa Fe group. Leggat, et al., (1964) reported that increases in groundwater withdrawals in the Mesilla Valley were likely to result in increases in the dissolved solids content of the groundwater. Thus, if the shallow aquifer is to remain a source of supplemental supply for irrigation, withdrawals of water must not be so great that an unfavorable salt balance results. Groundwater quality is considered a moderate limitation to about one-third of the irrigated cropland in the valley, and a severe limitation to about one-sixth, primarily in the southern portion of the valley. The deterioration in the quality of shallow groundwater and groundwater in the Santa Fe group is regarded as a major limitation to the further development of shallow groundwater sources for irrigated cropland in the lower portion of the Mesilla Valley.

METHODS AND PROCEDURES

INTRODUCTION

The economic effects of alternative water management systems for improving irrigation water applications were evaluated using four alternatives.

The alternatives evaluated were (1) the implementation of an Irrigation Scheduling Service (ISS) into the agricultural sector of the Mesilla Valley for the period 1967-76, (2) the addition of sprinkler irrigation for seed emergence of vegetable crops and incorporation of ISS, (3) trickle irrigation on orchard crops in addition to ISS, and (4) the combination of sprinkler irrigation for seed emergence of vegetable crops and trickle irrigation on orchard crops in addition to utilizing ISS.

Three periods of time were included in each alternative. The three time periods (1967, 1973, and 1976) were chosen to represent periods of below-average, average, and above-average water supplies: (1) 1967 represented a drought condition when surface water supplies were 115,151 acre-feet which was well below the 17 year average of 157,400 acre-feet, (2) 1973 with a surface water supply of 157,662 acre-feet was rather close to a 17 year average, thus representing an average water supply year, and (3) 1976 surface water supply of 190,715 acre-feet represented an above-average supply of irrigation water (Table 3).

A two-equation mass balance hydrology model was incorporated to utilize the results of the Linear Programming models. The hydrology model utilizes the total surface and ground irrigation water applications for each of the four alternatives to determine the resulting drain flows. From these results, it was possible to determine what effect each of the alternatives had on reducing the irrigation return flows and salt load on the Rio Grande from the Mesilla Valley.

A base Linear Programming (LP) model was designed to reflect existing Mesilla Valley agricultural water management practices. The base model consisted of two parts: (1) the individual crop budgets for each of the water supply periods and (2) the LP model which served as an accounting method for the resources used and the net returns to agricultural land and risk. The individual crop methods provided the primary data for the LP coefficients.

The alternative water management systems were analyzed via a three-step process: (1) revise crop budgets as required for each alternative; (2) incorporate crop budgets into the linear programming model and run the model; and (3) make comparisons to the base model. The comparisons of the revised model with the base model were made with respect to water use (surface and groundwater), total net return to land and risk for the entire Mesilla Valley, and the effect each of the alternatives had on reducing irrigation return flows.

MATERIALS AND METHODS

This portion of the study was confined to the geographic boundaries of the Mesilla Valley in the Lower Rio Grande Basin in New Mexico (see Figure 1). Only irrigated agricultural cropland in production was considered.

Crop Acreage

The 1976 cropped acreage for the Mesilla Valley was determined by evaluating the Elephant Butte Irrigation District (EBID) records and planimetry aerial photographs of the valley for 1976. The 1967 and 1973 acreage was based on 1967 and 1973 Bureau of Reclamation records for the EBID and historical trends of irrigated lands outside the EBID.

Surface and Groundwater Acreage

The cropland of the Mesilla Valley was categorized by source of irrigation water, surface and ground, to determine the total amount of water used by each source. The acreage that received surface water from the EBID was determined from Bureau of Reclamation records and a map of the Mesilla Valley furnished by the Bureau of Reclamation, El Paso Regional Office. These acreages are located in the valley floor and in many cases received supplemental water from groundwater sources (Table 4).

There are 4,791 acres that are irrigated by groundwater only. The area which received irrigation water from groundwater sources only was determined by subtracting the surface and groundwater acreage from the total irrigated acreage in the valley for 1967, 1973, and 1976 (Table 4). Typically these acreages are located on the piedmont slopes and valley highlands and are inaccessible to surface water sources.

Irrigation Requirements

To evaluate the effects of alternative water management practices in the Mesilla Valley, the irrigation water consumptively used by the various crops and an estimate of the irrigation water actually applied were determined. These two values represented the ideal and the actual conditions, respectively, for the valley.

Consumptive Irrigation Requirements--

The consumptive-use estimates obtained from measurements on the Demonstration Farm (see Sammis, 1980) were used to determine the consumptive irrigation requirements (CIR) by crops. These values were compared to estimates of requirements calculated by the modified Blaney-Criddle technique to estimate evapotranspiration for 1976, 1973 and 1967. The results of the Blaney-Criddle calculation for 1976 were comparable to those obtained from field measurements on the Demonstration Farm. The Blaney-Criddle estimates of CIR for 1973 and 1967 were adjusted to be consistent with the 1976 Demonstration Farm measured values reported by Sammis (1980) and those reported by Gelhar and McIn (1979).

Actual Irrigation Applications--

The actual irrigation application efficiency for flood irrigation varies widely between crops. To estimate the total irrigation applications, farmers were interviewed and results from other research were used to arrive at an estimate of the amount of irrigation water (surface and groundwater) that was actually applied.

TABLE 4. IRRIGATION CROP ACRES FOR THE MESILLA VALLEY, NEW MEXICO, 1967, 1973, AND 1976

Crop	Surface and Groundwater			Groundwater Only		
	1967	1973	1976	1967	1973	1976
	----- acres -----					
Alfalfa	10,556	9,865	12,220	1,534	1,211	1,050
Chile	1,388	3,535	3,641	--	198	297
Corn	1,226	869	483	78	100	--
Cotton	39,941	34,506	28,330	1,588	1,503	1,461
Grain Sorghum	1,481	1,830	1,679	93	192	241
Irrigated Pasture	1,560	918	945	20	651	819
Lettuce	3,486	3,278	2,964	7	--	--
Onions	1,988	2,072	2,134	8	--	--
Small Grains	1,888	3,601	7,829	313	686	873
Miscellaneous						
Vegetables	580	2,199	3,295	108	--	--
Tomatoes						
(Processing)	533	300	309	--	--	--
Orchards	<u>4,400</u>	<u>9,037</u>	<u>11,368</u>	<u>233</u>	<u>111</u>	<u>50</u>
Total	69,027	73,010	75,197	3,982	4,652	4,791

The surface water is that water supplied by the EBID from Caballo and Elephant Butte Reservoirs. The amount of surface water supplied in 1967, 1973 and 1976 was obtained from Bureau of Reclamation, El Paso Division, monthly delivery records (Table 3). These deliveries were prorated to all agricultural farm lands in the Mesilla Valley even though a portion may not have received any surface water. Surface water applications were subtracted from total irrigation water requirements resulting in the measure of groundwater application by crop and time periods. The estimated irrigation water application rates by source, crop, and by year are presented in the appendix on the individual enterprise costs and returns budgets and are summarized in Table 5.

EXPERIMENTAL PROCEDURES

Linear Programming

Linear programming (LP) is a technique that is often helpful in decisions requiring a choice among a large number of alternatives. In this study, linear programming was used to account for resources used and returns from irrigated agriculture in the Mesilla Valley.

The base model which served as a proxy for evaluating the alternative water management systems was derived from base-year budgets for 1967, 1973 and 1976. These budgets were considered representative of the irrigated farm sector in the Mesilla Valley for each time period and water supply period.

The budgets for 1973 served as the typical water supply level between the two extremes of 1967 and 1976. In this model, surface water was fixed at the actual EBID farm deliveries as reported in Table 3. Groundwater pumpage was assumed to supply the difference between surface water deliveries and the total irrigation requirements. Therefore, three base LP models were developed representing the three different surface water supply periods (1967, 1973 and 1976). Twelve alternative LP models were developed representing each of the four irrigation management alternatives for each of the surface water supply periods.

After the base models were constructed, in order to analyze a given alternative, budgets and LP coefficients were revised. Each of the 14 crops were constrained to the base level acreages for the alternatives for each of the water supply periods. Therefore, changes in net returns will be due to specific water management practices.

Once the base period linear programming models were developed, various assumptions, detailed below, were made and incorporated into the base-year budgets and linear programming models to represent each of the four irrigation alternatives. The following is a description of each of the four alternatives.

Alternative I (ISS)

The first alternative was the use of Irrigation Scheduling Service (ISS). ISS was evaluated, as were the other three alternatives, to determine what the economic effect would have been on the irrigated farming sector in the Mesilla Valley had it been implemented in 1967, 1973, or 1976. ISS is a procedure of using observed values of solar radiation, precipitation, and evaporation to determine the quantity of irrigation water required to achieve maximum crop production. The irrigation requirements

TABLE 5. PER ACRE IRRIGATION APPLICATIONS BY CROPS IN THE MESILLA VALLEY, NEW MEXICO, 1967,
1973, 1976

Crop	Surface	Ground	Surface	Ground	Surface	Ground
	----- acre-inches -----					
Alfalfa	20.72	54.57	31.60	45.62	32.20	43.29
Chile	19.32	28.44	23.52	16.08	30.00	18.82
Corn Silage	19.32	29.43	23.52	16.98	30.00	13.09
Cotton	19.32	21.29	23.52	22.71	29.88	11.83
Grain Sorghum	19.32	22.91	23.52	11.18	30.00	7.71
Irrigated Pasture	19.32	46.93	23.52	47.66	30.00	37.27
Lettuce (spring)	9.96	20.88	8.71	21.53	8.04	21.00
Lettuce (fall)	6.00	18.14	9.37	24.41	12.00	16.16
Onions (spring)	19.32	23.07	10.53	20.78	12.00	27.00
Onions (fall)	19.32	20.57	23.52	15.59	30.00	10.91
Small Grains (winter)	19.32	14.68	13.01	17.00	20.56	18.60
Small Grains (spring)	10.44	16.74	23.52	1.32	25.56	---
Tomatoes	19.32	31.16	23.52	20.59	30.00	14.86
Pecans	19.32	34.67	30.00	23.25	30.00	23.30

vary with soil type and stage of growth of the individual crops. There were three basic assumptions incorporated into the evaluation of ISS.

The first assumption was to reduce irrigation applications. The application efficiency is typically measured by dividing farm deliveries minus tailwater plus precipitation into the cropland evapo-transpiration quantity (Walker, et al., 1977). Through the use of irrigation, applications are made after estimating the available soil moisture and applying the quantity of irrigation water needed to saturate the soil horizon. Applications should occur when the crop soil moisture utilization approaches the stress level for the specific crop and soil. By using ISS, the farm operator is required to plan both irrigation periods and the quantity of water to be applied. The irrigation efficiencies reported by Sammis (1980) for the Demonstration Farm on alfalfa varied from 76 to 92 percent, cotton from 48 to 84 percent with an average of 72 percent and chile averaged 63 percent. Because of the wide range in irrigation efficiencies after employing ISS on the Demonstration Farm, discussions were held with the ISS contractor and other farmers using ISS. The contractor and the farmers felt that a 10 percent increase in irrigation efficiency was about average when ISS is incorporated. Walker, et al., (1977) also reported the process can reduce irrigation application by approximately 10 percent. Therefore, irrigation applications were reduced by 10 percent from the base alternative for all crops except vegetables.

The second assumption was to increase irrigation labor requirements by 15 percent. This increase in irrigation labor requirements was based on field observation of the Demonstration Farm and farms utilizing ISS in the Mesilla Valley. The increase in irrigation labor was a result of more precise irrigation application rates which required construction of additional checks and furrow borders. These types of pre-irrigation operations result from using alternative irrigation methods such as alternate row irrigations. Alternate row irrigation for row crops such as cotton and chile, is often used in heavier soils similar to those that exist in the Mesilla Valley.

The third assumption was to increase yields on all crops except lettuce and onions by five percent. This rate was estimated based on the increased efficiency of irrigation applications resulting from ISS utilization. By using ISS, plants receive water when it is most beneficial for their growth and development which results in increased yields.

The costs for ISS varied depending on level of service and geographic location. Most prices ranged from \$6.18 to \$14.83 per hectare for ISS (Jensen, 1977). In the Mesilla Valley, the following prices were used, based on the ISS utilized on the Demonstration Farm plus discussions with the manager of ISS company serving the Demonstration Farm: \$4.50 per acre in 1967, \$5.37 per acre in 1973, and \$5.80 per acre in 1976.

Alternative II (ISS and Sprinkler)

The second alternative evaluated was the use of ISS and sprinkler irrigation for seed emergence of vegetable crops. The use of sprinkler irrigation for seed emergence was incorporated as a fixed cost-per-acre contract charge of \$19.40 in 1967, \$23.13 in 1973 and \$25.00 in 1976. This procedure was followed because of the expense of purchasing an irrigation sprinkler system only for seed emergence. In addition, this is the common practice in Mesilla Valley.

There were four assumptions incorporated into the evaluation of ISS and sprinkler irrigation of vegetable crops. The first assumption was to increase the yield levels by five percent above the ISS yield levels. More uniform and earlier stands for vegetables can be expected when sprinkler irrigation is used for seed emergence. The second assumption was to decrease pre-plant irrigation labor for vegetable crops by 34 percent. The 34 percent was the decrease in irrigation labor developed by Cummings and Gisser, (1977) in changing from flood irrigation to a sprinkler irrigation system. The third assumption was to decrease irrigation water applications on lettuce, onions, and tomatoes by an additional 15 percent, and chile by eight percent below that required for ISS alone.

A fourth assumption was to increase the supervision rate by approximately 10 percent for irrigation labor. The use of sprinkler for crop production required that the farm manager devote more time to regulate irrigation requirements and irrigation application rates. In utilizing sprinkler irrigation for seed emergence, it was assumed that the pre-plant flood irrigation would be replaced with two or three pre-emergence sprinkler irrigations.

The on-farm variable cost of the sprinkler system for 1976 was \$0.45 per acre-inch with fixed cost being \$0.39 per acre-inch, for 1973 variable cost was \$0.42 per acre-inch with fixed costs being \$0.36 per acre-inch, and for 1967 variable cost was \$0.36 per acre-inch with fixed cost being \$0.30 per acre-inch.

Alternative III (ISS and Trickle)

The third alternative was the utilization of trickle irrigation on orchard crops. Pecans account for nearly all of the acreage in orchard crops and therefore were used as a proxy. ISS was also included. There were two additional assumptions added to the assumptions on ISS.

The first assumption was to decrease irrigation water applications on orchard crops 36 percent below that required for ISS. This was based on observations and measurements on the Demonstration Farm (Sammis, 1980) and from discussions with the ISS contractor. The second assumption was to decrease irrigation labor by 60 percent, but increase management by 14 percent (Cummings and Gisser, 1977). Yield levels were assumed to be maintained at the levels attainable with ISS alone.

Alternative IV (ISS, Sprinkler, and Trickle)

The fourth alternative evaluated was to combine the three previously discussed alternatives (ISS on all crops, sprinkler on vegetable crops, and trickle on orchard crops) into one model. The assumptions of this model were the combination of the assumptions of the three previous alternatives.

The four linear programming models were used to estimate the effects of the alternative irrigation management systems on net returns to irrigated agriculture in the Mesilla Valley. The changes occurring from the four alternatives were incorporated into a linear programming model to demonstrate what effects they would have on water requirements and net returns to agricultural lands in the Mesilla Valley and to compare these to the base conditions. The linear programming models consisted of nine resources and 14 crop activities.

Drain Flows

Based, in part, on reports by Wierenga (1979) and Gelhar and McLin (1979), it is suggested that improvements in irrigation efficiency could be made in the Mesilla Valley without excess accumulation of salts in the upper soil profile, and without negative effects on crop yields. Improvement in the irrigation efficiency should reduce the salt load in the irrigation return flow, at least for some time. At present, it is difficult to predict for how long the salt load would be reduced, upon a 10 or 20 percent increase in irrigation efficiency. Assuming salt balance, it may be expected that a new equilibrium condition would be established after some time, with a lower volume of return flow at a higher concentration and the same total salt load in the return flow.

A simple water balance equation is used to determine irrigation drain flows. The two equations of the drain flow model are:

$$Q_f = Q_s + Q_g - Q_e \quad (1)$$

$$Q_e = E_s Q_s + E_g Q_g \quad (2)$$

where:

Q_f = quantity of irrigation return flow in acre-feet per year

Q_s = quantity of surface water (drain flow) supplied to the farm gate in acre-feet per year

Q_g = quantity of groundwater supplied in acre-feet per year

Q_e = quantity of evapotranspiration in acre-feet per year

E_s = farm irrigation efficiency level for surface water

E_g = farm irrigation efficiency level for groundwater

The long-term mean EC of 1.46 mngers/cm for the Del Rio Drain as reported by Wierenga (1979), thus the milligrams per liter were calculated to be 1,057. The tons of salt in the return flows were calculated based on the data.

Budgeting

The per acre enterprise cost and return budgets were developed for 14 crops for each of the years 1967, 1973, and 1976 (see Appendix A for details). These 14 crops, which represent most of the cultivated acreage in the Mesilla Valley were: alfalfa, chile, corn silage, cotton, grain sorghum, irrigated pasture, lettuce (spring and fall), onions (spring and fall), small grains (winter and spring), tomatoes, and pecans. Tomatoes were utilized as a proxy for the miscellaneous vegetables in the valley. The budgets developed were designed to represent the base conditions in the valley with which to compare the alternative irrigation management systems.

The enterprise per acre cost and return budgets were prepared to provide an evaluation base for the economic analysis of alternative irrigation management systems. Procedures in preparing enterprise budgets for each of the three time periods (1967, 1973, and 1976) involved the following five steps:

1. The cultural and harvest operations were those typically performed on farms for each crop in the Mesilla Valley.
2. The physical quantities per acre for all inputs, including services such as labor and machinery hours plus seed, fertilizer, irrigation water, and other materials were obtained from survey data files for the years 1967 and 1973 and from field observations both on and off the Demonstration Farm during 1975-1976. Price data on these inputs were obtained from farm supply stores in the Mesilla Valley and from in-file reports in the Agricultural Economics Department, New Mexico State University.
3. The yields and prices farmers receive for crops were the average yields and prices farmers receive in Dona Ana County, New Mexico as reported in the New Mexico Agricultural Statistics for 1967, 1973, and 1976; from Statistical Reporting Service releases; and actual yields and prices from the Demonstration Farm. The yields utilized in the economic analysis are reported in Table 6 for the three time periods.
4. The fixed and variable machinery cost for the three periods were developed for a typical commercial farm in the Mesilla Valley. Straight-line depreciation was utilized in estimating the fixed depreciation costs. Fuel and repair costs were developed based on secondary data from Arizona and California studies as well as Demonstration Farm information (Reed, 1974 and Hawthorn, et al., 1976). Some farming operations were assumed to be performed on a custom or contract basis for those operations typically contracted.
5. The labor requirements were based on cultural operation efficiency levels in acres per hour for hand labor and machine operators. The supervision and management rates were adapted from a study of the Navajo Indian Irrigation Project (Sweetser, et al., 1976). The wage rates are reported in Table 7. The supervision charge was computed as follows: hours of direct labor (by type) x supervision factor (by crop) = supervision charge (dollars per acre). The supervision factors are presented in Table 8.

The fixed and variable cost per acre were summed and then subtracted from gross returns in order to obtain net contributions per hectare to land and risk.

RESULTS AND DISCUSSION

The economic and water use effects of four alternative irrigation water management systems were compared to the existing irrigation water management practices. Three periods of time were included which represent below-average, average, and above-average surface irrigation water supply.

Table 6. BASE YEAR YIELD AND YIELD INCREASES FROM IRRIGATION SCHEDULING SYSTEM (ISS), SPRINKLER IRRIGATION, AND TRICKLE IRRIGATION BY CROP IN THE MESILLA VALLEY, 1967, 1973, 1976

Crop	Unit Per Acre	Base Yield			ISS Yield			Sprinkler Yield			Trickle Yield		
		1967	1973	1976	1967	1973	1976	1967	1973	1976	1967	1973	1976
Alfalfa	tons	5.0	5.2	6.0	5.25	5.46	6.3						
Chile													
Green	tons	5.0	5.5	5.8	5.25	5.78	6.09	5.25	6.07	6.39			
Red	lbs.	340	410	430	389	431	452	457	452	475			
Corn Silage	tons	17.0	17.0	16.5	17.85	17.85	17.33						
Cotton													
Lint	lbs.	620	526	720	650	552	756						
Seed	lbs.	1030	877	1200	1083	921	1260						
Grain Sorghum	cwt.	40.0	42.0	45	42	44.1	47.25						
Irrigated Pasture	cwt.	5.1	8.6	6.8	5.36	7.14	7.14						
Lettuce													
Spring	cartons	580	540	430	580	540	430	609	567	452			
Fall	cartons	500	480	580	500	480	580	525	504	609			
Onions													
Spring	tons	16	15.25	20	16	15.25	20	16.8	16.01	21.0			
Fall	tons	14	14.5	16.75	14	14.5	16.75	14.7	15.23	17.59			
Small Grains													
Winter	cwt.	32.0	36.0	38	33.6	37.8	39.9						
Spring	cwt.	74.0	39.0	35	35.7	40.95	36.75						
Tomatoes	tons	12	12.5	13.3	12.6	13.13	13.97	13.23	13.79	14.67			
Pecans	lbs.	1300	1300	1300	1365	1365	1365				1365	1365	1365

TABLE 7. WAGE RATES BY WATER SUPPLY PERIOD FOR THE MESILLA VALLEY, NEW MEXICO, 1967, 1973
AND 1976

Water Supply Period	Wage Rate (dollars)
Below Average (1967)	
Irrigation Labor	1.00 per hour
Machine Labor	1.25 per hour
Average (1973)	
Irrigation Labor	1.67 per hour
Machine Labor	2.07 per hour
Above Average (1976)	
Irrigation Labor	2.00 per hour
Machine Labor	2.50 per hour

TABLE 8. SUPERVISION FACTORS BY TECHNOLOGY FOR THE MESILLA VALLEY, NEW MEXICO, 1967

Technology	Field Crops	Vegetable Crops	Orchard Crops
	----- dollars -----		
Base			
Irrigation and General Labor	1.80	2.60	2.60
Machine Labor	.90	1.80	1.80
ISS			
Irrigation and General Labor	2.00	2.85	2.86
Machine Labor	.90	1.80	1.80
Sprinkler			
Irrigation and General Labor	--	2.86	--
Machine Labor	--	2.00	--
Trickle			
Irrigation and General Labor	--	--	3.00
Machine Labor	--	--	2.00

BASE MODEL

The base model was designed to simulate the Mesilla Valley irrigated farming sector without the alternative water management systems being implemented. The net returns per acre to land and risk by crop for each of the water supply periods are presented in Table 9. Some crops, such as small grains, were included for crop rotational purposes.

The per acre water use coefficients for the base period are presented by water supply period in Table 5. The average irrigation water application rate per acre during 1967 was 46 acre-inches or with approximately 60 percent being supplied from groundwater sources (Table 5). The average per acre irrigation application rate for 1973 was 47.9 acre-inches. The water use was divided almost equally between ground and surface water. During 1976, groundwater only supplied about 40 percent (132,300 acre-feet) of the total irrigation water supply of 46.9 acre-inches per acre (Table 10). Nearly all of the differences in groundwater pumpage between the three years were due to the availability of surface water supplies.

The results of the base models for the water supply periods are presented in Table 10. The net return to land and risk for 1967 was estimated at approximately \$4.3 million, for 1973 at approximately \$5.7 million, and for 1976 at approximately \$14.9 million.

The quantity of irrigation return flow (drain flow) for the base model was determined by incorporating the irrigation water quantities derived from the LP model into the hydrology model. The irrigation efficiencies for the hydrology model were assumed to be 65 percent for the base period. The drain flows for the base water supply periods were 187,411 acre-feet in 1967, 207,593 acre-feet in 1973, and 209,960 acre-feet in 1976. The salt load from the irrigation return was estimated to be 142,949 tons in 1967, 149,772 tons in 1973, and 149,211 tons for 1976.

The net returns to agricultural land and risk and irrigation labor requirements were determined from the base model solutions. The LP model was constrained only by the individual crop acres for the three water supply periods. The respective coefficients for the three water supply periods represent the irrigated farming sector of the Mesilla Valley without the implementation of alternative irrigation management practices.

The base period results (water use, returns, and costs) served as the foundation from which each of the four alternative water management systems were compared.

ALTERNATIVE I (ISS)

The results of ISS implementation into the Mesilla Valley irrigated farming sector consisted of: (1) revisions to the base period budgets, and (2) modifications of the base LP model with regard to the assumptions made previously. Crop budgets were designed to represent the irrigated farming sector of the Mesilla Valley after the implementation of ISS. The net returns to land and risk per acre by crop for each of the water supply periods are presented in Table 5. Net returns per acre utilizing ISS were increased for all crops except lettuce and onions.

Table 9. Per acre net returns to land and risk by crop, water supply period, and alternative management practice, Mesilla Valley, New Mexico

Alternative	Net Return to Land and Risk Capital per Acre													
	Alfalfa	Chile	Corn Silage	Cotton	Grain Sorghum	Irrigated Pasture	Lettuce (spring)	Lettuce (fall)	Onions (spring)	Onions (fall)	Small Grains (winter)	Small Grains (spring)	Tomatoes	Pecans
<u>Base Period</u>														
1967	-13.86	-23.18	-15.37	60.75	-3.33	-22.03	842.06	324.66	82.46	-320.10	-21.85	-8.88	69.68	11.37
1973	43.75	131.20	-9.53	26.88	26.85	53.76	2,702.90	-17.97	97.85	64.92	0.24	19.77	48.70	32.06
1976	91.53	216.68	-5.73	205.77	18.55	-13.73	-273.32	2,006.70	130.12	-266.35	20.65	9.73	387.19	143.00
<u>Irrigation Scheduling Service (ISS)</u>														
1967	-13.64	-10.28	-15.33	67.49	-2.35	-22.64	836.44	319.10	76.69	-325.91	-22.13	-8.85	78.43	23.99
1973	46.82	145.60	-8.06	26.49	29.18	56.27	2,696.03	-24.34	90.27	57.85	0.28	20.96	58.48	53.42
1976	95.76	239.08	-3.13	223.22	20.97	-12.41	-281.95	1,998.58	121.17	-274.62	23.90	11.51	415.37	171.22
<u>ISS Plus Sprinkler</u>														
1967	-13.78	-73.77	-15.43	67.45	-2.43	-22.78	858.69	316.15	62.19	-360.46	-22.16	-8.90	53.59	24.05
1973	46.52	126.53	-8.17	26.34	29.12	56.91	2,815.49	-41.48	78.02	46.14	0.16	20.97	32.33	53.40
1976	98.24	207.75	-2.52	223.76	21.25	-10.29	-306.21	2,088.90	117.89	-299.08	24.92	11.51	408.81	172.61
<u>ISS Plus Trickle Irrigation</u>														
1967	-12.97	-66.85	-14.19	67.74	-2.09	-22.07	827.11	310.32	66.23	-336.41	-21.97	-8.66	58.61	-63.04
1973	47.57	127.16	-7.80	26.85	29.34	58.07	2,687.77	-32.00	80.80	48.25	0.56	20.96	39.52	-22.93
1976	96.26	196.27	-3.00	223.33	21.02	-11.97	-289.88	1,991.15	112.16	-283.89	24.11	11.51	396.68	90.97
<u>ISS Plus Sprinkler and Trickle Irrigation</u>														
1967	-13.13	-73.47	-15.08	67.68	-2.17	-22.21	858.90	316.34	62.38	-360.29	-22.01	-8.71	53.87	-62.86
1973	47.27	126.72	-7.92	26.70	29.28	57.72	2,815.77	-41.15	78.31	46.28	0.43	20.97	32.53	-22.78
1976	95.69	206.98	-3.15	223.21	20.96	-12.50	-307.25	2,088.20	116.57	-299.54	23.87	11.51	409.22	91.12

TABLE 10. RESULTS OF THE LINEAR PROGRAMMING MODEL BY WATER SUPPLY PERIOD AND ALTERNATIVE MANAGEMENT PRACTICE, MESILLA VALLEY, NEW MEXICO

Management Practice	Net Return to Land and Risk (dollars)	Water Use		Operating Capital (dollars)	Labor (dollars)
		Surface (ac-ft)	Ground (ac-ft)		
Below Average Water Supply (1967)					
Base	4,308,069	115,151	173,173	16,159,095	3,688,138
Alternative I (ISS)	4,647,000	115,151	143,734	16,676,535	3,854,447
Alternative II (ISS and Sprinkler)	4,516,395	115,151	141,161	17,404,210	4,038,917
Alternative III (ISS and Trickle)	4,106,632	107,692	144,989	17,132,778	4,275,538
Alternative IV (ISS, Sprinkler and Trickle)	4,135,114	107,722	141,868	17,536,656	4,388,520
Average Water Supply (1973)					
Base	5,673,523	157,662	161,712	23,539,678	5,233,434
Alternative I (ISS)	5,944,278	157,472	129,981	24,275,248	5,480,801
Alternative II (ISS and Sprinkler)	5,867,852	157,472	125,827	25,082,492	5,687,271
Alternative III (ISS and Trickle)	5,107,868	134,592	139,705	24,905,306	6,104,260
Alternative IV (ISS, Sprinkler and Trickle)	5,142,024	134,622	135,551	25,553,250	6,151,487
Above Average Water Supply (1976)					
Base	14,870,614	190,715	132,300	30,952,121	7,504,410
Alternative I (ISS)	16,244,729	189,862	100,850	31,863,852	7,827,818
Alternative II (ISS and Sprinkler)	16,294,017	188,307	97,518	32,921,128	8,155,317
Alternative III (ISS and Trickle)	14,710,688	161,304	112,967	32,686,593	8,577,834
Alternative IV (ISS, Sprinkler and Trickle)	14,995,777	159,750	109,636	33,475,578	8,636,567

The total surface and groundwater requirements for the incorporation of ISS are presented in Table 10. The average per acre irrigation requirements under the ISS alternative was assumed to be 90 percent of the base model for the three water supply periods. Surface irrigation water use was unchanged in 1967; however, in 1973 and 1976, surface irrigation water use would have been reduced by 0.1 percent (190 acre-feet) and 0.4 percent (853 acre-feet) (Tables 11 and 12). Groundwater saved through ISS was more substantial at 29,439, 31,731, and 31,450 acre-feet for 1967, 1973, and 1976, respectively. This groundwater savings amounted to from 17.0 to 23.8 percent. Thus, ISS achieves savings in groundwater pumpage for all three supply levels, whereas, surface water savings were small and might vary with the surface water supply level (Tables 11 and 12).

The net return to land and risk for 1967 was estimated at approximately \$4.65 million, up 7.9 percent from the base model. The net return to land and risk for 1973 was estimated at approximately \$5.94 million, up 4.8 percent, and for 1976 at approximately \$14.87 million, up 7.2 percent (Tables 10 and 13). Labor and operating capital costs increased about 3 percent due to the inclusion of ISS (Table 10). These costs have increased over the years, also. However, crop price increases and yield increases have more than offset these costs within each time frame. However, it must be noted that it is possible that net returns from one year to the next decrease depending on relationships between price levels, cost levels, and yields.

The reduction in drain flow from the incorporation of ISS ranged from 30 percent in 1967 to 36 percent in 1976 (Table 14). The drain flows for the ISS water supply periods were 72,021 acre-feet in 1967, 79,860 acre-feet in 1973, and 80,751 acre-feet in 1976. The reduction in salt load to the Rio Grande was estimated to be 42,587 tons in 1967, 45,839 tons in 1973, and 46,693 tons in 1976 (Table 14).

ALTERNATIVE II (ISS AND SPRINKLER)

The use of ISS on all crops and sprinkler irrigation for seed emergence of vegetable crops was the second alternative irrigation water management system evaluated. The results of the ISS and sprinkler model implementation in the Mesilla Valley irrigated farming sector consisted of (1) revisions to the ISS vegetable crop budgets and (2) modification of the ISS LP model.

The budgets were designed to represent the irrigated farming sector of the Mesilla Valley after the implementation of ISS and sprinkler irrigation for vegetable crop seed germination. The net returns per acre to land and risk for each of the water supply periods are presented in Table 10. The incorporation of sprinkler irrigation for vegetable crop seed germination resulted in adjustments in the net returns to land and risk per acre for only chile, lettuce, onions, and tomatoes.

The total surface and groundwater requirements for the incorporation of ISS and sprinkler irrigation are presented in Table 10. The average per acre irrigation water requirement when sprinkler irrigation for seed emergence was incorporated with ISS for 1967 was estimated to be 40.7 acre-feet, which was about 89 percent of the requirement for the base model. The water savings over ISS was about one percent. Surface irrigation water was unchanged in 1967; however, in 1973 and 1976, surface irrigation water would have been reduced by 0.1 percent (190 acre-feet) and 1.3 percent (2,408 acre-feet) (Tables 11 and 12). Groundwater saved through this alternative was more substantial at 32,012, 35,885, and 34,782 acre-feet for 1967, 1973, and 1976, respectively. This groundwater savings

TABLE 11. RELATIVE CHANGE IN IRRIGATION WATER USE BY SOURCE, TIMING, AND ALTERNATIVE MANAGEMENT PRACTICE, MESILLA VALLEY, NEW MEXICO

Management Practice	Change in Surface Water From Base			Change in Ground Water From Base		
	1967	1973	1976	1967	1973	1976
	----- acre-feet -----			----- acre-feet -----		
Alt. I	0	-190	-853	-29,439	-31,731	-31,450
Alt. II	0	-190	-2,408	-32,012	-35,885	-34,782
Alt. III	-7,459	-23,070	-29,411	-28,184	-22,007	-19,333
Alt. IV	-7,429	-23,040	-30,965	-31,305	-26,161	-22,664

TABLE 12. PERCENT CHANGE IN IRRIGATION WATER USE BY SOURCE, TIMING, AND ALTERNATIVE MANAGEMENT PRACTICE, MESILLA VALLEY, NEW MEXICO

Management Practice	Percent Change, Surface			Percent Change, Ground Water		
	1967	1973	1976	1967	1973	1976
Alt. I	0	-0.1	-0.4	-17.0	-19.6	-23.8
Alt. II	0	-0.1	-1.3	-18.5	-22.2	-26.3
Alt. III	-6.5	-14.6	-15.4	-16.3	-13.6	-14.6
Alt. IV	-6.5	-14.6	-16.2	-18.1	-16.2	-17.1

TABLE 13. NET RETURNS TO LAND AND RISK BY TIME PERIOD AND ALTERNATIVE MANAGEMENT PRACTICE, MESILLA VALLEY, NEW MEXICO

Management Practice	1967		1973		1976	
	Change from Base		Change from Base		Change from Base	
	Dollars	Percent	Dollars	Percent	Dollars	Percent
Alt. I	338,931	7.9	270,755	4.8	1,374,115	9.2
Alt. II	208,326	4.8	194,239	3.4	1,423,403	9.6
Alt. III	-201,437	-4.7	-565,655	-10.0	-159,926	-1.1
Alt. IV	-172,955	-4.0	-531,499	-9.4	125,163	0.8

TABLE 14. ESTIMATED DRAIN RETURN FLOW AND SALT LOAD BY TIME PERIOD AND ALTERNATIVE MANAGEMENT POSITION, MESILLA VALLEY, NEW MEXICO

Management Practice	Evapotranspiration (acre-feet)	Drain Return Flow (acre-feet)	Percent Change From Base	Salt Load (tons)	Reduction in Salt Load from Base (tons)
Base -- 1967	187,411	100,914	--	142,949	--
Alternative I		72,021	-30	100,362	42,587
Alternative II		68,901	-33	95,878	47,071
Alternative III		65,270	-37	90,659	52,290
Alternative IV		62,179	-40	86,216	56,734
Base -- 1973	207,593	111,782	--	149,772	--
Alternative I		79,860	-31	103,934	45,839
Alternative II		75,706	-35	97,962	51,811
Alternative III		66,704	-43	85,039	64,733
Alternative IV		62,550	-47	79,051	70,721
Base -- 1976	209,960	113,055	--	149,211	--
Alternative I		80,751	-31	102,518	46,693
Alternative II		75,866	-36	95,526	53,675
Alternative III		64,311	-47	78,932	70,279
Alternative IV		59,426	-52	71,866	77,345

amounted to from 18.5 to 26.3 percent. Thus, the addition of a sprinkler for vegetable germination achieved savings in groundwater pumpage for all three supply levels, whereas, surface water savings were relatively small and might vary with the surface water supply level (Tables 11 and 12). The groundwater saved for this alternative was approximately 1.5 percent for 1967, 2.6 percent for 1973, and 2.5 percent for 1976 over ISS alone.

The net return to land and risk for 1967 was estimated at approximately \$4.65 million, up 4.7 percent from the base model. The net return to land and risk for 1973 was estimated at approximately \$5.94 million, up 3.4 percent from the base model, and for 1976 at approximately \$16.29 million, up 9.6 percent from the base model (Tables 10 and 13).

Labor and operating capital costs increased about 7 percent due to adding a sprinkler for vegetable seed germination to the ISS alternative costs within each time frame.

The reduction in drain flow from the incorporation of ISS and sprinkler ranged from 33 percent in 1967 to 36 percent in 1976 (Table 14). The drain flows by water supply periods for the ISS and sprin-

kler alternative were 68,901 acre-feet, in 1967, 75,706 acre-feet in 1973, and 75,866 acre-feet in 1976. The reduction in salt load to the Rio Grande was estimated to be 47,071 tons in 1967, 51,811 tons in 1973, and 53,675 tons in 1976 (Table 14).

ALTERNATIVE III (ISS AND TRICKLE)

The use of ISS on all crops and trickle irrigation for orchard crops was the third alternative irrigation water management system evaluated. The results of the ISS and trickle model implementation in the Mesilla Valley irrigated farming sector consisted of (1) revisions to the ISS orchard crop budgets and (2) modification of the ISS LP model.

The budgets were designed to represent the irrigated farming sector of the Mesilla Valley after the implementation of ISS and trickle irrigation on orchard crops (pecans). Over 95 percent of the orchard crop in the Mesilla Valley are pecans. Net returns to land and risk per acre for pecans were reduced about \$70 in 1967, \$9 in 1973, and \$52 in 1976 with the incorporation of trickle irrigation. The individual crop budgets containing the two modifications for improvement of irrigation water management (ISS and trickle) provided the primary data for the revision of the base LP coefficients for Alternative III.

The total surface and groundwater requirements for the incorporation of ISS and trickle irrigation for orchards are presented in Table 10. The average per acre irrigation water requirement when trickle irrigation for orchards was incorporated with ISS was estimated to be about 87 percent of the requirement for the base model. Surface irrigation water would have been reduced by 6.5 percent (7,459 acre-feet), in 1967, 14.6 percent (23,070 acre-feet) in 1973 and 15.4 percent (29,411 acre-feet) in 1976 (Tables 11 and 12). Groundwater saved through ISS and trickle irrigation for orchards was more substantial at 28,184 acre-feet for 1967. However, in 1973 and 1976 surface water savings exceeded groundwater savings and amounted to from 13.6 to 14.6 percent, respectively. Thus, the combination of ISS and trickle irrigation for orchards achieved substantial savings in both surface and groundwater pumpage for all three supply levels (Tables 11 and 12). The surface water saved for this alternative was approximately 6.5 percent for 1967, 14.5 percent for 1973, and 14.1 percent for 1976 over ISS alone. The groundwater savings were less than ISS for all three time periods ranging from 0.7 percent in 1967 to 9.2 percent in 1976 (Table 12).

The net return to land and risk for 1967 was estimated at approximately \$4.11 million, down 4.7 percent. The net return to land and risk for 1973 was estimated at approximately \$5.11 million, down 10.0 percent; and for 1976 at approximately \$14.71 million, down only 1.1 percent from the base model (Tables 10 and 13).

Labor and operating capital costs increased about 8 percent due to adding trickle irrigation to the ISS alternative (Table 10). The crop price and yield increases did not offset these increased costs within each time frame.

The reduction in drain flow from the incorporation of ISS and trickle ranged from 37 percent in 1967 to 47 percent in 1976 (Table 14). The irrigation return flows for the water supply periods were 65,270 acre-feet in 1967, 66,704 acre-feet in 1973, and 64,311 acre-feet in 1976. The reduction in

salt load to the Rio Grande was estimated to be 52,290 tons in 1967, 64,733 tons in 1973, and 70,279 tons in 1976 (Table 14).

ALTERNATIVE IV (ISS AND SPRINKLER AND TRICKLE)

The use of ISS on all crops, sprinkler irrigation for seed emergence of vegetable crops and trickle irrigation on orchard crops was the fourth alternative irrigation management alternative evaluated. The results of the ISS, sprinkler, and trickle model implementation in the Mesilla Valley irrigated farming sector consisted of (1) revisions to the ISS vegetable crop budgets and the ISS orchard (pecan) crop budgets; and (2) modification of the ISS LP model.

The budgets were designed to represent the irrigated farming sector of the Mesilla Valley after the implementation of the ISS, sprinkler, and trickle irrigation techniques. The incorporation of ISS, sprinkler, and trickle irrigation resulted in modifications to both the vegetable and orchard crops. The individual crop budgets containing the three modifications for improvement of irrigation water management (ISS, sprinkler, and trickle) provided the primary data for the revision of the base LP coefficient for Alternative IV.

The total surface and groundwater requirements for the incorporation of ISS and trickle irrigation for orchards are presented in Table 10. The average per acre irrigation water requirement when sprinkler irrigation for vegetable seed emergence and trickle irrigation for orchards was incorporated with ISS was estimated to be about 86 percent of the requirement for the base model. Surface irrigation water use would have been reduced by 6.5 percent (7,429 acre-feet) in 1967, 14.6 percent (23,040 acre-feet) in 1973 and 16.2 percent (30,965 acre-feet) in 1976 (Tables 11 and 12). Groundwater saved through this alternative was more substantial at 31,305 acre-feet (18.1 percent) for 1967 and 26,161 acre-feet (16.2 percent) in 1973. However, in 1976 surface water savings exceeded groundwater savings (Table 12). Thus, the combination of ISS, sprinkler, and trickle irrigation systems achieves substantial savings in both surface and groundwater pumpage for all three supply levels (Tables 11 and 12). The surface water saved under this alternative was approximately 6.5 percent for 1967, 14.5 percent for 1973, and 14.9 percent for 1976 when compared to ISS. The groundwater savings under this alternative were less than those of ISS for 1973 and 1976, (from 0.4 percent in 1973 to 9.2 percent in 1976) but greater than ISS in 1967 with a 1.1 percent saving (Table 12).

The net return to land and risk for 1967 was estimated at approximately \$4.14 million, down 4.0 percent; 1973 approximately \$5.14 million, down 9.4 percent; 1976 approximately \$15.14 million, down only 0.8 percent from the base model (Tables 10 and 13).

Labor and operating capital costs increased about 10 percent due to adding a sprinkler for vegetable seed germination and trickle irrigation alternative (Table 10). The crop price and yield increases did not offset these increased costs in 1967 and 1973 but did in 1976.

The reduction in drain flow from the incorporation of ISS, sprinkler and trickle ranged from 40 percent in 1967 to 52 percent in 1976 (Table 63). The drain flows for the water supply periods were 62,179 acre-feet in 1967, 62,550 acre-feet in 1973, and 59,426 acre-feet in 1976. The reduction in salt load to the Rio Grande was estimated to be 56,734 tons in 1967, 70,721 tons in 1973, and 77,345 tons in 1976 (Table 14).

SUMMARY

The objective of this report was to evaluate the economic and water use effects of alternative water management systems for the Mesilla Valley, New Mexico, which would result in reduced irrigation return flows to the Rio Grande. The economic effects of four alternative water management systems for improving irrigation water applications were evaluated. Three periods of time (1967, 1973, and 1976) were included in each alternative that represented below-average (1967), average (1973), and above-average (1976) surface water irrigation supplies. The alternatives evaluated were (1) the implementation of Irrigation Service Scheduling (ISS) into the agricultural sector of the Mesilla Valley for the three periods, (2) the addition of sprinkler irrigation for seed emergence of vegetable crops and incorporation with ISS, (3) trickle irrigation on orchard crops in conjunction with ISS, and (4) the combination of ISS, sprinkler irrigation of vegetable crops, and trickle irrigation of orchard crops.

A linear programming model (LP) was designed to reflect existing Mesilla Valley agricultural water management practices for each of the time periods. Alternative water management systems were analyzed via a three step process: (1) revise crop budgets, (2) incorporate revised crop budgets in LP model and (3) make comparisons to the base model.

For the base model the average irrigation water application rate per acre during 1967 was 46 acre-inches or with approximately 60 percent being supplied from groundwater sources. The average per acre irrigation application rate for 1973 was 47.9 acre-inches. The water use was divided almost equally between ground and surface water. During 1976, groundwater only supplied about 40 percent (132,300 acre-feet) of the total irrigation water supply of 46.9 acre-inches per acre. Nearly all of the differences in groundwater pumpage between the three years were due to the availability of surface water supplies.

The base model net return to land and risk to the Mesilla Valley for 1967 was estimated at approximately \$4.3 million, for 1973 at approximately \$5.7 million, and for 1976 at approximately \$14.9 million.

The quantity of irrigation return flow (drain flow) for the base model was determined by incorporating the irrigation water quantities derived from the LP model into the hydrology model. The irrigation efficiencies for the hydrology model were assumed to be 65 percent for the base period. The drain flows for the base water supply periods were 187,411 acre-feet in 1967, 207,593 acre-feet in 1973, and 209,960 acre-feet in 1976. The salt load to the Rio Grande from the irrigation return flows was estimated to be 142,949 tons in 1967, 149,772 tons in 1973, and 149,211 tons for 1976.

The base period results (water use, returns, and costs) served as the foundation from which each of the four alternative water management systems were compared.

The results of ISS implementation into the Mesilla Valley irrigated farming sector resulted in the average per acre irrigation requirements being reduced to 90 percent of the base model for the three water supply periods. Surface irrigation water was unchanged in 1967; however, in 1973 and 1976, surface irrigation water would have been reduced by 0.1 percent (190 acre-feet) and 0.4 percent (853 acre-feet). Groundwater saved through ISS was more substantial at 29,439, 31,731, and 31,450 acre-feet for 1967, 1973, and 1976, respectively, and amounted to 17.0 to 23.8 percent.

The net return to land and risk for ISS for 1967 was estimated at approximately \$4.65 million, up 7.9 percent from the base model; for 1973, \$5.94 million, up 4.8 percent; and for 1976, \$14.87 million, up 7.2 percent. Labor and operating capital costs increased about 3 percent due to the inclusion of ISS. However, crop price increases and yield increases have more than offset these costs.

The reduction in drain flow from the incorporation of ISS ranged from 30 percent in 1967 to 36 percent in 1976. The drain return flows for the ISS water supply periods were 72,021 acre-feet in 1967, 79,860 acre-feet in 1973, and 80,751 acre-feet in 1976. The reduction in salt load to the Rio Grande was estimated to be 42,587 tons in 1967, 45,839 tons in 1973, and 46,693 tons in 1976.

The use of ISS on all crops and sprinkler irrigation for seed emergence of vegetable crops was the second alternative irrigation water management system evaluated. The average per acre irrigation water requirement when sprinkler irrigation for seed emergence was incorporated with ISS for 1967 was estimated to be about 89 percent of the requirement for the base model. The water savings over ISS was about one percent. Surface irrigation water use was unchanged in 1967; a slight decrease in 1973 (190 acre-feet) and a 2,408 acre-feet decrease (1.3 percent) in 1976. Groundwater saved through this alternative was more substantial at 32,012, 35,885, and 34,782 acre-feet for 1967, 1973, and 1976, respectively. The groundwater saved for this alternative was approximately 1.5 percent for 1967, 2.6 percent for 1973, and 2.5 percent for 1976 over ISS alone. Thus, the addition of a sprinkler for vegetable germination achieved savings in groundwater pumpage for all three supply levels.

The net return to land and risk for 1967 was estimated at approximately \$4.65 million, up 4.7 percent from the base model; for 1973, \$5.94 million, up 3.4 percent from the base model; and for 1976, \$16.29 million, up 9.6 percent from the base model. Labor and operating capital costs increased about 7 percent due to adding a sprinkler for vegetable seed germination to the ISS alternative.

The reduction in drain flow from the incorporation of ISS and sprinkler ranged from 33 percent in 1967 to 36 percent in 1976. The reduction in salt load to the Rio Grande was estimated to be 47,071 tons in 1967, 51,811 tons in 1973, and 53,675 tons in 1976.

The use of ISS on all crops and trickle irrigation for orchard crops was the third alternative irrigation water management system evaluated. The average per acre irrigation water requirement when trickle irrigation for orchards was incorporated with ISS in 1967 was estimated to be about 87 percent of the requirement for the base model. Surface irrigation water would have been reduced by 6.5 percent (7,459 acre-feet), in 1967, 14.6 percent (23,070 acre-feet) in 1973 and 15.4 percent (29,411 acre-feet) in 1976, had this alternative been used. Groundwater saved through ISS and trickle irrigation for orchards was more substantial at 28,184 acre-feet for 1967. However, in 1973 and 1976 surface water savings exceeded groundwater savings and amounted to 13.6 to 14.6 percent, respectively. Thus, the combination of ISS and trickle irrigation for orchards achieved substantial savings in both surface and groundwater pumpage for all three supply levels. The surface water saved for this alternative was approximately 6.5 percent for 1967, 14.5 percent for 1973, and 14.1 percent for 1976 over ISS alone. The groundwater savings were less than ISS for all three time periods ranging from 0.7 percent in 1967 to 9.2 percent in 1976.

The net return to land and risk for 1967 was estimated at approximately \$4.11 million, down 4.7 percent; for 1973, \$5.11 million, down 10.0 percent; and for 1976, \$14.71 million, down only 1.1 percent from the base model.

Labor and operating capital costs increased about 8 percent due to adding trickle irrigation to the ISS alternative. The crop price and yield increases did not offset these increased costs.

The reduction in drain flow from the incorporation of ISS and trickle ranged from 37 percent in 1967 to 47 percent in 1976. The reduction in salt load to the Rio Grande was estimated to be 52,290 tons in 1967, 64,733 tons in 1973, and 70,279 tons in 1976.

The use of ISS on all crops, sprinkler irrigation for seed emergence of vegetable crops and trickle irrigation on orchard crops was the fourth alternative irrigation management alternative evaluated. The average per acre irrigation water requirement for this alternative was estimated to be about 86 percent of the requirement for the base model. Surface irrigation water use would have been reduced by 6.5 percent (7,429 acre-feet) in 1967, 14.6 percent (23040 acre-feet) in 1973 and 16.2 percent (30,965 acre-feet) in 1976. Groundwater saved through this alternative was more substantial at 31,305 acre-feet (18.1 percent) for 1967 and 26,161 acre-feet (16.2 percent) in 1973. However, in 1976, surface water savings exceeded groundwater savings. The surface water saved under this alternative was approximately 6.5 percent for 1967, 14.5 percent for 1973, and 14.9 percent for 1976 when compared to ISS. The groundwater savings under this alternative were less than those of ISS for 1973 and 1976, (from 0.4 percent in 1973 to 9.2 percent in 1976) but greater than ISS in 1967 with a 1.1 percent savings.

The net return to land and risk for 1967 was estimated at approximately \$4.14 million, down 4.0 percent; 1973 approximately \$5.14 million, down 9.4 percent; 1976 approximately \$15.14 million, down only 0.8 percent from the base model.

Labor and operating capital costs increased about 10 percent due to adding a sprinkler for vegetable seed germination and trickle irrigation to this alternative. The crop price and yield increases did not offset these increased costs in 1967 and 1973 but did in 1976.

The reduction in drain return flow for this alternative ranged from 40 percent in 1967 to 52 percent in 1976. The reduction in salt load to the Rio Grande was estimated to be 56,734 tons in 1967, 70,721 tons in 1973, and 77,345 tons in 1976.

REFERENCES

- Cummings, R. G. and M. Gisser. 1977. Reduction of Water Allocations to Irrigated Agriculture in the Estancia Basin with Implications for New Mexico: Impacts and Technological Change. Working Paper No. 8, University of New Mexico, Albuquerque. 98 pp.
- Gelhar, L. W. and S. G. McLin. 1979. Evaluation of a Hydrosalinity Model of Irrigation Return Flow Water Quality in the Mesilla Valley, New Mexico. Environmental Protection Agency Technical Series: 600/2-79-173. 192 pp.
- Hawthorn, Scott, and N. Gene Wright. 1976. Arizona Farm Machinery Costs. Department of Agricultural Economics, University of Arizona, Tucson, Arizona. 78 pp.
- Henderson, Donald C. and Earl F. Sorensen. 1968. Consumptive Irrigation Requirements of Selected Irrigated Areas in New Mexico. New Mexico State University, Agricultural Experiment Station Bulletin 531, p. 44.
- Jensen, Marvin E. 1973. Consumptive Use of Water and Irrigation Water Requirements. Tech. Committee on Irrigation Water Requirements, Irrigation and Drainage Div. ASCE, 215 pp.
- Jensen, Marvin E. 1975. Scientific Irrigation Scheduling for Salinity Control of Irrigation Report Flows. U. S. Environmental Protection Agency Report 600/2-75-064.
- Jensen, Marvin E. 1977. Scientific Irrigation Scheduling for Salinity Control of Irrigation Return Flow. Proceedings National Conference on Irrigation Return Flow Quality Management. Office of University Publications, Colorado State University, Fort Collins. pp. 133-142.
- King, W. E., J. W. Hawley, A. M. Taylor, and R. P. Wilson. 1971. Geology and Ground Water Resources of Central and Western Dona Ana County, New Mexico. New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 1. 64 pp.
- Lansford, Robert R. 1965. Production Requirements, Costs and Returns Guide for Selected Crops in New Mexico. Agricultural Economics and Agricultural Business, New Mexico State University, Las Cruces, Special Report No. 5. 50 pp.
- Leggat, E. R., M. E. Lowry, and J. W. Hood. 1964. Ground-Water Resources of the Lower Mesilla Valley, Texas and New Mexico. Texas Water Commission Bulletin 6203, 109 pp.
- MacGillivray, N. A. 1975. Vegetative Water Use in California, 1974. Dept. of Water Resource. Bul. No. 113.3. 104 pp.
- Maker, H. J., R. E. Neher, P. H. Derr and J. U. Anderson. 1971. Soil Association and Land Classification for Irrigation: Dona Ana County. Agricultural Experiment Station Research Report 183, New Mexico State University, Las Cruces. 141 pp.

- Reed, A. D. 1974. Custom Rates for Farm Operations. University of California, Division of Agricultural Services, Cooperative Extension Service. 9 pp.
- Sammis, T. W. 1980. Demonstration of Irrigation Return Flow Salinity Control in the Upper Rio Grande. New Mexico Water Resources Research Report 117. 140 pp.
- Sweetser, John S., W. D. Gorman, R. R. Lansford, W. H. Trego, E. J. Gregory, and Steve Hicks. 1976. Annual Expenses, Returns and Capital Requirements of Selected Crops for the Navajo Indian Irrigation Project, Agricultural Experiment Station, New Mexico State University, Las Cruces, Research Report 313. 32 pp.
- United States Congress, Senate Select Committee on National Water Resources. 1961. Population Projections and Economic Assumptions. 86th Congress, 2nd Session, Comm. Print 5, Washington, Government Printing Office. 49 pp.
- United States Department of Agriculture, New Mexico Crop and Livestock Reporting Service, Statistical Reporting Service, and New Mexico Department of Agriculture. New Mexico Agricultural Statistics, New Mexico State University, Las Cruces, 1968 (Volume VI, Supplement I) and 1974 (Volume VII, Supplement II), 52 and 60 pp.
- United States Department of Agriculture, Soil Conservation Service. 1977. Soil Survey of Dona Ana County (Advanced copy). Las Cruces, New Mexico. 250 pp.
- United States Department of Interior, Bureau of Reclamation. 1971. Use of Water on Federal Irrigation Projects, Minidoka Project, North Side Pumping Division, Unit A. Crop and Irrigation Data, 1964-1968, Vol. 1, Summary Report, 154 pp.
- United States Department of Interior, Bureau of Reclamation. 1938-1977. Monthly Water Distributions, El Paso District Office. 39 pp.
- United States Department of Interior, Geological Survey. 1938. Quality of Water in the Rio Grande Basin Above Fort Quitman, Texas. Geological Survey Water Supply Paper 839.
- United States Water Resources Council. 1968. The Nation's Water Resources, the First National Assessment. Washington, Government Printing Office.
- Walker, Wynn R., Gaylord V. Skoegerboe, and Robert G. Evans. 1977. Development of Best Management Practices for Salinity Control in the Grand Valley. Proceedings National Conference on Irrigation Return Flow Quality Management. Office of University Publication, Colorado State University, Fort Collins. pp. 385-396.
- Wierenga, P. J. 1979. Soil Salinity and Cotton Yields as Affected by Surface and Trickle Irrigation. New Mexico Water Resources Research Report No. 106. 212 pp.
- Wierenga, P. J. 1980. Quality of Irrigation Return Flow in the Middle Rio Grande Basin, Proceedings InterAmerican Conference on Salinity and Water Management Technology, December 13-14, 1979, El Paso, Texas.

Wilcox, L. V., 1968. Discharge and Salt Burden of the Rio Grande Above Fort Quitman, Texas, and Salt Balance Conditions of the Rio Grande Project, summary report for the 30-year period 1934-1963. U. S. Salinity Laboratory, Research Report No. 113, Riverside, California.

APPENDIX

TABLE 15. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

-(DOLLARS)-----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	11.70				11.70
ALFALFA SEED		15.00 LB	14.25				14.25
CANAL WATER		7.00 AC.IN.	3.33				3.33
PUMP WATER		10.00 AC.IN.					
			-----				-----
SUBTOTAL			29.28				29.28
<u>PREHARVEST OPERATIONS</u>							
PLow (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER	40 HP	.13 HR		.16	.26	.29	.71
DRILL	40 HP	.33 HR		.41	.87	1.41	2.69
IRRIGATE (3X)		1.59 HR		1.59	1.95	1.15	4.69
			-----	-----	-----	-----	-----
SUBTOTAL		4.32 HR		5.00	7.83	7.08	19.91
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.68 HR		.85			.85
EMPLOYEE BENEFITS				.75			.75
FARM INSURANCE			6.03				6.03
SUPERVISION AND MANAGEMENT				5.16			5.16
OTHER EXPENSES			10.00				10.00
			-----	-----	-----	-----	-----
SUBTOTAL		.68 HR	16.03	6.76			22.79
<u>TOTAL OPERATING EXPENSES</u>							
		5.00 HR	45.31	11.76	7.83	7.08	71.98

TABLE 16. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES:		YIELD: 5.00 TON					
HARVEST DATES: JUNE 1 - OCT 1		PRICE: \$27.00/TON		GROSS RETURNS: \$135.00			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		78.00 LB	10.14				10.14
ESTABLISHMENT		1/5				16.74	16.74
WIRE		10.00 LB	4.70				4.70
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		52.57 AC.IN.					
SUBTOTAL			24.02			16.74	40.76
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
IRRIGATE (11X)		5.83 HR		5.83	10.23	6.07	22.13
SUBTOTAL			5.97 HR	6.01	10.49	6.38	22.88
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.50 HR		3.13	4.03	5.68	12.84
BALER (AUX ENG) (5X)	40 HP	1.70 HR		2.13	5.42	5.27	12.82
HAUL (TRAILER) (5X)	40 HP	1.85 HR		2.31	2.85	2.37	7.53
SUBTOTAL			6.05 HR	7.57	12.30	13.32	33.19
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.55 HR		1.93			1.93
EMPLOYEE BENEFITS				2.04			2.04
FARM INSURANCE			6.09				6.09
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				14.78			14.78
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.55 HR	16.09	18.75	6.50	41.34
TOTAL OPERATING EXPENSES		13.57 HR	40.11	32.33	22.79	42.94	138.17
NET OPERATING PROFIT							-3.17
INTEREST ON OPERATING CAPITAL							1.93
INTEREST ON EQUIPMENT INVESTMENT							8.76
RETURN TO LAND AND RISK							-13.86

TABLE 17. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE,

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 5.00 TON		RED: 370.00 LB			
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN: \$75.00/TON		RED: \$0.24/LB	GROSS RETURNS: \$463.80		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	15.40				15.40
PHOSPHORUS (P)		60.00 LB	7.80				7.80
CHILE SEED		5.00 LB	27.50				27.50
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		28.44 AC. IN.					
SACKS		50.00	5.00				5.00
SUBTOTAL			74.88				74.88
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
FLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.61 HR		.61	1.15	.68	2.44
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.35	4.53
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.92	2.97
THINNING		10.60 HR		13.25			13.25
HOEING (3X)		24.99 HR		31.24			31.24
IRRIGATE (12X)		4.44 HR		4.44	8.31	4.93	17.68
SUBTOTAL			47.19 HR	57.73	22.09	17.03	96.85
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			118.36				118.36
HAUL (TRAILER) (3X)	30 HP	7.50 HR		9.38	10.50	9.45	29.33
HAUL (TRUCK) (3X)	2 TON	5.10 HR		6.38	7.96	5.15	19.49
SUBTOTAL			12.60 HR	15.76	18.46	14.60	167.18
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		13.68 HR		17.11			17.11
EMPLOYEE BENEFITS				11.02			11.02
FARM INSURANCE			6.45				6.45
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				76.16			76.16
OTHER EXPENSES			10.00				10.00
SUBTOTAL			13.68 HR	16.45	104.29	6.50	127.24
TOTAL OPERATING EXPENSES			73.47 HR	209.69	177.78	40.55	466.15
NET OPERATING PROFIT							-2.35
INTEREST ON OPERATING CAPITAL							6.94
INTEREST ON EQUIPMENT INVESTMENT							13.89
RETURN TO LAND AND RISK							-23.18

TABLE 18. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: MAY 1 - MAY 15		YIELD:	17.00 TON				
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE:	6.55/TON	GROSS RETURNS: \$111.35			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		42.00 LB	4.62				4.62
CORN SEED		17.00 LB	2.89				2.89
HERBICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		29.43 AC.IN.					
			-----				-----
SUBTOTAL			26.69				26.69
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.53	1.24
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.61 HR		.61	1.05	.63	2.29
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.92	2.97
IRRIGATE (8X)		3.84 HR		3.84	4.67	2.77	11.28
			-----	-----	-----	-----	-----
SUBTOTAL		8.64 HR		9.69	14.33	14.26	38.28
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			7.50				7.50
HAUL (TRUCK) (CUSTOM)	2 TON		9.30				9.30
			-----				-----
SUBTOTAL			16.80				16.80
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.05 HR		1.31			1.31
EMPLOYEE BENEFITS				1.45			1.45
FARM INSURANCE			6.06				6.06
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				11.46			11.46
OTHER EXPENSES			10.00				10.00
			-----	-----			-----
SUBTOTAL		1.05 HR	16.06	14.22		6.50	36.78
<u>TOTAL OPERATING EXPENSES</u>							
		9.69 HR	59.55	23.91	14.33	20.76	118.55
<u>NET OPERATING PROFIT</u>							
							-7.20
<u>INTEREST ON OPERATING CAPITAL</u>							
							1.97
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							
							6.20
<u>RETURN TO LAND AND RISK</u>							
							-15.37

TABLE 19. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT: 620.00 LB		SEED: 1031.00 LB		GROSS RETURNS: \$272.73	
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT: \$0.39/LB		SEED: \$0.03/LB			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	11.00				11.00
PHOSPHORUS (P)		36.00 LB	4.68				4.68
COTTON SEED		25.00 LB	4.75				4.75
HERBICIDE (CUSTOM)		1.00 ACRE	11.00				11.00
INSECTICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
CROP INSURANCE		1.00 DOLLARS	9.97				9.97
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		21.29 AC.IN.					
SUBTOTAL			55.58				55.58
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.61 HR		.61	1.13	.67	2.41
COTTON PLANTER	40 HP	.35 HR		.44	.83	1.02	2.29
SLED	30 HP	.37 HR		.46	.48	.41	1.35
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.80	6.03
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.92	2.97
IRRIGATE (6X)		2.88 HR		2.88	3.01	1.79	7.68
HOEING (2X)		2.06 HR		2.58			2.58
SUBTOTAL			12.46 HR	14.71	17.35	14.30	46.37
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.04 HR		2.55	5.51	8.15	16.22
COTTON TRAILER (2X)	0.5 TON	2.00 HR		2.50	3.86	1.70	8.06
GIN COTTON (CUSTOM)			20.43				20.43
SUBTOTAL			4.04 HR	20.43	5.05	9.37	44.71
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.25 HR		4.07			4.07
EMPLOYEE BENEFITS				2.96			2.96
FARM INSURANCE			6.12				6.12
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				22.64			22.64
OTHER EXPENSES			10.00				10.00
SUBTOTAL			3.25 HR	16.12	29.67	6.50	52.29
TOTAL OPERATING EXPENSES			19.75 HR	92.13	49.43	26.73	198.95
NET OPERATING PROFIT							73.78
INTEREST ON OPERATING CAPITAL							3.32
INTEREST ON EQUIPMENT INVESTMENT							9.71
RETURN TO LAND AND RISK							60.75

TABLE 20. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 40.00 CWT					
HARVEST DATES: SEP 1 - OCT 30		PRICE: 2.95/CWT		GROSS RETURNS: \$118.00			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	8.80				8.80
GRAIN SORGHUM SEED		6.00 LB	1.32				1.32
HERBICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		22.91 AC. IN.					
SUBTOTAL			26.80				26.80
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.53	1.24
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.61 HR		.61	1.17	.70	2.48
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.92	2.97
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
IRRIGATE (6X)		2.88 HR		2.88	3.28	1.95	8.11
SUBTOTAL			8.96 HR	10.33	15.43	15.81	41.57
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			5.00				5.00
HAUL (TRUCK) (CUSTOM)	2 TON		2.00				2.00
SUBTOTAL			7.00				7.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.37 HR		1.71			1.71
EMPLOYEE BENEFITS				1.55			1.55
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				11.50			11.50
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.37 HR	16.07	14.76	6.50	37.33
TOTAL OPERATING EXPENSES		10.33 HR	49.87	25.09	15.43	22.31	112.70
NET OPERATING PROFIT							5.30
INTEREST ON OPERATING CAPITAL							1.97
INTEREST ON EQUIPMENT INVESTMENT							6.66
RETURN TO LAND AND RISK							-3.33

TABLE 21. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES:		YIELD: 5.10 CWT BEEF		GROSS RETURNS: \$74.82			
HARVEST DATES: MAY 1 - OCT. 30		PRICE: \$14.67/CWT BEEF					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	13.20				13.20
PHOSPHORUS (P)		46.00 LB	5.98				5.98
ESTABLISHMENT		1/10				6.98	6.98
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		46.93 AC.IN.					
SUBTOTAL			28.36			6.98	35.34
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
FERT SPREADER (2X)	30 HP	.48 HR		.60	.88	1.06	2.54
IRRIGATE (10X)		5.30 HR		5.30	9.13	5.42	19.85
SUBTOTAL			6.06 HR	6.25	10.42	6.85	23.52
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.19 HR		.24			.24
EMPLOYEE BENEFITS				.94			.94
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				8.85			8.85
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.19 HR	16.05	10.03	6.50	32.58
TOTAL OPERATING EXPENSES		6.25 HR	44.41	16.28	10.42	20.33	91.44
NET OPERATING PROFIT							-16.62
INTEREST ON OPERATING CAPITAL							1.73
INTEREST ON EQUIPMENT INVESTMENT							3.68
RETURN TO LAND AND RISK							-22.03

TABLE 22. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: JAN 15 - FEB 15		YIELD: 580.00 CTH		GROSS RETURNS: \$1809.60			
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$3.12/CTH					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		225.00 LB	24.75				24.75
PHOSPHORUS (P)		80.00 LB	10.40				10.40
LETTUCE SEED		2.00 LB	7.00				7.00
CANAL WATER		9.96 AC.IN.	4.73				4.73
PUMP WATER		20.88 AC.IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
INSECTICIDE (CUSTOM)		1.00 ACRE	50.00				50.00
SUBTOTAL			106.88				106.88
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.61 HR		.61	.54	.32	1.47
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.92	2.97
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.35	4.53
THIN & HOE (CUSTOM)			25.00				25.00
IRRIGATE (10X)		3.00 HR		3.00	3.52	2.09	8.61
SUBTOTAL			10.25 HR	25.00	11.91	13.93	67.63
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)				696.00			696.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				1.79			1.79
FARM INSURANCE			6.08				6.08
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				56.10			56.10
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.66 HR	16.08	59.97	6.50	82.55
TOTAL OPERATING EXPENSES			11.91 HR	843.96	71.88	20.43	953.06
NET OPERATING PROFIT							856.54
INTEREST ON OPERATING CAPITAL							8.64
INTEREST ON EQUIPMENT INVESTMENT							5.84
RETURN TO LAND AND RISK							842.06

TABLE 23. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 500.00 CTN		GROSS RETURNS: \$1200.00			
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: \$2.40/CTN					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	25.30				25.30
PHOSPHORUS (P)		80.00 LB	10.40				10.40
LETTUCE SEED		2.00 LB	7.00				7.00
CANAL WATER		6.00 AC. IN.	2.85				2.85
PUMP WATER		18.14 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				60.00
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
SUBTOTAL			118.05				118.05
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD,	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FEKT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.61 HR		.61	.52	.31	1.44
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.92	2.97
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.35	4.53
THIN & HOE (CUSTOM)			25.00				25.00
IRRIGATE (8X)		2.40 HR		2.40	3.01	1.78	7.19
SUBTOTAL			25.00	11.31	16.26	13.61	66.18
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			600.00				600.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				1.70			1.70
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				50.71			50.71
OTHER EXPENSES			10.00				10.00
SUBTOTAL			16.07	54.49		6.50	77.06
TOTAL OPERATING EXPENSES			11.31 HR	759.12	65.80	20.11	861.29
NET OPERATING PROFIT							338.71
INTEREST ON OPERATING CAPITAL							8.35
INTEREST ON EQUIPMENT INVESTMENT							5.70
RETURN TO LAND AND RISK							324.66

TABLE 24. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 16.00 TON						
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$81.80/TON		GROSS RETURNS: \$1308.80				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	22.00				22.00	
PHOSPHORUS (P)		70.00 LB	9.10				9.10	
ONION SEED		4.00 LB	16.00				16.00	
CANAL WATER		19.32 AC.IN.	9.18				9.18	
PUMP WATER		23.07 AC.IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00	
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00	
SUBTOTAL			76.28				76.28	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02	
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91	
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93	
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98	
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29	
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32	
PRE-IRRIGATE		.61 HR		.61	.55	.33	1.49	
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44	
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14	
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.92	2.97	
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.35	4.53	
THIN & HOE (CUSTOM)			33.00				33.00	
IRRIGATE (14X)		4.20 HR		4.20	3.94	2.34	10.48	
SUBTOTAL			33.00	13.11	17.17	14.22	77.50	
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM) ONIONS			480.00				480.00	
PACK ONIONS (CUSTOM)			480.00				480.00	
SUBTOTAL			960.00				960.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.66 HR		2.08			2.08	
EMPLOYEE BENEFITS				1.97			1.97	
FARM INSURANCE			6.09				6.09	
LAND TAXES						6.50	6.50	
SUPERVISION AND MANAGEMENT				70.42			70.42	
OTHER EXPENSES			10.00				10.00	
SUBTOTAL			16.09	74.47		6.50	97.06	
TOTAL OPERATING EXPENSES			13.11 HR	1085.37	87.58	17.17	20.72	1210.84
NET OPERATING PROFIT							97.96	
INTEREST ON OPERATING CAPITAL							9.50	
INTEREST ON EQUIPMENT INVESTMENT							6.00	
RETURN TO LAND AND RISK							82.46	

TABLE 25. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 14.00 TON					GROSS RETURNS: \$784.00
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: 56.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	22.00				22.00
PHOSPHORUS (P)		70.00 LB	9.10				9.10
ONION SEED		4.00 LB	16.00				16.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		20.57 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
SUBTOTAL			81.28				81.28
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.61 HR		.61	.52	.31	1.44
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.92	2.97
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.35	4.53
THIN & HOE (CUSTOM)			33.00				33.00
IRRIGATE (14X)		4.20 HR		4.20	3.51	2.08	9.79
SUBTOTAL			11.45 HR	33.00	13.11	16.71	76.76
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM)	ONIONS		420.00				420.00
PACK ONIONS (CUSTOM)			420.00				420.00
SUBTOTAL			840.00				840.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				1.97			1.97
FARM INSURANCE			6.09				6.09
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				64.64			64.64
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.66 HR	16.09	68.69	6.50	91.28
TOTAL OPERATING EXPENSES		13.11 HR	970.37	81.80	16.71	20.44	1089.32
NET OPERATING PROFIT							-305.32
INTEREST ON OPERATING CAPITAL							8.94
INTEREST ON EQUIPMENT INVESTMENT							5.84
RETURN TO LAND AND RISK							-320.10

TABLE 26. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD: 32.00 CWT					
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$3.20/CWT		GROSS RETURNS: \$102.40			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		14.68 AC.IN.					
SUBTOTAL			41.32				41.32
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
FLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.53	1.24
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (8X)		4.24 HR		4.24	2.86	1.69	8.79
SUBTOTAL			8.03 HR	8.98	10.77	9.78	29.53
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.50				7.50
HAUL (TRUCK) (CUSTOM)	2 TON		3.60				3.60
SUBTOTAL			11.10				11.10
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.35			1.35
FARM INSURANCE			6.06				6.06
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				10.64			10.64
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.95 HR	16.06	13.17	6.50	35.73
TOTAL OPERATING EXPENSES		8.98 HR	68.48	22.15	10.77	16.28	117.68
NET OPERATING PROFIT							-15.28
INTEREST ON OPERATING CAPITAL							2.24
INTEREST ON EQUIPMENT INVESTMENT							4.33
RETURN TO LAND AND RISK							-21.85

TABLE 27. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 34.00 CWT		GROSS RETURNS: \$108.80			
HARVEST DATES: JULY 1 - JULY 15		PRICE: \$3.20/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		10.44 AC.IN.	4.96				4.96
PUMP WATER		16.74 AC.IN.					
SUBTOTAL			37.10				37.10
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.53	1.24
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (5X)		2.65 HR		2.65	3.26	1.93	7.84
SUBTOTAL			6.44 HR	7.39	11.17	10.02	28.58
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.50				7.50
HAUL (TRUCK) (CUSTOM)	2 TON		3.60				3.60
SUBTOTAL			11.10				11.10
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.11			1.11
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				9.53			9.53
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.95 HR	16.05	11.82	6.50	34.37
TOTAL OPERATING EXPENSES			7.39 HR	64.25	19.21	11.17	111.15
NET OPERATING PROFIT							-2.35
INTEREST ON OPERATING CAPITAL							2.08
INTEREST ON EQUIPMENT INVESTMENT							4.45
RETURN TO LAND AND RISK							-8.88

TABLE 28. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 12.00 TON					
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: \$34.00/TON		GROSS RETURNS: \$408.00			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	6.93				6.93
PHOSPHORUS (P)		161.00 LB	20.93				20.93
TOMATO SEED		2.00 LB	13.34				13.34
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE (CUSTOM)		1.00 ACRE	12.00				12.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		31.16 AC.IN.					
SUBTOTAL			77.38				77.38
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
PRE-IRRIGATE		.61 HR		.61	.82	.49	1.92
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.80	6.03
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.92	2.97
HOEING (2X)		6.00 HR		7.50			7.50
IRRIGATE (11X)		3.85 HR		3.85	5.24	3.11	12.20
SUBTOTAL			17.46 HR	20.71	19.34	15.60	55.65
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			101.15				101.15
FORK LIFT (2X)		.70 HR		.88	1.21	5.52	7.61
HAUL (TRUCK) (2X)	2 TON	3.40 HR		4.25	5.30	3.43	12.98
SUBTOTAL			4.10 HR	101.15	5.13	8.95	121.74
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.27 HR		5.34			5.34
EMPLOYEE BENEFITS				3.88			3.88
FARM INSURANCE			6.16				6.16
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				36.43			36.43
OTHER EXPENSES			10.00				10.00
SUBTOTAL			4.27 HR	16.16	45.64	6.50	68.30
TOTAL OPERATING EXPENSES			25.83 HR	194.69	71.48	25.85	323.07
NET OPERATING PROFIT							84.93
INTEREST ON OPERATING CAPITAL							4.76
INTEREST ON EQUIPMENT INVESTMENT							10.49
RETURN TO LAND AND RISK							69.68

TABLE 29. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (BASE)

PLANTING DATES:		YIELD: 1300.00 LB		GROSS RETURNS: \$416.00			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.32/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	15.95				15.95
PHOSPHORUS (P)		48.00 LB	6.24				6.24
ZINC SULFATE		12.00 LB	2.52				2.52
MANGANESE SULFATE		24.00 LB	3.60				3.60
HERBICIDE		2.00 LB	1.70				1.70
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		34.67 AC. IN.					
ESTABLISHMENT		1/12				96.30	96.30
SUBTOTAL			54.19			96.30	150.49
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PRUNE (MACHINE)	40 HP	2.00 HR		2.50	6.50	9.76	18.76
HAUL (TRUCK)	2 TON	2.00 HR		2.50	3.12	2.02	7.64
DRILL HERBICIDE	70 HP	.24 HR		.30	.32	.67	1.29
SPRAYER (MTD)	40 HP	.50 HR		.63	.88	1.24	2.75
BORDER	30 HP	.27 HR		.34	.38	.65	1.37
FERT SPREADER	30 HP	.24 HR		.30	.44	.53	1.27
HOEING (2X)		4.00 HR		5.00			5.00
IRRIGATE (9X)		4.77 HR		4.77	6.75	4.00	15.52
SUBTOTAL			15.14 HR	17.74	20.79	20.98	59.51
<u>HARVEST OPERATIONS</u>							
SHAKE	70 HP	2.25 HR		2.81	9.77	12.11	24.69
SWEEP	30 HP	2.25 HR		2.81	4.91	7.94	15.66
CLEAN & SACK		11.00 HR		11.00			11.00
HAUL NUTS	40 HP	2.90 HR		3.63	4.23	3.05	10.91
HAND LABOR		16.00 HR		16.00			16.00
SUBTOTAL			34.40 HR	36.25	18.91	23.10	78.26
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.44 HR		5.55			5.55
EMPLOYEE BENEFITS				8.10			8.10
FARM INSURANCE			6.37				6.37
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				57.39			57.39
OTHER EXPENSES			10.00				10.00
SUBTOTAL			4.44 HR	16.37	71.04	6.50	93.91
TOTAL OPERATING EXPENSES			53.98 HR	70.56	125.03	146.88	382.17
NET OPERATING PROFIT							33.83
INTEREST ON OPERATING CAPITAL							4.55
INTEREST ON EQUIPMENT INVESTMENT							17.91
RETURN TO LAND AND RISK							11.37

TABLE 30. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	11.70				11.70
ALFALFA SEED		15.00 LB	14.25				14.25
CANAL WATER		7.00 AC.IN.	3.33				3.33
PUMP WATER		8.30 AC.IN.					
SUBTOTAL			29.28				29.28
<u>PREHARVEST OPERATIONS</u>							
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER	40 HP	.13 HR		.16	.26	.29	.71
DRILL	40 HP	.33 HR		.41	.87	1.40	2.68
IRRIGATE (3X)		1.83 HR		1.83	1.62	1.01	4.46
SUBTOTAL			4.56 HR	5.24	7.50	6.93	19.67
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.68 HR		.85			.85
EMPLOYEE BENEFITS				.79			.79
FARM INSURANCE			6.03				6.03
SUPERVISION AND MANAGEMENT				5.37			5.37
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.68 HR	16.03	7.00		23.03
TOTAL OPERATING EXPENSES			5.24 HR	45.31	12.24	7.50	71.98

TABLE 31. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES:		YIELD: 5.25 TON		GROSS RETURNS: \$141.75			
HARVEST DATES: JUNE 1 - OCT 1		PRICE: \$27.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		78.00 LB	10.14				10.14
ESTABLISHMENT		1/5				16.74	16.74
WIRE		10.50 LB	4.94				4.94
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		45.38 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			28.76			16.74	45.50
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
IRRIGATE (11X)		6.71 HR		6.71	8.83	5.55	21.09
SUBTOTAL				6.89	9.09	5.86	21.84
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.65 HR		3.31	4.27	5.67	13.25
BALER (AUX ENG) (5X)	40 HP	1.80 HR		2.25	5.74	5.35	13.34
HAUL (TRAILER) (5X)	40 HP	1.95 HR		2.44	3.00	2.44	7.88
SUBTOTAL				8.00	13.01	13.46	34.47
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.63 HR		2.04			2.04
EMPLOYEE BENEFITS				2.23			2.23
FARM INSURANCE			6.10				6.10
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				16.07			16.07
OTHER EXPENSES			10.00				10.00
SUBTOTAL				16.10	20.35	6.50	42.95
TOTAL OPERATING EXPENSES		14.88 HR	44.86	35.24	22.10	42.56	144.76
NET OPERATING PROFIT							-3.01
INTEREST ON OPERATING CAPITAL							2.10
INTEREST ON EQUIPMENT INVESTMENT							8.53
RETURN TO LAND AND RISK							-13.64

TABLE 32. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN:	5.25 TON	RED:	389.00 LB		
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN:	75.00/TON	RED:	50.24/LB	GROSS RETURNS: 1487.11	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	15.40				15.40
PHOSPHORUS (P)		60.00 LB	7.80				7.80
CHILE SEED		5.00 LB	27.50				27.50
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		23.66 AC. IN.					
SACKS		50.00	5.00				5.00
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			79.38				79.38
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
FLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.64	.40	1.74
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
THINNING		10.60 HR		13.25			13.25
HOEING (3X)		24.99 HR		31.24			31.24
IRRIGATE (12X)		6.60 HR		6.60	3.96	2.49	13.05
SUBTOTAL			49.44 HR	59.98	17.23	14.29	91.50
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			124.28				124.28
HAUL (TRAILER) (3X)	30 HP	7.89 HR		9.86	11.05	9.78	30.69
HAUL (TRUCK) (3X)	2 TON	5.10 HR		6.38	7.96	5.10	19.44
SUBTOTAL			12.99 HR	124.28	16.24	14.88	174.41
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		13.78 HR		17.23			17.23
EMPLOYEE BENEFITS			6.47	11.43			11.43
FARM INSURANCE						6.50	6.50
LAND TAXES				80.89			80.89
SUPERVISION AND MANAGEMENT			10.00				10.00
OTHER EXPENSES							
SUBTOTAL			13.78 HR	16.47	109.55	6.50	132.52
TOTAL OPERATING EXPENSES		76.21 HR	220.13	185.77	36.24	35.67	477.81
NET OPERATING PROFIT							9.30
INTEREST ON OPERATING CAPITAL							7.19
INTEREST ON EQUIPMENT INVESTMENT							12.39
RETURN TO LAND AND RISK							-10.28

TABLE 33. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: MAY 1 - MAY 15		YIELD:	17.85 TON		GROSS RETURNS: \$116.92		
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE:	\$6.55/TON				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		42.00 LB	4.62				4.62
CORN SEED		17.00 LB	2.89				2.89
HERBICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		24.56 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			31.19				31.19
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
FLOW (MOLDBOARD,	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.95	.60	2.25
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
IRRIGATE (8X)		4.40 HR		4.40	3.83	2.40	10.63
SUBTOTAL			9.29 HR	10.34	13.39	13.84	37.57
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		9.77				9.77
SUBTOTAL			17.65				17.65
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.05 HR		1.31			1.31
EMPLOYEE BENEFITS				1.55			1.55
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				12.33			12.33
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.05 HR	16.07	15.19	6.50	37.76
TOTAL OPERATING EXPENSES			10.34 HR	64.91	25.53	13.39	124.17
NET OPERATING PROFIT							-7.25
INTEREST ON OPERATING CAPITAL							2.11
INTEREST ON EQUIPMENT INVESTMENT							5.97
RETURN TO LAND AND RISK							-15.33

TABLE 34. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT: 650.00 LB		SEED: 1083.00 LB			
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT: 70.39/LB		SEED: 70.03/LB		GROSS RETURNS: \$285.99	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	11.00				11.00
PHOSPHORUS (P)		36.00 LB	4.68				4.68
COTTON SEED		25.00 LB	4.75				4.75
HERBICIDE (CUSTOM)		1.00 ACRE	11.00				11.00
INSECTICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
CROP INSURANCE		1.00 DOLLARS	9.97				9.97
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		17.23 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			60.08				60.08
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	1.02	.64	2.36
COTTON PLANTER	40 HP	.35 HR		.44	.83	1.01	2.28
SLED	30 HP	.37 HR		.46	.48	.41	1.35
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.79	6.02
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
IRRIGATE (6X)		3.30 HR		3.30	2.34	1.47	7.11
HOEING (2X)		2.06 HR		2.58			2.58
SUBTOTAL			12.97 HR	15.22	16.58	13.92	45.72
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.14 HR		2.68	5.78	8.17	16.63
COTTON TRAILER (2X)	0.5 TON	2.00 HR		2.50	3.86	1.70	8.06
GIN COTTON (CUSTOM)			21.45				21.45
SUBTOTAL			4.14 HR	21.45	5.18	9.87	46.14
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.28 HR		4.10			4.10
EMPLOYEE BENEFITS				3.06			3.06
FARM INSURANCE			6.13				6.13
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				23.80			23.80
OTHER EXPENSES			10.00				10.00
SUBTOTAL			3.28 HR	16.13	30.96	6.50	53.59
TOTAL OPERATING EXPENSES			20.39 HR	97.66	51.36	26.22	205.53
NET OPERATING PROFIT							80.46
INTEREST ON OPERATING CAPITAL							3.47
INTEREST ON EQUIPMENT INVESTMENT							9.50
RETURN TO LAND AND RISK							67.49

TABLE 35. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: MAY 1 - JUNE 30		YIELD:	42.00 CWT		GROSS RETURNS: \$123.90		
HARVEST DATES: SEP 1 - OCT 30		PRICE:	\$2.95/CWT				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	8.80				8.80
GRAIN SORGHUM SEED		6.00 LB	1.32				1.32
HERBICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		18.69 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			31.30				31.30
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	1.06	.66	2.42
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
IRRIGATE (6X)		3.30 HR		3.30	2.58	1.62	7.50
SUBTOTAL			9.47 HR	10.84	14.62	15.42	40.88
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			5.25				5.25
HAUL (TRUCK) (CUSTOM)	2 TON		2.10				2.10
SUBTOTAL			7.35				7.35
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.37 HR		1.71			1.71
EMPLOYEE BENEFITS				1.63			1.63
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				12.26			12.26
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.37 HR	16.07	15.60	6.50	38.17
TOTAL OPERATING EXPENSES			10.84 HR	54.72	26.44	14.62	117.70
NET OPERATING PROFIT							6.20
INTEREST ON OPERATING CAPITAL							2.10
INTEREST ON EQUIPMENT INVESTMENT							6.45
RETURN TO LAND AND RISK							-2.35

TABLE 36. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES:		YIELD:		GROSS RETURNS:			
HARVEST DATES: MAY 1 - OCT. 30		5.36 CWT BEEF		\$78.63			
		PRICE: 14.67/CWT BEEF					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	13.20				13.20
PHOSPHORUS (P)		46.00 LB	5.98				5.98
ESTABLISHMENT		1/10				6.98	6.98
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		40.31 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			32.86			6.98	39.84
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
FERT SPREADER (2X)	30 HP	.48 HR		.60	.88	1.06	2.54
IRRIGATE (10X)		6.10 HR		6.10	7.84	4.93	18.87
SUBTOTAL			6.86 HR	7.05	9.13	6.36	22.54
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.19 HR		.24			.24
EMPLOYEE BENEFITS				1.06			1.06
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				9.76			9.76
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.19 HR	16.05	11.06	6.50	33.61
TOTAL OPERATING EXPENSES		7.05 HR	48.91	18.11	9.13	19.84	95.99
NET OPERATING PROFIT							-17.36
INTEREST ON OPERATING CAPITAL							1.87
INTEREST ON EQUIPMENT INVESTMENT							3.41
RETURN TO LAND AND RISK							-22.64

TABLE 37. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: JAN 15 - FEB 15		YIELD: 580.00 CTH					GROSS RETURNS: \$1809.60	
HARVEST DATES: MAY 1 - MAY 15		PRICE: 3.12/CTH						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
-(DOLLARS)-								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		225.00 LB	24.75				24.75	
PHOSPHORUS (P)		80.00 LB	10.40				10.40	
LETTUCE SEED		2.00 LB	7.00				7.00	
CANAL WATER		9.96 AC.IN.	4.73				4.73	
PUMP WATER		17.80 AC.IN.						
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00	
INSECTICIDE (CUSTOM)		1.00 ACRE	50.00				50.00	
ISS		1.00 ACRE	4.50				4.50	
SUBTOTAL			111.38				111.38	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02	
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91	
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93	
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98	
FERT SPRACADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29	
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32	
PRE-IRRIGATE		.70 HR		.70	.49	.31	1.50	
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44	
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16	
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96	
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52	
THIN & HOE (CUSTOM)			25.00				25.00	
IRRIGATE (10X)		3.50 HR		3.50	2.97	1.87	8.34	
SUBTOTAL			10.84 HR	25.00	12.50	16.19	13.68	67.37
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			696.00				696.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.66 HR		2.08			2.08	
EMPLOYEE BENEFITS				1.87			1.87	
FARM INSURANCE			6.08				6.08	
LAND TAXES						6.50	6.50	
SUPERVISION AND MANAGEMENT				57.38			57.38	
OTHER EXPENSES			10.00				10.00	
SUBTOTAL			1.66 HR	16.08	61.33	6.50	83.91	
TOTAL OPERATING EXPENSES			12.50 HR	848.46	73.83	16.19	20.18	958.66
NET OPERATING PROFIT							850.94	
INTEREST ON OPERATING CAPITAL							8.79	
INTEREST ON EQUIPMENT INVESTMENT							5.71	
RETURN TO LAND AND RISK							836.44	

TABLE 38. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 500.00 CTN		GROSS RETURNS: \$1200.00				
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: \$2.40/CTN						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		230.00 LB	25.30				25.30	
PHOSPHORUS (P)		80.00 LB	10.40				10.40	
LETTUCE SEED		2.00 LB	7.00				7.00	
CANAL WATER		6.00 AC.IN.	2.85				2.85	
PUMP WATER		15.73 AC.IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				60.00	
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50	
ISS		1.00 ACRE	4.50				4.50	
SUBTOTAL			122.55				122.55	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02	
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91	
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93	
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98	
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29	
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32	
PRE-IRRIGATE		.70 HR		.70	.47	.29	1.46	
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44	
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16	
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96	
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52	
THIN & HOE (CUSTOM)			25.00				25.00	
IRRIGATE (8X)		2.80 HR		2.80	2.59	1.63	7.02	
SUBTOTAL			25.00	11.80	15.79	13.42	66.01	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			600.00				600.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.66 HR		2.08			2.08	
EMPLOYEE BENEFITS				1.77			1.77	
FARM INSURANCE			6.08				6.08	
LAND TAXES						6.50	6.50	
SUPERVISION AND MANAGEMENT				51.81			51.81	
OTHER EXPENSES			10.00				10.00	
SUBTOTAL			16.08	55.66		6.50	78.24	
TOTAL OPERATING EXPENSES			11.80 HR	763.63	67.46	15.79	19.92	866.80
NET OPERATING PROFIT							333.20	
INTEREST ON OPERATING CAPITAL							8.50	
INTEREST ON EQUIPMENT INVESTMENT							5.60	
RETURN TO LAND AND RISK							319.10	

TABLE 39. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 16.00 TON					
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$81.80/TON		GROSS RETURNS: \$1308.80			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	22.00				22.00
PHOSPHORUS (P)		70.00 LB	9.10				9.10
ONION SEED		4.00 LB	16.00				16.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		18.83 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			80.78				80.78
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.49	.31	1.50
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
THIN & HOE (CUSTOM)			33.00				33.00
IRRIGATE (14X)		4.90 HR		4.90	3.17	1.99	10.06
SUBTOTAL			33.00	13.90	16.34	13.83	77.07
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			480.00				480.00
PACK ONIONS (CUSTOM)			480.00				480.00
SUBTOTAL			960.00				960.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			6.09				6.09
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				72.06			72.06
OTHER EXPENSES			10.00				10.00
SUBTOTAL			16.09	76.22		6.50	98.81
TOTAL OPERATING EXPENSES		13.90 HR	1089.87	90.12	16.34	20.33	1216.66
NET OPERATING PROFIT							92.14
INTEREST ON OPERATING CAPITAL							9.66
INTEREST ON EQUIPMENT INVESTMENT							5.79
RETURN TO LAND AND RISK							76.69

TABLE 40. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 14.00 TON		GROSS RETURNS: 1784.00			
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: 56.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	22.00				22.00
PHOSPHORUS (P)		70.00 LB	9.10				9.10
ONION SEED		4.00 LB	16.00				16.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		16.58 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			85.78				85.78
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.47	.29	1.46
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
THIN & HOE (CUSTOM)			33.00				33.00
IRRIGATE (14X)		4.90 HR		4.90	2.76	1.73	9.39
SUBTOTAL			33.00	13.90	15.91	13.55	76.36
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			420.00				420.00
PACK ONIONS (CUSTOM)			420.00				420.00
SUBTOTAL			840.00				840.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			6.09				6.09
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				66.27			66.27
OTHER EXPENSES			10.00				10.00
SUBTOTAL			16.09	70.43		6.50	93.02
TOTAL OPERATING EXPENSES		13.90 HR	974.87	84.33	15.91	20.05	1095.16
NET OPERATING PROFIT							-311.16
INTEREST ON OPERATING CAPITAL							9.11
INTEREST ON EQUIPMENT INVESTMENT							5.64
RETURN TO LAND AND RISK							-325.91

TABLE 41. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD: 33.60 CWT					
HARVEST DATES: MAY 1 - MAY 15		PRICE: 3.20/CWT		GROSS RETURNS: \$107.52			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		10.69 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			45.82				45.82
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (6X)		4.88 HR		4.88	2.08	1.31	8.27
SUBTOTAL			8.67 HR	9.62	9.99	9.39	29.00
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		3.78				3.78
SUBTOTAL			11.66				11.66
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.44			1.44
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				11.48			11.48
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.95 HR	16.07	14.10	6.50	36.67
TOTAL OPERATING EXPENSES		9.62 HR	73.55	23.72	9.99	15.89	123.15
NET OPERATING PROFIT							-15.63
INTEREST ON OPERATING CAPITAL							2.39
INTEREST ON EQUIPMENT INVESTMENT							4.11
RETURN TO LAND AND RISK							-22.13

TABLE 42. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD:	35.70 CWT				
HARVEST DATES: JULY 1 - JULY 15		PRICE:	\$3.20/CWT	GROSS RETURNS: \$114.24			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		10.44 AC.IN.	4.96				4.96
PUMP WATER		14.02 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			41.60				41.60
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLow (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (5X)		3.05 HR		3.05	2.73	1.71	7.49
SUBTOTAL			6.84 HR	7.79	10.64	9.79	28.22
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		3.78				3.78
SUBTOTAL			11.66				11.66
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.17			1.17
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				10.16			10.16
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.95 HR	16.05	12.51	6.50	35.06
TOTAL OPERATING EXPENSES			7.79 HR	69.31	20.30	16.29	116.54
NET OPERATING PROFIT							-2.30
INTEREST ON OPERATING CAPITAL							2.22
INTEREST ON EQUIPMENT INVESTMENT							4.33
RETURN TO LAND AND RISK							-8.85

TABLE 43. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 12.60 TON					
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: \$34.00/TON		GROSS RETURNS: \$428.40			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (R)		63.00 LB	6.93				6.93
PHOSPHORUS (P)		161.00 LB	20.93				20.93
TOMATO SEED		2.00 LB	13.34				13.34
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE (CUSTOM)		1.00 ACRE	12.00				12.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		26.11 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			81.88				81.88
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
PRE-IRRIGATE		.70 HR		.70	.74	.46	1.90
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.79	6.02
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
HOEING (2X)		6.00 HR		7.50			7.50
IRRIGATE (11X)		4.40 HR		4.40	4.34	2.73	11.47
SUBTOTAL			18.10 HR	21.35	18.36	15.17	54.88
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			106.21				106.21
FORK LIFT (2X)		.74 HR		.93	1.28	5.53	7.74
HAUL (TRUCK) (2X)	2 TON	3.58 HR		4.48	5.58	3.58	13.64
SUBTOTAL			4.32 HR	106.21	5.41	6.86	127.59
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.33 HR		5.41			5.41
EMPLOYEE BENEFITS				4.01			4.01
FARM INSURANCE			6.17				6.17
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				38.26			38.26
OTHER EXPENSES			10.00				10.00
SUBTOTAL			4.33 HR	16.17	47.68	6.50	70.35
TOTAL OPERATING EXPENSES			26.75 HR	204.26	74.44	25.22	334.70
NET OPERATING PROFIT							93.70
INTEREST ON OPERATING CAPITAL							4.95
INTEREST ON EQUIPMENT INVESTMENT							10.32
RETURN TO LAND AND RISK							78.43

TABLE 44. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967 -- (ISS)

PLANTING DATES:		YIELD: 1365.00 LB		GROSS RETURNS: \$436.80			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.32/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	15.95				15.95
PHOSPHORUS (P)		48.00 LB	6.24				6.24
ZINC SULFATE		12.00 LB	2.52				2.52
MANGANESE SULFATE		24.00 LB	3.60				3.60
HERBICIDE		2.00 LB	1.70				1.70
INSECTICIDE (CUSTON)		1.00 ACRE	15.00				15.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		29.27 AC. IN.					
ESTABLISHMENT		1/12				96.30	96.30
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			58.69			96.30	154.99
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PRUNE (MACHINE)	40 HP	2.00 HR		2.50	6.50	9.74	18.74
HAUL (TRUCK)	2 TON	2.00 HR		2.50	3.12	2.00	7.62
DRILL HERBICIDE	70 HP	.24 HR		.30	.32	.67	1.29
SPRAYER (MPD)	40 HP	.50 HR		.63	.88	1.24	2.75
BORDER	30 HP	.27 HR		.34	.38	.65	1.37
FERT SPREADER	30 HP	.24 HR		.30	.44	.53	1.27
HOEING (2X)		4.00 HR		5.00			5.00
IRRIGATE (9X)		5.49 HR		5.49	5.70	3.58	14.77
SUBTOTAL			15.86 HR	18.46	19.74	20.52	58.72
<u>HARVEST OPERATIONS</u>							
SHAKE	70 HP	2.25 HR		2.81	9.77	12.11	24.69
SWEEP	30 HP	2.25 HR		2.81	4.91	7.94	15.66
CLEAN & SACK		11.55 HR		11.55			11.55
HAUL NUTS	40 HP	2.90 HR		3.63	4.23	3.02	10.88
HAND LABOR		16.80 HR		16.80			16.80
SUBTOTAL			35.75 HR	37.60	18.91	23.07	79.58
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.44 HR		5.55			5.55
EMPLOYEE BENEFITS				8.41			8.41
FARM INSURANCE			6.39				6.39
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				60.29			60.29
OTHER EXPENSES			10.00				10.00
SUBTOTAL			4.44 HR	16.39	74.25	6.50	97.14
TOTAL OPERATING EXPENSES			56.05 HR	75.08	130.31	38.65	390.43
NET OPERATING PROFIT							46.37
INTEREST ON OPERATING CAPITAL							4.75
INTEREST ON EQUIPMENT INVESTMENT							17.63
RETURN TO LAND AND RISK							23.99

TABLE 45. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

- (DOLLARS) -							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	11.70				11.70
ALFALFA SEED		15.00 LB	14.25				14.25
CANAL WATER		7.00 AC.IN.	3.33				3.33
PUMP WATER		8.30 AC.IN.					
		<u>SUBTOTAL</u>	<u>29.28</u>				<u>29.28</u>
<u>PREHARVEST OPERATIONS</u>							
PLow (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER	40 HP	.13 HR		.16	.26	.29	.71
DKILL	40 HP	.33 HR		.41	.87	1.40	2.68
IRRI GATE (3X)		1.83 HR		1.83	1.62	1.03	4.48
		<u>SUBTOTAL</u>		<u>5.24</u>	<u>7.50</u>	<u>6.95</u>	<u>19.69</u>
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.68 HR		.85			.85
EMPLOYEE BENEFITS				.79			.79
FARM INSURANCE			6.03				6.03
SUPERVISION AND MANAGEMENT				5.37			5.37
OTHER EXPENSES			10.00				10.00
		<u>SUBTOTAL</u>	<u>16.03</u>	<u>7.00</u>			<u>23.03</u>
<u>TOTAL OPERATING EXPENSES</u>							
		<u>5.24 HR</u>	<u>45.31</u>	<u>12.24</u>	<u>7.50</u>	<u>6.95</u>	<u>72.00</u>

TABLE 46. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES:		YIELD: 5.25 TON		GROSS RETURNS: 5141.75			
HARVEST DATES: JUNE 1 - OCT 1		PRICE: 127.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		78.00 LB	10.14				10.14
ESTABLISHMENT		1/5				16.75	16.75
WIRE		10.50 LB	4.94				4.94
CANAL WATER		19.32 AC. IN.	9.16				9.16
PUMP WATER		45.38 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			28.76			16.75	45.51
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
IRRIGATE (11X)		6.71 HR		6.71	8.83	5.65	21.19
SUBTOTAL			6.85 HR	6.89	9.09	5.96	21.94
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.65 HR		3.31	4.27	5.67	13.25
BALER (AUX ENG) (5X)	40 HP	1.80 HR		2.25	5.74	5.35	13.34
HAUL (TRAILER) (5X)	40 HP	1.95 HR		2.44	3.00	2.42	7.86
SUBTOTAL			6.40 HR	8.00	13.01	13.44	34.45
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.63 HR		2.04			2.04
EMPLOYEE BENEFITS				2.23			2.23
FARM INSURANCE			6.10				6.10
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				16.07			16.07
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.63 HR	16.10	20.35	6.50	42.95
TOTAL OPERATING EXPENSES			14.88 HR	44.86	35.24	42.65	144.84
NET OPERATING PROFIT							-3.09
INTEREST ON OPERATING CAPITAL							2.10
INTEREST ON EQUIPMENT INVESTMENT							8.59
RETURN TO LAND AND RISK							-13.78

TABLE 47. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 5.51 TON		RED: 408.00 LB			
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN: \$75.00/TON		RED: 50.24/LB	GROSS RETURNS: \$511.17		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	15.40				15.40
PHOSPHORUS (P)		60.00 LB	7.80				7.80
CHILE SEED		5.00 LB	27.50				27.50
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		20.22 AC.IN.					
SACKS		50.00	5.00				5.00
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
SUBTOTAL			98.78				98.78
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLow (MOLDOBOARD)	90 HP	.87 HR		.80	1.65	1.44	3.93
LAND FLARE	70 HP	.48 HR		.60	.70	.68	1.98
PEAK SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISZEL	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE (2X)		.92 HR		.92	1.18	.76	2.86
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
THINNING		10.60 HR		13.25			13.25
HOEING (3X)		24.99 HR		31.24			31.24
IRRIGATE (11X)		6.05 HR		6.05	2.75	1.76	10.56
SUBTOTAL			49.11 HR	59.65	16.56	13.92	90.13
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			130.49				130.49
HAUL (TRAILER) (3X)	30 HP	8.28 HR		10.35	11.59	10.10	32.04
HAUL (TRUCK) (3X)	2 TON	5.64 HR		7.05	8.80	5.36	21.21
SUBTOTAL			13.92 HR	17.40	20.39	15.46	183.74
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		14.01 HR		17.52			17.52
EMPLOYEE BENEFITS				11.56			11.56
FARM INSURANCE			6.47				6.47
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				138.54			138.54
OTHER EXPENSES			10.00				10.00
SUBTOTAL			14.01 HR	16.47	167.62	6.50	190.59
TOTAL OPERATING EXPENSES			77.04 HR	245.74	244.67	36.95	563.24
NET OPERATING PROFIT							-52.07
INTEREST ON OPERATING CAPITAL							9.25
INTEREST ON EQUIPMENT INVESTMENT							12.45
RETURN TO LAND AND RISK							-73.77

TABLE 48. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.85 TON					
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: \$6.55/TON		GROSS RETURNS: \$116.92			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS)----- -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		42.00 LB	4.62				4.62
CORN SEED		17.00 LB	2.89				2.89
HERBICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		24.56 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			31.19				31.19
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.95	.61	2.26
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
IRRIGATE (8X)		4.40 HR		4.40	3.83	2.45	10.68
SUBTOTAL			9.29 HR	10.34	13.39	13.90	37.63
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		9.77				9.77
SUBTOTAL			17.65				17.65
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.05 HR		1.31			1.31
EMPLOYEE BENEFITS				1.55			1.55
FARM INSURANCE			6.07				6.07
LAND TAXES					6.50		6.50
SUPERVISION AND MANAGEMENT				12.33			12.33
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.05 HR	16.07	15.19	6.50	37.76
TOTAL OPERATING EXPENSES			10.34 HR	64.91	25.53	20.40	124.23
NET OPERATING PROFIT							-7.31
INTEREST ON OPERATING CAPITAL							2.11
INTEREST ON EQUIPMENT INVESTMENT							6.01
RETURN TO LAND AND RISK							-15.43

TABLE 49. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT:	650.00 LB	SEED: 1083.00 LB			
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT:	10.39/LB	SEED: 10.03/LB	GROSS RETURNS: \$285.99		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

PURCHASED INPUTS							

(DOLLARS)							

NITROGEN (N)		100.00 LB	11.00				11.00
PHOSPHORUS (P)		36.00 LB	4.68				4.68
COTTON SEED		25.00 LB	4.75				4.75
HERBICIDE (CUSTOM)		1.00 ACRE	11.00				11.00
INSECTICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
CROP INSURANCE		1.00 DOLLARS	9.97				9.97
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		17.23 AC. IN.					9.18
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			60.08				60.08

PREHARVEST OPERATIONS							

SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	1.02	.65	2.37
COTTON PLANTER	40 HP	.35 HR		.44	.83	1.01	2.28
SLED	30 HP	.37 HR		.46	.48	.40	1.34
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.79	6.02
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
IRRIGATE (6X)		3.30 HR		3.30	2.34	1.49	7.13
HOEING (2X)		2.06 HR		2.58			2.58
SUBTOTAL			12.97 HR	15.22	16.58	13.94	45.74

HARVEST OPERATIONS							

COTTON PICKER (2X)	2-ROW	2.14 HR		2.68	5.78	8.17	16.63
COTTON TRAILER (2X)	0.5 TON	2.00 HR		2.50	3.86	1.70	8.06
GIN COTTON (CUSTOM)			21.45				21.45
SUBTOTAL			4.14 HR	21.45	5.18	9.64	46.14

OVERHEAD EXPENSES							

DOWNTIME		3.28 HR		4.10			4.10
EMPLOYEE BENEFITS				3.06			3.06
FARM INSURANCE			6.13				6.13
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				23.80			23.80
OTHER EXPENSES			10.00				10.00
SUBTOTAL			3.28 HR	16.13	30.96	6.50	53.59

TOTAL OPERATING EXPENSES		20.39 HR	97.66	51.36	26.22	30.31	205.55

NET OPERATING PROFIT							80.44

INTEREST ON OPERATING CAPITAL							3.47
INTEREST ON EQUIPMENT INVESTMENT							9.52

RETURN TO LAND AND RISK							67.45

TABLE 50. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: MAY 1 - JUNE 30		YIELD:	42.00 CWT				GROSS RETURNS: \$123.90
HARVEST DATES: SEP 1 - OCT 30		PRICE:	\$2.95/CWT				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	8.80				8.80
GRAIN SORGHUM SEED		6.00 LB	1.32				1.32
HERBICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		18.69 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			31.30				31.30
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	1.06	.68	2.44
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
IRRIGATE (6X)		3.30 HR		3.30	2.58	1.65	7.53
SUBTOTAL			9.47 HR	10.84	14.62	15.47	40.93
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			5.25				5.25
HAUL (TRUCK, CUSTOM)	2 TON		2.10				2.10
SUBTOTAL			7.35				7.35
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.37 HR		1.71			1.71
EMPLOYEE BENEFITS				1.63			1.63
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				12.26			12.26
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.37 HR	16.07	15.60	6.50	38.17
TOTAL OPERATING EXPENSES			10.84 HR	54.72	26.44	21.97	117.75
NET OPERATING PROFIT							6.15
INTEREST ON OPERATING CAPITAL							2.10
INTEREST ON EQUIPMENT INVESTMENT							6.48
RETURN TO LAND AND RISK							-2.43

TABLE 51. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES:		YIELD: 5.36 CWT BEEF					
HARVEST DATES: MAY 1 - OCT. 30		PRICE: 14.67/CWT BEEF		GROSS RETURNS: 778.63			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	13.20				13.20
PHOSPHORUS (P)		46.00 LB	5.98				5.98
ESTABLISHMENT		1/10				6.98	6.98
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		40.31 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			32.86			6.98	39.84
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
FERT SPREADER (2X)	30 HP	.48 HR		.60	.88	1.05	2.53
IRRIGATE (10X)		6.10 HR		6.10	7.84	5.02	18.96
SUBTOTAL			6.86 HR	7.05	9.13	6.44	22.62
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.19 HR		.24			.24
EMPLOYEE BENEFITS				1.06			1.06
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				9.76			9.76
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.19 HR	16.05	11.06	6.50	33.61
TOTAL OPERATING EXPENSES		7.05 HR	48.91	18.11	9.13	19.92	96.07
NET OPERATING PROFIT							-17.44
INTEREST ON OPERATING CAPITAL							1.87
INTEREST ON EQUIPMENT INVESTMENT							3.47
RETURN TO LAND AND RISK							-22.78

TABLE 52. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: JAN 15 - FEB 15		YIELD: 609.00 CTN		GROSS RETURNS: \$1900.08			
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$3.12/CTN					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		225.00 LB	24.75				24.75
PHOSPHORUS (P)		80.00 LB	10.40				10.40
LETTUCE SEED		2.00 LB	7.00				7.00
CANAL WATER		9.96 AC.IN.	4.73				4.73
PUMP WATER		13.64 AC.IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
INSECTICIDE (CUSTOM)		1.00 ACRE	50.00				50.00
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
SUBTOTAL			130.78				130.78
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND FLAKE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE (3X)		1.38 HR		1.38	1.06	.68	3.12
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
THIN & HOE (CUSTOM)			25.00				25.00
IRRIGATE (10X)		3.50 HR		3.50	1.59	1.02	6.11
SUBTOTAL			25.00	13.18	15.38	13.19	66.75
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			730.80				730.80
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				1.98			1.98
FARM INSURANCE			6.09				6.09
LAND TAXES					6.50		6.50
SUPERVISION AND MANAGEMENT				71.16			71.16
OTHER EXPENSES			10.00				10.00
SUBTOTAL			16.09	75.22		6.50	97.81
TOTAL OPERATING EXPENSES		13.18 HR	902.67	88.40	15.38	19.69	1026.14
NET OPERATING PROFIT							873.94
INTEREST ON OPERATING CAPITAL							9.82
INTEREST ON EQUIPMENT INVESTMENT							5.43
RETURN TO LAND AND RISK							858.69

TABLE 53. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 525.00 CTN		GROSS RETURNS: \$1260.00			
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: 2.40/CTN					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	25.30				25.30
PHOSPHORUS (P)		80.00 LB	10.40				10.40
LETTUCE SEED		2.00 LB	7.00				7.00
CANAL WATER		6.00 AC. IN.	2.85				2.85
PUMP WATER		12.47 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				60.00
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
			-----				-----
SUBTOTAL			141.95				141.95
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE (3X)		1.38 HR		1.38	.96	.61	2.95
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
THIN & HOE (CUSTOM)			25.00				25.00
IRRIGATE (8X)		2.80 HR		2.80	1.47	.94	5.21
			-----	-----	-----	-----	-----
SUBTOTAL		10.82 HR	25.00	12.48	15.16	13.04	65.68
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			630.00				630.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				1.87			1.87
FARM INSURANCE			6.08				6.08
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				64.81			64.81
OTHER EXPENSES			10.00				10.00
			-----	-----	-----	-----	-----
SUBTOTAL		1.66 HR	16.08	68.76		6.50	91.34
<u>TOTAL OPERATING EXPENSES</u>							
		12.48 HR	813.03	81.24	15.16	19.54	928.97
<u>NET OPERATING PROFIT</u>							
							331.03
<u>INTEREST ON OPERATING CAPITAL</u>							
							9.49
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							
							5.39
<u>RETURN TO LAND AND RISK</u>							
							316.15

TABLE 54. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 16.80 TON					
HARVEST DATES: JUNE 1 - JULY 15		PRICE: .81.80/TON		GROSS RETURNS: \$1374.24			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	22.00				22.00
PHOSPHORUS (P)		70.00 LB	9.10				9.10
ONION SEED		4.00 LB	16.00				16.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		13.11 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
			-----				-----
SUBTOTAL			100.18				100.18
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE (3X)		1.38 HR		1.38	1.26	.81	3.45
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
THIN & HOE (CUSTOM)			33.00				33.00
IRRIGATE (12X)		4.20 HR		4.20	1.29	.83	6.32
			-----	-----	-----	-----	-----
SUBTOTAL		12.22 HR	33.00	13.88	15.23	13.16	75.27
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			504.00				504.00
PACK ONIONS (CUSTOM)			504.00				504.00
			-----				-----
SUBTOTAL			1008.00				1008.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			6.09				6.09
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				85.74			85.74
OTHER EXPENSES			10.00				10.00
			-----	-----	-----	-----	-----
SUBTOTAL		1.66 HR	16.09	89.90		6.50	112.49
<u>TOTAL OPERATING EXPENSES</u>							
		13.88 HR	1157.27	103.78	15.23	19.66	1295.94
<u>NET OPERATING PROFIT</u>							
							78.30
<u>INTEREST ON OPERATING CAPITAL</u>							
							10.72
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							
							5.39
<u>RETURN TO LAND AND RISK</u>							
							62.19

TABLE 55. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD:	14.70 TON				GROSS RETURNS: \$823.20
HARVEST DATES: OCT. 1 - OCT. 15		PRICE:	\$56.00/TON				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
							(DOLLARS)
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	22.00				22.00
PHOSPHORUS (P)		70.00 LB	9.10				9.10
ONION SEED		4.00 LB	16.00				16.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		11.20 AC.IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
SUBTOTAL			105.18				105.18
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.46 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.92 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE (3X)		1.38 HR		1.38	1.19	.75	3.33
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULT & SLEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
THIN & HOE (CUSTOM)			33.00				33.00
IRRIGATE (12X)		4.20 HR		4.20	.99	.64	5.83
SUBTOTAL			33.00	13.88	14.86	12.92	74.66
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			441.00				441.00
PACK ONIONS (CUSTOM)			441.00				441.00
SUBTOTAL			882.00				882.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			6.09				6.09
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				79.66			79.66
OTHER EXPENSES			10.00				10.00
SUBTOTAL			16.09	83.82		6.50	106.41
TOTAL OPERATING EXPENSES		13.88 HR	1036.27	97.70	14.86	19.42	1168.25
NET OPERATING PROFIT							-345.05
INTEREST ON OPERATING CAPITAL							10.14
INTEREST ON EQUIPMENT INVESTMENT							5.27
RETURN TO LAND AND RISK							-360.46

TABLE 56. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD: 33.60 CWT					
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$3.20/CWT		GROSS RETURNS: \$107.52			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		10.69 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			45.82				45.82
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (8X)		4.88 HR		4.88	2.08	1.33	8.29
SUBTOTAL			8.67 HR	9.62	9.99	9.41	29.02
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		3.78				3.78
SUBTOTAL			11.66				11.66
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.44			1.44
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				11.48			11.48
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.95 HR	16.07	14.10	6.50	36.67
TOTAL OPERATING EXPENSES		9.62 HR	73.55	23.72	9.99	15.91	123.17
NET OPERATING PROFIT							-15.65
INTEREST ON OPERATING CAPITAL							2.39
INTEREST ON EQUIPMENT INVESTMENT							4.12
RETURN TO LAND AND RISK							-22.16

TABLE 57. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1969
(ISS AND SPINKLER)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 35.70 CWT					
HARVEST DATES: JULY 1 - JULY 15		PRICE: 3.20/CWT		GROSS RETURNS: \$114.24			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

(DOLLARS,							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		10.44 AC. IN.	4.96				4.96
PUMP WATER		14.02 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
			-----				-----
SUBTOTAL			41.60				41.60
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
PERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDEBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (5X)		3.05 HR		3.05	2.73	1.74	7.52
			-----	-----	-----	-----	-----
SUBTOTAL		6.84 HR		7.79	10.64	9.82	28.25
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		3.78				3.78
			-----				-----
SUBTOTAL			11.66				11.66
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.17			1.17
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				10.16			10.16
OTHER EXPENSES			10.00				10.00
			-----	-----			-----
SUBTOTAL		.95 HR	16.05	12.51		6.50	35.06
<u>TOTAL OPERATING EXPENSES</u>							
		7.79 HR	69.31	20.30	10.64	16.32	116.57
<u>NET OPERATING PROFIT</u>							
							-2.33
<u>INTEREST ON OPERATING CAPITAL</u>							
							2.22
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							
							4.35
<u>RETURN TO LAND AND RISK</u>							
							-8.90

TABLE 58. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 13.23 TON					
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: \$34.00/TON		GROSS RETURNS: \$449.82			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	6.93				6.93
PHOSPHORUS (P)		161.00 LB	20.93				20.93
TOMATO SEED		2.00 LB	13.34				13.34
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE (CUSTOM)		1.00 ACRE	12.00				12.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		19.30 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
SUBTOTAL			101.28				101.28
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43
PRE-IRRIGATE (3X)		1.38 HR		1.38	1.73	1.11	4.22
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.79	6.02
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
HOEING (2X)		6.00 HR		7.50			7.50
IRRIGATE (10X)		4.00 HR		4.00	2.02	1.29	7.31
SUBTOTAL			18.38 HR	21.63	17.03	14.37	53.03
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			111.52				111.52
FORK LIFT (2X)		.76 HR		.98	1.35	5.53	7.86
HAUL (TRUCK) (2X)	2 TON	3.76 HR		4.70	5.87	3.57	14.14
SUBTOTAL			4.54 HR	111.52	5.68	9.10	133.52
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.38 HR		5.48			5.48
EMPLOYEE BENEFITS				4.10			4.10
FARM INSURANCE			6.17				6.17
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				60.23			60.23
OTHER EXPENSES			10.00				10.00
SUBTOTAL			4.38 HR	16.17	69.81	6.50	92.48
TOTAL OPERATING EXPENSES			27.30 HR	228.97	97.12	24.25	380.31
NET OPERATING PROFIT							69.51
INTEREST ON OPERATING CAPITAL							6.05
INTEREST ON EQUIPMENT INVESTMENT							9.87
RETURN TO LAND AND RISK							53.59

TABLE 59. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND SPRINKLER)

PLANTING DATES:		YIELD: 1365.00 LB					
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: .0.32/LB		GROSS RETURNS: \$436.80			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	15.95				15.95
PHOSPHORUS (P)		48.00 LB	6.24				6.24
ZINC SULFATE		12.00 LB	2.52				2.52
MANGANESE SULFATE		24.00 LB	3.60				3.60
HERBICIDE		2.00 LB	1.70				1.70
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER ESTABLISHMENT		1/12				96.30	96.30
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			58.69			96.30	154.99
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PRUNE (MACHINE)	40 HP	2.00 HR		2.50	6.50	9.74	18.74
HAUL (TRUCK)	2 TON	2.00 HR		2.50	3.12	1.90	7.52
DRIILL HERBICIDE	70 HP	.24 HR		.30	.32	.67	1.29
SPRAYER (MTD)	40 HP	.50 HR		.63	.88	1.24	2.75
BORDER	30 HP	.27 HR		.34	.38	.65	1.37
FERT SPREADER	30 HP	.24 HR		.30	.44	.53	1.27
HOEING (2X)		4.00 HR		5.00			5.00
IRRIGATE (9X)		5.49 HR		5.49	5.70	3.64	14.83
SUBTOTAL			15.86 HR	18.46	19.74	20.48	58.68
<u>HARVEST OPERATIONS</u>							
SHAKE	70 HP	2.25 HR		2.81	9.77	12.11	24.69
SWEEP	30 HP	2.25 HR		2.81	4.91	7.92	15.64
CLEAN & SACK		11.55 HR		11.55			11.55
HAUL NUTS	40 HP	2.90 HR		3.63	4.23	3.02	10.88
HAND LABOR		16.80 HR		16.80			16.80
SUBTOTAL			35.75 HR	37.60	18.91	23.05	79.56
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.44 HR		5.55			5.55
EMPLOYEE BENEFITS				8.41			8.41
FARM INSURANCE			6.39				6.39
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				60.29			60.29
OTHER EXPENSES			10.00				10.00
SUBTOTAL			4.44 HR	16.39	74.25	6.50	97.14
TOTAL OPERATING EXPENSES			56.05 HR	75.08	130.31	146.33	390.37
NET OPERATING PROFIT							46.43
INTEREST ON OPERATING CAPITAL							4.75
INTEREST ON EQUIPMENT INVESTMENT							17.63
RETURN TO LAND AND RISK							24.05

TABLE 60. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
		90.00 LB	11.70				11.70
		15.00 LB	14.25				14.25
		7.00 AC. IN.	3.33				3.33
		8.30 AC. IN.					
			29.28				29.28
<u>PREHARVEST OPERATIONS</u>							
	90 HP	.67 HR		.84	1.65	1.44	3.93
	90 HP	1.12 HR		1.40	2.40	2.11	5.91
	70 HP	.48 HR		.60	.70	.68	1.98
	40 HP	.13 HR		.16	.26	.29	.71
	40 HP	.33 HR		.41	.87	1.40	2.68
		1.83 HR		1.83	1.62	.94	4.39
		4.56 HR		5.24	7.50	6.86	19.60
<u>OVERHEAD EXPENSES</u>							
		.68 HR		.85			.85
				.79			.79
			6.03				6.03
				5.37			5.37
			10.00				10.00
		.68 HR	16.03	7.00			23.03
<u>TOTAL OPERATING EXPENSES</u>							
		5.24 HR	45.31	12.24	7.50	6.86	71.91

TABLE 61. ALPALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES:		YIELD: 5.25 TON					
HARVEST DATES: JUN 1 - OCT 1		PRICE: \$27.00/TON		GROSS RETURNS: \$141.75			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		78.00 LB	10.14				10.14
ESTABLISHMENT		1/5				16.72	16.72
WIRE		10.50 LB	4.94				4.94
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		45.38 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			28.76			16.72	45.48
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	30 HF	.14 HR		.18	.26	.31	.75
IRRIGATE (11X)		6.71 HR		6.71	8.83	5.13	20.67
SUBTOTAL			6.85 HA	6.89	9.09	5.44	21.42
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.65 HR		3.31	4.27	5.67	13.25
BALER (AUX ENG, (5X)	40 HP	1.80 HR		2.25	5.74	5.35	13.34
HAUL (TRAILER) (5X)	40 HP	1.95 HR		2.44	3.00	2.44	7.88
SUBTOTAL			6.40 HR	8.00	13.01	13.46	34.47
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.63 HR		2.04			2.04
EMPLOYEE BENEFITS				2.23			2.23
FARM INSURANCE			6.10				6.10
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				16.07			16.07
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.63 HR	16.10	20.35	6.50	42.95
TOTAL OPERATING EXPENSES		14.88 HR	44.86	35.24	22.10	42.12	144.32
NET OPERATING PROFIT							-2.57
INTEREST ON OPERATING CAPITAL							2.10
INTEREST ON EQUIPMENT INVESTMENT							8.30
RETURN TO LAND AND RISK							-12.97

TABLE 62. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 5.25 TON		RED: 389.00 LB			
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN: .75/00/TON		RED: 10.24/LB	GROSS RETURNS: \$487.11		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	15.40				15.40
PHOSPHORUS (P)		60.00 LB	7.80				7.80
CHILE SEED		5.00 LB	27.50				27.50
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		23.66 AC. IN.					5.00
SACKS		50.00	5.00				4.50
ISS		1.00 ACRE	4.50				
SUBTOTAL			79.38				79.38
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.64	.37	1.71
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
THINNING		10.60 HR		13.25			13.25
HOEING (3X)		24.99 HR		31.24			31.24
IRRIGATE (12X)		6.60 HR		6.60	3.96	2.30	12.86
SUBTOTAL			49.44 HR	59.98	17.23	14.07	91.28
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			124.28				124.28
HAUL (TRAILER) (3X)	30 HP	7.89 HR		9.86	11.05	9.78	30.69
HAUL (TRUCK) (3X)	2 TON	5.10 HR		6.38	7.96	5.10	19.44
SUBTOTAL			12.99 HR	124.28	16.24	14.88	174.41
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		13.78 HR		17.23			17.23
EMPLOYEE BENEFITS			6.47	11.43			11.43
FARM INSURANCE						6.50	6.47
LAND TAXES				136.33			6.50
SUPERVISION AND MANAGEMENT			10.00				136.33
OTHER EXPENSES							10.00
SUBTOTAL			13.78 HR	16.47	165.00	6.50	187.97
TOTAL OPERATING EXPENSES			76.21 HR	220.13	241.22	36.24	533.04
NET OPERATING PROFIT							-45.93
INTEREST ON OPERATING CAPITAL							8.64
INTEREST ON EQUIPMENT INVESTMENT							12.28
RETURN TO LAND AND RISK							-66.85

TABLE 63. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.85 TON					GROSS RETURNS: \$116.92
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: .6.55/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		42.00 LB	4.62				4.62
CORN SEED		17.00 LB	2.89				2.89
HERBICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		24.56 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			31.19				31.19
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
FLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
FEET SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.95	.55	2.20
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
IRRIGATE (8X)		4.40 HR		4.40	3.83	2.23	10.46
SUBTOTAL			9.29 HR	10.34	13.39	13.62	37.35
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		9.77				9.77
SUBTOTAL			17.65				17.65
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.05 HR		1.31			1.31
EMPLOYEE BENEFITS				1.55			1.55
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				12.33			12.33
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.05 HR	16.07	15.19	6.50	37.76
TOTAL OPERATING EXPENSES			10.34 HR	64.91	25.53	13.39	123.95
NET OPERATING PROFIT							-7.03
INTEREST ON OPERATING CAPITAL							2.11
INTEREST ON EQUIPMENT INVESTMENT							5.85
RETURN TO LAND AND RISK							-14.99

TABLE 64. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT:	650.00 LB	SEED: 1083.00 LB			
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT:	0.39/LB	SEED: 0.03/LB	GROSS RETURNS: 1285.99		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	11.00				11.00
PHOSPHORUS (P)		36.00 LB	4.68				4.68
COTTON SEED		25.00 LB	4.75				4.75
HERBICIDE (CUSTOM)		1.00 ACRE	11.00				11.00
INSECTICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
CROP INSURANCE		1.00 DOLLARS	9.97				9.97
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		17.23 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			60.08				60.08
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
FRE-IRRIGATE		.70 HR		.70	1.02	.59	2.31
COTTON PLANTER	40 HP	.35 HR		.44	.83	1.01	2.28
SLED	30 HP	.37 HR		.46	.48	.41	1.35
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.79	6.02
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
IRRIGATE (6X)		3.30 HR		3.30	2.34	1.36	7.00
HOEING (2X)		2.06 HR		2.58			2.58
SUBTOTAL			12.97 HR	15.22	16.58	13.76	45.56
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.14 HR		2.68	5.78	8.17	16.63
COTTON TRAILER (2X)	0.5 TON	2.00 HR		2.50	3.86	1.70	8.06
GIN COTTON (CUSTOM)			21.45				21.45
SUBTOTAL			4.14 HR	21.45	5.18	9.87	46.14
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.28 HR		4.10			4.10
EMPLOYEE BENEFITS				3.06			3.06
FARM INSURANCE			6.13				6.13
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				23.80			23.80
OTHER EXPENSES			10.00				10.00
SUBTOTAL			3.28 HR	16.13	30.96	6.50	53.59
TOTAL OPERATING EXPENSES			20.39 HR	97.66	51.36	26.22	205.37
NET OPERATING PROFIT							80.62
INTEREST ON OPERATING CAPITAL							3.47
INTEREST ON EQUIPMENT INVESTMENT							9.41
RETURN TO LAND AND RISK							67.74

TABLE 65. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 42.00 CWT					
HARVEST DATES: SEP 1 - OCT 30		PRICE: 2.95/CWT		GROSS RETURNS: \$123.90			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	8.80				8.80
GRAIN SORGHUM SEED		6.00 LB	1.32				1.32
HERBICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		18.69 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			31.30				31.30
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
FLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	1.06	.61	2.37
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
IRRIGATE (6X)		3.30 HR		3.30	2.58	1.50	7.38
SUBTOTAL			9.47 HR	10.84	14.62	15.25	40.71
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			5.25				5.25
HAUL (TRUCK) (CUSTOM)	2 TON		2.10				2.10
SUBTOTAL			7.35				7.35
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.37 HR		1.71			1.71
EMPLOYEE BENEFITS				1.63			1.63
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				12.26			12.26
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.37 HR	16.07	15.60	6.50	38.17
TOTAL OPERATING EXPENSES			10.84 HR	54.72	26.44	14.62	117.53
NET OPERATING PROFIT							6.37
INTEREST ON OPERATING CAPITAL							2.10
INTEREST ON EQUIPMENT INVESTMENT							6.36
RETURN TO LAND AND RISK							-2.09

TABLE 66. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES:		YIELD:		GROSS RETURNS:			
HARVEST DATES: MAY 1 - OCT. 30		5.36 CWT BEEF		\$78.63			
		PRICE: \$14.67/CWT BEEF					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	13.20				13.20
PHOSPHORUS (P)		46.00 LB	5.98				5.98
ESTABLISHMENT		1/10				6.98	6.98
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		40.31 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			32.86			6.98	39.84
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
FERT SPREADER (2X)	30 HP	.48 HR		.60	.88	1.06	2.54
IRRIGATE (10X)		6.10 HR		6.10	7.84	4.56	18.50
SUBTOTAL			6.86 HR	7.05	9.13	5.99	22.17
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.19 HR		.24			.24
EMPLOYEE BENEFITS				1.06			1.06
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				9.76			9.76
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.19 HR	16.05	11.06	6.50	33.61
TOTAL OPERATING EXPENSES			7.05 HR	48.91	18.11	19.47	95.62
NET OPERATING PROFIT							-16.99
INTEREST ON OPERATING CAPITAL							1.87
INTEREST ON EQUIPMENT INVESTMENT							3.21
RETURN TO LAND AND RISK							-22.07

TABLE 67. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: JAN 15 - FEB 15		YIELD: 580.00 CTH		GROSS RETURNS: \$1809.50			
HARVEST DATES: MAY 1 - MAY 15		PRICE: .3.12/CTH					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		225.00 LB	24.75				24.75
PHOSPHORUS (P)		80.00 LB	10.40				10.40
LETTUCE SEED		2.00 LB	7.00				7.00
CANAL WATER		9.96 AC. IN.	4.73				4.73
PUMP WATER		17.80 AC. IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
INSECTICIDE (CUSTOM)		1.00 ACRE	50.00				50.00
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			111.38				111.38
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.49	.29	1.48
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
THIN & HOE (CUSTOM)			25.00				25.00
IRRIGATE (10X)		3.50 HR		3.50	2.97	1.73	8.20
SUBTOTAL			10.84 HR	25.00	16.19	13.52	67.21
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			696.00				696.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				1.87			1.87
FARM INSURANCE			6.08				6.08
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				66.70			66.70
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.66 HR	16.08	70.66	6.50	93.24
TOTAL OPERATING EXPENSES			12.50 HR	848.46	83.16	20.02	967.83
NET OPERATING PROFIT							841.77
INTEREST ON OPERATING CAPITAL							9.04
INTEREST ON EQUIPMENT INVESTMENT							5.62
RETURN TO LAND AND RISK							827.11

TABLE 68. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 500.00 CTW		GROSS RETURNS: \$1200.00				
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: \$2.40/CTW						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
----- -(DOLLARS) -----								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		230.00 LB	25.30				25.30	
PHOSPHORUS (P)		80.00 LB	10.40				10.40	
LETTUCE SEED		2.00 LB	7.00				7.00	
CANAL WATER		6.00 AC.IN.	2.85				2.85	
PUMP WATER		15.73 AC.IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				60.00	
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50	
ISS		1.00 ACRE	4.50				4.50	
SUBTOTAL			122.55				122.55	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02	
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91	
FLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93	
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98	
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29	
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32	
PRE-IRRIGATE		.70 HR		.70	.47	.27	1.44	
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44	
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16	
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96	
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52	
THIN & HOE (CUSTOM)			25.00				25.00	
IRRIGATE (8X)		2.80 HR		2.80	2.59	1.51	6.90	
SUBTOTAL			25.00	11.80	15.79	13.28	65.87	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			600.00				600.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.66 HR		2.08			2.08	
EMPLOYEE BENEFITS				1.77			1.77	
FARM INSURANCE			6.08				6.08	
LAND TAXES						6.50	6.50	
SUPERVISION AND MANAGEMENT				60.58			60.58	
OTHER EXPENSES			10.00				10.00	
SUBTOTAL			16.08	64.43		6.50	87.01	
TOTAL OPERATING EXPENSES			11.80 HR	763.63	76.23	15.79	19.78	875.43
NET OPERATING PROFIT							324.57	
INTEREST ON OPERATING CAPITAL							8.73	
INTEREST ON EQUIPMENT INVESTMENT							5.52	
RETURN TO LAND AND RISK							310.32	

TABLE 69. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 16.00 TON					
HARVEST DATES: JUNE 1 - JULY 15		PRICE: .81.80/TON		GROSS RETURNS: 1308.80			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	22.00				22.00
PHOSPHORUS (P)		70.00 LB	9.10				9.10
ONION SEED		4.00 LB	16.00				16.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		18.83 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			80.78				80.78
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.49	.29	1.48
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
THIN & HOE (CUSTOM)			33.00				33.00
IRRIGATE (14X)		4.90 HR		4.90	3.17	1.84	9.91
SUBTOTAL			33.00	13.90	16.34	13.66	76.90
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			480.00				480.00
PACK ONIONS (CUSTOM)			480.00				480.00
SUBTOTAL			960.00				960.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			6.09				6.09
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				82.50			82.50
OTHER EXPENSES			10.00				10.00
SUBTOTAL			16.09	86.67		6.50	109.26
TOTAL OPERATING EXPENSES		13.90 HR	1089.87	100.57	16.34	20.16	1226.94
NET OPERATING PROFIT							81.86
INTEREST ON OPERATING CAPITAL							9.93
INTEREST ON EQUIPMENT INVESTMENT							5.70
RETURN TO LAND AND RISK							66.23

TABLE 70. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 14.00 TON						
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: 756.00/TON		GROSS RETURNS: \$784.00				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
----- (DOLLARS) -----								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	22.00				22.00	
PHOSPHORUS (P)		70.00 LB	9.10				9.10	
ONION SEED		4.00 LB	16.00				16.00	
CANAL WATER		19.32 AC. IN.	9.18				9.18	
PUMP WATER		16.58 AC. IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50	
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50	
ISS		1.00 ACRE	4.50				4.50	
SUBTOTAL			85.78				85.78	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02	
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91	
PLOW (MOLDBOARD,	90 HP	.67 HR		.84	1.65	1.44	3.93	
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98	
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29	
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32	
PRE-IRRIGATE		.70 HR		.70	.47	.27	1.44	
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44	
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14	
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96	
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52	
THIN & HOE (CUSTOM)			33.00				33.00	
IRRIGATE (14X)		4.90 HR		4.90	2.76	1.61	9.27	
SUBTOTAL			33.00	13.90	15.91	13.41	76.22	
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM) ONIONS			420.00				420.00	
PACK ONIONS (CUSTOM)			420.00				420.00	
SUBTOTAL			840.00				840.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.66 HR		2.08			2.08	
EMPLOYEE BENEFITS				2.08			2.08	
FARM INSURANCE			6.09				6.09	
LAND TAXES						6.50	6.50	
SUPERVISION AND MANAGEMENT				76.71			76.71	
OTHER EXPENSES			10.00				10.00	
SUBTOTAL			16.09	80.88		6.50	103.47	
TOTAL OPERATING EXPENSES			13.90 HR	974.87	94.78	15.91	19.91	1105.47
NET OPERATING PROFIT							-321.47	
INTEREST ON OPERATING CAPITAL							9.38	
INTEREST ON EQUIPMENT INVESTMENT							5.56	
RETURN TO LAND AND RISK							-336.41	

TABLE 71. SMALL CRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD:	33.60 CWT		GROSS RETURNS: \$107.52		
HARVEST DATES: MAY 1 - MAY 15		PRICE:	\$3.20/CWT				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		10.69 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			45.82				45.82
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (8X)		4.88 HR		4.88	2.08	1.21	8.17
SUBTOTAL			8.67 HR	9.62	9.99	9.29	28.90
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		3.78				3.78
SUBTOTAL			11.66				11.66
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.44			1.44
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				11.48			11.48
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.95 HR	16.07	14.10	6.50	36.67
TOTAL OPERATING EXPENSES		9.62 HR	73.55	23.72	9.99	15.79	123.05
NET OPERATING PROFIT							-15.53
INTEREST ON OPERATING CAPITAL							2.39
INTEREST ON EQUIPMENT INVESTMENT							4.05
RETURN TO LAND AND RISK							-21.97

TABLE 72. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 35.70 CWT					
HARVEST DATES: JULY 1 - JULY 15		PRICE: \$3.20/CWT		GROSS RETURNS: \$114.24			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		10.44 AC. IN.	4.96				4.96
PUMP WATER		14.02 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			41.60				41.60
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
FERT SPREADER	30 HP	.14 HR		.18	.25	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (5X)		3.05 HR		3.05	2.73	1.59	7.37
SUBTOTAL			6.84 HR	7.79	10.64	9.67	28.10
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		3.78				3.78
SUBTOTAL			11.66				11.66
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.17			1.17
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				10.16			10.16
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.95 HR	16.05	12.51	6.50	35.06
TOTAL OPERATING EXPENSES			7.79 HR	69.31	20.30	16.17	116.42
NET OPERATING PROFIT							-2.18
INTEREST ON OPERATING CAPITAL							2.22
INTEREST ON EQUIPMENT INVESTMENT							4.26
RETURN TO LAND AND RISK							-8.66

TABLE 73. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 12.60 TON					
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: .34.00/TON		GROSS RETURNS: \$428.40			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	6.93				6.93
PHOSPHORUS (P)		161.00 LB	20.93				20.93
TOMATO SEED		2.00 LB	13.34				13.34
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE (CUSTOM)		1.00 ACRE	12.00				12.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		26.11 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			81.88				81.88
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
BED SHAPER	30 HP	.37 HR		.46	.51	.47	1.44
PRE-IRRIGATE		.70 HR		.70	.74	.43	1.87
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.79	6.02
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
HOEING (2X)		6.00 HR		7.50			7.50
IRRIGATE (11X)		4.40 HR		4.40	4.34	2.53	11.27
SUBTOTAL			18.10 HR	21.35	18.36	14.94	54.65
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			106.21				106.21
FORK LIFT (2X)		.74 HR		.93	1.28	5.53	7.74
HAUL (TRUCK) (2X)	2 TON	3.58 HR		4.48	5.58	3.58	13.64
SUBTOTAL			4.32 HR	106.21	5.41	6.86	127.59
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.33 HR		5.41			5.41
EMPLOYEE BENEFITS				4.01			4.01
FARM INSURANCE			6.17				6.17
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				57.92			57.92
OTHER EXPENSES			10.00				10.00
SUBTOTAL			4.33 HR	16.17	67.34	6.50	90.01
TOTAL OPERATING EXPENSES			26.75 HR	204.26	94.10	25.22	354.13
NET OPERATING PROFIT							74.27
INTEREST ON OPERATING CAPITAL							5.47
INTEREST ON EQUIPMENT INVESTMENT							10.19
RETURN TO LAND AND RISK							58.61

TABLE 74. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS AND TRICKLE)

PLANTING DATES:		YIELD: 1365.00 LB		GROSS RETURNS: \$436.80			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.32/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	15.95				15.95
PHOSPHORUS (P)		48.00 LB	6.24				6.24
ZINC SULFATE		12.00 LB	2.52				2.52
MANGANESE SULFATE		24.00 LB	3.60				3.60
HERBICIDE		2.00 LB	1.70				1.70
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
CANAL WATER		AC. IN.					
PUMP WATER		31.10 AC. IN.					
ESTABLISHMENT		1/12				96.30	96.30
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			49.51			96.30	145.81
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PRUNE (MACHINE)	40 HP	2.00 HR		2.50	6.50	9.74	18.74
HAUL (TRUCK)	2 TON	2.00 HR		2.50	3.12	2.00	7.62
DRILL HERBICIDE	70 HP	.24 HR		.30	.32	.67	1.29
SPRAYER (MTD)	40 HP	.50 HR		.63	.88	1.24	2.75
BORDER	30 HP	.27 HR		.34	.38	.65	1.37
FERT SPREADER	30 HP	.24 HR		.30	.44	.53	1.27
HOEING (2X)		4.00 HR		5.00			5.00
IRRIGATE		2.12 HR		2.12	17.45	19.70	39.27
SUBTOTAL			12.49 HR	15.09	31.49	36.64	83.22
<u>HARVEST OPERATIONS</u>							
SHAKE	70 HP	2.25 HR		2.81	9.77	12.11	24.69
SWEEP	30 HP	2.25 HR		2.81	4.91	7.94	15.66
CLEAN & SACK		11.55 HR		11.55			11.55
HAUL NUTS	40 HP	2.90 HR		3.63	4.23	3.02	10.88
HAND LABOR		16.80 HR		16.80			16.80
SUBTOTAL			35.75 HR	37.60	18.91	23.07	79.58
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.44 HR		5.55			5.55
EMPLOYEE BENEFITS				7.90			7.90
FARM INSURANCE			6.36				6.36
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				126.92			126.92
OTHER EXPENSES			10.00				10.00
SUBTOTAL			4.44 HR	16.36	140.37	6.50	163.23
TOTAL OPERATING EXPENSES			52.68 HR	65.87	193.06	50.40	471.84
NET OPERATING PROFIT							-35.04
INTEREST ON OPERATING CAPITAL							6.36
INTEREST ON EQUIPMENT INVESTMENT							21.64
RETURN TO LAND AND RISK							-63.04

TABLE 75. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	11.70				11.70
ALFALFA SEED		15.00 LB	14.25				14.25
CANAL WATER		7.00 AC.IN.	3.33				3.33
PUMP WATER		8.30 AC.IN.					
SUBTOTAL			29.28				29.28
<u>PREHARVEST OPERATIONS</u>							
PLGW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
LAWD PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER	40 HP	.13 HR		.16	.26	.29	.71
DRILL	40 HP	.33 HR		.41	.87	1.40	2.68
IRRIGATE (3X)		1.83 HR		1.83	1.62	.96	4.41
SUBTOTAL			4.56 HR	5.24	7.50	6.88	19.62
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.68 HR		.85			.85
EMPLOYEE BENEFITS				.79			.79
FARM INSURANCE			6.03				6.03
SUPERVISION AND MANAGEMENT				5.37			5.37
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.68 HR	16.03	7.00		23.03
<u>TOTAL OPERATING EXPENSES</u>		5.24 HR	45.31	12.24	7.50	6.88	71.93

TABLE 76. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES:		YIELD: 5.25 TON		GROSS RETURNS: \$141.75			
HARVEST DATES: JUNE 1 - OCT 1		PRICE: \$27.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		78.00 LB	10.14				10.14
ESTABLISHMENT		1/5				16.73	16.73
WIRE		10.50 LB	4.94				4.94
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		45.38 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			29.76			16.73	45.49
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
IRRIGATE (11X)		6.71 HR		6.71	8.83	5.24	20.78
SUBTOTAL			6.85 HR	6.89	9.09	5.55	21.53
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.65 HR		3.31	4.27	5.67	13.25
BALER (AUX ENG) (5X)	40 HP	1.80 HR		2.25	5.74	5.35	13.34
HAUL (TRAILER) (5X)	40 HP	1.95 HR		2.44	3.00	2.42	7.86
SUBTOTAL			6.40 HR	8.00	13.01	13.44	34.45
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.63 HR		2.04			2.04
EMPLOYEE BENEFITS				2.23			2.23
FARM INSURANCE			6.10				6.10
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				16.07			16.07
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.63 HR	16.10	20.35	6.50	42.95
TOTAL OPERATING EXPENSES			14.88 HR	44.86	35.24	22.10	144.41
NET OPERATING PROFIT							-2.66
INTEREST ON OPERATING CAPITAL							2.10
INTEREST ON EQUIPMENT INVESTMENT							8.37
RETURN TO LAND AND RISK							-13.13

TABLE 77. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN:	5.51 TON	RED:	408.00 LB		
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN:	\$75.00/TON	RED:	\$0.24/LB	GROSS RETURNS: \$511.17	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	15.40				15.40
PHOSPHORUS (P)		60.00 LB	7.80				7.80
CHILE SEED		5.00 LB	27.50				27.50
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00
CAHAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		20.22 AC. IN.					
SACKS		50.00	5.00				5.00
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
SUBTOTAL			98.78				98.78
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE (2X)		.92 HR		.92	1.18	.70	2.80
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
THINNING		10.60 HR		13.25			13.25
HOEING (3X)		24.99 HR		31.24			31.24
IRRIGATE (11X)		6.05 HR		6.05	2.75	1.63	10.43
SUBTOTAL			49.11 HR	59.65	16.56	13.73	89.94
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			130.49				130.49
HAUL (TRAILER) (3X)	30 HP	8.28 HR		10.35	11.59	10.10	32.04
HAUL (TRUCK) (3X)	2 TON	5.64 HR		7.05	8.80	5.36	21.21
SUBTOTAL			13.92 HR	17.40	20.39	15.46	183.74
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		14.01 HR		17.52			17.52
EMPLOYEE BENEFITS				11.56			11.56
FARM INSURANCE			6.47				6.47
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				138.53			138.53
OTHER EXPENSES			10.00				10.00
SUBTOTAL			14.01 HR	16.47		6.50	190.58
TOTAL OPERATING EXPENSES			77.04 HR	245.74	244.66	36.95	563.04
NET OPERATING PROFIT							-51.87
INTEREST ON OPERATING CAPITAL							9.25
INTEREST ON EQUIPMENT INVESTMENT							12.35
RETURN TO LAND AND RISK							-73.47

TABLE 78. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: MAY 1 - MAY 15		YIELD:	17.85 TON		GROSS RETURNS: \$116.92		
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE:	\$6.55/TON				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		42.00 LB	4.62				4.62
CORN SEED		17.00 LB	2.89				2.89
HERBICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		24.56 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			31.19				31.19
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	.95	.56	2.21
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
IRRIGATE (8X)		4.40 HR		4.40	3.83	2.27	10.50
SUBTOTAL			9.29 HR	10.34	13.39	13.67	37.40
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		9.77				9.77
SUBTOTAL			17.65				17.65
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.05 HR		1.31			1.31
EMPLOYEE BENEFITS				1.55			1.55
FARM INSURANCE			6.07				6.07
LAND TAXES					6.50		6.50
SUPERVISION AND MANAGEMENT				12.33			12.33
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.05 HR	16.07	15.19	6.50	37.76
TOTAL OPERATING EXPENSES			10.34 HR	64.91	25.53	13.39	124.00
NET OPERATING PROFIT							-7.08
INTEREST ON OPERATING CAPITAL							2.11
INTEREST ON EQUIPMENT INVESTMENT							5.89
RETURN TO LAND AND RISK							-15.08

TABLE 79. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT: 650.00 LB		SEED: 1083.00 LB			
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT: \$0.39/LB		SEED: \$0.03/LB		GROSS RETURNS: \$285.99	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	11.00				11.00
PHOSPHORUS (P)		36.00 LB	4.68				4.68
COTTON SEED		25.00 LB	4.75				4.75
HERBICIDE (CUSTOM)		1.00 ACRE	11.00				11.00
INSECTICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
CROP INSURANCE		1.00 DOLLARS	9.97				9.97
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		17.23 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			60.08				60.08
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	1.02	.60	2.32
COTTON PLANTER	40 HP	.35 HR		.44	.83	1.01	2.28
SLED	30 HP	.37 HR		.46	.48	.40	1.34
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.79	6.02
CULT e SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
IRRIGATE (6X)		3.30 HR		3.30	2.34	1.39	7.03
HOEING (2X)		2.06 HR		2.58			2.58
SUBTOTAL			12.97 HR	15.22	16.58	13.79	45.59
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.14 HR		2.68	5.78	8.17	16.63
COTTON TRAILER (2X)	0.5 TON	2.00 HR		2.50	3.86	1.70	8.06
GIN COTTON (CUSTOM)			21.45				21.45
SUBTOTAL			4.14 HR	21.45	5.18	9.64	46.14
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.28 HR		4.10			4.10
EMPLOYEE BENEFITS				3.06			3.06
FARM INSURANCE			6.13				6.13
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				23.80			23.80
OTHER EXPENSES			10.00				10.00
SUBTOTAL			3.28 HR	16.13	30.96	6.50	53.59
TOTAL OPERATING EXPENSES			20.39 HR	97.66	51.36	26.22	205.40
NET OPERATING PROFIT							80.59
INTEREST ON OPERATING CAPITAL							3.47
INTEREST ON EQUIPMENT INVESTMENT							9.44
RETURN TO LAND AND RISK							67.68

TABLE 80. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: MAY 1 - JUNE 30		YIELD:	42.00 CWT		GROSS RETURNS: \$123.90		
HARVEST DATES: SEP 1 - OCT 30		PRICE:	\$2.95/CWT				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	8.80				8.80
GRAIN SORGHUM SEED		6.00 LB	1.32				1.32
HERBICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		18.69 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			31.30				31.30
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
FLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
FERT SPREADER	40 HP	.14 HR		.18	.28	.31	.77
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE		.70 HR		.70	1.06	.63	2.39
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
CORN PLANTER	40 HP	.35 HR		.44	.83	3.79	5.06
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR	40 HP	.36 HR		.45	.61	.45	1.51
IRRIGATE (6X)		3.30 HR		3.30	2.58	1.53	7.41
SUBTOTAL			9.47 HR	10.84	14.62	15.30	40.76
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			5.25				5.25
HAUL (TRUCK) (CUSTOM)	2 TON		2.10				2.10
SUBTOTAL			7.35				7.35
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.37 HR		1.71			1.71
EMPLOYEE BENEFITS				1.63			1.63
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				12.26			12.26
OTHER EXPENSES			10.00				10.00
SUBTOTAL			1.37 HR	16.07	15.60	6.50	38.17
TOTAL OPERATING EXPENSES			10.84 HR	54.72	26.44	21.80	117.58
NET OPERATING PROFIT							6.32
INTEREST ON OPERATING CAPITAL							2.10
INTEREST ON EQUIPMENT INVESTMENT							6.39
RETURN TO LAND AND RISK							-2.17

TABLE 81. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES:		YIELD:		GROSS RETURNS:			
HARVEST DATES: MAY 1 - OCT. 30		5.36 CWT BEEF		\$78.63			
		PRICE:		\$14.67/CWT BEEF			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	13.20				13.20
PHOSPHORUS (P)		46.00 LB	5.98				5.98
ESTABLISHMENT		1/10				6.98	6.98
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		40.31 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			32.86			6.98	39.84
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
FERT SPREADER (2X)	30 HP	.48 HR		.60	.88	1.05	2.53
IRRIGATE (10X)		6.10 HR		6.10	7.84	4.65	18.59
SUBTOTAL				7.05	9.13	6.07	22.25
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.19 HR		.24			.24
EMPLOYEE BENEFITS				1.06			1.06
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				9.76			9.76
OTHER EXPENSES			10.00				10.00
SUBTOTAL				11.06		6.50	33.61
TOTAL OPERATING EXPENSES		7.05 HR	48.91	18.11	9.13	19.55	95.70
NET OPERATING PROFIT							-17.07
INTEREST ON OPERATING CAPITAL							1.87
INTEREST ON EQUIPMENT INVESTMENT							3.27
RETURN TO LAND AND RISK							-22.21

TABLE 82. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: JAN 15 - FEB 15		YIELD: 609.00 CTN		GROSS RETURNS: \$1900.08				
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$3.12/CTN						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		225.00 LB	24.75				24.75	
PHOSPHORUS (P)		80.00 LB	10.40				10.40	
LETTUCE SEED		2.00 LB	7.00				7.00	
CANAL WATER		9.96 AC. IN.	4.73				4.73	
PUMP WATER		13.64 AC. IN.						
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00	
INSECTICIDE (CUSTOM)		1.00 ACRE	50.00				50.00	
ISS		1.00 ACRE	4.50				4.50	
SPRINKLER SYSTEM		1.00	19.40				19.40	
SUBTOTAL			130.78				130.78	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02	
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91	
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93	
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98	
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29	
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32	
PRE-IRRIGATE (3X)		1.38 HR		1.38	1.06	.63	3.07	
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43	
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16	
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96	
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52	
THIN & HOE (CUSTOM)			25.00				25.00	
IRRIGATE (10X)		3.50 HR		3.50	1.59	.94	6.03	
SUBTOTAL			25.00	13.18	15.38	13.06	66.62	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			730.80				730.80	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.66 HR		2.08			2.08	
EMPLOYEE BENEFITS				1.98			1.98	
FARM INSURANCE			6.09				6.09	
LAND TAXES						6.50	6.50	
SUPERVISION AND MANAGEMENT				71.15			71.15	
OTHER EXPENSES			10.00				10.00	
SUBTOTAL			16.09	75.21		6.50	97.80	
TOTAL OPERATING EXPENSES			13.18 HR	902.67	88.39	15.38	19.56	1026.00
NET OPERATING PROFIT							874.08	
INTEREST ON OPERATING CAPITAL							9.82	
INTEREST ON EQUIPMENT INVESTMENT							5.36	
RETURN TO LAND AND RISK							858.90	

TABLE 83. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 525.00 CTN					GROSS RETURNS: 1260.00
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: 2.40/CTN					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	25.30				25.30
PHOSPHORUS (P)		80.00 LB	10.40				10.40
LETTUCE SEED		2.00 LB	7.00				7.00
CANAL WATER		6.00 AC. IN.	2.85				2.85
PUMP WATER		12.47 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				60.00
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
SUBTOTAL			141.95				141.95
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE (3X)		1.38 HR		1.38	.96	.57	2.91
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43
VEGETABLE PLANTER	40 HP	.44 HR		.55	.77	.84	2.16
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
TRIM & HOE (CUSTOM)			25.00				25.00
IRRIGATE (8X)		2.80 HR		2.80	1.47	.87	5.14
SUBTOTAL			25.00	12.48	15.16	12.93	65.57
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			630.00				630.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				1.87			1.87
FARM INSURANCE			6.08				6.08
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				64.80			64.80
OTHER EXPENSES			10.00				10.00
SUBTOTAL			16.08	68.75		6.50	91.33
TOTAL OPERATING EXPENSES		12.48 HR	813.03	81.23	15.16	19.43	928.85
NET OPERATING PROFIT							331.15
INTEREST ON OPERATING CAPITAL							9.49
INTEREST ON EQUIPMENT INVESTMENT							5.32
RETURN TO LAND AND RISK							316.34

TABLE 84. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 16.80 TON						
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$81.80/TON		GROSS RETURNS: \$1374.24				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FLYED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	22.00				22.00	
PHOSPHORUS (P)		70.00 LB	9.10				9.10	
ONION SEED		4.00 LB	16.00				16.00	
CANAL WATER		19.32 AC. IN.	9.18				9.18	
PUMP WATER		13.11 AC. IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	10.00				10.00	
HERBICIDE (CUSTOM)		1.00 ACRE	10.00				10.00	
ISS		1.00 ACRE	4.50				4.50	
SPRINKLER SYSTEM		1.00	19.40				19.40	
SUBTOTAL			100.18				100.18	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02	
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91	
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93	
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98	
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29	
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32	
PRE-IRRIGATE (3X)		1.38 HR		1.38	1.26	.75	3.39	
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43	
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14	
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96	
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52	
THIN & HOE (CUSTOM)			33.00				33.00	
IRRIGATE (12X)		4.20 HR		4.20	1.29	.77	6.25	
SUBTOTAL			12.22 HR	33.00	13.88	15.23	13.04	75.15
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM) ONIONS			504.00				504.00	
PACK ONIONS (CUSTOM)			504.00				504.00	
SUBTOTAL			1008.00				1008.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.66 HR		2.08			2.08	
EMPLOYEE BENEFITS				2.08			2.08	
FARM INSURANCE			6.09				6.09	
LAND TAXES						6.50	6.50	
SUPERVISION AND MANAGEMENT				85.73			85.73	
OTHER EXPENSES			10.00				10.00	
SUBTOTAL			1.66 HR	16.09	89.89	6.50	112.48	
TOTAL OPERATING EXPENSES			13.88 HR	1157.27	103.77	15.23	19.54	1295.81
NET OPERATING PROFIT							78.43	
INTEREST ON OPERATING CAPITAL							10.72	
INTEREST ON EQUIPMENT INVESTMENT							5.33	
RETURN TO LAND AND RISK							52.38	

TABLE 85. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 14.70 TON					
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: 56.00/TON		GROSS RETURNS: \$823.20			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	22.00				22.00
PHOSPHORUS (P)		70.00 LB	9.10				9.10
ONION SEED		4.00 LB	16.00				16.00
CANAL WATER		19.32 AC.IN.	9.18				9.18
PUMP WATER		11.20 AC.IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
HERBICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
			-----				-----
SUBTOTAL			105.18				105.18
<u>PREHARVEST OPERATIONS</u>							
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
PRE-IRRIGATE (3X)		1.38 HR		1.38	1.19	.70	3.27
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
CULTIVATOR (3X)	40 HP	1.08 HR		1.35	1.83	1.34	4.52
THIN & HOE (CUSTOM)			33.00				33.00
IRRIGATE (12X)		4.20 HR		4.20	.99	.59	5.78
			-----	-----	-----	-----	-----
SUBTOTAL		12.22 HR	33.00	13.88	14.86	12.81	74.55
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			441.00				441.00
PACK ONIONS (CUSTOM)			441.00				441.00
			-----				-----
SUBTOTAL			882.00				882.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.66 HR		2.08			2.08
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			6.09				6.09
LAND TAXES					6.50		6.50
SUPERVISION AND MANAGEMENT				79.65			79.65
OTHER EXPENSES			10.00				10.00
			-----	-----	-----	-----	-----
SUBTOTAL		1.66 HR	16.09	83.81		6.50	106.40
			-----	-----	-----	-----	-----
TOTAL OPERATING EXPENSES		13.88 HR	1036.27	97.69	14.86	19.31	1168.13
<u>NET OPERATING PROFIT</u>							
							-344.93
INTEREST ON OPERATING CAPITAL							10.14
INTEREST ON EQUIPMENT INVESTMENT							5.22
RETURN TO LAND AND RISK							-360.29

TABLE 86. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD: 33.60 CWT					
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$3.20/CWT		GROSS RETURNS: \$107.52			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		10.69 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			45.82				45.82
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
FERT SPREADER	30 HP	.14 HR		.18	.26	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (8X)		4.88 HR		4.88	2.08	1.23	8.19
SUBTOTAL			8.67 HR	9.62	9.99	9.31	28.92
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		3.78				3.78
SUBTOTAL			11.66				11.66
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.44			1.44
FARM INSURANCE			6.07				6.07
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				11.48			11.48
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.95 HR	16.07	14.10	6.50	36.67
TOTAL OPERATING EXPENSES		9.62 HR	73.55	23.72	9.99	15.81	123.07
NET OPERATING PROFIT							-15.55
INTEREST ON OPERATING CAPITAL							2.39
INTEREST ON EQUIPMENT INVESTMENT							4.07
RETURN TO LAND AND RISK							-22.01

TABLE 87. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 35.70 CWT					
HARVEST DATES: JULY 1 - JULY 15		PRICE: 3.20/CWT		GROSS RETURNS: \$114.24			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	12.76				12.76
PHOSPHORUS (P)		92.00 LB	11.96				11.96
SEED		120.00 LB	3.42				3.42
INSECTICIDE (CUSTOM)		1.00 ACRE	4.00				4.00
CANAL WATER		10.44 AC.IN.	4.96				4.96
PUMP WATER		14.02 AC.IN.					
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			41.60				41.60
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	30 HP	.28 HR		.35	.41	.37	1.13
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
FEET SPREADER	30 HP	.14 HR		.18	.26	.31	.75
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
HARROW	40 HP	.24 HR		.30	.36	.46	1.12
FLOAT	40 HP	.25 HR		.31	.40	.52	1.23
DRILL	30 HP	.33 HR		.41	.83	1.40	2.64
IRRIGATE (5X)		3.05 HR		3.05	2.73	1.62	7.40
SUBTOTAL			6.84 HR	7.79	10.64	9.70	28.13
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			7.88				7.88
HAUL (TRUCK) (CUSTOM)	2 TON		3.78				3.78
SUBTOTAL			11.66				11.66
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.95 HR		1.18			1.18
EMPLOYEE BENEFITS				1.17			1.17
FARM INSURANCE			6.05				6.05
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				10.16			10.16
OTHER EXPENSES			10.00				10.00
SUBTOTAL			.95 HR	16.05	12.51	6.50	35.06
TOTAL OPERATING EXPENSES			7.79 HR	69.31	20.30	10.64	116.45
NET OPERATING PROFIT							-2.21
INTEREST ON OPERATING CAPITAL							2.22
INTEREST ON EQUIPMENT INVESTMENT							4.28
RETURN TO LAND AND RISK							-8.71

TABLE 88. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 13.23 TON					GROSS RETURNS: \$449.82
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: \$34.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	6.93				6.93
PHOSPHORUS (P)		161.00 LB	20.93				20.93
TOMATO SEED		2.00 LB	13.34				13.34
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE (CUSTOM)		1.00 ACRE	12.00				12.00
CANAL WATER		19.32 AC. IN.	9.18				9.18
PUMP WATER		19.30 AC. IN.					
ISS		1.00 ACRE	4.50				4.50
SPRINKLER SYSTEM		1.00	19.40				19.40
SUBTOTAL			101.28				101.28
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
CHISEL	90 HP	.76 HR		.95	1.60	1.47	4.02
PLOW (MOLDBOARD)	90 HP	.67 HR		.84	1.65	1.44	3.93
LAND PLANE	70 HP	.48 HR		.60	.70	.68	1.98
FERT SPREADER (3X)	40 HP	.42 HR		.53	.83	.93	2.29
LISTER	90 HP	.61 HR		.76	1.25	1.31	3.32
BED SHAPER	30 HP	.37 HR		.46	.51	.46	1.43
PRE-IRRIGATE (3X)		1.38 HR		1.38	1.73	1.03	4.14
VEGETABLE PLANTER	70 HP	.44 HR		.55	.72	.87	2.14
CULTIVATOR (4X)	40 HP	1.44 HR		1.80	2.43	1.79	6.02
CULT & SIDEDRESS	40 HP	.69 HR		.86	1.19	.91	2.96
HOEING (2X)		6.00 HR		7.50			7.50
IRRIGATE (10X)		4.00 HR		4.00	2.02	1.20	7.22
SUBTOTAL		18.38 HR		21.63	17.03	14.20	52.86
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			111.52				111.52
FORK LIFT (2X)		.78 HR		.98	1.35	5.53	7.86
HAUL (TRUCK) (2X)	2 TON	3.76 HR		4.70	5.87	3.57	14.14
SUBTOTAL		4.54 HR	111.52	5.68	7.22	9.10	133.52
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.38 HR		5.48			5.48
EMPLOYEE BENEFITS				4.10			4.10
FARM INSURANCE			6.17				6.17
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				60.22			60.22
OTHER EXPENSES			10.00				10.00
SUBTOTAL		4.38 HR	16.17	69.80		6.50	92.47
TOTAL OPERATING EXPENSES		27.30 HR	226.97	97.11	24.25	29.80	380.13
NET OPERATING PROFIT							69.69
INTEREST ON OPERATING CAPITAL							6.05
INTEREST ON EQUIPMENT INVESTMENT							9.77
RETURN TO LAND AND RISK							53.87

TABLE 89. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1967
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES:		YIELD: 1365.00 LB					
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.32/LB		GROSS RETURNS: \$436.80			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	15.95				15.95
PHOSPHORUS (P)		48.00 LB	6.24				6.24
ZINC SULFATE		12.00 LB	2.52				2.52
MANGANESE SULFATE		24.00 LB	3.60				3.60
HERBICIDE		2.00 LB	1.70				1.70
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
CANAL WATER		AC.IN.					
PUMP WATER		31.10 AC.IN.					
ESTABLISHMENT		1/12				96.30	96.30
ISS		1.00 ACRE	4.50				4.50
SUBTOTAL			49.51			96.30	145.81
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	90 HP	1.12 HR		1.40	2.40	2.11	5.91
PRUNE (MACHINE)	40 HP	2.00 HR		2.50	6.50	9.74	18.74
HAUL (TRUCK)	2 TON	2.00 HR		2.50	3.12	1.90	7.52
DRILL HERBICIDE	70 HP	.24 HR		.30	.32	.67	1.29
SPRAYER (MTD)	40 HP	.50 HR		.63	.88	1.24	2.75
BORDER	30 HP	.27 HR		.34	.38	.65	1.37
FERT SPREADER	30 HP	.24 HR		.30	.44	.53	1.27
HOEING (2X)		4.00 HR		5.00			5.00
IRRIGATE		2.12 HR		2.12	17.45	19.70	39.27
SUBTOTAL			12.49 HR	15.09	31.49	36.54	83.12
<u>HARVEST OPERATIONS</u>							
SHAKE	70 HP	2.25 HR		2.81	9.77	12.11	24.69
SWEEP	30 HP	2.25 HR		2.81	4.91	7.92	15.64
CLEAN & SACK		11.55 HR		11.55			11.55
HAUL NUTS	40 HP	2.90 HR		3.63	4.23	3.02	10.88
HAND LABOR		16.80 HR		16.80			16.80
SUBTOTAL			35.75 HR	37.60	18.91	23.05	79.56
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.44 HR		5.55			5.55
EMPLOYEE BENEFITS				7.90			7.90
FARM INSURANCE			6.36				6.36
LAND TAXES						6.50	6.50
SUPERVISION AND MANAGEMENT				126.91			126.91
OTHER EXPENSES			10.00				10.00
SUBTOTAL			4.44 HR	16.36	140.36	6.50	163.22
TOTAL OPERATING EXPENSES			52.68 HR	65.87	193.05	162.39	471.71
NET OPERATING PROFIT							-34.91
INTEREST ON OPERATING CAPITAL							6.36
INTEREST ON EQUIPMENT INVESTMENT							21.59
RETURN TO LAND AND RISK							-62.86

TABLE 90. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:						
HARVEST DATES:		PRICE:						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
PHOSPHORUS (P)		90.00 LB	15.30				15.30	
ALFALFA SEED		15.00 LB	20.25				20.25	
CANAL WATER		8.00 AC.IN.	3.60				3.60	
PUMP WATER		9.00 AC.IN.						
SUBTOTAL			39.15				39.15	
<u>PREHARVEST OPERATIONS</u>								
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23	
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98	
LAND PLANE	80 HP	.39 HR		.81	.74	1.17	2.72	
FERT SPREADER	60 HP	.13 HR		.27	.27	.45	.99	
DRILL	60 HP	.31 HR		.64	1.00	1.88	3.52	
IRRIGATE (3X)		1.59 HR		2.66	2.18	1.24	6.08	
SUBTOTAL			3.76 HR	7.17	8.40	8.95	24.52	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		.54 HR		1.13			1.13	
EMPLOYEE BENEFITS				1.08			1.08	
FARM INSURANCE			10.05				10.05	
SUPERVISION AND MANAGEMENT				5.65			5.65	
OTHER EXPENSES			12.00				12.00	
SUBTOTAL			.54 HR	22.05	7.85		29.90	
TOTAL OPERATING EXPENSES			4.30 HR	61.20	15.02	8.40	8.95	93.57

TABLE 91. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES:		YIELD: 5.20 TON					
HARVEST DATES: JUNE 1 - OCT. 1		PRICE: \$47.00/TON		GROSS RETURNS: \$244.40			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		92.00 LB	15.64				15.64
WIRE		10.40 LB	11.54				11.54
CANAL WATER		30.00 AC.IN.	13.50				13.50
PUMP WATER		43.82 AC.IN.					
ESTABLISHMENT		1/5				23.28	23.28
SUBTOTAL			40.68			23.28	63.96
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	60 HP	.13 HR		.27	.27	.45	.99
IRRIGATE (1X)		5.83 HR		9.74	10.61	6.05	26.40
SUBTOTAL				10.01	10.88	6.50	27.39
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.25 HR		4.68	3.87	4.57	13.12
BALER (AUX ENG) (5X)	80 HP	1.55 HR		3.22	5.75	6.80	15.77
HAUL (TRALLER) (5X)	60 HP	1.75 HR		3.64	2.50	3.22	9.36
SUBTOTAL				11.54	12.12	14.59	38.25
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.42 HR		2.95			2.95
EMPLOYEE BENEFITS				3.23			3.23
FARM INSURANCE			10.14				10.14
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				20.02			20.02
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.42 HR	22.14	26.21	4.80	53.15
TOTAL OPERATING EXPENSES		12.93 HR	62.82	47.76	23.00	49.17	182.75
NET OPERATING PROFIT							61.65
INTEREST ON OPERATING CAPITAL							4.10
INTEREST ON EQUIPMENT INVESTMENT							13.80
RETURN TO LAND AND RISK							43.75

TABLE 92. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 5.50 TON		RED: 410.00 LB			
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN: \$100.00/TON		RED: \$0.30/LB	GROSS RETURNS: \$673.00		

ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

(DOLLARS)							

<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	18.20				18.20
PHOSPHORUS (P)		60.00 LB	10.20				10.20
CHILE SEED		5.00 LB	38.75				38.75
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		16.08 AC.IN.					
SUBTOTAL			106.23				106.23
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.17	2.72
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.34	2.97
LISTER	80 HP	.56 HR		1.16	1.14	1.67	3.97
PRE-IRRIGATE		.61 HR		1.02	.74	.42	2.18
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.50	5.43
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
THINNING (CUSTOM)			20.00				20.00
HOELING (CUSTOM)			40.00				40.00
IRRIGATE (12X)		4.44 HR		7.41	3.15	1.80	12.36
SUBTOTAL			10.56 HR	60.00	19.88	16.86	113.25
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			162.75				162.75
HAUL (TRAILER) (3X)	40 HP	2.76 HR		5.74	4.55	4.03	14.32
FORK LIFT (3X)		1.02 HR		2.12	2.01	1.81	5.94
HAUL (TRUCK) (3X)	2 TON	5.04 HR		10.48	9.42	6.80	26.70
SUBTOTAL			8.82 HR	182.75	18.34	15.98	209.71
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.58 HR		7.45			7.45
EMPLOYEE BENEFITS				5.73			5.73
FARM INSURANCE			10.23				10.23
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				43.82			43.82
OTHER EXPENSES			12.00				12.00
SUBTOTAL			3.58 HR	22.23	57.00	4.80	84.03
TOTAL OPERATING EXPENSES			22.96 HR	351.21	95.22	32.84	513.22
NET OPERATING PROFIT							159.78
INTEREST ON OPERATING CAPITAL							10.43
INTEREST ON EQUIPMENT INVESTMENT							18.15
RETURN TO LAND AND RISK							131.20

TABLE 93. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.00 TON					
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: 10.50/TON		GROSS RETURNS: \$178.43			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
PHOSPHORUS (P)		60.00 LB	10.20				10.20
CORN SEED		17.00 LB	12.58				12.58
HERBICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
INSECTICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		16.98 AC. IN.					
SUBTOTAL			56.76				56.76
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
FEET SPREADER	60 HP	.13 HR		.27	.27	.45	.99
LISTER	80 HP	.56 HR		1.16	1.14	1.67	3.97
PRE-IRRIGATE		.61 HR		1.02	1.09	.62	2.73
CORN PLANTER	40 HP	.35 HR		.73	.90	4.18	5.81
CULTIVATOR	40 HP	.33 HR		.69	.62	.50	1.81
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
IRRIGATE (8X)		3.84 HR		6.41	3.02	1.72	11.15
SUBTOTAL			7.97 HR	14.76	12.81	15.26	42.83
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			16.50				16.50
HAUL (TRUCK) (CUSTOM)	2 TON		12.00				12.00
SUBTOTAL			28.50				28.50
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.88 HR		1.83			1.83
EMPLOYEE BENEFITS				2.21			2.21
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				14.51			14.51
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.88 HR	22.10	18.55	4.80	45.45
TOTAL OPERATING EXPENSES		8.85 HR	107.36	33.31	12.81	20.06	173.54
NET OPERATING PROFIT							4.89
INTEREST ON OPERATING CAPITAL							4.59
INTEREST ON EQUIPMENT INVESTMENT							9.83
RETURN TO LAND AND RISK							-9.53

TABLE 94. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT: 526.00 LB		SEED: 877.00 LB			
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT: \$0.50/LB		SEED: \$0.04/LB		GROSS RETURNS: \$294.57	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	13.00				13.00
PHOSPHORUS (P)		40.00 LB	6.80				6.80
COTTON SEED		30.00 LB	9.90				9.90
HERBICIDE (CUSTOM)		1.00 ACRE	10.50				10.50
INSECTICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CROP INSURANCE		1.00 DOLLARS	14.00				14.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		22.71 AC. IN.					
SUBTOTAL			72.28				72.28
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLCW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.17	2.72
FERT SPREADER	60 HP	.13 HR		.27	.27	.45	.99
LISTER	80 HP	.56 HR		1.16	1.14	1.67	3.97
PRE-IRRIGATE		.61 HR		1.02	1.60	.91	3.53
COTTON PLANTER	40 HP	.35 HR		.73	.90	1.32	2.95
SLED	40 HP	.29 HR		.60	.45	.39	1.44
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	2.01	7.25
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
IRRIGATE (6X)		2.88 HR		4.81	3.90	2.22	10.93
SUBTOTAL			9.30 HR	17.91	18.91	17.46	54.28
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	1.92 HR		3.99	6.70	9.08	19.77
COTTON TRAILER (2X)	0.5 TON	1.88 HR		3.91	4.47	3.16	11.54
GIN COTTON (CUSTOM)			28.14				28.14
SUBTOTAL			3.80 HR	28.14	7.90	11.17	59.45
<u>OVERHEAD EXPENSES</u>							
POWER TIME		2.40 HR		5.00			5.00
EMPLOYEE BENEFITS				3.87			3.87
FARM INSURANCE			10.16				10.16
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				22.20			22.20
OTHER EXPENSES			12.00				12.00
SUBTOTAL			2.40 HR	22.16	31.07	4.80	58.03
TOTAL OPERATING EXPENSES			15.50 HR	122.58	56.88	30.08	244.04
NET OPERATING PROFIT							50.53
INTEREST ON OPERATING CAPITAL							5.97
INTEREST ON EQUIPMENT INVESTMENT							17.68
RETURN TO LAND AND RISK							26.86

TABLE 95. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: MAY 1 - JUNE 30		YIELD:	42.00 CWT				
HARVEST DATES: SEP 1 - OCT 30		PRICE:	4.39/CWT	GROSS RETURNS: \$184.38			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
GRAIN SORGHUM SEED		8.00 LB	3.04				3.04
HERBICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		11.18 AC. IN.					
SUBTOTAL			32.02				32.02
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
FERT SPREADER	60 HP	.13 HR		.27	.27	.45	.99
LISTER	80 HP	.56 HR		1.16	1.14	1.67	3.97
PRE-IRRIGATE		.61 HR		1.02	1.20	.68	2.90
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
CORN PLANTER	40 HP	.35 HR		.73	.90	4.18	5.81
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR	40 HP	.33 HR		.69	.62	.50	1.81
IRRIGATE (6X)		2.88 HR		4.81	1.51	.86	7.18
SUBTOTAL			8.01 HR	15.24	13.70	16.92	45.86
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			13.67				13.67
HAUL (TRUCK) (CUSTOM)	2 TON		6.06				6.06
SUBTOTAL			19.73				19.73
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.13 HR		2.35			2.35
EMPLOYEE BENEFITS				2.29			2.29
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				14.40			14.40
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.13 HR	22.10	19.03	4.80	45.93
TOTAL OPERATING EXPENSES		9.14 HR	73.85	34.27	13.70	21.72	143.54
NET OPERATING PROFIT							40.84
INTEREST ON OPERATING CAPITAL							3.62
INTEREST ON EQUIPMENT INVESTMENT							10.37
RETURN TO LAND AND RISK							26.85

TABLE 96. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES:		YIELD: 6.80 CWT BEEF					
HARVEST DATES: MAY 1 - OCT. 30		PRICE: \$26.67/CWT BEEF		GROSS RETURNS: \$181.36			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	15.60				15.60
PHOSPHORUS (P)		46.00 LB	7.82				7.82
ESTABLISHMENT		1/10				8.87	8.87
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		47.66 AC.IN.					
SUBTOTAL			34.00			8.87	42.87
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
FERT SPREADER (2X)	60 HP	.42 HR		.87	.88	1.44	3.19
IRRIGATE (10X)		5.30 HR		8.85	11.54	6.58	26.97
SUBTOTAL			5.99 HR	10.28	12.89	8.50	31.67
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.17 HR		.36			.36
EMPLOYEE BENEFITS				1.54			1.54
FARM INSURANCE			10.07				10.07
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				14.15			14.15
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.17 HR	22.07	16.05	4.80	42.92
TOTAL OPERATING EXPENSES			6.16 HR	56.07	26.33	22.17	117.46
NET OPERATING PROFIT							63.90
INTEREST ON OPERATING CAPITAL							3.34
INTEREST ON EQUIPMENT INVESTMENT							6.80
RETURN TO LAND AND RISK							53.76

TABLE 97. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: JAN. 15 - FEB. 15		YIELD: 540.00 CTN						
HARVEST DATES: MAY 1 - MAY 31		PRICE: \$7.07/CTN		GROSS RETURNS: \$3817.80				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
----- (DOLLARS) -----								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		225.00 LB	29.25				29.25	
PHOSPHORUS (P)		80.00 LB	13.60				13.60	
LETTUCE SEED		2.00 LB	40.00				40.00	
CANAL WATER		8.71 AC. IN.	3.92				3.92	
PUMP WATER		21.53 AC. IN.						
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00	
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				66.00	
SUBTOTAL			161.77				161.77	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19	
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98	
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23	
LAND PLANE	80 HP	.39 HR		.81	.74	1.17	2.72	
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.34	2.97	
LISTER	80 HP	.56 HR		1.16	1.14	1.67	3.97	
PRE-IRRIGATE		.61 HR		1.02	.67	.38	2.07	
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84	
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12	
CULT e SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59	
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.50	5.43	
THIN e HOE (CUSTOM)			50.00				50.00	
IRRIGATE (10X)		3.00 HR		5.01	4.55	2.59	12.15	
SUBTOTAL			50.00	17.52	18.26	17.48	103.26	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			729.00				729.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.38 HR		2.88			2.88	
EMPLOYEE BENEFITS				2.63			2.63	
FARM INSURANCE			10.11				10.11	
LAND TAXES						4.80	4.80	
SUPERVISION AND MANAGEMENT				61.33			61.33	
OTHER EXPENSES			12.00				12.00	
SUBTOTAL			1.38 HR	22.11	66.83	4.80	93.74	
TOTAL OPERATING EXPENSES			10.52 HR	962.88	84.35	18.26	22.28	1087.77
NET OPERATING PROFIT							2730.03	
INTEREST ON OPERATING CAPITAL							16.18	
INTEREST ON EQUIPMENT INVESTMENT							10.95	
RETURN TO LAND AND RISK							2702.90	

TABLE 98. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 480.00 CTN		GROSS RETURNS: \$1027.20			
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: \$2.14/CTN					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	29.90				29.90
PHOSPHORUS (P)		80.00 LB	13.60				13.60
LETTUCE SEED		2.00 LB	40.00				40.00
CANAL WATER		9.37 AC. IN.	4.22				4.22
PUMP WATER		24.41 AC. IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50
INSECTICIDE (CUSTOM)		1.00 ACRE	72.00				72.00
SUBTOTAL			177.22				177.22
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.17	2.72
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.34	2.97
LISTER	80 HP	.56 HR		1.16	1.14	1.67	3.97
PRE-IRRIGATE		.61 HR		1.02	.91	.52	2.45
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.50	5.43
THIN & HOE (CUSTOM)			50.00				50.00
IRRIGATE (8X)		2.40 HR		4.01	5.00	2.85	11.86
SUBTOTAL			8.54 HR	50.00	16.52	18.95	103.35
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			648.00				648.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.87			2.87
EMPLOYEE BENEFITS				2.48			2.48
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				56.97			56.97
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.38 HR	22.10	62.31	4.80	89.21
TOTAL OPERATING EXPENSES			9.92 HR	897.32	78.83	18.95	1017.78
NET OPERATING PROFIT							9.42
INTEREST ON OPERATING CAPITAL							16.07
INTEREST ON EQUIPMENT INVESTMENT							11.32
RETURN TO LAND AND RISK							-17.97

TABLE 99. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 15.25 TON					
HARVEST DATES: JUNE 1 - JULY 15		PRICE: 144.00/TON		GROSS RETURNS: \$2196.00			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	26.00				26.00
PHOSPHORUS (P)		70.00 LB	11.90				11.90
ONION SEED		4.00 LB	51.60				51.60
CANAL WATER		10.53 AC. IN.	4.74				4.74
PUMP WATER		20.78 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00
SUBTOTAL			119.74				119.74
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.45 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.17	2.72
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.34	2.97
LISTER	80 HP	.56 HR		1.16	1.14	1.67	3.97
PRE-IRRIGATE		.61 HR		1.02	.51	.29	1.82
BED SHAPEK	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.50	5.43
THIN & HOE (CUSTOM)			67.00				67.00
IRRIGATE (14X)		4.20 HR		7.01	4.53	2.58	14.12
SUBTOTAL			67.00	19.52	18.08	17.38	121.98
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM; ONIONS)			840.00				840.00
PACK ONIONS (CUSTOM)			840.00				840.00
SUBTOTAL			1680.00				1680.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.88			2.88
EMPLOYEE BENEFITS				2.93			2.93
FARM INSURANCE			10.12				10.12
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				109.86			109.86
OTHER EXPENSES			12.00				12.00
SUBTOTAL			22.12	115.67		4.80	142.59
TOTAL OPERATING EXPENSES		11.72 HR	1888.86	135.19	18.08	22.18	2054.31
NET OPERATING PROFIT							131.69
INTEREST ON OPERATING CAPITAL							22.95
INTEREST ON EQUIPMENT INVESTMENT							10.89
RETURN TO LAND AND RISK							97.85

TABLE 100. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 14.50 TON		GROSS RETURNS: \$2088.00			
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: \$144.00/TON					
ITEM	POWER UNITS	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	26.00				26.00
PHOSPHORUS (P)		70.00 LB	11.90				11.90
ONION SEED		4.00 LB	51.60				51.60
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		15.59 AC.IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
SUBTOTAL			131.08				131.08
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.17	2.72
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.34	2.97
LISTER	80 HP	.56 HR		1.16	1.14	1.67	3.97
PRE-IRRIGATE		.61 HR		1.02	.63	.36	2.01
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.50	5.43
THIN & HOE (CUSTOM)			67.00				67.00
IRRIGATE (14X)		4.20 HR		7.01	3.14	1.79	11.94
SUBTOTAL			67.00	19.52	16.81	16.66	119.99
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM)	ONIONS		800.00				800.00
PACK ONIONS (CUSTOM)			800.00				800.00
SUBTOTAL			1600.00				1600.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.88			2.88
EMPLOYEE BENEFITS				2.93			2.93
FARM INSURANCE			10.12				10.12
LAND TAXES					4.80		4.80
SUPERVISION AND MANAGEMENT				106.33			106.33
OTHER EXPENSES			12.00				12.00
SUBTOTAL			22.12	112.14		4.80	139.06
TOTAL OPERATING EXPENSES			11.72 HR	1820.20	131.66	21.46	1990.13
NET OPERATING PROFIT							97.87
INTEREST ON OPERATING CAPITAL							22.71
INTEREST ON EQUIPMENT INVESTMENT							10.24
RETURN TO LAND AND RISK							64.92

TABLE 101. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE

PLANTING DATES: SEP 1 - SEP 15		YIELD: 36.00 CWT					
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$4.41/CWT		GROSS RETURNS: \$158.76			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		92.00 LB	15.64				15.64
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER		13.01 AC.IN.	5.85				5.85
PUMP WATER		17.00 AC.IN.					
			-----				-----
SUBTOTAL			46.57				46.57
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FERT SPREADER	60 HP	.13 HR		.27	.27	.45	.99
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (8X)		4.24 HR		7.08	4.12	2.35	13.55
			-----	-----	-----	-----	-----
SUBTOTAL		7.19 HR		13.22	12.16	12.07	37.45
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			13.50				13.50
HAUL (TRUCK) (CUSTOM)	2 TON		5.47				5.47
			-----				-----
SUBTOTAL			18.97				18.97
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.53			1.53
EMPLOYEE BENEFITS				1.98			1.98
FARM INSURANCE			10.09				10.09
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				13.08			13.08
OTHER EXPENSES			12.00				12.00
			-----	-----			-----
SUBTOTAL		.74 HR	22.09	16.60		4.80	43.49
<u>TOTAL OPERATING EXPENSES</u>							
		7.93 HR	87.63	29.82	12.16	16.87	146.48
<u>NET OPERATING PROFIT</u>							
							12.28
<u>INTEREST ON OPERATING CAPITAL</u>							
							4.01
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							
							8.03
<u>RETURN TO LAND AND RISK</u>							
							0.24

TABLE 102. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 39.00 CWT					
HARVEST DATES: JULY 1 - JULY 15		PRICE: \$4.20/CWT		GROSS RETURNS: \$163.80			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		40.00 LB	6.80				6.80
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		1.32 AC. IN.					
SUBTOTAL			42.46				42.46
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FERT SPREADER	60 HP	.13 HR		.27	.27	.45	.99
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (5X)		2.65 HR		4.43	.32	.18	4.93
SUBTOTAL			5.60 HR	10.57	8.36	9.90	28.83
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.00				15.00
HAUL (TRUCK) (CUSTOM)	2 TON		6.05				6.05
SUBTOTAL			21.05				21.05
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.53			1.53
EMPLOYEE BENEFITS				1.59			1.59
FARM INSURANCE			10.07				10.07
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				11.90			11.90
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.74 HR	22.07	15.02	4.80	41.89
TOTAL OPERATING EXPENSES		6.34 HR	85.58	25.59	8.36	14.70	134.23
NET OPERATING PROFIT							29.57
INTEREST ON OPERATING CAPITAL							3.68
INTEREST ON EQUIPMENT INVESTMENT							6.12
RETURN TO LAND AND RISK							19.77

TABLE 103. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 12.50 TON					
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: \$45.00/TON		GROSS RETURNS: \$562.50			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	8.19				8.19
PHOSPHORUS (P)		161.00 LB	27.37				27.37
TOMATO SEED		2.00 LB	25.80				25.80
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		20.59 AC. IN.					
SUBTOTAL			107.94				107.94
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.17	2.72
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.34	2.97
LISTER	80 HP	.56 HR		1.16	1.14	1.67	3.97
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
PRE-IRRIGATE		.61 HR		1.02	.89	.51	2.42
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	2.01	7.25
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
HOEING (2X)		6.00 HR		12.48			12.48
IRRIGATE (11X)		3.85 HR		6.43	4.09	2.33	12.85
SUBTOTAL			16.32 HR	32.11	18.64	17.86	68.61
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			206.42				206.42
FORK LIFT (2X)		.68 HR		1.41	1.34	1.20	3.95
HAUL (TRUCK) (2X)	2 TON	3.36 HR		6.99	6.28	4.54	17.81
SUBTOTAL			4.04 HR	206.42	8.40	5.74	228.18
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.97 HR		8.27			8.27
EMPLOYEE BENEFITS				6.08			6.08
FARM INSURANCE			10.24				10.24
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				42.99			42.99
OTHER EXPENSES			12.00				12.00
SUBTOTAL			3.97 HR	22.24	57.34	4.80	84.38
TOTAL OPERATING EXPENSES		24.33 HR	336.60	97.85	26.26	28.40	489.11
NET OPERATING PROFIT							73.39
INTEREST ON OPERATING CAPITAL							9.78
INTEREST ON EQUIPMENT INVESTMENT							14.91
RETURN TO LAND AND RISK							48.70

TABLE 104. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (BASE)

PLANTING DATES:		YIELD: 1300.00 LB		GROSS RETURNS: \$624.00			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.48/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	18.85				18.85
PHOSPHORUS (P)		48.00 LB	8.16				8.16
ZINC SULFATE		12.00 LB	2.88				2.88
MANGANESE SULFATE		24.00 LB	4.08				4.08
HERBICIDE		2.00 LB	1.98				1.98
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		30.00 AC. IN.	13.50				13.50
PUMP WATER ESTABLISHMENT		23.25 AC. IN. 1/12					
						179.25	179.25
SUBTOTAL			69.45			179.25	248.70
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PRUNE (MACHINE)	60 HP	2.00 HR		4.16	5.58	12.42	23.16
HAUL (TRUCK)	2 TON	2.00 HR		4.16	3.74	2.70	10.60
DRILL HERBICIDE	80 HP	.24 HR		.50	.42	.98	1.90
SPRAYER (MTD) (4X)	60 HP	2.00 HR		4.16	3.44	5.14	12.74
BORDER	40 HP	.29 HR		.60	.50	.75	1.85
FERT SPREADER	60 HP	.21 HR		.44	.44	.72	1.60
HOEING (2X)		4.00 HR		8.32			8.32
IRRIGATE (9X)		4.77 HR		7.97	5.63	3.21	16.81
SUBTOTAL			16.39 HR	32.14	23.34	28.48	83.96
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		4.16	10.34	17.00	31.50
SWEEP	40 HP	2.00 HR		4.16	5.02	9.52	18.70
CLEAN & SACK		7.85 HR		13.11			13.11
HAUL NUTS	60 HP	2.60 HR		5.41	3.54	4.58	13.53
HAND LABOR		15.00 HR		25.05			25.05
SUBTOTAL			29.45 HR	51.89	18.90	31.10	101.89
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.55 HR		9.47			9.47
EMPLOYEE BENEFITS				12.60			12.60
FARM INSURANCE			10.55				10.55
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				64.26			64.26
TRIP EXPENSES			12.00				12.00
SUBTOTAL			4.55 HR	22.55	86.33	4.80	113.68
TOTAL OPERATING EXPENSES			50.39 HR	92.00	170.36	42.24	243.63
NET OPERATING PROFIT							75.77
INTEREST ON OPERATING CAPITAL							8.54
INTEREST ON EQUIPMENT INVESTMENT							35.17
RETURN TO LAND AND RISK							32.06

TABLE 105. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	15.30				15.30
ALFALFA SEED		15.00 LB	20.25				20.25
CANAL WATER		8.00 AC.IN.	3.60				3.60
PUMP WATER		7.30 AC.IN.					
SUBTOTAL			39.15				39.15
<u>PREHARVEST OPERATIONS</u>							
FLOW (MOLDEGARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
PERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DRILL	60 HP	.31 HR		.64	1.00	1.88	3.52
IRRIGATE (3X)		1.63 HR		3.06	1.77	1.09	5.92
SUBTOTAL			4.00 HR	7.57	7.99	8.78	24.34
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.54 HR		1.13			1.13
EMPLOYEE BENEFITS				1.14			1.14
FARM INSURANCE			10.05				10.05
SUPERVISION AND MANAGEMENT				5.85			5.85
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.54 HR	22.05	8.12		30.17
<u>TOTAL OPERATING EXPENSES</u>		4.54 HR	61.20	15.69	7.99	8.78	93.66

TABLE 106. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES:		YIELD: 5.46 TON		GROSS RETURNS: \$256.62			
HARVEST DATES: JUNE 1 - OCT. 1		PRICE: 47.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		92.00 LB	15.64				15.64
WIRE		10.92 LB	12.12				12.12
CANAL WATER		30.00 AC. IN.	13.50				13.50
PUMP WATER		36.44 AC. IN.					
ESTABLISHMENT		1/5				23.30	23.30
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			46.63			23.30	69.93
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
IRRIGATE (11X)		6.71 HR		11.21	8.82	5.44	25.47
SUBTOTAL			6.84 HR	11.48	9.09	5.88	26.45
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.35 HR		4.89	4.04	4.56	13.49
BALEK (AUX ENG) (5X)	80 HP	1.65 HR		3.43	6.12	6.95	16.50
HAUL (TRAILER) (5X)	60 HP	1.85 HR		3.85	2.65	3.72	10.22
SUBTOTAL			5.85 HR	12.17	12.81	15.23	40.21
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.49 HR		3.11			3.11
EMPLOYEE BENEFITS				3.55			3.55
FARM INSURANCE			10.15				10.15
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				21.56			21.56
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.49 HR	22.15	28.22	4.80	55.17
TOTAL OPERATING EXPENSES			14.18 HR	68.78	51.87	49.21	191.76
NET OPERATING PROFIT							64.86
INTEREST ON OPERATING CAPITAL							4.41
INTEREST ON EQUIPMENT INVESTMENT							13.63
RETURN TO LAND AND RISK							46.82

TABLE 107. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 5.78 TON		RED: 431.60 LB			
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN: 100.00/TON		RED: 0.30/LE	GROSS RETURNS: 1707.30		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
PURCHASED INPUTS							
NITROGEN (F)		140.00 LB	18.20				18.20
PHOSPHORUS (P)		60.00 LB	10.20				10.20
CHILE SEED		5.00 LB	38.75				38.75
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		12.12 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			111.60				111.60
PREHARVEST OPERATIONS							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	.66	.41	2.24
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
THINNING (CUSTOM)			20.00				20.00
HOEING (CUSTOM)			40.00				40.00
IRRIGATE (12X)		5.16 HR		8.62	2.27	1.40	12.29
SUBTOTAL			11.37 HR	60.00	21.24	15.90	113.19
HARVEST OPERATIONS							
HARVEST (CUSTOM)			170.89				170.89
HAUL (TRAILER) (3X)	40 HP	2.91 HR		6.05	4.80	4.74	15.59
FORK LIFT (3X)		1.08 HR		2.25	2.13	1.80	6.18
HAUL (TRUCK) (3X)	2 TON	5.28 HR		10.98	9.87	6.92	27.77
SUBTOTAL			9.27 HR	170.89	19.28	16.80	220.43
OVERHEAD EXPENSES							
DOWNTIME		3.69 HR		7.68			7.68
EMPLOYEE BENEFITS				6.08			6.08
FARM INSURANCE			10.25				10.25
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				46.50			46.50
OTHER EXPENSES			12.00				12.00
SUBTOTAL			3.69 HR	22.25	60.26	4.80	87.31
TOTAL OPERATING EXPENSES			24.33 HR	364.74	100.78	32.70	532.53
NET OPERATING PROFIT							174.77
INTEREST ON OPERATING CAPITAL							10.83
INTEREST ON EQUIPMENT INVESTMENT							18.34
RETURN TO LAND AND RISK							145.60

TABLE 108. CORN: SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.85 TON					
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: 10.50/TON		GROSS RETURNS: 187.43			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
PHOSPHORUS (P)		60.00 LB	10.20				10.20
CORN SEED		17.00 LB	12.58				12.58
HERBICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
INSECTICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		12.93 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			62.13				62.13
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLow (MOLDBOARD, FLOAT)	120 HP	.46 HR		.96	1.62	1.65	4.23
FERT SPREADER	60 HP	.19 HR		.40	.33	.84	1.57
LISTER	60 HP	.13 HR		.27	.27	.44	.98
PRE-IRRIGATE	80 HP	.56 HR		1.16	1.14	1.65	3.95
CORN PLANTER	40 HP	.70 HR		1.17	.98	.60	2.75
CULTIVATOR	40 HP	.35 HR		.73	.90	4.18	5.81
CULT e SIDEDRESS	40 HP	.33 HR		.69	.62	.50	1.81
IRRIGATE (8X)	40 HP	.62 HR		1.29	1.23	1.07	3.59
		4.40 HR		7.35	2.15	1.33	10.83
SUBTOTAL			8.62 HR	15.85	11.83	14.82	42.50
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			17.33				17.33
HAUL (TRUCK) (CUSTOM)	2 TON		12.60				12.60
SUBTOTAL			29.93				29.93
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.88 HR		1.83			1.83
EMPLOYEE BENEFITS				2.38			2.38
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.54			15.54
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.88 HR	22.10	19.75	4.80	46.65
TOTAL OPERATING EXPENSES		9.50 HR	114.16	35.60	11.83	19.62	181.21
NET OPERATING PROFIT							6.22
INTEREST ON OPERATING CAPITAL							4.85
INTEREST ON EQUIPMENT INVESTMENT							9.43
RETURN TO LAND AND RISK							-8.06

TABLE 109. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT: 552.00 LB		SEED: 921.00 LB			
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT: \$0.50/LB		SEED: \$0.04/LB		GROSS RETURNS: \$309.16	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	13.00				13.00
PHOSPHORUS (P)		40.00 LB	6.80				6.80
COTTON SEED		30.00 LB	9.90				9.90
HERBICIDE (CUSTOM)		1.00 ACRE	10.50				10.50
INSECTICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CROP INSURANCE		1.00 DOLLARS	14.00				14.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		18.09 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			77.65				77.65
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	1.44	.89	3.50
COTTON PLANTER	40 HP	.35 HR		.73	.90	1.31	2.94
SLID	40 HP	.29 HR		.60	.45	.39	1.44
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	1.99	7.23
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
IRRIGATE (6X)		3.30 HR		5.51	2.94	1.81	10.26
SUBTOTAL			9.81 HR	18.76	17.79	16.96	53.51
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.02 HR		4.20	7.05	13.64	24.89
COTTON TRAILER (2X)	0.5 TON	1.88 HR		3.91	4.47	3.16	11.54
GIN COTTON (CUSTOM)			29.55				29.55
SUBTOTAL			3.90 HR	29.55	8.11	16.80	65.98
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		2.43 HR		5.05			5.05
EMPLOYEE BENEFITS				4.03			4.03
FARM INSURANCE			10.16				10.16
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				23.43			23.43
OTHER EXPENSES			12.00				12.00
SUBTOTAL			2.43 HR	22.16	32.51	4.80	59.47
TOTAL OPERATING EXPENSES		16.14 HR	129.36	59.38	29.31	38.56	256.61
NET OPERATING PROFIT							52.55
INTEREST ON OPERATING CAPITAL							6.25
INTEREST ON EQUIPMENT INVESTMENT							19.81
RETURN TO LAND AND RISK							26.49

TABLE 110. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 44.10 CWT		GROSS RETURNS: \$193.60			
HARVEST DATES: SEP 1 - OCT 30		PRICE: \$4.39/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
GRAIN SORGHUM SEED		8.00 LB	3.04				3.04
HERBICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		7.71 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			37.39				37.39
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	1.08	.67	2.92
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
CORN PLANTER	40 HP	.35 HR		.73	.90	4.18	5.81
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR	40 HP	.33 HR		.69	.62	.50	1.81
IRRIGATE (6X)		3.30 HR		5.51	.79	.49	6.79
SUBTOTAL			8.52 HR	16.09	12.86	16.51	45.46
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			14.35				14.35
HAUL (TRUCK) (CUSTOM)	2 TCN		6.36				6.36
SUBTOTAL			20.71				20.71
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.13 HR		2.35			2.35
EMPLOYEE BENEFITS				2.41			2.41
FARM INSURANCE			10.10				10.10
LAND TAXES					4.80		4.80
SUPERVISION AND MANAGEMENT				15.31			15.31
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.13 HR	22.10	20.08	4.80	46.98
TOTAL OPERATING EXPENSES		9.65 HR	80.20	36.17	12.86	21.31	150.54
NET OPERATING PROFIT							43.06
INTEREST ON OPERATING CAPITAL							3.87
INTEREST ON EQUIPMENT INVESTMENT							10.01
RETURN TO LAND AND RISK							29.18

TABLE 111. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES:		YIELD: 7.14 CWT BEEF					
HARVEST DATES: MAY 1 - OCT. 30		PRICE: 26.67/CWT BEEF		GROSS RETURNS: \$190.42			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	15.60				15.60
PHOSPHORUS (P)		46.00 LB	7.82				7.82
ESTABLISHMENT		1/10				8.87	8.87
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		40.54 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			39.37			8.87	48.24
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
FERT SPREADER (2X)	60 HP	.42 HR		.87	.88	1.44	3.19
IRRIGATE (10X)		6.10 HR		10.19	9.82	6.05	26.06
SUBTOTAL			6.79 HR	11.62	11.17	7.97	30.76
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.17 HR		.36			.36
EMPLOYEE BENEFITS				1.74			1.74
FARM INSURANCE			10.08				10.08
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.32			15.32
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.17 HR	22.08	17.42	4.80	44.30
TOTAL OPERATING EXPENSES		6.96 HR	61.45	29.04	11.17	21.64	123.30
NET OPERATING PROFIT							67.12
INTEREST ON OPERATING CAPITAL							3.59
INTEREST ON EQUIPMENT INVESTMENT							6.26
RETURN TO LAND AND RISK							57.27

TABLE 112. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: JAN. 15 - FEB. 15		YIELD: 540.00 CTN						
HARVEST DATES: MAY 1 - MAY 31		PRICE: 7.07/CTN		GROSS RETURNS: 3817.80				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
----- (DOLLARS) -----								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		225.00 LB	29.25				29.25	
PHOSPHORUS (P)		80.00 LB	13.60				13.60	
LETTUCE SEED		2.00 LB	40.00				40.00	
CANAL WATER		8.71 AC. IN.	3.92				3.92	
PUMP WATER		18.51 AC. IN.						
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00	
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				60.00	
ISS		1.00 ACRE	5.37				5.37	
SUBTOTAL			167.14				167.14	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19	
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98	
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23	
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71	
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96	
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95	
PRE-IRRIGATE		.70 HR		1.17	.60	.37	2.14	
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84	
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12	
CULT & SLEDDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59	
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42	
THIN & HOE (CUSTOM)			50.00				50.00	
IRRIGATE (10X)		3.50 HR		5.85	3.88	2.40	12.13	
SUBTOTAL			50.00	18.51	17.52	17.23	103.26	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			729.00				729.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.38 HR		2.87			2.87	
EMPLOYEE BENEFITS				2.78			2.78	
FARM INSURANCE			10.12				10.12	
LAND TAXES						4.80	4.80	
SUPERVISION AND MANAGEMENT				62.65			62.65	
OTHER EXPENSES			12.00				12.00	
SUBTOTAL			22.12	68.30		4.80	95.22	
TOTAL OPERATING EXPENSES			11.11 HR	968.26	86.81	17.52	22.03	1094.62
NET OPERATING PROFIT							2723.18	
INTEREST ON OPERATING CAPITAL							16.45	
INTEREST ON EQUIPMENT INVESTMENT							10.70	
RETURN TO LAND AND RISK							2696.03	

TABLE 113. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 480.00 CTN					
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: \$2.14/CTN		GROSS RETURNS: \$1027.20			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	29.90				29.90
PHOSPHORUS (P)		80.00 LB	13.60				13.60
LETTUCE SEED		2.00 LB	40.00				40.00
CANAL WATER		9.37 AC.IN.	4.22				4.22
PUMP WATER		21.03 AC.IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50
INSECTICIDE (CUSTOM)		1.00 ACRE	72.00				72.00
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			182.59				182.59
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-INRIGATE		.70 HR		1.17	.82	.50	2.49
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLES PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
THIN & HOE (CUSTOM)			50.00				50.00
IRRIGATE (8X)		2.80 HR		4.68	4.27	2.64	11.59
SUBTOTAL			50.00	17.34	18.13	17.60	103.07
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			648.00				648.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.87			2.87
EMPLOYEE BENEFITS				2.60			2.60
FARM INSURANCE			10.11				10.11
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				58.11			58.11
OTHER EXPENSES			12.00				12.00
SUBTOTAL			22.11	63.58		4.80	90.49
TOTAL OPERATING EXPENSES		10.41 HR	902.70	80.92	18.13	22.40	1024.15
NET OPERATING PROFIT							3.05
INTEREST ON OPERATING CAPITAL							16.33
INTEREST ON EQUIPMENT INVESTMENT							11.06
RETURN TO LAND AND RISK							-24.34

TABLE 114. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 15.25 TON					
HARVEST DATES: JUNE 1 - JULY 15		PRICE: .144.00/TON		GROSS RETURNS: \$2196.00			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	26.00				26.00
PHOSPHORUS (P)		70.00 LB	11.90				11.90
ONION SEED		4.00 LB	51.60				51.60
CANAL WATER		10.53 AC. IN.	4.74				4.74
PUMP WATER		17.65 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			125.11				125.11
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	.46	.28	1.91
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
THIN & HOE (CUSTOM)			67.00				67.00
IRRIGATE (14X)		4.90 HR		8.18	3.82	2.36	14.36
SUBTOTAL			67.00	20.84	17.32	17.10	122.26
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			840.00				840.00
PACK ONIONS (CUSTOM)			840.00				840.00
SUBTOTAL			1680.00				1680.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.88			2.88
EMPLOYEE BENEFITS				3.13			3.13
FARM INSURANCE			10.13				10.13
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				111.57			111.57
OTHER EXPENSES			12.00				12.00
SUBTOTAL			22.13	117.57		4.80	144.50
TOTAL OPERATING EXPENSES			12.51 HR	1894.24	138.41	17.32	2071.87
NET OPERATING PROFIT							124.13
INTEREST ON OPERATING CAPITAL							23.24
INTEREST ON EQUIPMENT INVESTMENT							10.62
RETURN TO LAND AND RISK							90.27

TABLE 115. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 14.50 TON		GROSS RETURNS: \$2088.00				
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: .144.00/TON						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
-(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	26.00				26.00	
PHOSPHORUS (P)		70.00 LB	11.90				11.90	
ONION SEED		4.00 LB	51.60				51.60	
CANAL WATER		23.52 AC. IN.	10.58				10.58	
PUMP WATER		11.68 AC. IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	16.00				16.00	
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00	
ISS		1.00 ACRE	5.37				5.37	
SUBTOTAL			136.45				136.45	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19	
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98	
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23	
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71	
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96	
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95	
PRE-IRRIGATE		.70 HR		1.17	.57	.35	2.09	
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84	
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12	
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59	
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42	
THRIN & HOE (CUSTOM)			67.00				67.00	
IRRIGATE (14X)		4.90 HR		8.18	2.26	1.39	11.83	
SUBTOTAL			67.00	20.84	15.87	16.20	119.91	
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM), ONIONS			800.00				800.00	
PACK ONIONS (CUSTOM)			800.00				800.00	
SUBTOTAL			1600.00				1600.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.38 HR		2.88			2.88	
EMPLOYEE BENEFITS				3.13			3.13	
FARM INSURANCE			10.13				10.13	
LAND TAXES						4.80	4.80	
SUPERVISION AND MANAGEMENT				108.02			108.02	
OTHER EXPENSES			12.00				12.00	
SUBTOTAL			22.13	114.02		4.80	140.95	
TOTAL OPERATING EXPENSES			12.51 HR	1825.58	134.86	15.87	21.00	1997.31
NET OPERATING PROFIT							90.69	
INTEREST ON OPERATING CAPITAL							23.00	
INTEREST ON EQUIPMENT INVESTMENT							9.84	
RETURN TO LAND AND RISK							57.85	

TABLE 116. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: SEP 1 - SEP 15		YIELD: 37.80 CWT		GROSS RETURNS: \$166.32			
HARVEST DATES: MAY 1 - MAY 15		PRICE: .440/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		92.00 LB	15.64				15.64
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER		13.01 AC. IN.	5.85				5.85
PUMP WATER		14.00 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			51.94				51.94
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (8X)		4.88 HR		8.15	3.39	2.09	13.63
SUBTOTAL			7.83 HR	14.29	11.43	11.80	37.52
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			14.18				14.18
HAUL (TRUCK, (CUSTOM)	2 TON		5.74				5.74
SUBTOTAL			19.92				19.92
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.53			1.53
EMPLOYEE BENEFITS				2.14			2.14
FARM INSURANCE			10.09				10.09
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				14.04			14.04
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.74 HR	22.09	17.71	4.80	44.60
TOTAL OPERATING EXPENSES		8.57 HR	93.95	32.00	11.43	16.60	153.98
NET OPERATING PROFIT							12.34
INTEREST ON OPERATING CAPITAL							4.28
INTEREST ON EQUIPMENT INVESTMENT							7.78
RETURN TO LAND AND RISK							0.28

TABLE 117. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 40.95 CWT					
HARVEST DATES: JULY 1 - JULY 15		PRICE: 4.20/CWT		GROSS RETURNS: \$171.99			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		40.00 LB	6.80				6.80
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER		22.36 AC.IN.	10.06				10.06
PUMP WATER		AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			47.31				47.31
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HF	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLAGG	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (5X)		3.05 HR		5.09			5.09
SUBTOTAL			6.00 HR	11.23	8.04	9.71	28.98
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.75				15.75
HAUL (TRUCK) (CUSTOM)	2 TON		6.35				6.35
SUBTOTAL			22.10				22.10
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.54			1.54
EMPLOYEE BENEFITS				1.68			1.68
FARM INSURANCE			10.07				10.07
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				12.67			12.67
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.74 HR	22.07	15.90	4.80	42.77
TOTAL OPERATING EXPENSES		6.74 HR	91.48	27.13	8.04	14.51	141.16
NET OPERATING PROFIT							30.83
INTEREST ON OPERATING CAPITAL							3.91
INTEREST ON EQUIPMENT INVESTMENT							5.96
RETURN TO LAND AND RISK							20.96

TABLE 118. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 13.13 TON					
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: .45.00/TON		GROSS RETURNS: \$590.85			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	8.19				8.19
PHOSPHORUS (P)		161.00 LB	27.37				27.37
TOMATO SEED		2.00 LB	25.80				25.80
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		16.18 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			113.31				113.31
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND FLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FEKT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
PRE-IRRIGATE		.70 HR		1.17	.80	.49	2.46
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	1.99	7.23
CULT e SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
HOEING (2X)		6.00 HR		12.48			12.48
IRRIGATE (11X)		4.40 HR		7.35	3.12	1.92	12.39
SUBTOTAL			16.96 HR	33.18	17.58	17.37	68.13
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			216.74				216.74
FORK LIFT (2X)		.72 HR		1.50	1.42	1.20	4.12
HAUL (TRUCK) (2X)	2 TON	3.52 HR		7.32	6.58	4.61	18.51
SUBTOTAL			4.24 HR	216.74	8.82	5.81	239.37
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.02 HR		8.37			8.37
EMPLOYEE BENEFITS				6.30			6.30
FARM INSURANCE			10.25				10.25
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				45.13			45.13
OTHER EXPENSES			12.00				12.00
SUBTOTAL			4.02 HR	22.25	59.80	4.80	86.85
TOTAL OPERATING EXPENSES		25.22 HR	352.30	101.80	25.58	27.98	507.66
NET OPERATING PROFIT							83.19
INTEREST ON OPERATING CAPITAL							10.16
INTEREST ON EQUIPMENT INVESTMENT							14.55
RETURN TO LAND AND RISK							58.48

TABLE 119. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE NESILLA VALLEY, NEW MEXICO, 1973 -- (ISS)

PLANTING DATES:		YIELD: 1365.00 LB					
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: .0.48/LB		GROSS RETURNS: \$655.20			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	18.85				18.85
PHOSPHORUS (P)		48.00 LB	8.16				8.16
ZINC SULFATE		12.00 LB	2.88				2.88
MANGANESE SULFATE		24.00 LB	4.08				4.08
HERBICIDE		2.00 LB	1.98				1.98
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		30.00 AC. IN.	13.50				13.50
PUMP WATER		17.93 AC. IN.					
ESTABLISHMENT		1/12				179.25	179.25
ISS		1.00 ACRE	5.37				5.37
<u>SUBTOTAL</u>			74.82			179.25	254.07
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PRUNE (MACHINE)	60 HP	2.00 HR		4.16	6.58	12.40	23.14
HAUL (TRUCK)	2 TON	2.00 HR		4.16	3.74	2.62	10.52
DRILL HERBICIDE	80 HP	.24 HR		.50	.42	.97	1.89
SPRAYER (MTD) (4X)	60 HP	2.00 HR		4.16	3.44	5.12	12.72
BORDER	40 HP	.29 HR		.60	.50	.74	1.84
FERT SPREADER	60 HP	.21 HR		.44	.44	.72	1.60
HOEING (2X)		4.00 HR		8.32			8.32
IRRIGATE (9X)		5.49 HR		9.17	4.34	2.68	16.19
<u>SUBTOTAL</u>			17.11 HR	33.34	22.05	27.81	83.20
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		4.16	10.34	16.94	31.44
SWEEP	40 HP	2.00 HR		4.16	5.02	9.50	18.68
CLEAN € SACK		8.24 HR		13.76			13.76
HAUL NUTS	60 HP	2.60 HR		5.41	3.54	4.55	13.50
HAND LABOR		15.75 HR		26.30			26.30
<u>SUBTOTAL</u>			30.59 HR	53.79	18.90	30.99	103.68
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.56 HR		9.47			9.47
EMPLOYEE BENEFITS				13.07			13.07
FARM INSURANCE			10.57				10.57
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				67.49			67.49
OTHER EXPENSES			12.00				12.00
<u>SUBTOTAL</u>			4.56 HR	22.57	90.03	4.80	117.40
<u>TOTAL OPERATING EXPENSES</u>			52.26 HR	97.39	177.16	242.85	558.35
<u>NET OPERATING PROFIT</u>							96.85
<u>INTEREST ON OPERATING CAPITAL</u>							8.90
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							34.53
<u>RETURN TO LAND AND RISK</u>							53.42

TABLE 120. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS)----- -----							
<u>PURCHASED INPUTS</u>							
		90.00 LB	15.30				15.30
		15.00 LB	20.25				20.25
		8.00 AC. IN.	3.60				3.60
		7.30 AC. IN.					
			39.15				39.15
<u>PREHARVEST OPERATIONS</u>							
	120 HP	.46 HR		.96	1.62	1.65	4.23
	120 HP	.88 HR		1.83	2.59	2.56	6.98
	80 HP	.39 HR		.81	.74	1.16	2.71
	60 HP	.13 HR		.27	.27	.44	.98
	60 HP	.31 HR		.64	1.00	1.88	3.52
		1.83 HR		3.06	1.77	1.12	5.95
		4.00 HR		7.57	7.99	8.81	24.37
<u>OVERHEAD EXPENSES</u>							
		.54 HR		1.13			1.13
				1.14			1.14
			10.05				10.05
				5.85			5.85
			12.00				12.00
		.54 HR	22.05	8.12			30.17
<u>TOTAL OPERATING EXPENSES</u>							
		4.54 HR	61.20	15.69	7.99	8.81	93.69

TABLE 121. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES:		YIELD:	5.46 TON		GROSS RETURNS: \$256.62		
HARVEST DATES: JUNE 1 - OCT. 1		PRICE:	.47.00/TON				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		92.00 LB	15.64				15.64
WIRE		10.92 LB	12.12				12.12
CANAL WATER		30.00 AC. IN.	13.50				13.50
PUMP WATER		36.44 AC. IN.					
ESTABLISHMENT		1/5				23.31	23.31
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			45.63			23.31	69.94
<u>PREHARVEST OPERATIONS</u>							
FEET SPREADER	60 HP	.13 HR		.27	.27	.44	.98
IRRIGATE (11X)		6.71 HR		11.21	8.82	5.61	25.64
SUBTOTAL				11.48	9.09	6.05	26.62
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.35 HR		4.89	4.04	4.56	13.49
BALER (AUX ENG) (5X)	80 HP	1.65 HR		3.43	6.12	6.95	16.50
HAUL (TRAILER) (5X)	60 HP	1.85 HR		3.85	2.65	3.70	10.20
SUBTOTAL				12.17	12.81	15.21	40.19
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.49 HR		3.11			3.11
EMPLOYEE BENEFITS				3.55			3.55
FARM INSURANCE			10.15				10.15
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				21.56			21.56
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.49 HR	22.15	28.22	4.80	55.17
TOTAL OPERATING EXPENSES			14.18 HR	68.78	51.87	49.37	191.92
NET OPERATING PROFIT							64.70
INTEREST ON OPERATING CAPITAL							4.41
INTEREST ON EQUIPMENT INVESTMENT							13.77
RETURN TO LAND AND RISK							46.52

TABLE 122. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 6.07 TON		RED: 452.00 LB			
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN: \$100.00/TON		RED: \$0.30/LB		GROSS RETURNS: \$742.60	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	18.20				18.20
PHOSPHORUS (P)		60.00 LB	10.20				10.20
CHILE SEED		5.00 LB	38.75				38.75
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		9.27 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			134.73				134.73
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE (2X)		.92 HR		1.54	1.22	.78	3.54
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
THINNING (CUSTOM)			20.00				20.00
HOEING (CUSTOM)			40.00				40.00
IRRIGATE (11X)		4.73 HR		7.90	1.02	.65	9.57
SUBTOTAL			11.16 HR	60.00	20.89	15.21	111.77
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			179.43				179.43
HAUL (TRAILER) (3X)	40 HP	3.06 HR		6.36	5.05	4.96	16.37
FORK LIFT (3X)		1.14 HR		2.37	2.25	1.80	6.42
HAUL (TRUCK) (3X)	2 TON	5.55 HR		11.54	10.38	7.05	28.97
SUBTOTAL			9.75 HR	179.43	20.27	17.68	231.19
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.81 HR		7.93			7.93
EMPLOYEE BENEFITS				6.17			6.17
FARM INSURANCE			10.25				10.25
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				66.44			66.44
OTHER EXPENSES			12.00				12.00
SUBTOTAL			3.81 HR	22.25	80.54	4.80	107.59
TOTAL OPERATING EXPENSES		24.72 HR	396.41	121.70	32.89	34.28	585.28
NET OPERATING PROFIT							157.32
INTEREST ON OPERATING CAPITAL							12.56
INTEREST ON EQUIPMENT INVESTMENT							18.23
RETURN TO LAND AND RISK							126.53

TABLE 123. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.85 TON					
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: \$10.50/TON		GROSS RETURNS: \$187.43			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
PHOSPHORUS (P)		60.00 LB	10.20				10.20
CORN SEED		17.00 LB	12.58				12.58
HERBICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
INSECTICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		12.93 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			62.13				62.13
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	.98	.62	2.77
CORN PLANTER	40 HP	.35 HR		.73	.90	4.18	5.81
CULTIVATOR	40 HP	.33 HR		.69	.62	.50	1.81
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
IRRIGATE (8X)		4.40 HR		7.35	2.15	1.37	10.87
SUBTOTAL			8.62 HR	15.85	11.83	14.88	42.56
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			17.33				17.33
HAUL (TRUCK) (CUSTOM)	2 TON		12.60				12.60
SUBTOTAL			29.93				29.93
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.88 HR		1.83			1.83
EMPLOYEE BENEFITS				2.38			2.38
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.54			15.54
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.88 HR	22.10	19.75	4.80	46.65
TOTAL OPERATING EXPENSES			9.50 HR	114.16	35.60	19.68	181.27
NET OPERATING PROFIT							6.16
INTEREST ON OPERATING CAPITAL							4.85
INTEREST ON EQUIPMENT INVESTMENT							9.48
RETURN TO LAND AND RISK							-8.17

TABLE 124. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT: 552.00 LB		SEED: 921.00 LB		GROSS RETURNS: \$309.16	
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT: \$0.50/LB		SEED: \$0.04/LB			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
PURCHASED INPUTS							
NITROGEN (N)		100.00 LB	13.00				13.00
PHOSPHORUS (P)		40.00 LB	6.80				6.80
COTTON SEED		30.00 LB	9.90				9.90
HERBICIDE (CUSTOM)		1.00 ACRE	10.50				10.50
INSECTICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CROP INSURANCE		1.00 DOLLARS	14.00				14.00
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		18.09 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			77.65				77.65
PREHARVEST OPERATIONS							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (HOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	1.44	.91	3.52
COTTON PLANTER	40 HP	.35 HR		.73	.90	1.31	2.94
SLED	40 HP	.29 HR		.60	.45	.39	1.44
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	1.99	7.23
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
IRRIGATE (6X)		3.30 HR		5.51	2.94	1.87	10.32
SUBTOTAL			9.81 HR	18.76	17.79	17.04	53.59
HARVEST OPERATIONS							
COTTON PICKER (2X)	2-ROW	2.02 HR		4.20	7.05	13.64	24.89
COTTON TRAILER (2X)	0.5 TON	1.88 HR		3.91	4.47	3.16	11.54
GIN COTTON (CUSTOM)			29.55				29.55
SUBTOTAL			3.90 HR	29.55	8.11	11.52	65.98
OVERHEAD EXPENSES							
DOWNTIME		2.43 HR		5.05			5.05
LOYEE BENEFITS				4.03			4.03
FARM INSURANCE			10.16				10.16
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				23.43			23.43
OTHER EXPENSES			12.00				12.00
SUBTOTAL			2.43 HR	22.16	32.51	4.80	59.47
TOTAL OPERATING EXPENSES			16.14 HR	129.36	59.38	29.31	256.69
NET OPERATING PROFIT							52.47
INTEREST ON OPERATING CAPITAL							6.25
INTEREST ON EQUIPMENT INVESTMENT							19.88
RETURN TO LAND AND RISK							26.34

TABLE 125. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 44.10 CWT		GROSS RETURNS: \$193.60			
HARVEST DATES: SEP 1 - OCT 30		PRICE: \$4.39/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
GRAIN SORGHUM SEED		8.00 LB	3.04				3.04
HERBICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		7.71 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			37.39				37.39
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	1.08	.69	2.94
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
CORN PLANTER	40 HP	.35 HR		.73	.90	4.18	5.81
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR	40 HP	.33 HR		.69	.62	.50	1.81
IRRIGATE (6X)		3.30 HR		5.51	.79	.50	6.80
SUBTOTAL			8.52 HR	16.09	12.86	16.54	45.49
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			14.35				14.35
HAUL (TRUCK) (CUSTOM)	2 TON		6.36				6.36
SUBTOTAL			20.71				20.71
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.13 HR		2.35			2.35
EMPLOYEE BENEFITS				2.41			2.41
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.31			15.31
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.13 HR	22.10	20.08	4.80	46.98
TOTAL OPERATING EXPENSES			9.65 HR	80.20	36.17	21.34	150.57
NET OPERATING PROFIT							43.03
INTEREST ON OPERATING CAPITAL							3.87
INTEREST ON EQUIPMENT INVESTMENT							10.04
RETURN TO LAND AND RISK							29.12

TABLE 126. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES:		YIELD: 7.14 CWT BEEF		GROSS RETURNS: \$190.42			
HARVEST DATES: MAY 1 - OCT. 30		PRICE: 26.67/CWT BEEF					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	15.60				15.60
PHOSPHORUS (P)		46.00 LB	7.82				7.82
ESTABLISHMENT		1/10				8.87	8.87
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		40.54 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			39.37			8.87	48.24
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
FERT SPREADER (2X)	60 HP	.42 HR		.87	.88	1.44	3.19
IRRIGATE (10X)		6.10 HR		10.19	9.82	6.24	26.25
SUBTOTAL			6.79 HR	11.62	11.17	8.16	30.95
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.17 HR		.36			.36
EMPLOYEE BENEFITS				1.74			1.74
FARM INSURANCE			10.08				10.08
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.32			15.32
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.17 HR	22.08	17.42	4.80	44.30
TOTAL OPERATING EXPENSES		6.96 HR	61.45	29.04	11.17	21.83	123.49
NET OPERATING PROFIT							66.93
INTEREST ON OPERATING CAPITAL							3.59
INTEREST ON EQUIPMENT INVESTMENT							6.43
RETURN TO LAND AND RISK							56.91

TABLE 127. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: JAN. 15 - FEB. 15		YIELD: 567.00 CTN		GROSS RETURNS: 44008.69			
HARVEST DATES: MAY 1 - MAY 31		PRICE: 77.07/CTN					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		225.00 LB	29.25				29.25
PHOSPHORUS (P)		80.00 LB	13.60				13.60
LETTUCE SEED		2.00 LB	40.00				40.00
CANAL WATER		8.71 AC. IN.	3.92				3.92
PUMP WATER		14.43 AC. IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				60.00
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			190.27				190.27
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE (2X)		.92 HR		1.54	.93	.59	3.06
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
THIN & HOE (CUSTOM)			50.00				50.00
IRRIGATE (10X)		3.50 HR		5.85	2.56	1.63	10.04
SUBTOTAL			50.00	18.88	16.53	16.68	102.09
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			765.45				765.45
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.87			2.87
EMPLOYEE BENEFITS				2.83			2.83
FARM INSURANCE			10.12				10.12
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				74.48			74.48
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.38 HR	22.12	80.18	4.80	107.10
TOTAL OPERATING EXPENSES			11.33 HR	1027.84	99.06	21.48	1164.91
NET OPERATING PROFIT							2843.78
INTEREST ON OPERATING CAPITAL							18.03
INTEREST ON EQUIPMENT INVESTMENT							10.26
RETURN TO LAND AND RISK							2815.49

TABLE 128. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 504.00 CTN						
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: 2.14/CTN		GROSS RETURNS: \$1078.56				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
----- -(DOLLARS) -----								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		230.00 LB	29.90				29.90	
PHOSPHORUS (P)		80.00 LB	13.60				13.60	
LETTUCE SEED		2.00 LB	40.00				40.00	
CANAL WATER		9.37 AC. IN.	4.22				4.22	
PUMP WATER		16.47 AC. IN.						
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50	
INSECTICIDE (CUSTOM)		1.00 ACRE	72.00				72.00	
ISS		1.00 ACRE	5.37				5.37	
SPRINKLER SYSTEM		1.00	23.13				23.13	
SUBTOTAL			205.72				205.72	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19	
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98	
PLOW (MOLDEBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23	
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71	
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96	
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95	
PRE-IRRIGATE (3X)		1.38 HR		2.30	1.71	1.08	5.09	
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84	
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12	
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59	
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42	
THIN & HOE (CUSTOM)			50.00				50.00	
IRRIGATE (8X)		2.80 HR		4.68	2.28	1.45	8.41	
SUBTOTAL			50.00	18.47	17.03	16.99	102.49	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			680.40				680.40	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.38 HR		2.88			2.88	
EMPLOYEE BENEFITS				2.77			2.77	
FARM INSURANCE			10.12				10.12	
LAND TAXES						4.80	4.80	
SUPERVISOR AND MANAGEMENT				70.39			70.39	
OTHER EXPENSES			12.00				12.00	
SUBTOTAL			22.12	76.04		4.80	102.96	
TOTAL OPERATING EXPENSES			11.09 HR	958.24	94.51	17.03	21.79	1091.57
NET OPERATING PROFIT							-13.01	
INTEREST ON OPERATING CAPITAL							17.92	
INTEREST ON EQUIPMENT INVESTMENT							10.55	
RETURN TO LAND AND RISK							-41.48	

TABLE 129. ONIONS (SPRING), EUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 16.01 TON					
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$144.00/TON		GROSS RETURNS: 2305.44			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	26.00				26.00
PHOSPHORUS (P)		70.00 LB	11.90				11.90
ONION SEED		4.00 LB	51.60				51.60
CANAL WATER		10.53 AC. IN.	4.74				4.74
PUMP WATER		13.42 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			148.24				148.24
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE (3X)		1.38 HR		2.30	1.16	.74	4.20
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
THIN & HOE (CUSTOM)			67.00				67.00
IRRIGATE (12X)		4.20 HR		7.01	2.09	1.33	10.43
SUBTOTAL			67.00	20.80	16.29	16.53	120.62
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			882.00				882.00
PACK ONIONS (CUSTOM)			882.00				882.00
SUBTOTAL			1764.00				1764.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.88			2.88
EMPLOYEE BENEFITS				3.12			3.12
FARM INSURANCE			10.13				10.13
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				126.25			126.25
OTHER EXPENSES			12.00				12.00
SUBTOTAL			22.13	132.25		4.80	159.18
TOTAL OPERATING EXPENSES		12.49 HR	2001.37	153.05	16.29	21.33	2192.04
NET OPERATING PROFIT							113.40
INTEREST ON OPERATING CAPITAL							25.23
INTEREST ON EQUIPMENT INVESTMENT							10.15
RETURN TO LAND AND RISK							78.02

TABLE 130. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 15.23 TON					
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: \$144.00/TON		GROSS RETURNS: \$2193.12			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	26.00				26.00
PHOSPHORUS (P)		70.00 LB	11.90				11.90
ONION SEED		4.00 LB	51.60				51.60
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		6.40 AC.IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			159.58				159.58
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE (3X)		1.38 HR		2.30	1.45	.92	4.67
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
THIN & HOE (CUSTOM)			67.00				67.00
IRRIGATE (12X)		4.20 HR		7.01	.10	.07	7.18
SUBTOTAL			67.00	20.80	14.59	15.45	117.84
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			840.00				840.00
PACK ONIONS (CUSTOM)			840.00				840.00
SUBTOTAL			1680.00				1680.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.88			2.88
EMPLOYEE BENEFITS				3.12			3.12
FARM INSURANCE			10.13				10.13
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				122.48			122.48
OTHER EXPENSES			12.00				12.00
SUBTOTAL			22.13	128.48		4.80	155.41
TOTAL OPERATING EXPENSES		12.49 HR	1928.71	149.28	14.59	20.25	2112.83
NET OPERATING PROFIT							80.29
INTEREST ON OPERATING CAPITAL							24.95
INTEREST ON EQUIPMENT INVESTMENT							9.20
RETURN TO LAND AND RISK							46.14

TABLE 131. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: SEP 1 - SEP 15		YIELD: 37.80 CWT		GROSS RETURNS: \$166.32			
HARVEST DATES: MAY 1 - MAY 15		PRICE: 24.40/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		92.00 LB	15.64				15.64
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER		13.01 AC.IN.	5.85				5.85
PUMP WATER		14.00 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			51.94				51.94
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (8X)		4.88 HR		8.15	3.39	2.15	13.69
SUBTOTAL			7.83 HR	14.29	11.43	11.86	37.58
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			14.18				14.18
HAUL (TRUCK) (CUSTOM)	2 TON		5.74				5.74
SUBTOTAL			19.92				19.92
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.53			1.53
EMPLOYEE BENEFITS				2.14			2.14
FARM INSURANCE			10.09				10.09
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				14.04			14.04
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.74 HR	22.09	17.71	4.80	44.60
TOTAL OPERATING EXPENSES			8.57 HR	93.95	32.00	11.43	154.04
NET OPERATING PROFIT							12.28
INTEREST ON OPERATING CAPITAL							4.28
INTEREST ON EQUIPMENT INVESTMENT							7.84
RETURN TO LAND AND RISK							0.16

TABLE 132. SMALL CRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD:	40.95 CWT				
HARVEST DATES: JULY 1 - JULY 15		PRICE:	\$4.20/CWT		GROSS RETURNS: \$171.99		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		40.00 LB	6.80				6.80
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER		22.36 AC.IN.	10.06				10.06
PUMP WATER		AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			47.31				47.31
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FEET SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (5X)		3.05 HR		5.09			5.09
SUBTOTAL			6.00 HR	11.23	8.04	9.71	28.98
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.75				15.75
HAUL (TRUCK) (CUSTOM)	2 TON		6.35				6.35
SUBTOTAL			22.10				22.10
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.54			1.54
EMPLOYEE BENEFITS				1.68			1.68
FARM INSURANCE			10.07				10.07
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				12.67			12.67
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.74 HR	22.07	15.90	4.80	42.77
TOTAL OPERATING EXPENSES			6.74 HR	91.48	27.13	8.04	141.16
NET OPERATING PROFIT							30.83
INTEREST ON OPERATING CAPITAL							3.91
INTEREST ON EQUIPMENT INVESTMENT							5.95
RETURN TO LAND AND RISK							20.97

TABLE 133. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 13.79 TON		GROSS RETURNS: \$620.55			
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: .45.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	8.19				8.19
PHOSPHORUS (P)		161.00 LB	27.37				27.37
TOMATO SEED		2.00 LB	25.80				25.80
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		10.23 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			136.44				136.44
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
PRE-IRRIGATE (3X)		1.38 HR		2.30	1.89	1.20	5.39
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	1.99	7.23
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
HOELING (2X)		6.00 HR		12.48			12.48
IRRIGATE (10X)		4.00 HR		6.68	.59	.37	7.64
SUBTOTAL			17.24 HR	33.64	16.14	16.53	66.31
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			227.58				227.58
FORK LIFT (2X)		.76 HR		1.58	1.50	1.20	4.28
HAUL (TRUCK) (2X)	2 TON	3.70 HR		7.70	6.92	4.70	19.32
SUBTOTAL			4.46 HR	227.58	9.28	5.90	251.18
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.08 HR		8.49			8.49
EMPLOYEE BENEFITS				6.44			6.44
FARM INSURANCE			10.26				10.26
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				66.48			66.48
OTHER EXPENSES			12.00				12.00
SUBTOTAL			4.08 HR	22.26	81.41	4.80	108.47
TOTAL OPERATING EXPENSES			25.78 HR	386.28	124.33	24.56	562.40
NET OPERATING PROFIT							58.15
INTEREST ON OPERATING CAPITAL							11.95
INTEREST ON EQUIPMENT INVESTMENT							13.87
RETURN TO LAND AND RISK							32.33

TABLE 134. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND SPRINKLER)

PLANTING DATES:		YIELD: 1365.00 LB		GROSS RETURNS: \$655.20			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.48/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	18.85				18.85
PHOSPHORUS (P)		48.00 LB	8.16				8.16
ZINC SULFATE		12.00 LB	2.88				2.88
MANGANESE SULFATE		24.00 LB	4.08				4.08
HERBICIDE		2.00 LB	1.98				1.98
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		30.00 AC. IN.	13.50				13.50
PUMP WATER ESTABLISHMENT		1/12				179.25	179.25
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			74.82			179.25	254.07
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PRUNE (MACHINE)	60 HP	2.00 HR		4.16	6.58	12.40	23.14
HAUL (TRUCK)	2 TON	2.00 HR		4.16	3.74	2.54	10.44
DRILL HERBICIDE	80 HP	.24 HR		.50	.42	.97	1.89
SPRAYER (MTD) (4X)	60 HP	2.00 HR		4.16	3.44	5.12	12.72
BORDER	40 HP	.29 HR		.60	.50	.74	1.84
FERT SPREADER	60 HP	.21 HR		.44	.44	.72	1.60
HOING (2X)		4.00 HR		8.32			8.32
IRRIGATE (9X)		5.49 HR		9.17	4.34	2.76	16.27
SUBTOTAL			17.11 HR	33.34	22.05	27.81	83.20
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		4.16	10.34	16.94	31.44
SWEEP	40 HP	2.00 HR		4.16	5.02	9.50	18.68
CLEAN & SACK		8.24 HR		13.76			13.76
HAUL NUTS	60 HP	2.60 HR		5.41	3.54	4.55	13.50
HAND LABOR		15.75 HR		26.30			26.30
SUBTOTAL			30.59 HR	53.79	18.90	30.99	103.68
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.56 HR		9.47			9.47
EMPLOYEE BENEFITS				13.07			13.07
FARM INSURANCE			10.57				10.57
LAND TAXES					4.80		4.80
SUPERVISION AND MANAGEMENT				67.49			67.49
OTHER EXPENSES			12.00				12.00
SUBTOTAL			4.56 HR	22.57	90.03	4.80	117.40
TOTAL OPERATING EXPENSES		52.26 HR	97.39	177.16	40.95	242.85	558.35
NET OPERATING PROFIT							96.85
INTEREST ON OPERATING CAPITAL							8.90
INTEREST ON EQUIPMENT INVESTMENT							34.55
RETURN TO LAND AND RISK							53.40

TABLE 135. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO
(ISS AND TRICKLE)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	15.30				15.30
ALFALFA SEED		15.00 LB	20.25				20.25
CANAL WATER		8.00 AC.IN.	3.60				3.60
PUMP WATER		7.30 AC.IN.					
SUBTOTAL			39.15				39.15
<u>PREHARVEST OPERATIONS</u>							
PLow (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DRILL	60 HP	.31 HR		.64	1.00	1.88	3.52
IRRIGATE (3X)		1.83 HR		3.06	1.77	1.01	5.84
SUBTOTAL			4.00 HR	7.57	7.99	8.70	24.26
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.54 HR		1.13			1.13
EMPLOYEE BENEFITS				1.14			1.14
FARM INSURANCE			10.05				10.05
SUPERVISION AND MANAGEMENT				5.85			5.85
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.54 HR	22.05	8.12		30.17
TOTAL OPERATING EXPENSES			4.54 HR	61.20	15.69	8.70	93.58

TABLE 136. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES:		YIELD:	5.46 TON		GROSS RETURNS: \$256.62		
HARVEST DATES: JUNE 1 - OCT. 1		PRICE:	.47.00/TON				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		92.00 LB	15.64				15.64
WIRE		10.92 LB	12.12				12.12
CANAL WATER		30.00 AC. IN.	13.50				13.50
PUMP WATER ESTABLISHMENT		36.44 AC. IN. 1/5				23.28	23.28
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			46.63			23.28	69.91
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
IRRIGATE (11X)		6.71 HR		11.21	8.82	5.03	25.06
SUBTOTAL				11.48	9.09	5.47	26.04
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.35 HR		4.89	4.04	4.56	13.49
BALER (AUX ENG) (5X)	80 HP	1.65 HR		3.43	6.12	6.95	16.50
HAUL (TRAILER) (5X)	60 HP	1.85 HR		3.85	2.65	3.72	10.22
SUBTOTAL				12.17	12.81	15.23	40.21
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.49 HR		3.11			3.11
EMPLOYEE BENEFITS				3.55			3.55
FARM INSURANCE			10.15				10.15
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				21.56			21.56
OTHER EXPENSES			12.00				12.00
SUBTOTAL				28.22		4.80	55.17
TOTAL OPERATING EXPENSES			14.18 HR	66.78	51.87	48.78	191.33
NET OPERATING PROFIT							65.29
INTEREST ON OPERATING CAPITAL							4.41
INTEREST ON EQUIPMENT INVESTMENT							13.31
RETURN TO LAND AND RISK							47.57

TABLE 137. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 5.78 TON		RED: 431.00 LB				
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN: \$100.00/TON		RED: \$0.30/LB		GROSS RETURNS: \$707.30		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
-(DOLLARS)-								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		140.00 LB	18.20				18.20	
PHOSPHORUS (P)		60.00 LB	10.20				10.20	
CHILE SEED		5.00 LB	38.75				38.75	
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00	
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50	
CANAL WATER		23.52 AC.IN.	10.58				10.58	
PUMP WATER		12.12 AC.IN.						
ISS		1.00 ACRE	5.37				5.37	
SUBTOTAL			111.60				111.60	
<u>PREHARVEST OPERATIONS</u>								
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51	
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19	
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98	
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23	
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71	
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96	
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95	
PRE-IRRIGATE		.70 HR		1.17	.66	.38	2.21	
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12	
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42	
CULT e SIDEDNESS	40 HP	.62 HR		1.29	1.23	1.07	3.59	
THINNING (CUSTOM)			20.00				20.00	
HOEING (CUSTOM)			40.00				40.00	
IRRIGATE (12X)		5.16 HR		8.62	2.27	1.29	12.18	
SUBTOTAL			11.37 HR	60.00	21.24	15.90	15.91	113.05
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			170.89				170.89	
HAUL (TRAILER) (3X)	40 HP	2.91 HR		6.05	4.80	4.74	15.59	
FORK LIFT (3X)		1.08 HR		2.25	2.13	1.80	6.18	
HAUL (TRUCK) (3X)	2 TON	5.28 HR		10.98	9.87	6.92	27.77	
SUBTOTAL			9.27 HR	170.89	19.28	16.80	13.46	220.43
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		3.69 HR		7.68			7.68	
EMPLOYEE BENEFITS				6.08			6.08	
FARM INSURANCE			10.25				10.25	
LAND TAXES						4.80	4.80	
SUPERVISION AND MANAGEMENT				64.48			64.48	
OTHER EXPENSES			12.00				12.00	
SUBTOTAL			3.69 HR	22.25	78.24	4.80	105.29	
TOTAL OPERATING EXPENSES			24.33 HR	364.74	118.76	32.70	34.17	550.37
NET OPERATING PROFIT							156.93	
INTEREST ON OPERATING CAPITAL							11.53	
INTEREST ON EQUIPMENT INVESTMENT							18.24	
RETURN TO LAND AND RISK							127.16	

TABLE 138. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.85 TON		GROSS RETURNS: \$187.43			
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: \$10.50/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
PHOSPHORUS (P)		60.00 LB	10.20				10.20
CORN SEED		17.00 LB	12.58				12.58
HERBICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
INSECTICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		12.93 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			62.13				62.13
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	.98	.56	2.71
CORN PLANTER	40 HP	.35 HR		.73	.90	4.18	5.81
CULTIVATOR	40 HP	.33 HR		.69	.62	.50	1.81
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
IRRIGATE (8X)		4.40 HR		7.35	2.15	1.23	10.73
SUBTOTAL			8.62 HR	15.85	11.83	14.68	42.36
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			17.33				17.33
HAUL (TRUCK) (CUSTOM)	2 TON		12.60				12.60
SUBTOTAL			29.93				29.93
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.88 HR		1.83			1.83
EMPLOYEE BENEFITS				2.38			2.38
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.54			15.54
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.88 HR	22.10	19.75	4.80	46.65
TOTAL OPERATING EXPENSES			9.50 HR	114.16	35.60	11.83	181.07
NET OPERATING PROFIT							6.36
INTEREST ON OPERATING CAPITAL							4.85
INTEREST ON EQUIPMENT INVESTMENT							9.31
RETURN TO LAND AND RISK							-7.80

TABLE 139. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT:	552.00 LB	SEED: 921.00 LB			
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT:	10.50/LB	SEED: 10.04/LB	GROSS RETURNS: 1309.16		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	13.00				13.00
PHOSPHORUS (P)		40.00 LB	6.80				6.80
COTTON SEED		30.00 LB	9.90				9.90
HERBICIDE (CUSTOM)		1.00 ACRE	10.50				10.50
INSECTICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CROP INSURANCE		1.00 DOLLARS	14.00				14.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		18.09 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			77.65				77.65
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	1.44	.82	3.43
COTTON PLANTER	40 HP	.35 HR		.73	.90	1.31	2.94
SLED	40 HP	.29 HR		.60	.45	.39	1.44
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	1.99	7.23
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
IRRIGATE (6X)		3.30 HR		5.51	2.94	1.68	10.13
SUBTOTAL			9.81 HR	18.76	17.79	16.76	53.31
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.02 HR		4.20	7.05	13.64	24.89
COTTON TRAILER (2X)	0.5 TON	1.88 HR		3.91	4.47	3.16	11.54
GIN COTTON (CUSTOM)			29.55				29.55
SUBTOTAL			3.90 HR	29.55	8.11	11.52	65.98
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		2.43 HR		5.05			5.05
EMPLOYEE BENEFITS				4.03			4.03
FARM INSURANCE			10.16				10.16
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				23.43			23.43
OTHER EXPENSES			12.00				12.00
SUBTOTAL			2.43 HR	22.16	32.51	4.80	59.47
TOTAL OPERATING EXPENSES			16.14 HR	129.36	59.38	29.31	256.41
NET OPERATING PROFIT							52.75
INTEREST ON OPERATING CAPITAL							6.25
INTEREST ON EQUIPMENT INVESTMENT							19.65
RETURN TO LAND AND RISK							26.85

TABLE 140. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 44.10 CWT		GROSS RETURNS: \$193.60			
HARVEST DATES: SEP 1 - OCT 30		PRICE: \$4.39/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
GRAIN SORGHUM SEED		8.00 LB	3.04				3.04
HERBICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		7.71 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			37.39				37.39
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	1.08	.62	2.87
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
CORN PLANTER	40 HP	.35 HR		.73	.90	4.18	5.81
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR	40 HP	.33 HR		.69	.62	.50	1.81
IRRIGATE (6X)		3.30 HR		5.51	.79	.45	6.75
SUBTOTAL			8.52 HR	16.09	12.86	16.42	45.37
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			14.35				14.35
HAUL (TRUCK) (CUSTOM)	2 TON		6.36				6.36
SUBTOTAL			20.71				20.71
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.13 HR		2.35			2.35
EMPLOYEE BENEFITS				2.41			2.41
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.31			15.31
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.13 HR	22.10	20.08	4.80	46.98
TOTAL OPERATING EXPENSES			9.65 HR	80.20	36.17	21.22	150.45
NET OPERATING PROFIT							43.15
INTEREST ON OPERATING CAPITAL							3.87
INTEREST ON EQUIPMENT INVESTMENT							9.94
RETURN TO LAND AND RISK							29.34

TABLE 141. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES:		YIELD:	7.14 CWT BEEF		GROSS RETURNS: \$190.42		
HARVEST DATES: MAY 1 - OCT. 30		PRICE:	\$26.67/CWT BEEF				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	15.60				15.60
PHOSPHORUS (P)		46.00 LB	7.82				7.82
ESTABLISHMENT		1/10				8.87	8.87
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		40.54 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			39.37			8.87	48.24
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
FERT SPREADER (2X)	60 HP	.42 HR		.87	.88	1.44	3.19
IRRIGATE (10X)		6.10 HR		10.19	9.82	5.60	25.61
SUBTOTAL			6.79 HR	11.62	11.17	7.52	30.31
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.17 HR		.36			.36
EMPLOYEE BENEFITS				1.74			1.74
FARM INSURANCE			10.08				10.08
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.32			15.32
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.17 HR	22.08	17.42	4.80	44.30
TOTAL OPERATING EXPENSES		6.96 HR	61.45	29.04	11.17	21.19	122.85
NET OPERATING PROFIT							67.57
INTEREST ON OPERATING CAPITAL							3.59
INTEREST ON EQUIPMENT INVESTMENT							5.91
RETURN TO LAND AND RISK							58.07

TABLE 142. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: JAN. 15 - FEB. 15		YIELD: 540.00 CTN					
HARVEST DATES: MAY 1 - MAY 31		PRICE: 7.07/CTN		GROSS RETURNS: 3817.80			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		225.00 LB	29.25				2.25
PHOSPHORUS (P)		80.00 LB	13.60				13.60
LETTUCE SEED		2.00 LB	40.00				40.00
CANAL WATER		8.71 AC. IN.	3.92				3.92
PUMP WATER		18.51 AC. IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				60.00
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			167.14				167.14
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	.60	.34	2.11
BED SHAPEK	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
THIN & HOE (CUSTOM)			50.00				50.00
IRRIGATE (10X)		3.50 HR		5.85	3.88	2.21	11.94
SUBTOTAL			9.73 HR	50.00	18.51	17.52	103.04
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			729.00				729.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.87			2.87
EMPLOYEE BENEFITS				2.78			2.78
FARM INSURANCE			10.12				10.12
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				70.98			70.98
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.38 HR	22.12	76.62	4.80	103.54
TOTAL OPERATING EXPENSES		11.11 HR	968.26	95.13	17.52	21.81	1102.72
NET OPERATING PROFIT							2715.08
INTEREST ON OPERATING CAPITAL							16.77
INTEREST ON EQUIPMENT INVESTMENT							10.54
RETURN TO LAND AND RISK							2687.77

TABLE 143. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 480.00 CTN		GROSS RETURNS: \$1027.20			
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: \$2.14/CTN					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	29.90				29.90
PHOSPHORUS (P)		80.00 LB	13.60				13.60
LETTUCE SEED		2.00 LB	40.00				40.00
CANAL WATER		9.37 AC.IN.	4.22				4.22
PUMP WATER		21.03 AC.IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50
INSECTICIDE (CUSTOM)		1.00 ACRE	72.00				72.00
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			182.59				182.59
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (HOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	.92	.47	2.46
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT e SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
THIN e HOE (CUSTOM)			50.00				50.00
IRRIGATE (8X)		2.80 HR		4.68	4.27	2.44	11.39
SUBTOTAL			50.00	17.34	18.13	17.37	102.84
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			648.00				648.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.87			2.87
EMPLOYEE BENEFITS				2.60			2.60
FARM INSURANCE			10.11				10.11
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				65.88			65.88
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.38 HR	22.11	71.35	4.80	98.26
TOTAL OPERATING EXPENSES			10.41 HR	902.70	88.69	22.17	1031.69
NET OPERATING PROFIT							-4.49
INTEREST ON OPERATING CAPITAL							16.63
INTEREST ON EQUIPMENT INVESTMENT							10.88
RETURN TO LAND AND RISK							-32.00

TABLE 144. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 15.25 TON		GROSS RETURNS: \$2196.00				
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$144.00/TON						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	26.00				26.00	
PHOSPHORUS (P)		70.00 LB	11.90				11.90	
ONION SEED		4.00 LB	51.60				51.60	
CANAL WATER		10.53 AC. IN.	4.74				4.74	
FUMP WATER		17.65 AC. IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50	
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00	
ISS		1.00 ACRE	5.37				5.37	
SUBTOTAL			125.11				125.11	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19	
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98	
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23	
LAND PLANE	80 HP	.39 HR		.81	.74	1.15	2.71	
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96	
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95	
PRE-IRRIGATE		.70 HR		1.17	.46	.26	1.89	
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84	
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12	
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59	
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42	
THIN & HOE (CUSTOM)			67.00				67.00	
IRRIGATE (14X)		4.90 HR		8.18	3.82	2.18	14.18	
SUBTOTAL			11.13 HR	67.00	20.84	17.32	16.90	122.06
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM) ONIONS			840.00				840.00	
PACK ONIONS (CUSTOM)			840.00				840.00	
SUBTOTAL			1680.00				1680.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.38 HR		2.88			2.88	
EMPLOYEE BENEFITS				3.13			3.13	
FARM INSURANCE			10.13				10.13	
LAND TAXES						4.80	4.80	
SUPERVISION AND MANAGEMENT				121.01			121.01	
OTHER EXPENSES			12.00				12.00	
SUBTOTAL			1.38 HR	22.13	127.02	4.80	153.95	
TOTAL OPERATING EXPENSES			12.51 HR	1894.24	147.86	17.32	21.70	2081.12
NET OPERATING PROFIT							114.88	
INTEREST ON OPERATING CAPITAL							23.61	
INTEREST ON EQUIPMENT INVESTMENT							10.47	
RETURN TO LAND AND RISK							80.80	

TABLE 145. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 14.50 TON					
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: \$144.00/TON		GROSS RETURNS: \$2088.00			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	26.00				26.00
PHOSPHORUS (P)		70.00 LB	11.90				11.90
ONION SEED		4.00 LB	51.60				51.60
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		11.68 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			136.45				136.45
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDEBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
FRE-IRRIGATE		.70 HR		1.17	.57	.32	2.06
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
TRIM & HOE (CUSTOM, IRRIGATE (14X)		4.90 HR	67.00	8.18	2.26	1.29	11.73
SUBTOTAL			67.00	20.84	15.87	16.07	119.78
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			800.00				800.00
PACK ONIONS (CUSTOM)			800.00				800.00
SUBTOTAL			1600.00				1600.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.88			2.88
EMPLOYEE BENEFITS				3.13			3.13
FARM INSURANCE			10.13				10.13
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				117.47			117.47
OTHER EXPENSES			12.00				12.00
SUBTOTAL			22.13	123.48		4.80	150.41
TOTAL OPERATING EXPENSES		12.51 HR	1825.58	144.32	15.87	20.87	2006.64
NET OPERATING PROFIT							81.36
INTEREST ON OPERATING CAPITAL							23.37
INTEREST ON EQUIPMENT INVESTMENT							9.74
RETURN TO LAND AND RISK							48.25

TABLE 146. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: SEP 1 - SEP 15		YIELD: 37.80 CWT		GROSS RETURNS: \$166.32			
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$4.40/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		92.00 LB	15.64				15.64
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER		13.01 AC.IN.	5.85				5.85
PUMP WATER		14.00 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			51.94				51.94
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FEET SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLow (MOLDOBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (8X)		4.88 HR		8.15	3.39	1.93	13.47
SUBTOTAL			7.83 HR	14.29	11.43	11.64	37.36
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			14.18				14.18
HAUL (TRUCK) (CUSTOM)	2 TON		5.74				5.74
SUBTOTAL			19.92				19.92
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.53			1.53
EMPLOYEE BENEFITS				2.14			2.14
FARM INSURANCE			10.09				10.09
LAND TAXES					4.80		4.80
SUPERVISION AND MANAGEMENT				14.04			14.04
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.74 HR	22.09	17.71	4.80	44.60
TOTAL OPERATING EXPENSES		8.57 HR	93.95	32.00	11.43	16.44	153.82
NET OPERATING PROFIT							12.50
INTEREST ON OPERATING CAPITAL							4.28
INTEREST ON EQUIPMENT INVESTMENT							7.66
RETURN TO LAND AND RISK							0.56

TABLE 147. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD:	40.95 CWT		GROSS RETURNS: \$171.99		
HARVEST DATES: JULY 1 - JULY 15		PRICE:	4.20/CWT				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		40.00 LB	6.80				6.80
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER PUMP & ATEK		22.36 AC. IN.	10.06				10.06
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			47.31				47.31
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (5X)		3.05 HR		5.09			5.09
SUBTOTAL			6.00 HR	11.23	8.04	9.71	28.98
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.75				15.75
HAUL (TRUCK) (CUSTOM)	2 TON		6.35				6.35
SUBTOTAL			22.10				22.10
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.54			1.54
EMPLOYEE BENEFITS				1.68			1.68
FARM INSURANCE			10.07				10.07
LARD TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				12.67			12.67
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.74 HR	22.07	15.90	4.80	42.77
TOTAL OPERATING EXPENSES			6.74 HR	91.48	27.13	14.51	141.16
NET OPERATING PROFIT							30.83
INTEREST ON OPERATING CAPITAL							3.91
INTEREST ON EQUIPMENT INVESTMENT							5.96
RETURN TO LAND AND RISK							20.96

TABLE 148. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 13.13 TON		GROSS RETURNS: \$590.85			
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: .45.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	8.19				8.19
PHOSPHORUS (P)		161.00 LB	27.37				27.37
TOMATO SEED		2.00 LB	25.80				25.80
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		16.18 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			113.31				113.31
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
PLow (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
PRE-IRRIGATE		.70 HR		1.17	.80	.46	2.43
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	1.99	7.23
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
HOEING (2X)		6.00 HR		12.48			12.48
IRRIGATE (11X)		4.40 HR		7.35	3.12	1.78	12.25
SUBTOTAL			16.96 HR	33.18	17.58	17.20	67.96
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			216.74				216.74
FORK LIFT (2X)		.72 HR		1.50	1.42	1.20	4.12
HAUL (TRUCK) (2X)	2 TON	3.52 HR		7.32	6.58	4.61	18.51
SUBTOTAL			4.24 HR	216.74	8.82	5.81	239.37
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.02 HR		8.37			8.37
EMPLOYEE BENEFITS				6.30			6.30
FARM INSURANCE			10.25				10.25
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				63.69			63.69
OTHER EXPENSES			12.00				12.00
SUBTOTAL			4.02 HR	22.25	78.36	4.80	105.41
TOTAL OPERATING EXPENSES			25.22 HR	352.30	120.36	25.58	526.05
NET OPERATING PROFIT							64.80
INTEREST ON OPERATING CAPITAL							10.87
INTEREST ON EQUIPMENT INVESTMENT							14.41
RETURN TO LAND AND RISK							39.52

TABLE 149. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS AND TRICKLE)

PLANTING DATES:		YIELD: 1365.00 LB		GROSS RETURNS: \$655.20			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: .0.48/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	18.85				18.85
PHOSPHORUS (P)		48.00 LB	8.16				8.16
ZINC SULFATE		12.00 LB	2.88				2.88
MANGANESE SULFATE		24.00 LB	4.08				4.08
HERBICIDE		2.00 LB	1.98				1.98
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		AC. IN.					
PUMP WATER		30.68 AC. IN.					
ESTABLISHMENT		1/12				179.25	179.25
ISS		1.00 ACRE	5.37				5.37
			-----			-----	-----
SUBTOTAL			61.32			179.25	240.57
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PRUNE (MACHINE)	60 HP	2.00 HR		4.16	6.58	12.40	23.14
HAUL (TRUCK)	2 TON	2.00 HR		4.16	3.74	2.62	10.52
DRILL HERBICIDE	80 HP	.24 HR		.50	.42	.97	1.89
SPRAYER (MTD); (4X)	60 HP	2.00 HR		4.16	3.44	5.12	12.72
BORDER	40 HP	.29 HR		.60	.50	.74	1.84
FEET SPREADER	60 HP	.21 HR		.44	.44	.72	1.60
HOING (2X)		4.00 HR		8.32			8.32
IRRIGATE		2.12 HR		3.54	19.44	19.44	42.42
		-----		-----	-----	-----	-----
SUBTOTAL			13.74 HR	27.71	37.15	44.57	109.43
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		4.16	10.34	16.94	31.44
SWEEP	40 HP	2.00 HR		4.16	5.02	9.50	18.68
CLEAN e SACK		8.24 HR		13.76			13.76
HAUL NUTS	60 HP	2.60 HR		5.41	3.54	4.55	13.50
HAND LABOR		15.75 HR		26.30			26.30
		-----		-----	-----	-----	-----
SUBTOTAL			30.59 HR	53.79	18.90	30.99	103.68
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.56 HR		9.48			9.48
EMPLOYEE BENEFITS				12.22			12.22
FARM INSURANCE			10.53				10.53
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				123.84			123.84
OTHER EXPENSES			12.00				12.00
		-----	-----	-----	-----	-----	-----
SUBTOTAL			4.56 HR	22.53	145.55	4.80	172.88
TOTAL OPERATING EXPENSES			48.89 HR	83.85	227.05	259.61	626.58
NET OPERATING PROFIT							28.64
INTEREST ON OPERATING CAPITAL							10.71
INTEREST ON EQUIPMENT INVESTMENT							40.86
RETURN TO LAND AND RISK							-22.93

TABLE 150. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	15.30				15.30
ALFALFA SEED		15.00 LB	20.25				20.25
CANAL WATER		8.00 AC. IN.	3.60				3.60
PUMP WATER		7.30 AC. IN.					
SUBTOTAL			39.15				39.15
<u>PREHARVEST OPERATIONS</u>							
PLow (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FEKT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DRILL	60 HP	.31 HR		.64	1.00	1.88	3.52
IRRIGATE (3X)		1.83 HR		3.06	1.77	1.04	5.87
SUBTOTAL			4.00 HR	7.57	7.99	8.73	24.29
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.54 HR		1.13			1.13
EMPLOYEE BENEFITS				1.14			1.14
FARM INSURANCE			10.05				10.05
SUPERVISION AND MANAGEMENT				5.85			5.85
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.54 HR	22.05	8.12		30.17
TOTAL OPERATING EXPENSES			4.54 HR	61.20	15.69	8.73	93.61

TABLE 151. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES:		YIELD: 5.46 TON		GROSS RETURNS: \$256.62			
HARVEST DATES: JUNE 1 - OCT. 1		PRICE: \$47.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		92.00 LB	15.64				15.64
WIRE		10.92 LB	12.12				12.12
CANAL WATER		30.00 AC.IN.	13.50				13.50
PUMP WATER ESTABLISHMENT		36.44 AC.IN.				23.29	23.29
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			46.63			23.29	69.92
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
IRRIGATE (11X)		6.71 HR		11.21	8.82	5.19	25.22
SUBTOTAL			6.84 HR	11.48	9.09	5.63	26.20
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.35 HR		4.89	4.04	4.56	13.49
BALER (AUX ENG) (5X)	80 HP	1.65 HR		3.43	6.12	6.95	16.50
HAUL (TRAILER) (5X)	60 HP	1.85 HR		3.85	2.65	3.70	10.20
SUBTOTAL			5.85 HR	12.17	12.81	15.21	40.19
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.49 HR		3.11			3.11
EMPLOYEE BENEFITS				3.55			3.55
FARM INSURANCE			10.15				10.15
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				21.56			21.56
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.49 HR	22.15	28.22	4.80	55.17
TOTAL OPERATING EXPENSES			14.18 HR	68.78	51.87	48.93	191.48
NET OPERATING PROFIT							65.14
INTEREST ON OPERATING CAPITAL							4.41
INTEREST ON EQUIPMENT INVESTMENT							13.46
RETURN TO LAND AND RISK							47.27

TABLE 152. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 6.07 TON		RED: 452.00 LB			
HARVEST DATES: JULY 10 - NOV. 30		PRICE: GREEN: \$100.00/TON		RED: \$0.30/LB		GROSS RETURNS: \$742.60	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	18.20				18.20
PHOSPHORUS (P)		60.00 LB	10.20				10.20
CHILE SEED		5.00 LB	38.75				38.75
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		9.27 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			134.73				134.73
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE (2X)		.92 HR		1.54	1.22	.72	3.48
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
THINNING (CUSTOM)			20.00				20.00
HOEING (CUSTOM)			40.00				40.00
IRRIGATE (11X)		4.73 HR		7.90	1.02	.60	9.52
SUBTOTAL			11.16 HR	60.00	20.89	15.21	111.66
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			179.43				179.43
HAUL (TRAILER) (3X)	40 HP	3.06 HR		6.36	5.05	4.96	16.37
FORK LIFT (3X)		1.14 HR		2.37	2.25	1.80	6.42
HAUL (TRUCK) (3X)	2 TON	5.55 HR		11.54	10.38	7.05	28.97
SUBTOTAL			9.75 HR	179.43	20.27	17.68	231.19
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.81 HR		7.93			7.93
EMPLOYEE BENEFITS				6.17			6.17
FARM INSURANCE			10.25				10.25
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				66.44			66.44
OTHER EXPENSES			12.00				12.00
SUBTOTAL			3.81 HR	22.25	80.54	4.80	107.59
TOTAL OPERATING EXPENSES			24.72 HR	396.41	121.70	32.89	585.17
NET OPERATING PROFIT							157.43
INTEREST ON OPERATING CAPITAL							12.56
INTEREST ON EQUIPMENT INVESTMENT							18.15
RETURN TO LAND AND RISK							126.72

TABLE 153. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.85 TON					
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: \$10.50/TON		GROSS RETURNS: \$187.43			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
PHOSPHORUS (P)		60.00 LB	10.20				10.20
CORN SEED		17.00 LB	12.58				12.58
HERBICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
INSECTICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC.IN.	10.58				10.58
PUMP WATER		12.93 AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			62.13				62.13
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	.98	.58	2.73
CORN PLANTER	40 HP	.35 HR		.73	.90	4.18	5.81
CULTIVATOR	40 HP	.33 HR		.69	.62	.50	1.81
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
IRRIGATE (8X)		4.40 HR		7.35	2.15	1.27	10.77
SUBTOTAL			8.62 HR	15.85	11.83	14.74	42.42
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			17.33				17.33
HAUL (TRUCK) (CUSTOM)	2 TON		12.60				12.60
SUBTOTAL			29.93				29.93
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.88 HR		1.83			1.83
EMPLOYEE BENEFITS				2.38			2.38
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.54			15.54
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.88 HR	22.10	19.75	4.80	46.65
TOTAL OPERATING EXPENSES		9.50 HR	114.16	35.60	11.83	19.54	181.13
NET OPERATING PROFIT							6.30
INTEREST ON OPERATING CAPITAL							4.85
INTEREST ON EQUIPMENT INVESTMENT							9.37
RETURN TO LAND AND RISK							-7.92

TABLE 154. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT: 552.00 LB	SEED: 921.00 LB				
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT: 30.50/LB	SEED: 30.04/LB	GROSS RETURNS: \$309.16			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	13.00				13.00
PHOSPHORUS (P)		40.00 LB	6.80				6.80
COTTON SEED		30.00 LB	9.90				9.90
HERBICIDE (CUSTOM)		1.00 ACRE	10.50				10.50
INSECTICIDE (CUSTOM)		1.00 ACRE	7.50				7.50
CROP INSURANCE		1.00 DOLLARS	14.00				14.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		18.09 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			77.65				77.65
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	1.44	.85	3.46
COTTON PLANTER	40 HP	.35 HR		.73	.90	1.31	2.94
SLED	40 HP	.29 HR		.60	.45	.39	1.44
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	1.99	7.23
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
IRRIGATE (6X)		3.30 HR		5.51	2.94	1.73	10.18
SUBTOTAL			9.81 HR	18.76	17.79	16.84	53.39
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.02 HR		4.20	7.05	13.64	24.89
COTTON TRAILER (2X)	0.5 TON	1.88 HR		3.91	4.47	3.16	11.54
GIN COTTON (CUSTOM)			29.55				29.55
SUBTOTAL			3.90 HR	29.55	8.11	11.52	65.98
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		2.43 HR		5.05			5.05
EMPLOYEE BENEFITS				4.03			4.03
FARM INSURANCE			10.16				10.16
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				23.43			23.43
OTHER EXPENSES			12.00				12.00
SUBTOTAL			2.43 HR	22.16	32.51	4.80	59.47
TOTAL OPERATING EXPENSES			16.14 HR	129.36	59.38	29.31	256.49
NET OPERATING PROFIT							52.67
INTEREST ON OPERATING CAPITAL							6.25
INTEREST ON EQUIPMENT INVESTMENT							19.72
RETURN TO LAND AND RISK							26.70

TABLE 155. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: MAY 1 - JUNE 30		YIELD:	44.10 CWT		GROSS RETURNS: \$193.60		
HARVEST DATES: SEP 1 - OCT 30		PRICE:	\$4.39/CWT				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	10.40				10.40
GRAIN SORGHUM SEED		8.00 LB	3.04				3.04
HERBICIDE (CUSTOM)		1.00 ACRE	8.00				8.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		7.71 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			37.39				37.39
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
FLOCAT	60 HP	.19 HR		.40	.33	.84	1.57
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE		.70 HR		1.17	1.08	.64	2.89
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
CORN PLANTER	40 HP	.35 HR		.73	.90	4.18	5.81
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR	40 HP	.33 HR		.69	.62	.50	1.81
IRRIGATE (6X)		3.30 HR		5.51	.79	.46	6.76
SUBTOTAL			8.52 HR	16.09	12.86	16.45	45.40
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			14.35				14.35
HAUL (TRUCK) (CUSTOM)	2 TON		6.36				6.36
SUBTOTAL			20.71				20.71
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.13 HR		2.35			2.35
EMPLOYEE BENEFITS				2.41			2.41
FARM INSURANCE			10.10				10.10
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.31			15.31
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.13 HR	22.10	20.08	4.80	46.98
TOTAL OPERATING EXPENSES		9.65 HR	80.20	36.17	12.86	21.25	150.48
NET OPERATING PROFIT							43.12
INTEREST ON OPERATING CAPITAL							3.87
INTEREST ON EQUIPMENT INVESTMENT							9.97
RETURN TO LAND AND RISK							29.28

TABLE 156. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES:		YIELD:		GROSS RETURNS: \$190.42			
HARVEST DATES: MAY 1 - OCT. 30		PRICE: 7.14 CWT BEEF		26.67/CWT BEEF			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	15.60				15.60
PHOSPHORUS (P)		46.00 LB	7.82				7.82
ESTABLISHMENT		1/10				8.87	8.87
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		40.54 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			39.37			8.87	48.24
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
FERT SPREADER (2X)	60 HP	.42 HR		.87	.88	1.44	3.19
IRRIGATE (10X)		6.10 HR		10.19	9.82	5.78	25.79
SUBTOTAL			6.79 HR	11.62	11.17	7.70	30.49
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.17 HR		.36			.36
EMPLOYEE BENEFITS				1.74			1.74
FARM INSURANCE			10.08				10.08
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				15.32			15.32
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.17 HR	22.08	17.42	4.80	44.30
TOTAL OPERATING EXPENSES		6.96 HR	61.45	29.04	11.17	21.37	123.03
NET OPERATING PROFIT							67.39
INTEREST ON OPERATING CAPITAL							3.59
INTEREST ON EQUIPMENT INVESTMENT							6.08
RETURN TO LAND AND RISK							57.72

TABLE 157. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: JAN. 15 - FEB. 15		YIELD: 567.00 CTN					
HARVEST DATES: MAY 1 - MAY 31		PRICE: .77.07/CTN		GROSS RETURNS: 24008.69			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		225.00 LB	29.25				29.25
PHOSPHORUS (P)		80.00 LB	13.60				13.60
LETTUCE SEED		2.00 LB	40.00				40.00
CANAL WATER		8.71 AC.IN.	3.92				3.92
PUMP WATER		14.43 AC.IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
INSECTICIDE (CUSTOM)		1.00 ACRE	60.00				60.00
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
			-----				-----
SUBTOTAL			190.27				190.27
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE (2X)		.92 HR		1.54	.93	.55	3.02
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
THIN & HOE (CUSTOM)			50.00				50.00
IRRIGATE (10X)		3.50 HR		5.85	2.56	1.51	9.92
			-----	-----	-----	-----	-----
SUBTOTAL		9.95 HR	50.00	18.88	16.53	16.52	101.93
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			765.45				765.45
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.87			2.87
EMPLOYEE BENEFITS				2.83			2.83
FARM INSURANCE			10.12				10.12
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				74.48			74.48
OTHER EXPENSES			12.00				12.00
			-----	-----	-----	-----	-----
SUBTOTAL		1.38 HR	22.12	80.18		4.80	107.10
<u>TOTAL OPERATING EXPENSES</u>							
		11.33 HR	1027.84	99.06	16.53	21.32	1164.75
<u>NET OPERATING PROFIT</u>							
							2843.94
<u>INTEREST ON OPERATING CAPITAL</u>							
							18.03
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							
							10.14
<u>RETURN TO LAND AND RISK</u>							
							2815.77

TABLE 158. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 504.00 CTN					
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: \$2.14/CTN		GROSS RETURNS: \$1078.56			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	29.90				29.90
PHOSPHORUS (P)		80.00 LB	13.60				13.60
LETTUCE SEED		2.00 LB	40.00				40.00
CANAL WATER		9.37 AC.IN.	4.22				4.22
PUMP WATER		16.47 AC.IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50
INSECTICIDE (CUSTOM)		1.00 ACRE	72.00				72.00
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			205.72				205.72
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
FRE-IRRIGATE (3X)		1.38 HR		2.30	1.71	1.01	5.02
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
THIN & HOE (CUSTOM)			50.00				50.00
IRRIGATE (8X)		2.80 HR		4.68	2.28	1.34	8.30
SUBTOTAL			9.71 HR	50.00	18.47	16.81	102.31
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)				680.40			680.40
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.88			2.88
EMPLOYEE BENEFITS				2.77			2.77
FARM INSURANCE			10.12				10.12
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				70.39			70.39
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.38 HR	22.12	76.04	4.80	102.96
TOTAL OPERATING EXPENSES			11.09 HR	958.24	94.51	17.03	1091.39
NET OPERATING PROFIT							-12.83
INTEREST ON OPERATING CAPITAL							17.92
INTEREST ON EQUIPMENT INVESTMENT							10.40
RETURN TO LAND AND RISK							-41.15

TABLE 159. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 16.01 TON					
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$144.00/TON		GROSS RETURNS: \$2305.44			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	26.00				26.00
PHOSPHORUS (P)		70.00 LB	11.90				11.90
ONION SEED		4.00 LB	51.60				51.60
CANAL WATER		10.53 AC. IN.	4.74				4.74
PUMP WATER		13.42 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	12.50				12.50
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			148.24				148.24
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
PRE-IRRIGATE (3X)		1.38 HR		2.30	1.16	.68	4.14
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
TRIM & HOE (CUSTOM)			67.00				67.00
IRRIGATE (12X)		4.20 HR		7.01	2.09	1.23	10.33
SUBTOTAL			67.00	20.80	16.29	16.37	120.46
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			882.00				882.00
PACK ONIONS (CUSTOM)			882.00				882.00
SUBTOTAL			1764.00				1764.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.88			2.88
EMPLOYEE BENEFITS				3.12			3.12
FARM INSURANCE			10.13				10.13
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				126.24			126.24
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.38 HR	22.13	132.24	4.80	159.17
TOTAL OPERATING EXPENSES			12.49 HR	2001.37	153.04	16.29	2191.87
NET OPERATING PROFIT							113.57
INTEREST ON OPERATING CAPITAL							25.23
INTEREST ON EQUIPMENT INVESTMENT							10.03
RETURN TO LAND AND RISK							78.31

TABLE 160. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 15.23 TON		GROSS RETURNS: \$2193.12			
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: \$144.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	26.00				26.00
PHOSPHORUS (P)		70.00 LB	11.90				11.90
ONION SEED		4.00 LB	51.60				51.60
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		6.40 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
HERBICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			159.58				159.58
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLow (MOLDBOARD,	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
ERE-IRRIGATE (3X)		1.38 HR		2.30	1.45	.85	4.60
BED SHAPER	40 HP	.29 HR		.60	.54	.70	1.84
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
CULTIVATOR (3X)	40 HP	.99 HR		2.06	1.87	1.49	5.42
TRIN & HOE (CUSTOM)			67.00				67.00
IRRIGATE (12X)		4.20 HR		7.01	.10	.06	7.17
SUBTOTAL			11.11 HR	67.00	20.80	14.59	117.76
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM)	ONIONS		840.00				840.00
PACK ONIONS (CUSTOM)			840.00				840.00
SUBTOTAL			1680.00				1680.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.38 HR		2.88			2.88
EMPLOYEE BENEFITS				3.12			3.12
FARM INSURANCE			10.13				10.13
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				122.47			122.47
OTHER EXPENSES			12.00				12.00
SUBTOTAL			1.38 HR	22.13	128.47	4.80	155.40
TOTAL OPERATING EXPENSES			12.49 HR	1928.71	149.27	14.59	2112.74
NET OPERATING PROFIT							80.38
INTEREST ON OPERATING CAPITAL							24.95
INTEREST ON EQUIPMENT INVESTMENT							9.15
RETURN TO LAND AND RISK							46.28

TABLE 161. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: SEP 1 - SEP 15		YIELD: 37.80 CWT					
HARVEST DATES: MAY 1 - MAY 15		PRICE: 44.40/CWT		GROSS RETURNS: \$166.32			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		92.00 LB	15.64				15.64
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER		13.01 AC. IN.	5.85				5.85
PUMP WATER		14.00 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			51.94				51.94
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (8X)		4.88 HR		8.15	3.39	2.00	13.54
SUBTOTAL			7.83 HR	14.29	11.43	11.71	37.43
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			14.18				14.18
HAUL (TRUCK) (CUSTOM)	2 TON		5.74				5.74
SUBTOTAL			19.92				19.92
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.53			1.53
EMPLOYEE BENEFITS				2.14			2.14
FARM INSURANCE			10.09				10.09
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				14.04			14.04
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.74 HR	22.09	17.71	4.80	44.60
TOTAL OPERATING EXPENSES			8.57 HR	93.95	32.00	11.43	153.89
NET OPERATING PROFIT							12.43
INTEREST ON OPERATING CAPITAL							4.28
INTEREST ON EQUIPMENT INVESTMENT							7.72
RETURN TO LAND AND RISK							0.43

TABLE 162. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 40.95 CWT		GROSS RETURNS: \$171.99			
HARVEST DATES: JULY 1 - JULY 15		PRICE: \$4.20/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	15.08				15.08
PHOSPHORUS (P)		40.00 LB	6.80				6.80
SEED		110.00 LB	5.50				5.50
INSECTICIDE (CUSTOM)		1.00 ACRE	4.50				4.50
CANAL WATER		22.36 AC.IN.	10.06				10.06
PUMP WATER		AC.IN.					
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			47.31				47.31
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.27 HR		.56	.47	.48	1.51
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FERT SPREADER	60 HP	.13 HR		.27	.27	.44	.98
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PLow (MOLDBOARD,	120 HP	.46 HR		.96	1.62	1.65	4.23
HARROW	40 HP	.19 HR		.40	.31	.42	1.13
FLOAT	60 HP	.19 HR		.40	.33	.84	1.57
DRILL	60 HP	.29 HR		.60	.94	1.76	3.30
IRRIGATE (5X)		3.05 HR		5.09			5.09
SUBTOTAL			6.00 HR	11.23	8.04	9.71	28.98
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.75				15.75
HAUL (TRUCK) (CUSTOM)	2 TON		6.35				6.35
SUBTOTAL			22.10				22.10
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.74 HR		1.54			1.54
EMPLOYEE BENEFITS				1.68			1.68
FARM INSURANCE			10.07				10.07
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				12.67			12.67
OTHER EXPENSES			12.00				12.00
SUBTOTAL			.74 HR	22.07	15.90	4.80	42.77
TOTAL OPERATING EXPENSES		6.74 HR	91.48	27.13	8.04	14.51	141.16
NET OPERATING PROFIT							30.83
INTEREST ON OPERATING CAPITAL							3.91
INTEREST ON EQUIPMENT INVESTMENT							5.95
RETURN TO LAND AND RISK							20.97

TABLE 163. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 13.79 TON		GROSS RETURNS: \$620.55			
HARVEST DATES: OCT. 1 - OCT. 30		PRICE: \$45.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	8.19				8.19
PHOSPHORUS (P)		161.00 LB	27.37				27.37
TOMATO SEED		2.00 LB	25.80				25.80
HERBICIDE (CUSTOM)		1.00 ACRE	16.00				16.00
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		23.52 AC. IN.	10.58				10.58
PUMP WATER		10.23 AC. IN.					
ISS		1.00 ACRE	5.37				5.37
SPRINKLER SYSTEM		1.00	23.13				23.13
SUBTOTAL			136.44				136.44
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
CHISEL	120 HP	.54 HR		1.12	1.51	1.56	4.19
FLOW (MOLDBOARD)	120 HP	.46 HR		.96	1.62	1.65	4.23
LAND PLANE	80 HP	.39 HR		.81	.74	1.16	2.71
FERT SPREADER (3X)	60 HP	.39 HR		.81	.82	1.33	2.96
LISTER	80 HP	.56 HR		1.16	1.14	1.65	3.95
BED SHAPEK	40 HP	.29 HR		.60	.54	.70	1.84
PRE-IRRIGATE (3X)		1.38 HR		2.30	1.89	1.11	5.30
VEGETABLE PLANTER	40 HP	.41 HR		.85	.98	1.29	3.12
CULTIVATOR (4X)	40 HP	1.32 HR		2.75	2.49	1.99	7.23
CULT & SIDEDRESS	40 HP	.62 HR		1.29	1.23	1.07	3.59
HOEING (2X)		6.00 HR		12.48			12.48
IRRIGATE (10X)		4.00 HR		6.68	.59	.35	7.62
SUBTOTAL			17.24 HR	33.64	16.14	16.42	66.20
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			227.58				227.58
FORK LIFT (2X)		.76 HR		1.58	1.50	1.20	4.28
HAUL (TRUCK) (2X)	2 TON	3.70 HR		7.70	6.92	4.70	19.32
SUBTOTAL			4.46 HR	227.58	9.28	5.90	251.18
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.08 HR		8.49			8.49
EMPLOYEE BENEFITS				6.44			6.44
FARM INSURANCE			10.26				10.26
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				66.48			66.48
OTHER EXPENSES			12.00				12.00
SUBTOTAL			4.08 HR	22.26	81.41	4.80	108.47
TOTAL OPERATING EXPENSES		25.78 HR	386.28	124.33	24.56	27.12	562.29
NET OPERATING PROFIT							58.26
INTEREST ON OPERATING CAPITAL							11.95
INTEREST ON EQUIPMENT INVESTMENT							13.78
RETURN TO LAND AND RISK							32.53

TABLE 164. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1973
(ISS, SPRINKLER AND TRICKLE)

PLANTING DATES:		YIELD: 1365.00 LB		GROSS RETURNS: \$655.20			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.48/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	18.85				18.85
PHOSPHORUS (P)		48.00 LB	8.16				8.16
ZINC SULFATE		12.00 LB	2.88				2.88
MANGANESE SULFATE		24.00 LB	4.08				4.08
HERBICIDE		2.00 LB	1.98				1.98
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
CANAL WATER		AC.IN.					
PUMP WATER ESTABLISHMENT		30.68 AC.IN.				179.25	179.25
ISS		1.00 ACRE	5.37				5.37
SUBTOTAL			61.32			179.25	240.57
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.88 HR		1.83	2.59	2.56	6.98
PRUNE (MACHINE)	60 HP	2.00 HR		4.16	6.58	12.40	23.14
HAUL (TRUCK)	2 TON	2.00 HR		4.16	3.74	2.54	10.44
DRILL HERBICIDE	80 HP	.24 HR		.50	.42	.97	1.89
SPRAYER (MTD) (4X)	60 HP	2.00 HR		4.16	3.44	5.12	12.72
BORDER	40 HP	.29 HR		.60	.50	.74	1.84
FERT SPREADER	60 HP	.21 HR		.44	.44	.72	1.60
HOING (2X)		4.00 HR		8.32			8.32
IRRIGATE		2.12 HR		3.54	19.44	19.44	42.42
SUBTOTAL			13.74 HR	27.71	37.15	44.49	109.35
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		4.16	10.34	16.94	31.44
SWEEP	40 HP	2.00 HR		4.16	5.02	9.50	18.68
CLEAN & SACK		8.24 HR		13.76			13.76
HAUL NUTS	60 HP	2.60 HR		5.41	3.54	4.55	13.50
HAND LABOR		15.75 HR		26.30			26.30
SUBTOTAL			30.59 HR	53.79	18.90	30.99	103.68
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.56 HR		9.48			9.48
EMPLOYEE BENEFITS				12.22			12.22
FARM INSURANCE			10.53				10.53
LAND TAXES						4.80	4.80
SUPERVISION AND MANAGEMENT				123.83			123.83
OTHER EXPENSES			12.00				12.00
SUBTOTAL			4.56 HR	22.53	145.54	4.80	172.87
TOTAL OPERATING EXPENSES		48.89 HR	83.85	227.04	56.05	259.53	626.47
NET OPERATING PROFIT							28.73
INTEREST ON OPERATING CAPITAL							10.71
INTEREST ON EQUIPMENT INVESTMENT							40.80
RETURN TO LAND AND RISK							-22.78

TABLE 165. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	18.90				18.90
ALFALFA SEED		15.00 LB	26.25				26.25
CANAL WATER		11.00 AC. IN.	5.06				5.06
PUMP WATER		6.00 AC. IN.					
			-----				-----
SUBTOTAL			50.21				50.21
<u>PREHARVEST OPERATIONS</u>							
PLow (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
LAND PLANE	80 HP	.34 HR		.85	1.03	1.08	2.96
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (3X)		1.59 HR		3.18	1.82	1.13	6.13
				-----	-----	-----	-----
SUBTOTAL		3.44 HR		7.81	9.75	9.95	27.51
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.46 HR		1.16			1.16
EMPLOYEE BENEFITS				1.17			1.17
FARM INSURANCE			12.05				12.05
SUPERVISION AND MANAGEMENT				6.20			6.20
OTHER EXPENSES			15.00				15.00
			-----	-----	-----	-----	-----
SUBTOTAL		.46 HR	27.05	8.53			35.58
<u>TOTAL OPERATING EXPENSES</u>							
		3.90 HR	77.26	16.34	9.75	9.95	113.30

TABLE 166. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES:		YIELD: 6.00 TON		GROSS RETURNS: \$336.00			
HARVEST DATES: JUNE 1 - OCT 1		PRICE: \$56.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		92.00 LB	19.32				19.32
WIRE		12.00 LB	12.60				12.60
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		42.09 AC. IN.					
ESTABLISHMENT		1/5				29.13	29.13
SUBTOTAL			45.72			29.13	74.85
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
IRRIGATE (11X)		5.83 HR		11.66	12.76	7.91	32.33
SUBTOTAL			5.95 HR	11.96	13.12	8.34	33.42
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.10 HR		5.25	5.31	5.90	16.46
BALER (AUX ENG) (5X)	80 HP	1.50 HR		3.75	8.75	7.56	20.06
HAUL (TRAILER) (5X)	60 HP	1.65 HR		4.13	3.80	3.20	11.13
SUBTOTAL			5.25 HR	13.13	17.86	16.66	47.65
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.34 HR		3.36			3.36
EMPLOYEE BENEFITS				3.76			3.76
FARM INSURANCE			12.17				12.17
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				24.46			24.46
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.34 HR	27.17	31.59	5.00	63.76
TOTAL OPERATING EXPENSES			12.54 HR	72.89	56.68	59.13	219.68
NET OPERATING PROFIT							116.32
INTEREST ON OPERATING CAPITAL							5.61
INTEREST ON EQUIPMENT INVESTMENT							19.18
RETURN TO LAND AND RISK							91.53

TABLE 167. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 5.80 TON		RED: 430.00 LB			
HARVEST DATES: JULY 10 - NOV 30		PRICE: GREEN: \$140.00/TON		RED: \$0.33/LB		GROSS RETURNS: \$953.90	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
PURCHASED INPUTS							
NITROGEN (N)		140.00 LB	25.20				25.20
PHOSPHORUS (P)		60.00 LB	12.60				12.60
CHILE SEED		5.00 LB	60.00				60.00
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		18.82 AC.IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE		2.00 LB	24.00				24.00
SUBTOTAL			150.60				150.60
PREHARVEST OPERATIONS							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLow (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.08	2.96
PERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.29	3.28
LISTER	80 HP	.53 HR		1.33	1.67	1.45	4.45
PRE-IRRIGATE		.61 HR		1.22	1.14	.71	3.07
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.60	6.68
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.15	4.35
THINNING		10.60 HR		26.50			26.50
HOEING (2X)		16.00 HR		40.00			40.00
IRRIGATE (12X)		4.44 HR		8.88	4.57	2.83	16.28
SUBTOTAL			36.64 HR	89.09	23.22	19.01	131.32
HARVEST OPERATIONS							
HARVEST (CUSTOM)			206.31				206.31
HAUL (TRAILER) (3X)	40 HP	2.49 HR		6.23	6.35	3.98	16.56
FORK LIFT (3X)		.99 HR		2.48	3.15	1.98	7.61
HAUL (TRUCK) (3X)	2 TON	5.01 HR		12.53	16.58	6.66	35.77
SUBTOTAL			8.49 HR	21.24	26.08	12.62	266.25
OVERHEAD EXPENSES							
DOWNTIME		10.02 HR		25.05			25.05
EMPLOYEE BENEFITS				16.55			16.55
FARM INSURANCE			12.68				12.68
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				73.82			73.82
OTHER EXPENSES			15.00				15.00
SUBTOTAL			10.02 HR	27.68	115.42	5.00	148.10
TOTAL OPERATING EXPENSES		55.15 HR	384.59	225.75	49.30	36.63	696.27
NET OPERATING PROFIT							257.63
INTEREST ON OPERATING CAPITAL							17.76
INTEREST ON EQUIPMENT INVESTMENT							23.19
RETURN TO LAND AND RISK							216.68

TABLE 168. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 16.50 TON					
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: \$13.50/TON		GROSS RETURNS: \$222.73			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
PHOSPHORUS (P)		60.00 LB	12.60				12.60
HERBICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
INSECTICIDE (CUSTOM)		1.00 ACRE	9.00				9.00
CORN SEED		17.00 LB	14.62				14.62
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		13.09 AC.IN.					
SUBTOTAL			70.42				70.42
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.45	4.45
PRE-IRRIGATE		.61 HR		1.22	1.45	.90	3.57
CORN PLANTER	40 HP	.33 HR		.83	1.14	5.75	7.72
CULTIVATOR	40 HP	.32 HR		.80	.89	.53	2.22
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.15	4.35
IRRIGATE (8X)		3.84 HR		7.68	2.52	1.56	11.76
SUBTOTAL			7.63 HR	16.87	15.56	17.53	49.96
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			20.62				20.62
HAUL (TRUCK) (CUSTOM)	2 TON		15.00				15.00
SUBTOTAL			35.62				35.62
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.79 HR		1.99			1.99
EMPLOYEE BENEFITS				2.53			2.53
FARM INSURANCE			12.11				12.11
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				16.58			16.58
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.79 HR	27.11	21.10	5.00	53.21
TOTAL OPERATING EXPENSES			8.42 HR	133.15	37.97	22.53	209.21
NET OPERATING PROFIT							13.52
INTEREST ON OPERATING CAPITAL							6.45
INTEREST ON EQUIPMENT INVESTMENT							12.80
RETURN TO LAND AND RISK							-5.73

TABLE 169. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT:	720.00 LB	SEED:	1200.00 LB		
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT:	\$0.71/LB	SEED:	\$0.05/LB	GROSS RETURNS: \$571.20	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

--(DOLLARS)--							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	18.00				18.00
PHOSPHORUS (P)		40.00 LB	8.40				8.40
COTTON SEED		25.00 LB	7.00				7.00
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00
CROP INSURANCE		1.00 DOLLARS	20.00				20.00
CANAL WATER		29.88 AC. IN.	13.74				13.74
PUMP WATER		11.83 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	9.50				9.50
			-----				-----
SUBTOTAL			89.64				89.64
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLow (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.08	2.96
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.45	4.45
PRE-IRRIGATE		.61 HR		1.22	1.81	1.12	4.15
COTTON PLANTER	40 HP	.33 HR		.83	1.14	1.22	3.19
SLED	40 HP	.25 HR		.63	.60	.41	1.64
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.14	8.91
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.15	4.35
IRRIGATE (6X)		2.88 HR		5.76	1.78	1.10	8.64
HOEING		3.09 HR		7.73			7.73
			-----	-----	-----	-----	-----
SUBTOTAL		11.83 HR		27.86	21.58	17.50	66.94
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.04 HR		5.10	10.36	13.38	28.84
COTTON TRAILER (2X)	0.5 TON	2.00 HR		5.00	7.52	3.70	16.32
GIN COTTON (CUSTOM)			48.00				48.00
			-----	-----	-----	-----	-----
SUBTOTAL		4.04 HR	48.00	10.10	17.98	17.08	93.16
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.09 HR		7.74			7.74
EMPLOYEE BENEFITS				5.69			5.69
FARM INSURANCE			12.24				12.24
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				37.27			37.27
OTHER EXPENSES			15.00				15.00
			-----	-----	-----	-----	-----
SUBTOTAL		3.09 HR	27.24	50.71		5.00	82.95
<u>TOTAL OPERATING EXPENSES</u>							
		16.96 HR	164.88	88.67	39.56	39.58	332.69
<u>NET OPERATING PROFIT</u>							
							238.51
<u>INTEREST ON OPERATING CAPITAL</u>							
							9.34
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							
							23.40
<u>RETURN TO LAND AND RISK</u>							
							205.77

TABLE 170. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 45.00 CWT		GROSS RETURNS: \$204.75			
HARVEST DATES: SEP. 1 - OCT. 30		PRICE: \$4.55/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
GRAIN SORGHUM SEED		8.00 LB	1.68				1.68
HERBICIDE		2.00 LB	6.30				6.30
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		7.71 AC.IN.					
SUBTOTAL			36.18				36.18
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
FLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.45	4.45
PRE-IRRIGATE		.61 HR		1.22	1.63	1.01	3.86
HARROW	40 HP	.17 HR		.43	.42	.34	1.19
CORN PLANTER	40 HP	.33 HR		.83	1.14	5.75	7.72
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.15	4.35
CULTIVATOR	40 HP	.32 HR		.80	.89	.53	2.22
IRRIGATE (6X)		2.88 HR		5.76	.70	.44	6.90
SUBTOTAL			7.53 HR	17.11	16.89	19.25	53.25
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			18.00				18.00
HAUL (TRUCK) (CUSTOM)	2 TON		8.10				8.10
SUBTOTAL			26.10				26.10
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.01 HR		2.53			2.53
EMPLOYEE BENEFITS				2.57			2.57
FARM INSURANCE			12.11				12.11
LAND TAXES					5.00		5.00
SUPERVISION AND MANAGEMENT				15.20			15.20
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.01 HR	27.11	20.30	5.00	52.41
TOTAL OPERATING EXPENSES			8.54 HR	89.39	37.41	16.89	167.94
NET OPERATING PROFIT							36.81
INTEREST ON OPERATING CAPITAL							4.83
INTEREST ON EQUIPMENT INVESTMENT							13.43
RETURN TO LAND AND RISK							18.55

TABLE 171. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES:		YIELD:		GROSS RETURNS: \$136.00			
HARVEST DATES: MAY 1 - OCT. 30		PRICE: \$20.00/CWT BEEF					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	21.60				21.60
PHOSPHORUS (P)		46.00 LB	9.66				9.66
ESTABLISHMENT		1/10				11.27	11.27
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		37.27 AC.IN.					
<u>SUBTOTAL</u>			45.06			11.27	56.33
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
FERT SPREADER (2X)	60 HP	.40 HR		1.00	1.22	1.43	3.65
IRRIGATE (10X)		5.30 HR		10.60	11.30	7.00	28.90
<u>SUBTOTAL</u>				12.25	13.20	8.96	34.41
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.16 HR		.41			.41
EMPLOYEE BENEFITS				1.84			1.84
FARM INSURANCE			12.09				12.09
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				11.87			11.87
OTHER EXPENSES			15.00				15.00
<u>SUBTOTAL</u>				27.09	14.11	5.00	46.20
<u>TOTAL OPERATING EXPENSES</u>			6.12 HR	72.15	26.36	13.20	25.23
							136.94
<u>NET OPERATING PROFIT</u>							-0.94
<u>INTEREST ON OPERATING CAPITAL</u>							4.57
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							8.22
<u>RETURN TO LAND AND RISK</u>							-13.73

TABLE 172. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: JAN. 15 - FEB. 1		YIELD: 430.00 CTN					
HARVEST DATES: MAY 1 - MAY 31		PRICE: \$2.52/CTN		GROSS RETURNS: 1083.60			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		225.00 LB	40.50				40.50
PHOSPHORUS (P)		80.00 LB	16.80				16.80
LETTUCE SEED		2.00 LB	46.00				46.00
CANAL WATER		8.04 AC. IN.	3.70				3.70
PUMP WATER		21.00 AC. IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
INSECTICIDE (CUSTOM)		1.00 ACRE	90.00				90.00
SUBTOTAL			217.00				217.00
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
FLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.08	2.96
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.29	3.28
LISTER	80 HP	.53 HR		1.33	1.67	1.45	4.45
PRE-IRRIGATE		.61 HR		1.22	.80	.50	2.52
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.15	4.35
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.60	6.68
THIN & HOE (CUSTOM)			90.00				90.00
IRRIGATE (10X)		3.00 HR		6.00	5.57	3.45	15.02
SUBTOTAL			90.00	19.69	23.91	19.64	153.24
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			838.50				838.50
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				2.95			2.95
FARM INSURANCE			12.13				12.13
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				71.57			71.57
OTHER EXPENSES			15.00				15.00
SUBTOTAL			27.13	77.63		5.00	109.76
TOTAL OPERATING EXPENSES		9.83 HR	1172.63	97.32	23.91	24.64	1318.50
NET OPERATING PROFIT							-234.90
INTEREST ON OPERATING CAPITAL							23.89
INTEREST ON EQUIPMENT INVESTMENT							14.53
RETURN TO LAND AND RISK							-273.32

TABLE 173. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 580.00 CTN						
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: \$6.39/CTN		GROSS RETURNS: \$3706.20				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
----- (DOLLARS) -----								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		230.00 LB	41.40				41.40	
PHOSPHORUS (P)		80.00 LB	16.80				16.80	
LETTUCE SEED		2.00 LB	46.00				46.00	
CANAL WATER		12.00 AC. IN.	5.52				5.52	
PUMP WATER		16.16 AC. IN.						
HERBICIDE (CUSTOM)		1.00 ACRE	22.50				22.50	
INSECTICIDE (CUSTOM)		1.00 ACRE	120.00				120.00	
SUBTOTAL			252.22				252.22	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.08	2.96	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.29	3.28	
LISTER	80 HP	.53 HR		1.33	1.67	1.45	4.45	
PRE-IRRIGATE		.61 HR		1.22	.95	.59	2.76	
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.15	4.35	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.60	6.68	
THIN & HOE (CUSTOM)			90.00				90.00	
IRRIGATE (8X)		2.40 HR		4.80	3.95	2.45	11.20	
SUBTOTAL			90.00	18.49	22.44	18.73	149.66	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			1131.00				1131.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				2.77			2.77	
FARM INSURANCE			12.12				12.12	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				86.70			86.70	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			27.12	92.58		5.00	124.70	
TOTAL OPERATING EXPENSES			9.23 HR	1500.34	111.07	22.44	23.73	1657.58
NET OPERATING PROFIT							2046.62	
INTEREST ON OPERATING CAPITAL							28.28	
INTEREST ON EQUIPMENT INVESTMENT							13.64	
RETURN TO LAND AND RISK							2006.70	

TABLE 174. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 20.00 TON		GROSS RETURNS: \$2600.00			
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$130.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	36.00				36.00
PHOSPHORUS (P)		70.00 LB	14.70				14.70
ONION SEED		4.00 LB	60.00				60.00
CANAL WATER		12.00 AC. IN.	5.52				5.52
PUMP WATER		27.00 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50
SUBTOTAL			148.72				148.72
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.08	2.96
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.29	3.28
LISTER	80 HP	.53 HR		1.33	1.67	1.45	4.45
PRE-IRRIGATE		.61 HR		1.22	.79	.49	2.50
BED SHAPEK	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.15	4.35
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.60	6.68
THIN & HOE (CUSTOM)			120.00				120.00
IRRIGATE (14X)		4.20 HR		8.40	7.40	4.58	20.38
SUBTOTAL			120.00	22.09	25.73	20.76	188.58
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			960.00				960.00
PACK ONIONS (CUSTOM)			960.00				960.00
SUBTOTAL			1920.00				1920.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				3.31			3.31
FARM INSURANCE			12.15				12.15
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				126.16			126.16
OTHER EXPENSES			15.00				15.00
SUBTOTAL			27.15	132.58		5.00	164.73
TOTAL OPERATING EXPENSES		11.03 HR	2215.87	154.67	25.73	25.76	2422.03
NET OPERATING PROFIT							177.97
INTEREST ON OPERATING CAPITAL							32.17
INTEREST ON EQUIPMENT INVESTMENT							15.68
RETURN TO LAND AND RISK							130.12

TABLE 175. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 16.75 TON					GROSS RETURNS: \$1876.00	
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: \$112.00/TON						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
----- (DOLLARS) -----								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	36.00				36.00	
PHOSPHORUS (P)		70.00 LB	14.70				14.70	
ONION SEED		4.00 LB	60.00				60.00	
CANAL WATER		30.00 AC. IN.	13.80				13.80	
PUMP WATER		10.91 AC. IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00	
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50	
SUBTOTAL			162.00				162.00	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.08	2.96	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.29	3.28	
LISTER	80 HP	.53 HR		1.33	1.67	1.45	4.45	
PRE-IRRIGATE		.61 HR		1.22	.83	.51	2.56	
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.15	4.35	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.60	6.68	
THIN & HOE (CUSTOM)			120.00				120.00	
IRRIGATE (14X)		4.20 HR		9.40	2.48	1.54	12.42	
SUBTOTAL			120.00	22.09	20.85	17.74	180.68	
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM)	ONIONS		804.00				804.00	
PACK ONIONS (CUSTOM)			804.00				804.00	
SUBTOTAL			1608.00				1608.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				3.31			3.31	
FARM INSURANCE			12.15				12.15	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				110.83			110.83	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			27.15	117.25		5.00	149.40	
TOTAL OPERATING EXPENSES			11.03 HR	1917.15	139.34	20.85	22.74	2100.08
NET OPERATING PROFIT							-224.08	
INTEREST ON OPERATING CAPITAL							29.63	
INTEREST ON EQUIPMENT INVESTMENT							12.64	
RETURN TO LAND AND RISK							-266.35	

TABLE 176. SMALL CHAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD:	38.00 CWT				
HARVEST DATES: MAY 1 - MAY 15		PRICE:	\$5.80/CWT	GROSS RETURNS: \$220.40			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	20.88				20.88
PHOSPHORUS (P)		92.00 LB	19.32				19.32
SEED		110.00 LB	6.05				6.05
INSECTICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
CANAL WATER		20.56 AC.IN.	9.46				9.46
PUMP WATER		18.60 AC.IN.					
SUBTOTAL			60.71				60.71
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
HARROW	40 HP	.17 HR		.43	.42	.34	1.19
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (8X)		4.24 HR		8.48	5.64	3.49	17.61
SUBTOTAL			6.78 HR	14.85	15.97	14.71	45.53
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			16.80				16.80
HAUL (TRUCK) (CUSTOM)	2 TON		7.56				7.56
SUBTOTAL			24.36				24.36
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.63 HR		1.59			1.59
EMPLOYEE BENEFITS				2.23			2.23
FARM INSURANCE			12.10				12.10
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				15.98			15.98
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.63 HR	27.10	19.80	5.00	51.90
TOTAL OPERATING EXPENSES		7.41 HR	112.17	34.65	15.97	19.71	182.50
NET OPERATING PROFIT							37.90
INTEREST ON OPERATING CAPITAL							5.83
INTEREST ON EQUIPMENT INVESTMENT							11.42
RETURN TO LAND AND RISK							20.65

TABLE 177. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD:	35.00 CWT				
HARVEST DATES: JULY 1 - JULY 15		PRICE:	.5.60/CWT		GROSS RETURNS: \$196.00		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	20.88				20.88
PHOSPHORUS (P)		40.00 LB	8.40				8.40
SEED		110.00 LB	19.80				19.80
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		25.56 AC.IN.	11.76				11.76
SUBTOTAL			66.84				66.84
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
FEKT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
HARROW	40 HP	.17 HR		.43	.42	.34	1.19
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (6X)		3.18 HR		6.36			6.36
SUBTOTAL			5.72 HR	12.73	10.33	11.22	34.28
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.20				15.20
HAUL (TRUCK) (CUSTOM)	2 TON		6.84				6.84
SUBTOTAL			22.04				22.04
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.63 HR		1.59			1.59
EMPLOYEE BENEFITS				1.91			1.91
FARM INSURANCE			12.09				12.09
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				13.80			13.80
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.63 HR	27.09	17.30	5.00	49.39
TOTAL OPERATING EXPENSES			6.35 HR	115.97	30.03	16.22	172.55
NET OPERATING PROFIT							23.45
INTEREST ON OPERATING CAPITAL							5.80
INTEREST ON EQUIPMENT INVESTMENT							7.92
RETURN TO LAND AND RISK							9.73

TABLE 178. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 13.30 TON					
HARVEST DATES: SEPT. 1 - OCT. 30		PRICE: 75.00/TON		GROSS RETURNS: \$997.50			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (R)		63.00 LB	11.34				11.34
PHOSPHORUS (P)		161.00 LB	33.81				33.81
TOMATO SEED		2.00 LB	30.00				30.00
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				25.00
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		14.86 AC. IN.					
SUBTOTAL			133.95				133.95
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.08	2.96
PEKT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.29	3.28
LLESTER	80 HP	.53 HR		1.33	1.67	1.45	4.45
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
PRE-IRRIGATE		.61 HR		1.22	1.13	.70	3.05
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.14	8.91
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.15	4.35
HOEING (2X)		6.00 HR		15.00			15.00
IRRIGATE (11X)		3.85 HR		7.70	3.37	2.09	13.16
SUBTOTAL			15.76 HR	37.19	22.93	19.02	79.14
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			241.29				241.29
FORK LIFT (2X)		.66 HR		1.65	2.10	1.32	5.07
HAUL (TRUCK) (2X)	2 TON	3.34 HR		8.35	11.06	4.44	23.85
SUBTOTAL			4.00 HR	241.29	10.00	5.76	270.21
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.82 HR		9.56			9.56
EMPLOYEE BENEFITS				7.08			7.08
FARM INSURANCE			12.30				12.30
LAND TAXES						5.00	5.00
SUPERVISOR AND MANAGEMENT				46.44			46.44
OTHEA EXPENSES			15.00				15.00
SUBTOTAL			3.82 HR	27.30	63.08	5.00	95.38
TOTAL OPERATING EXPENSES			23.58 HR	402.54	110.27	29.78	578.68
NET OPERATING PROFIT							418.82
INTEREST ON OPERATING CAPITAL							13.54
INTEREST ON EQUIPMENT INVESTMENT							18.09
RETURN TO LAND AND RISK							387.19

TABLE 179. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (BASE)

PLANTING DATES:		YIELD: 1300.00 LB					
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.65/LB		GROSS RETURNS: \$845.00			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	26.10				26.10
PHOSPHORUS (P)		48.00 LB	10.08				10.08
ZINC SULFATE		12.00 LB	3.36				3.36
MANGANESE SULFATE		24.00 LB	4.80				4.80
HERBICIDE		2.00 LB	2.30				2.30
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				25.00
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		23.30 AC.IN.					
ESTABLISHMENT		1/12				208.43	208.43
SUBTOTAL			85.44			208.43	293.87
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PRUNE (MACHINE)	60 HP	2.00 HR		5.00	9.40	11.58	25.98
HAUL (TRUCK)	2 TON	2.00 HR		5.00	6.62	2.66	14.28
BORDEK	40 HP	.27 HR		.68	.71	.72	2.11
FERT SPREADER	60 HP	.20 HR		.50	.61	.71	1.82
DRILL HERBICIDE	80 HP	.24 HR		.60	.70	1.01	2.31
SPRAYER (MTD) (4X)	60 HP	2.00 HR		5.00	5.16	5.50	15.66
HOELING (2X)		4.00 HR		10.00			10.00
IRRIGATE (9X)		4.77 HR		9.54	7.07	4.38	20.99
SUBTOTAL			16.24 HR	38.22	33.72	29.82	101.76
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		5.00	15.34	15.80	36.14
SWEEP	40 HP	2.00 HR		5.00	6.98	9.14	21.12
CLEAN & SACK		7.75 HR		15.50			15.50
HAND LABOR		15.00 HR		30.00			30.00
HAUL NUTS	60 HP	2.50 HR		6.25	5.55	4.63	16.43
SUBTOTAL			29.25 HR	61.75	27.87	29.57	119.19
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.49 HR		11.23			11.23
EMPLOYEE BENEFITS				15.00			15.00
FARM INSURANCE			12.68				12.68
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				75.10			75.10
OTHER EXPENSES			15.00				15.00
SUBTOTAL			4.49 HR	27.68	101.33	5.00	134.01
TOTAL OPERATING EXPENSES		49.98 HR	113.12	201.30	61.59	272.82	648.83
NET OPERATING PROFIT							196.17
INTEREST ON OPERATING CAPITAL							12.05
INTEREST ON EQUIPMENT INVESTMENT							41.12
RETURN TO LAND AND RISK							143.00

TABLE 180. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	18.90				18.90
ALFALFA SEED		15.00 LB	26.25				26.25
CANAL WATER		11.00 AC.IN.	5.06				5.06
PUMP WATER		4.30 AC.IN.					
SUBTOTAL			50.21				50.21
<u>PREHARVEST OPERATIONS</u>							
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (3X)		1.83 HR		3.66	1.30	.88	5.84
SUBTOTAL			3.68 HR	8.29	9.23	9.98	27.50
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.46 HR		1.16			1.16
EMPLOYEE BENEFITS				1.24			1.24
FARM INSURANCE			12.06				12.06
SUPERVISION AND MANAGEMENT				6.42			6.42
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.46 HR	27.06	8.82		35.88
TOTAL OPERATING EXPENSES		4.14 HR	77.27	17.11	9.23	9.98	113.59

TABLE 181. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES:		YIELD:		GROSS RETURNS:				
HARVEST DATES: JUNE 1 - OCT 1		6.30 TON		3352.80				
		PRICE: \$6.00/TON						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
PHOSPHORUS (P)		92.00 LB	19.32				19.32	
WIRE		12.60 LB	13.23				13.23	
CANAL WATER		30.00 AC. IN.	13.80				13.80	
PUMP WATER		34.88 AC. IN.						
ESTABLISHMENT		1/5				29.20	29.20	
ISS		1.00 ACRE	5.80				5.80	
<u>SUBTOTAL</u>			52.15			29.20	81.35	
<u>PREHARVEST OPERATIONS</u>								
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09	
IRRIGATE (11X)		6.71 HR		13.42	10.58	7.10	31.10	
<u>SUBTOTAL</u>				13.72	10.94	7.53	32.19	
<u>HARVEST OPERATIONS</u>								
SWATHER (5X)	14 FT	2.20 HR		5.50	5.57	5.90	16.97	
BALEK (AUX ENG, (5X)	80 HP	1.60 HR		4.00	9.33	9.02	22.35	
HAUL (TRAILER) (5X)	60 HP	1.75 HR		4.38	4.03	3.80	12.21	
<u>SUBTOTAL</u>				13.88	18.93	18.72	51.53	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.42 HR		3.54			3.54	
EMPLOYEE BENEFITS				4.14			4.14	
FARM INSURANCE			12.19				12.19	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				26.23			26.23	
OTHER EXPENSES			15.00				15.00	
<u>SUBTOTAL</u>				33.91		5.00	66.10	
<u>TOTAL OPERATING EXPENSES</u>			13.80 HR	79.34	61.51	29.87	60.45	231.17
<u>NET OPERATING PROFIT</u>							121.63	
INTEREST ON OPERATING CAPITAL							6.01	
INTEREST ON EQUIPMENT INVESTMENT							19.86	
<u>RETURN TO LAND AND RISK</u>							95.76	

TABLE 182. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 6.09 TON		RED: 452.00 LB			
HARVEST DATES: JULY 10 - NOV 30		PRICE: GREEN: 140.00/TON		RED: 50.33/LE		GROSS RETURNS: 1001.76	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	25.20				25.20
PHOSPHORUS (P)		60.00 LB	12.60				12.60
CHILE SEED		5.00 LB	60.00				60.00
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		13.94 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				16.00
HERBICIDE		2.00 LB	24.00				24.00
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			157.40				157.40
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.02	.69	3.11
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
THINNING		10.60 HR		26.50			26.50
HOEING (2X)		16.00 HR		40.00			40.00
IRRIGATE (12X)		5.16 HR		10.32	3.20	2.15	15.67
SUBTOTAL			37.45 HR	90.71	21.73	18.99	131.43
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			216.63				216.63
HAUL (TRAILER) (3X)	40 HP	2.61 HR		6.53	6.66	4.78	17.97
FORK LIFT (3X)		1.05 HR		2.53	3.34	2.01	7.98
HAUL (TRUCK) (3X)	2 TON	5.28 HR		13.20	17.48	6.81	37.49
SUBTOTAL			8.94 HR	216.63	22.36	13.60	280.07
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		10.13 HR		25.33			25.33
EMPLOYEE BENEFITS				16.96			16.96
FARM INSURANCE			12.70				12.70
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				76.73			76.73
OTHER EXPENSES			15.00				15.00
SUBTOTAL			10.13 HR	27.70	119.03	5.00	151.73
TOTAL OPERATING EXPENSES		56.52 HR	401.73	232.10	49.21	37.59	720.63
NET OPERATING PROFIT							281.13
INTEREST ON OPERATING CAPITAL							18.33
INTEREST ON EQUIPMENT INVESTMENT							23.72
RETURN TO LAND AND RISK							239.08

TABLE 153. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.33 TON					
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: 13.50/TON		GROSS RETURNS: \$233.96			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
PHOSPHORUS (P)		60.00 LB	12.60				12.60
HERBICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
INSECTICIDE (CUSTOM)		1.00 ACRE	9.00				9.00
CORN SEED		17.00 LB	14.62				14.62
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		8.78 AC. IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			76.22				76.22
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
PEK SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PKE-IRRIGATE		.70 HR		1.40	1.31	.88	3.59
CORN PLANTER	40 HP	.33 HR		.83	1.14	5.75	7.72
CULTIVATOR	40 HP	.32 HR		.80	.89	.53	2.22
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
IRRIGATE (8X)		4.40 HR		8.80	1.36	.91	11.07
SUBTOTAL			8.28 HR	18.17	14.26	17.28	49.71
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			21.65				21.65
HAUL (TRUCK) (CUSTOM)	2 TON		15.75				15.75
SUBTOTAL			37.40				37.40
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.79 HR		1.99			1.99
EMPLOYEE BENEFITS				2.73			2.73
FARM INSURANCE			12.12				12.12
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				17.72			17.72
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.79 HR	27.12	22.44	5.00	54.56
TOTAL OPERATING EXPENSES		9.07 HR	140.74	40.61	14.26	22.28	217.89
NET OPERATING PROFIT							16.07
INTEREST ON OPERATING CAPITAL							6.78
INTEREST ON EQUIPMENT INVESTMENT							12.42
RETURN TO LAND AND RISK							-3.13

TABLE 184. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT:	756.00 LB	SEED:	1260.00 LB	GROSS RETURNS: \$599.76	
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT:	\$0.71/LB	SEED:	\$0.05/LB		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	18.00				18.00
PHOSPHORUS (P)		40.00 LB	8.40				8.40
COTTON SEED		25.00 LB	7.00				7.00
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00
CROP INSURANCE		1.00 DOLLARS	20.00				20.00
CANAL WATER		29.88 AC. IN.	13.74				13.74
PUMP WATER		7.66 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	9.50				9.50
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			95.44				95.44
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.63	1.09	4.12
COTTON PLANTER	40 HP	.33 HR		.83	1.14	1.22	3.19
SLED	40 HP	.25 HR		.63	.60	.41	1.64
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.12	8.89
CULT e SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
IRRIGATE (6X)		3.30 HR		6.60	.70	.47	7.77
HOEING		3.09 HR		7.73			7.73
SUBTOTAL			12.34 HR	28.88	20.32	17.52	66.72
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.14 HR		5.35	10.87	13.38	29.60
COTTON TRAILER (2X)	0.5 TON	2.00 HR		5.00	7.62	3.70	16.32
GIN COTTON (CUSTOM)			50.40				50.40
SUBTOTAL			4.14 HR	50.40	10.35	17.08	96.32
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.12 HR		7.80			7.80
EMPLOYEE BENEFITS				5.88			5.88
FARM INSURANCE			12.25				12.25
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				39.21			39.21
OTHER EXPENSES			15.00				15.00
SUBTOTAL			3.12 HR	27.25	52.89	5.00	85.14
TOTAL OPERATING EXPENSES			19.60 HR	173.09	92.12	38.81	343.62
NET OPERATING PROFIT							256.14
INTEREST ON OPERATING CAPITAL							9.71
INTEREST ON EQUIPMENT INVESTMENT							23.21
RETURN TO LAND AND RISK							223.22

TABLE 185. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 47.25 CWT					
HARVEST DATES: SEP. 1 - OCT. 30		PRICE: 14.55/CWT		GROSS RETURNS: \$214.99			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
GRAIN SORGHUM SEED		8.00 LB	1.68				1.68
HERBICIDE		2.00 LB	6.30				6.30
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		3.94 AC. IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			41.98				41.98
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.19	.80	3.39
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
CORN PLANTER	40 HP	.33 HR		.83	1.14	5.75	7.72
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR	40 HP	.32 HR		.80	.89	.53	2.22
IRRIGATE (6X)		3.30 HR		6.60			6.60
SUBTOTAL			8.04 HR	18.13	15.75	19.01	52.89
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			18.90				18.90
HAUL (TRUCK) (CUSTOM)	2 TON		8.50				8.50
SUBTOTAL			27.40				27.40
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.01 HR		2.53			2.53
EMPLOYEE BENEFITS				2.72			2.72
FARM INSURANCE			12.12				12.12
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				16.17			16.17
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.01 HR	27.12	21.42	5.00	53.54
TOTAL OPERATING EXPENSES		9.05 HR	96.50	39.55	15.75	24.01	175.81
NET OPERATING PROFIT							39.18
INTEREST ON OPERATING CAPITAL							5.15
INTEREST ON EQUIPMENT INVESTMENT							13.06
RETURN TO LAND AND RISK							20.97

TABLE 186. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES:		YIELD:		GROSS RETURNS: \$142.80			
HARVEST DATES: MAY 1 - OCT. 30		PRICE: \$20.00/CWT BEEF					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	21.60				21.60
PHOSPHORUS (P)		46.00 LB	9.66				9.66
ESTABLISHMENT		1/10				11.27	11.27
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		30.54 AC.IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			50.86			11.27	62.13
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
FERT SPREADER (2X)	60 HP	.40 HR		1.00	1.22	1.42	3.64
IRRIGATE (10X)		6.10 HR		12.20	9.26	6.22	27.68
SUBTOTAL			6.76 HR	13.85	11.16	8.17	33.18
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.16 HR		.41			.41
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			12.10				12.10
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				12.93			12.93
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.16 HR	27.10	15.41	5.00	47.51
TOTAL OPERATING EXPENSES		6.92 HR	77.96	29.26	11.16	24.44	142.82
NET OPERATING PROFIT							-0.02
INTEREST ON OPERATING CAPITAL							4.88
INTEREST ON EQUIPMENT INVESTMENT							7.51
RETURN TO LAND AND RISK							-12.41

TABLE 187. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: JAN. 15 - FEB. 1		YIELD: 430.00 CTN						
HARVEST DATES: MAY 1 - MAY 31		PRICE: \$2.52/CTN		GROSS RETURNS: \$1083.60				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		225.00 LB	40.50				40.50	
PHOSPHORUS (P)		80.00 LB	16.80				16.80	
LETTUCE SEED		2.00 LB	46.00				46.00	
CANAL WATER		8.04 AC.IN.	3.70				3.70	
PUMP WATER		18.10 AC.IN.						
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				20.00	
INSECTICIDE (CUSTOM)		1.00 ACRE	90.00				90.00	
ISS		1.00 ACRE	5.80				5.80	
SUBTOTAL			222.80				222.80	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27	
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88	
PRE-IRRIGATE		.70 HR		1.40	.72	.48	2.60	
BED SHAPEK	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67	
THIN & HOE (CUSTOM)			90.00				90.00	
IRRIGATE (10X)		3.50 HR		7.00	4.77	3.20	14.97	
SUBTOTAL			90.00	20.87	23.03	20.05	153.95	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			838.50				838.50	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				3.13			3.13	
FARM INSURANCE			12.14				12.14	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				72.96			72.96	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			27.14	79.20		5.00	111.34	
TOTAL OPERATING EXPENSES			10.42 HR	1178.44	100.07	23.03	25.05	1326.59
NET OPERATING PROFIT							-242.99	
INTEREST ON OPERATING CAPITAL							24.23	
INTEREST ON EQUIPMENT INVESTMENT							14.73	
RETURN TO LAND AND RISK							-281.95	

TABLE 188. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 580.00 CTN					
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: 76.39/CTN		GROSS RETURNS: \$3706.20			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	41.40				41.40
PHOSPHORUS (P)		80.00 LB	16.80				16.80
LETTUCE SEED		2.00 LB	46.00				46.00
CANAL WATER		12.00 AC.IN.	5.52				5.52
PUMP WATER		13.34 AC.IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	22.50				22.50
INSECTICIDE (CUSTOM)		1.00 ACRE	120.00				120.00
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			256.02				256.02
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	.86	.57	2.83
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
THIN & HOE (CUSTOM)			90.00				90.00
IRRIGATE (8X)		2.80 HR		5.60	3.19	2.14	10.93
SUBTOTAL			90.00	19.47	21.59	19.08	150.14
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			1131.00				1131.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				2.92			2.92
FARM INSURANCE			12.13				12.13
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				87.89			87.89
OTHER EXPENSES			15.00				15.00
SUBTOTAL			27.13	93.92		5.00	126.05
TOTAL OPERATING EXPENSES		9.72 HR	1506.15	113.39	21.59	24.08	1665.21
NET OPERATING PROFIT							2040.99
INTEREST ON OPERATING CAPITAL							28.60
INTEREST ON EQUIPMENT INVESTMENT							13.81
RETURN TO LAND AND RISK							1998.58

TABLE 189. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 20.00 TON					
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$130.00/TON		GROSS RETURNS: \$2600.00			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	36.00				36.00
PHOSPHORUS (P)		70.00 LB	14.70				14.70
ONION SEED		4.00 LB	60.00				60.00
CANAL WATER		12.00 AC.IN.	5.52				5.52
PUMP WATER		23.10 AC.IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			154.52				154.52
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	.71	.48	2.59
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
THIN & HOE (CUSTOM)			120.00				120.00
IRRIGATE (14X)		4.90 HR		9.80	6.29	4.23	20.32
SUBTOTAL			10.58 HR	120.00	23.67	24.54	189.29
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			960.00				960.00
PACK ONIONS (CUSTOM)			960.00				960.00
SUBTOTAL			1920.00				1920.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				3.55			3.55
FARM INSURANCE			12.16				12.16
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				127.91			127.91
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.24 HR	27.16	134.57	5.00	166.73
TOTAL OPERATING EXPENSES		11.82 HR	2221.68	158.24	24.54	26.08	2430.54
NET OPERATING PROFIT							169.46
INTEREST ON OPERATING CAPITAL							32.53
INTEREST ON EQUIPMENT INVESTMENT							15.76
RETURN TO LAND AND RISK							121.17

TABLE 190. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 16.75 TON		GROSS RETURNS: \$1876.00				
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: \$112.00/TON						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
----- (DOLLARS) -----								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	36.00				36.00	
PHOSPHORUS (P)		70.00 LB	14.70				14.70	
ONION SEED		4.00 LB	60.00				60.00	
CANAL WATER		30.00 AC.IN.	13.80				13.80	
PUMP WATER		6.82 AC.IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00	
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50	
ISS		1.00 ACRE	5.80				5.80	
SUBTOTAL			167.80				167.80	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27	
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88	
PRE-IRRIGATE		.70 HR		1.40	.74	.50	2.64	
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67	
THIN & HOE (CUSTOM)			120.00				120.00	
IRRIGATE (14X)		4.90 HR		9.80	1.33	.89	12.02	
SUBTOTAL			120.00	23.67	19.61	17.76	181.04	
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM) ONIONS			804.00				804.00	
PACK ONIONS (CUSTOM)			804.00				804.00	
SUBTOTAL			1608.00				1608.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				3.55			3.55	
FARM INSURANCE			12.16				12.16	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				112.56			112.56	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			27.16	119.22		5.00	151.38	
TOTAL OPERATING EXPENSES			11.82 HR	1922.96	142.89	19.61	22.76	2108.22
NET OPERATING PROFIT							-232.22	
INTEREST ON OPERATING CAPITAL							29.98	
INTEREST ON EQUIPMENT INVESTMENT							12.42	
RETURN TO LAND AND RISK							-274.62	

TABLE 191. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD: 39.90 CWT					
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$5.80/CWT		GROSS RETURNS: \$231.42			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	20.88				20.88
PHOSPHORUS (P)		92.00 LB	19.32				19.32
SEED		110.00 LB	5.05				6.05
INSECTICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
CANAL WATER		20.56 AC.IN.	9.46				9.46
PUMP WATER		14.68 AC.IN.					
ISS		1.00 ACRE	5.80				5.80
			-----				-----
SUBTOTAL			66.51				66.51
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLow (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (8X)		4.88 HR		9.76	4.45	2.99	17.20
			-----	-----	-----	-----	-----
SUBTOTAL		7.42 HR		16.13	14.78	14.20	45.11
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			17.64				17.64
HAUL (TRUCK) (CUSTOM)	2 TON		7.94				7.94
			-----				-----
SUBTOTAL			25.58				25.58
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.63 HR		1.59			1.59
EMPLOYEE BENEFITS				2.42			2.42
FARM INSURANCE			12.11				12.11
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				17.10			17.10
OTHER EXPENSES			15.00				15.00
			-----	-----			-----
SUBTOTAL		.63 HR	27.11	21.11		5.00	53.22
<u>TOTAL OPERATING EXPENSES</u>							
		8.05 HR	119.20	37.24	14.78	19.20	190.42
<u>NET OPERATING PROFIT</u>							
							41.00
<u>INTEREST ON OPERATING CAPITAL</u>							
							6.16
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							
							10.94
<u>RETURN TO LAND AND RISK</u>							
							23.90

TABLE 192. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 36.75 CWT		GROSS RETURNS: \$205.80			
HARVEST DATES: JULY 1 - JULY 15		PRICE: \$5.60/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	20.88				20.88
PHOSPHORUS (P)		40.00 LB	8.40				8.40
SEED		110.00 LB	19.80				19.80
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		23.00 AC.IN.	10.58				10.58
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			71.46				71.46
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLGW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (6X)		3.66 HR		7.32			7.32
SUBTOTAL			6.20 HR	13.69	10.33	11.21	35.23
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.96				15.96
HAUL (TRUCK) (CUSTOM)	2 TON		7.18				7.18
SUBTOTAL			23.14				23.14
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.63 HR		1.59			1.59
EMPLOYEE BENEFITS				2.05			2.05
FARM INSURANCE			12.09				12.09
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				14.73			14.73
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.63 HR	27.09	18.37	5.00	50.46
TOTAL OPERATING EXPENSES		6.83 HR	121.69	32.06	10.33	16.21	180.29
NET OPERATING PROFIT							25.51
INTEREST ON OPERATING CAPITAL							6.09
INTEREST ON EQUIPMENT INVESTMENT							7.91
RETURN TO LAND AND RISK							11.51

TABLE 193. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 13.97 TON					
HARVEST DATES: SEPT. 1 - OCT. 30		PRICE: \$75.00/TON		GROSS RETURNS: \$1047.75			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	11.34				11.34
PHOSPHORUS (P)		161.00 LB	33.81				33.81
TOMATO SEED		2.00 LB	30.00				30.00
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				25.00
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		10.37 AC. IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			139.75				139.75
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
PRE-IRRIGATE		.70 HR		1.40	1.02	.68	3.10
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.12	8.89
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
HOEING (2X)		6.00 HR		15.00			15.00
IRRIGATE (11X)		4.40 HR		8.80	2.13	1.43	12.36
SUBTOTAL			16.40 HR	38.47	21.58	19.01	79.06
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			253.35				253.35
FORK LIFT (2X)		.70 HR		1.75	2.23	1.34	5.32
HAUL (TRUCK) (2X)	2 TON	3.50 HR		8.75	11.59	4.52	24.86
SUBTOTAL			4.20 HR	253.35	10.50	5.86	283.53
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.87 HR		9.69			9.69
EMPLOYEE BENEFITS				7.35			7.35
FARM INSURANCE			12.31				12.31
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				48.73			48.73
OTHER EXPENSES			15.00				15.00
SUBTOTAL			3.87 HR	27.31	65.77	5.00	98.08
TOTAL OPERATING EXPENSES			24.47 HR	420.41	114.74	35.40	600.42
NET OPERATING PROFIT							447.33
INTEREST ON OPERATING CAPITAL							14.02
INTEREST ON EQUIPMENT INVESTMENT							17.94
RETURN TO LAND AND RISK							415.37

TABLE 194. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976 - (ISS)

PLANTING DATES:		YIELD: 1365.00 LB		GROSS RETURNS: \$887.25			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: '0.65/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (R)		145.00 LB	26.10				26.10
PHOSPHORUS (P)		48.00 LB	10.08				10.08
ZINC SULFATE		12.00 LB	3.36				3.36
MANGANESE SULFATE		24.00 LB	4.80				4.80
HERBICIDE		2.00 LB	2.30				2.30
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				25.00
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		17.97 AC.IN.					
ESTABLISHMENT		1/12				208.43	208.43
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			91.24			208.43	299.67
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.80	3.45	3.26	8.61
PRUNE (MACHINE)	60 HP	2.00 HR		5.00	9.40	11.56	25.96
HAUL (TRUCK)	2 TON	2.00 HR		5.00	6.62	2.58	14.20
BORDER	40 HP	.27 HR		.68	.71	.72	2.11
FERT SPREADER	60 HP	.20 HR		.50	.61	.71	1.82
DRILL HERBICIDE	80 HP	.24 HR		.60	.70	1.20	2.50
SPRAYER (MTD) (4X)	60 HP	2.00 HR		5.00	5.16	5.48	15.64
HOEING (2X)		4.00 HR		10.00			10.00
IRRIGATE (9X)		5.49 HR		10.98	5.45	3.66	20.09
SUBTOTAL			16.96 HR	39.66	32.10	29.17	100.93
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		5.00	15.34	17.42	37.76
SWEEP	40 HP	2.00 HR		5.00	6.98	9.12	21.10
CLEAN e SACK		8.14 HR		16.28			16.28
HAND LABOR		15.75 HR		31.50			31.50
HAUL NUTS	60 HP	2.50 HR		6.25	5.55	4.60	16.40
SUBTOTAL			30.39 HR	64.03	27.87	31.14	123.04
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.49 HR		11.23			11.23
EMPLOYEE BENEFITS				15.55			15.55
FARM INSURANCE			12.71				12.71
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				78.89			78.89
OTHER EXPENSES			15.00				15.00
SUBTOTAL			4.49 HR	27.71	105.67	5.00	138.38
TOTAL OPERATING EXPENSES			51.84 HR	118.95	209.36	59.97	662.02
NET OPERATING PROFIT							225.23
INTEREST ON OPERATING CAPITAL							12.52
INTEREST ON EQUIPMENT INVESTMENT							41.49
RETURN TO LAND AND RISK							171.22

TABLE 195. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(155 AND SPRINKLER)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	18.90				18.90
ALFALFA SEED		15.00 LB	26.25				26.25
CANAL WATER		11.00 AC.IN.	5.06				5.06
PUMP WATER		4.30 AC.IN.					
SUBTOTAL			50.21				50.21
<u>PREHARVEST OPERATIONS</u>							
PLow (MOLDOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (3X)		1.83 HR		3.66	1.30	.73	5.69
SUBTOTAL				8.29	9.23	9.83	27.35
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.46 HR		1.16			1.16
EMPLOYEE BENEFITS				1.24			1.24
FARM INSURANCE			12.06				12.06
SUPERVISION AND MANAGEMENT				6.42			6.42
OTHER EXPENSES			15.00				15.00
SUBTOTAL				27.06	8.82		35.88
TOTAL OPERATING EXPENSES		4.14 HR	77.27	17.11	9.23	9.83	113.44

TABLE 196. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES:		YIELD: 6.30 TON		GROSS RETURNS: \$352.80			
HARVEST DATES: JUNE 1 - OCT 1		PRICE: .56.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		92.00 LB	19.32				19.32
WIRE		12.60 LB	13.23				13.23
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		34.88 AC.IN.					
ESTABLISHMENT		1/5				29.17	29.17
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			52.15			29.17	81.32
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
IRRIGATE (11X)		6.71 HR		13.42	10.58	5.92	29.92
SUBTOTAL			6.83 HR	13.72	10.94	6.35	31.01
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.20 HR		5.50	5.57	5.90	16.97
BALEH (AUX ENG) (5X)	80 HP	1.60 HR		4.00	9.33	9.02	22.35
HAUL (TRAILER) (5X)	60 HP	1.75 HR		4.38	4.03	3.78	12.19
SUBTOTAL			5.55 HR	13.88	18.93	18.70	51.51
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.42 HR		3.54			3.54
EMPLOYEE BENEFITS				4.14			4.14
FARM INSURANCE			12.19				12.19
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				26.23			26.23
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.42 HR	27.19	33.91	5.00	66.10
TOTAL OPERATING EXPENSES			13.80 HR	79.34	61.51	59.22	229.94
NET OPERATING PROFIT							122.86
INTEREST ON OPERATING CAPITAL							6.01
INTEREST ON EQUIPMENT INVESTMENT							18.61
RETURN TO LAND AND RISK							98.24

TABLE 197. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN: 6.39 TON		RED: 475.00 LB			
HARVEST DATES: JULY 10 - NOV 30		PRICE: GREEN: 140.00/TON		RED: 0.33/LB	GROSS RETURNS: 1051.35		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
		140.00 LB	25.20				25.20
		60.00 LB	12.60				12.60
		5.00 LB	60.00				60.00
		30.00 AC. IN.	13.80				13.80
		10.42 AC. IN.					
		1.00 ACRE	15.00				15.00
		2.00 LB	24.00				24.00
		1.00 ACRE	5.80				5.80
		1.00	25.00				25.00
SUBTOTAL			181.40				181.40
<u>PREHARVEST OPERATIONS</u>							
	40 HP	.26 HR		.65	.68	.53	1.86
	120 HP	.43 HR		1.08	1.87	1.86	4.81
	120 HP	.76 HR		1.90	3.45	3.26	8.61
	120 HP	.36 HR		.90	1.90	1.75	4.55
	80 HP	.34 HR		.85	1.03	1.36	3.24
	60 HP	.36 HR		.90	1.09	1.28	3.27
	80 HP	.53 HR		1.33	1.67	1.88	4.88
		.92 HR		1.84	1.89	1.06	4.79
	40 HP	.40 HR		1.00	1.42	1.50	3.92
	40 HP	.96 HR		2.40	2.68	1.59	6.67
	40 HP	.59 HR		1.48	1.72	1.14	4.34
		10.60 HR		26.50			26.50
		16.00 HR		40.00			40.00
		4.73 HR		9.46	1.27	.71	11.44
SUBTOTAL			37.24 HR	90.29	20.67	17.92	128.88
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)				227.46			227.46
	40 HP	2.73 HR		6.83	6.96	4.97	18.76
		1.11 HR		2.78	3.53	1.99	8.30
	2 TON	5.55 HR		13.88	18.37	6.94	39.19
SUBTOTAL			9.39 HR	23.49	28.86	13.90	293.71
<u>OVERHEAD EXPENSES</u>							
		10.24 HR		25.61			25.61
				17.07			17.07
			12.70				12.70
						5.00	5.00
				119.93			119.93
			15.00				15.00
SUBTOTAL			10.24 HR	27.70	162.61	5.00	195.31
TOTAL OPERATING EXPENSES			56.87 HR	436.56	276.39	49.53	799.30
NET OPERATING PROFIT							252.05
INTEREST ON OPERATING CAPITAL							21.43
INTEREST ON EQUIPMENT INVESTMENT							22.87
RETURN TO LAND AND RISK							207.75

TABLE 198. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.33 TON					
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: 13.50/TON		GROSS RETURNS: 1233.96			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
PHOSPHORUS (P)		60.00 LB	12.60				12.60
HERBICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
INSECTICIDE (CUSTOM)		1.00 ACRE	9.00				9.00
CORN SEED		17.00 LB	14.62				14.62
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		8.78 AC. IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			76.22				76.22
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDEBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PKE-IRRIGATE		.70 HR		1.40	1.31	.73	3.44
CORN PLANTER	40 HP	.33 HR		.83	1.14	5.75	7.72
CULTIVATOR	40 HP	.32 HR		.80	.89	.53	2.22
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
IRRIGATE (8X)		4.40 HR		8.80	1.36	.76	10.92
SUBTOTAL			8.28 HR	18.17	14.26	16.98	49.41
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			21.65				21.65
HAUL (TRUCK) (CUSTOM)	2 TON		15.75				15.75
SUBTOTAL			37.40				37.40
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.79 HR		1.99			1.99
EMPLOYEE BENEFITS				2.73			2.73
FARM INSURANCE			12.12				12.12
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				17.72			17.72
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.79 HR	27.12	22.44	5.00	54.56
TOTAL OPERATING EXPENSES		9.07 HR	140.74	40.61	14.26	21.98	217.59
NET OPERATING PROFIT							16.37
INTEREST ON OPERATING CAPITAL							6.78
INTEREST ON EQUIPMENT INVESTMENT							12.11
RETURN TO LAND AND RISK							-2.52

TABLE 199. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT: 756.00 LB		SEED: 1260.00 LB			
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT: .0.71/LB		SEED: .0.05/LB		GROSS RETURNS: \$599.76	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	18.00				18.00
PHOSPHORUS (P)		40.00 LB	8.40				8.40
COTTON SEED		25.00 LB	7.00				7.00
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00
CROP INSURANCE		1.00 DOLLARS	20.00				20.00
CANAL WATER		29.88 AC. IN.	13.74				13.74
PUMP WATER		7.66 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	9.50				9.50
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			95.44				95.44
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
FLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.63	.91	3.94
COTTON PLANTER	40 HP	.33 HR		.83	1.14	1.22	3.19
SLED	40 HP	.25 HR		.53	.60	.41	1.64
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.12	8.89
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
IRRIGATE (6X)		3.30 HR		6.60	.70	.39	7.69
HOEING		3.09 HR		7.73			7.73
SUBTOTAL			12.34 HR	28.88	20.32	17.26	66.46
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.14 HR		5.35	10.87	13.38	29.60
COTTON TRAILER (2X)	0.5 TON	2.00 HR		5.00	7.62	3.70	16.32
GIN COTTON (CUSTOM)			50.40				50.40
SUBTOTAL			4.14 HR	50.40	10.35	17.08	96.32
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.12 HR		7.80			7.80
EMPLOYEE BENEFITS				5.88			5.88
FARM INSURANCE			12.25				12.25
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				39.21			39.21
OTHER EXPENSES			15.00				15.00
SUBTOTAL			3.12 HR	27.25	52.89	5.00	85.14
TOTAL OPERATING EXPENSES			19.60 HR	173.09	92.12	38.81	343.36
NET OPERATING PROFIT							256.40
INTEREST ON OPERATING CAPITAL							9.71
INTEREST ON EQUIPMENT INVESTMENT							22.93
RETURN TO LAND AND RISK							223.76

TABLE 200. GRAIN SORGHUM, BUDGETED FOR ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 47.25 CWT		GROSS RETURNS: \$214.99			
HARVEST DATES: SEP. 1 - OCT. 30		PRICE: 4.55/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
GRAIN SORGHUM SEED		8.00 LB	1.68				1.68
HERBICIDE		2.00 LB	6.30				6.30
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		3.94 AC.IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			41.98				41.98
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDEGARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
FEKT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.19	.67	3.26
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
CORN PLANTER	40 HP	.33 HR		.83	1.14	5.75	7.72
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR	40 HP	.32 HR		.80	.89	.53	2.22
IRRIGATE (6X)		3.30 HR		6.60			6.60
SUBTOTAL			8.04 HR	18.13	15.75	18.88	52.76
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			18.90				18.90
HAUL (TRUCK) (CUSTOM)	2 TON		8.50				8.50
SUBTOTAL			27.40				27.40
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.01 HR		2.53			2.53
EMPLOYEE BENEFITS				2.72			2.72
FARM INSURANCE			12.12				12.12
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				16.17			16.17
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.01 HR	27.12	21.42	5.00	53.54
TOTAL OPERATING EXPENSES		9.05 HR	96.50	39.55	15.75	23.88	175.68
NET OPERATING PROFIT							39.31
INTEREST ON OPERATING CAPITAL							5.15
INTEREST ON EQUIPMENT INVESTMENT							12.91
RETURN TO LAND AND RISK							21.25

TABLE 201. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES:		YIELD:		GROSS RETURNS:			
HARVEST DATES: MAY 1 - OCT. 30		7.14 CWT BEEF		J142.80			
		PRICE: 20.00/CWT BEEF					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	21.60				21.60
PHOSPHORUS (P)		46.00 LB	9.66				9.66
ESTABLISHMENT		1/10				11.27	11.27
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		30.54 AC.IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			50.86			11.27	62.13
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
FERT SPREADER (2X)	60 HP	.40 HR		1.00	1.22	1.42	3.64
IRRIGATE (10X)		6.10 HR		12.20	9.26	5.18	26.64
SUBTOTAL			6.76 HR	13.85	11.16	7.13	32.14
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.16 HR		.41			.41
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			12.10				12.10
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				12.93			12.93
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.16 HR	27.10	15.41	5.00	47.51
TOTAL OPERATING EXPENSES			6.92 HR	77.96	29.26	11.16	141.78
NET OPERATING PROFIT							1.02
INTEREST ON OPERATING CAPITAL							4.88
INTEREST ON EQUIPMENT INVESTMENT							6.43
RETURN TO LAND AND RISK							-10.29

TABLE 202. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: JAN. 15 - FEB. 1		YIELD: 452.00 CTN						
HARVEST DATES: MAY 1 - MAY 31		PRICE: .252/CTN		CROSS RETURNS: \$1139.04				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
-(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		225.00 LB	40.50				40.50	
PHOSPHORUS (P)		80.00 LB	16.80				16.80	
LETTUCE SEED		2.00 LB	46.00				46.00	
CANAL WATER		8.04 AC. IN.	3.70				3.70	
PUMP WATER		14.18 AC. IN.						
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				20.00	
INSECTICIDE (CUSTOM)		1.00 ACRE	90.00				90.00	
ISS		1.00 ACRE	5.80				5.80	
SPRINKLER SYSTEM		1.00	25.00				25.00	
SUBTOTAL			247.80				247.80	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27	
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88	
PRE-IRRIGATE (3X)		1.38 HR		2.76	1.56	.87	5.19	
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67	
THIN & HOE (CUSTOM)			90.00				90.00	
IRRIGATE (10X)		3.50 HR		7.00	2.74	1.54	11.28	
SUBTOTAL			90.00	22.23	21.84	18.78	152.85	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			880.43				880.43	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				3.33			3.33	
FARM INSURANCE			12.15				12.15	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				85.86			85.86	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			27.15	92.31		5.00	124.46	
TOTAL OPERATING EXPENSES			11.10 HR	1245.38	114.54	21.84	23.78	1405.54
NET OPERATING PROFIT							-266.50	
INTEREST ON OPERATING CAPITAL							26.26	
INTEREST ON EQUIPMENT INVESTMENT							13.45	
RETURN TO LAND AND RISK							-306.21	

TABLE 203. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 609.00 CTN					
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: 16.39/CTN		GROSS RETURNS: 3891.51			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	41.40				41.40
PHOSPHORUS (P)		80.00 LB	16.80				16.80
LETTUCE SEED		2.00 LB	46.00				46.00
CANAL WATER		12.00 AC. IN.	5.52				5.52
PUMP WATER		9.54 AC. IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	22.50				22.50
INSECTICIDE (CUSTOM)		1.00 ACRE	120.00				120.00
ISS		1.00 ACRE	5.80				5.80
SPRINKLER SYSTEM		1.00	25.00				25.00
SUBTOTAL			283.02				283.02
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTEN	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE (3X)		1.38 HR		2.76	1.78	1.00	5.54
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
THIN & HOE (CUSTOM)			90.00				90.00
IRRIGATE (8X)		2.80 HR		5.60	1.11	.62	7.33
SUBTOTAL			90.00	20.83	20.43	17.99	149.25
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			1187.55				1187.55
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				3.12			3.12
FARM INSURANCE			12.14				12.14
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				100.98			100.98
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.24 HR	27.14	107.22	5.00	139.36
TOTAL OPERATING EXPENSES			10.40 HR	1587.71	128.05	20.43	1759.18
NET OPERATING PROFIT							2132.33
INTEREST ON OPERATING CAPITAL							30.75
INTEREST ON EQUIPMENT INVESTMENT							12.68
RETURN TO LAND AND RISK							2088.90

TABLE 204. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 21.00 TON					
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$130.00/TON		GROSS RETURNS: \$2730.00			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		200.00 LB	36.00				36.00
PHOSPHORUS (P)		70.00 LB	14.70				14.70
ONION SEED		4.00 LB	60.00				60.00
CANAL WATER		12.00 AC. IN.	5.52				5.52
PUMP WATER		17.84 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50
ISS		1.00 ACRE	5.80				5.80
SPRINKLER SYSTEM		1.00	25.00				25.00
SUBTOTAL			179.52				179.52
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.54 HR		.85	1.03	1.36	3.24
FEKT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE (3X)		1.38 HR		2.76	1.81	1.01	5.58
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
THIN & HOE (CUSTOM)			120.00				120.00
IRRIGATE (12X)		4.20 HR		8.40	3.60	2.01	14.01
SUBTOTAL			10.56 HR	120.00	23.63	19.39	185.97
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			1008.00				1008.00
PACK ONIONS (CUSTOM)			1008.00				1008.00
SUBTOTAL			2016.00				2016.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				3.54			3.54
FARM INSURANCE			12.16				12.16
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				142.70			142.70
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.24 HR	27.16	149.36	5.00	181.52
TOTAL OPERATING EXPENSES			11.80 HR	2342.68	172.99	22.95	2563.01
NET OPERATING PROFIT							166.99
INTEREST ON OPERATING CAPITAL							35.00
INTEREST ON EQUIPMENT INVESTMENT							14.10
RETURN TO LAND AND RISK							117.89

TABLE 205. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 17.59 TON						
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: \$112.00/TON		GROSS RETURNS: \$1970.08				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	

-(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	36.00				36.00	
PHOSPHORUS (P)		70.00 LB	14.70				14.70	
ONION SEED		4.00 LB	60.00				60.00	
CANAL WATER		25.03 AC. IN.	11.51				11.51	
PUMP WATER		6.27 AC. IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00	
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50	
LSS		1.00 ACRE	5.80				5.80	
SPRINKLER SYSTEM		1.00	25.00				25.00	
SUBTOTAL			190.51				190.51	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27	
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88	
PRE-IRRIGATE (3X)		1.38 HR		2.76	1.90	1.06	5.72	
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67	
THIN & HOE (CUSTOM)			120.00				120.00	
IRRIGATE (12X)		4.20 HR		8.40			8.40	
SUBTOTAL			10.56 HR	120.00	23.63	19.44	17.43	180.50
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM) ONIONS			844.20				844.20	
PACK ONIONS (CUSTOM)			844.20				844.20	
SUBTOTAL			1688.40				1688.40	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				3.54			3.54	
FARM INSURANCE			12.16				12.16	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				126.60			126.60	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			1.24 HR	27.16	133.26	5.00	165.42	
TOTAL OPERATING EXPENSES			11.80 HR	2026.07	156.89	19.44	224.73	
NET OPERATING PROFIT							-254.75	
INTEREST ON OPERATING CAPITAL							32.24	
INTEREST ON EQUIPMENT INVESTMENT							12.09	
RETURN TO LAND AND RISK							-299.08	

TABLE 206. SMALL GRAINS (WINTER). BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD:	39.90 CWT		GROSS RETURNS: \$231.42			
HARVEST DATES: MAY 1 - MAY 15		PRICE:	\$5.80/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
-(DOLLARS)-								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		116.00 LB	20.88				20.88	
PHOSPHORUS (P)		92.00 LB	19.32				19.32	
SEED		110.00 LB	6.05				6.05	
INSECTICIDE (CUSTOM)		1.00 ACRE	5.00				5.00	
CANAL WATER		20.56 AC.IN.	9.46				9.46	
PUMP WATER		14.68 AC.IN.						
ISS		1.00 ACRE	5.80				5.80	
SUBTOTAL			66.51				66.51	
<u>PREHARVEST OPERATIONS</u>								
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86	
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
HARROW	40 HP	.17 HR		.43	.42	.33	1.18	
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64	
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17	
IRRIGATE (8X)		4.88 HR		9.76	4.45	2.49	16.70	
SUBTOTAL				16.13	14.78	13.70	44.61	
<u>HARVEST OPERATIONS</u>								
COMBINE (CUSTOM)			17.64				17.64	
HAUL (TRUCK), (CUSTOM)	2 TON		7.94				7.94	
SUBTOTAL			25.58				25.58	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		.63 HR		1.59			1.59	
EMPLOYEE BENEFITS				2.42			2.42	
FARM INSURANCE			12.11				12.11	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				17.10			17.10	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			.63 HR	27.11	21.11	5.00	53.22	
TOTAL OPERATING EXPENSES			8.05 HR	119.20	37.24	14.78	18.70	189.92
NET OPERATING PROFIT							41.50	
INTEREST ON OPERATING CAPITAL							6.16	
INTEREST ON EQUIPMENT INVESTMENT							10.42	
RETURN TO LAND AND RISK							24.92	

TABLE 207. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 36.75 CWT					
HARVEST DATES: JULY 1 - JULY 15		PRICE: .5.60/CWT		GROSS RETURNS: \$205.80			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	20.88				20.88
PHOSPHORUS (P)		40.00 LB	8.40				8.40
SEED		110.00 LB	19.80				19.80
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		23.00 AC. IN.	10.58				10.58
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			71.46				71.46
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD,	120 HP	.36 HR		.90	1.90	1.75	4.55
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (6X)		3.66 HR		7.32			7.32
SUBTOTAL			6.20 HR	13.69	10.33	11.21	35.23
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.96				15.96
HAUL (TRUCK) (CUSTOM,	2 TON		7.18				7.18
SUBTOTAL			23.14				23.14
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.63 HR		1.59			1.59
EMPLOYEE BENEFITS				2.05			2.05
FARM INSURANCE			12.09				12.09
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				14.73			14.73
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.63 HR	27.09	18.37	5.00	50.46
TOTAL OPERATING EXPENSES		6.83 HR	121.69	32.06	10.33	16.21	180.29
NET OPERATING PROFIT							25.51
INTEREST ON OPERATING CAPITAL							6.09
INTEREST ON EQUIPMENT INVESTMENT							7.91
RETURN TO LAND AND RISK							11.51

TABLE 208. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 14.67 TON		GROSS RETURNS: \$1100.25			
HARVEST DATES: SEPT. 1 - OCT. 30		PRICE: \$75.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		63.00 LB	11.34				11.34
PHOSPHORUS (P)		161.00 LB	33.81				33.81
TOMATO SEED		2.00 LB	30.00				30.00
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				25.00
CANAL WATER		26.39 AC. IN.	12.14				12.14
PUMP WATER		7.92 AC. IN.					
ISS		1.00 ACRE	5.80				5.80
SPRINKLER SYSTEM		1.00	25.00				25.00
SUBTOTAL			163.09				163.09
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
PLow (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
PRE-IRRIGATE (3X)		1.38 HR		2.76	2.40	1.34	6.50
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.12	8.89
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
HOEING (2X)		6.00 HR		15.00			15.00
IRRIGATE (10X)		4.00 HR		8.00			8.00
SUBTOTAL			16.68 HR	39.03	20.83	18.24	78.10
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			266.02				266.02
FORK LIFT (2X)		.74 HR		1.85	2.35	1.32	5.52
HAUL (TRUCK) (2X)	2 TON	3.68 HR		9.20	12.18	4.60	25.98
SUBTOTAL			4.42 HR	266.02	11.05	5.92	297.52
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.93 HR		9.83			9.83
EMPLOYEE BENEFITS				7.51			7.51
FARM INSURANCE			12.32				12.32
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				69.71			69.71
OTHER EXPENSES			15.00				15.00
SUBTOTAL			3.93 HR	27.32	87.06	5.00	119.38
TOTAL OPERATING EXPENSES			25.03 HR	456.43	137.14	35.36	658.09
NET OPERATING PROFIT							442.16
INTEREST ON OPERATING CAPITAL							16.13
INTEREST ON EQUIPMENT INVESTMENT							17.22
RETURN TO LAND AND RISK							408.81

TABLE 209. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND SPRINKLER)

PLANTING DATES:		YIELD: 1365.00 LB					
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.65/LB		GROSS RETURNS: \$887.25			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	26.10				26.10
PHOSPHORUS (P)		48.00 LB	10.08				10.08
ZINC SULFATE		12.00 LB	3.36				3.36
MANGANESE SULFATE		24.00 LB	4.80				4.80
HERBICIDE		2.00 LB	2.30				2.30
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				25.00
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		17.97 AC. IN.					
ESTABLISHMENT		1/12				208.43	208.43
ISS		1.00 ACRE	5.80				5.80
<u>SUBTOTAL</u>			91.24			208.43	299.67
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PRUNE (MACHINE)	60 HP	2.00 HR		5.00	9.40	11.56	25.96
HAUL (TRUCK)	2 TON	2.00 HR		5.00	6.62	2.50	14.12
BORDER	40 HP	.27 HR		.68	.71	.72	2.11
FERT SPREADER	60 HP	.20 HR		.50	.61	.71	1.82
DRILL HERBICIDE	80 HP	.24 HR		.60	.70	1.20	2.50
SPRAYER (MTD) (4X)	60 HP	2.00 HR		5.00	5.16	5.48	15.64
HOEING (2X)		4.00 HR		10.00			10.00
IRRIGATE (9X)		5.49 HR		10.98	5.45	3.05	19.48
<u>SUBTOTAL</u>				39.66	32.10	28.48	100.24
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		5.00	15.34	17.42	37.76
SWEEP	40 HP	2.00 HR		5.00	6.98	9.12	21.10
CLEAN & SACK		8.14 HR		16.28			16.28
HAND LABOR		15.75 HR		31.50			31.50
HAUL NUTS	60 HP	2.50 HR		6.25	5.55	4.60	16.40
<u>SUBTOTAL</u>				64.03	27.87	31.14	123.04
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.49 HR		11.23			11.23
EMPLOYEE BENEFITS				15.55			15.55
FARM INSURANCE			12.71				12.71
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				78.89			78.89
OTHER EXPENSES			15.00				15.00
<u>SUBTOTAL</u>				27.71	105.67	5.00	138.38
<u>TOTAL OPERATING EXPENSES</u>		51.84 HR	118.95	209.36	59.97	273.05	661.33
<u>NET OPERATING PROFIT</u>							225.92
<u>INTEREST ON OPERATING CAPITAL</u>							12.52
<u>INTEREST ON EQUIPMENT INVESTMENT</u>							40.79
<u>RETURN TO LAND AND RISK</u>							172.61

TABLE 210. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		90.00 LB	18.90				18.90
ALFALFA SEED		15.00 LB	26.25				26.25
CANAL WATER		11.00 AC.IN.	5.05				5.05
PUMP WATER		4.30 AC.IN.					
SUBTOTAL			50.21				50.21
<u>PREHARVEST OPERATIONS</u>							
PLOW (MOLDEBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (3X)		1.83 HR		3.66	1.30	.85	5.81
SUBTOTAL			3.68 HR	8.29	9.23	9.95	27.47
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.46 HR		1.16			1.16
EMPLOYEE BENEFITS				1.24			1.24
FARM INSURANCE			12.06				12.06
SUPERVISION AND MANAGEMENT				6.42			6.42
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.46 HR	27.06	8.82		35.88
TOTAL OPERATING EXPENSES			4.14 HR	77.27	17.11	9.95	113.56

TABLE 211. ALFALFA (LALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES:		YIELD: 6.30 TON					
HARVEST DATES: JUNE 1 - OCT 1		PRICE: 56.00/TON		GROSS RETURNS: \$352.80			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P)		92.00 LB	19.32				19.32
WIRE		12.60 LB	13.23				13.23
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		34.88 AC.IN.					
ESTABLISHMENT		1/5				29.20	29.20
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			52.15			29.20	81.35
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
IRRIGATE (11X)		6.71 HR		13.42	10.58	6.87	30.87
SUBTOTAL			6.83 HR	13.72	10.94	7.30	31.96
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.20 HR		5.50	5.57	5.90	16.97
BALER (AUX ENG) (5X)	80 HP	1.60 HR		4.00	9.33	9.02	22.35
HAUL (TRAILER) (5X)	60 HP	1.75 HR		4.38	4.03	3.80	12.21
SUBTOTAL			5.55 HR	13.88	18.93	18.72	51.53
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.42 HR		3.54			3.54
EMPLOYEE BENEFITS				4.14			4.14
FARM INSURANCE			12.19				12.19
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				26.23			26.23
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.42 HR	27.19	33.91	5.00	66.10
TOTAL OPERATING EXPENSES			13.80 HR	79.34	61.51	60.22	230.94
NET OPERATING PROFIT							121.86
INTEREST ON OPERATING CAPITAL							6.01
INTEREST ON EQUIPMENT INVESTMENT							19.59
RETURN TO LAND AND RISK							96.26

TABLE 212. CHILE, BUDGETED P/LR ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN:	6.09 TON	RED:	452.00 LB		
HARVEST DATES: JULY 10 - NOV 30		PRICE: GREEN:	140.00/TON	RED:	30.33/LB	GROSS RETURNS: 1001.76	
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
		NITROGEN (N)	140.00 LB	25.20			25.20
		PHOSPHORUS (P)	60.00 LB	12.60			12.60
		CHILE SEED	5.00 LB	60.00			60.00
		CANAL WATER	30.00 AC. IN.	13.80			13.80
		PUMP WATER	13.94 AC. IN.				
		INSECTICIDE (CUSTOM)	1.00 ACRE	16.00			16.00
		HERBICIDE	2.00 LB	24.00			24.00
		ISS	1.00 ACRE	5.80			5.80
		<u>SUBTOTAL</u>		157.40			157.40
<u>PREHARVEST OPERATIONS</u>							
	40 HP	SHREDDER	.26 HR	.65	.68	.53	1.86
	120 HP	CHISEL	.43 HR	1.08	1.87	1.86	4.81
	120 HP	DISC (2X)	.76 HR	1.90	3.45	3.26	8.61
	120 HP	PLOW (MOLDBOARD)	.36 HR	.90	1.90	1.75	4.55
	80 HP	LAND PLANE	.34 HR	.85	1.03	1.36	3.24
	60 HP	FERT SPREADER (3X)	.36 HR	.90	1.09	1.28	3.27
	80 HP	LISTER	.53 HR	1.33	1.67	1.88	4.88
		PRE-IRRIGATE	.70 HR	1.40	1.02	.67	3.09
	40 HP	VEGETABLE PLANTER	.40 HR	1.00	1.42	1.50	3.92
	40 HP	CULTIVATOR (3X)	.96 HR	2.40	2.68	1.59	6.67
	40 HP	CULT & SIDEDRESS	.59 HR	1.48	1.72	1.14	4.34
		THINNING	10.60 HR	26.50			26.50
		HOEING (2X)	16.00 HR	40.00			40.00
		IRRIGATE (12X)	5.16 HR	10.32	3.20	2.08	15.60
		<u>SUBTOTAL</u>	37.45 HR	90.71	21.73	18.90	131.34
<u>HARVEST OPERATIONS</u>							
		HARVEST (CUSTOM)		216.63			216.63
	40 HP	HAUL (TRAILER) (3X)	2.61 HR	6.53	6.66	4.78	17.97
		FORK LIFT (3X)	1.05 HR	2.63	3.34	2.01	7.98
	2 TON	HAUL (TRUCK) (3X)	5.28 HR	13.20	17.48	6.81	37.49
		<u>SUBTOTAL</u>	8.94 HR	216.63	22.36	13.60	280.07
<u>OVERHEAD EXPENSES</u>							
		DOWNTIME	10.13 HR	25.33			25.33
		EMPLOYEE BENEFITS		16.96			16.96
		FARM INSURANCE		12.70			12.70
		LAND TAXES				5.00	5.00
		SUPERVISION AND MANAGEMENT		117.90			117.90
		OTHER EXPENSES		15.00			15.00
		<u>SUBTOTAL</u>	10.13 HR	27.70	160.19	5.00	192.89
<u>TOTAL OPERATING EXPENSES</u>			56.52 HR	401.73	273.26	49.21	761.70
<u>NET OPERATING PROFIT</u>							240.06
INTEREST ON OPERATING CAPITAL							20.18
INTEREST ON EQUIPMENT INVESTMENT							23.61
<u>RETURN TO LAND AND RISK</u>							196.27

TABLE 213. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.33 TON					
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: 13.50/TON		GROSS RETURNS: 233.96			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
PHOSPHORUS (P)		60.00 LB	12.60				12.60
HERBICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
INSECTICIDE (CUSTOM)		1.00 ACRE	9.00				9.00
CORN SEED		17.00 LB	14.62				14.62
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		8.78 AC. IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			76.22				76.22
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.31	.85	3.56
CORN PLANTER	40 HP	.33 HR		.83	1.14	5.75	7.72
CULTIVATOR	40 HP	.32 HR		.80	.89	.53	2.22
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
IRRIGATE (8X)		4.40 HR		8.80	1.36	.88	11.04
SUBTOTAL			8.28 HR	18.17	14.26	17.22	49.65
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			21.65				21.65
HAUL (TRUCK, (CUSTOM, 2 TON			15.75				15.75
SUBTOTAL			37.40				37.40
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.79 HR		1.99			1.99
EMPLOYEE BENEFITS				2.73			2.73
FARM INSURANCE			12.12				12.12
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				17.72			17.72
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.79 HR	27.12	22.44	5.00	54.56
TOTAL OPERATING EXPENSES		9.07 HR	140.74	40.61	14.26	22.22	217.83
NET OPERATING PROFIT							16.13
INTEREST ON OPERATING CAPITAL							6.78
INTEREST ON EQUIPMENT INVESTMENT							12.35
RETURN TO LAND AND RISK							-3.00

TABLE 214. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT:	756.00 LB	SEED: 1260.00 LB			
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT:	0.71/LB	SEED: .05/LB	GROSS RETURNS: \$599.76		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	18.00				18.00
PHOSPHORUS (P)		40.00 LB	8.40				8.40
COTTON SEED		25.00 LB	7.00				7.00
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00
CROP INSURANCE		1.00 DOLLARS	20.00				20.00
CANAL WATER		29.88 AC.IN.	13.74				13.74
PUMP WATER		7.66 AC.IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	9.50				9.50
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			95.44				95.44
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	90 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.63	1.06	4.09
COTTON PLANTER	40 HP	.33 HR		.83	1.14	1.22	3.19
SLED	40 HP	.25 HR		.63	.60	.41	1.64
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.12	8.89
CULT e SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
IRRIGATE (6X)		3.30 HR		6.60	.70	.45	7.75
HOEING		3.09 HR		7.73			7.73
SUBTOTAL			12.34 HR	28.88	20.32	17.47	66.67
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.14 HR		5.35	10.87	13.38	29.60
COTTON TRAILER (2X)	0.5 TON	2.00 HR		5.00	7.62	3.70	16.32
GIN COTTON (CUSTOM)			50.40				50.40
SUBTOTAL			4.14 HR	50.40	10.35	17.08	96.32
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.12 HR		7.80			7.80
EMPLOYEE BENEFITS				5.88			5.88
FARM INSURANCE			12.25				12.25
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				39.21			39.21
OTHER EXPENSES			15.00				15.00
SUBTOTAL			3.12 HR	27.25	52.89	5.00	85.14
TOTAL OPERATING EXPENSES			19.60 HR	173.09	92.12	38.81	343.57
NET OPERATING PROFIT							256.19
INTEREST ON OPERATING CAPITAL							9.71
INTEREST ON EQUIPMENT INVESTMENT							23.15
RETURN TO LAND AND RISK							223.33

TABLE 215. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 47.25 CWT		GROSS RETURNS: \$214.99			
HARVEST DATES: SEP. 1 - OCT. 30		PRICE: \$4.55/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
GRAIN SORGHUM SEED		8.00 LB	1.68				1.68
HERBICIDE		2.00 LB	6.30				6.30
CANAL WATER		30.00 AC. IN.	13.80				13.80
PUMP WATER		3.94 AC. IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			41.98				41.98
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD, FLOAT)	120 HP	.36 HR		.90	1.90	1.75	4.55
FEET SPREADER	60 HP	.17 HR		.43	.46	.75	1.64
LISTER	80 HP	.12 HR		.30	.36	.43	1.09
PRE-IRRIGATE		.70 HR		1.33	1.67	1.88	4.88
HARROW	40 HP	.17 HR		1.40	1.19	.78	3.37
CORN PLANTER	40 HP	.33 HR		.43	.42	.33	1.18
CULT & SIDEDRESS	40 HP	.33 HR		.83	1.14	5.75	7.72
CULTIVATOR	40 HP	.59 HR		1.48	1.72	1.14	4.34
IRRIGATE (GX)		3.30 HR		.80	.89	.53	2.22
SUBTOTAL			8.04 HR	18.13	15.75	18.99	52.87
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			18.90				18.90
HAUL (TRUCK, (CUSTOM)	2 TON		8.50				8.50
SUBTOTAL			27.40				27.40
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.01 HR		2.53			2.53
EMPLOYEE BENEFITS				2.72			2.72
FARM INSURANCE			12.12				12.12
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				16.17			16.17
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.01 HR	27.12	21.42	5.00	53.54
TOTAL OPERATING EXPENSES			9.05 HR	96.50	39.55	15.75	175.79
NET OPERATING PROFIT							39.20
INTEREST ON OPERATING CAPITAL							5.15
INTEREST ON EQUIPMENT INVESTMENT							13.03
RETURN TO LAND AND RISK							21.02

TABLE 216. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES:		YIELD:		GROSS RETURNS:			
HARVEST DATES: MAY 1 - OCT. 30		7.14 CWT BEEF		1142.80			
		PRICE: .20.00/CWT BEEF					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	21.60				21.60
PHOSPHORUS (P), ESTABLISHMENT		46.00 LB 1/10	9.66			11.27	11.27
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		30.54 AC.IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			50.86			11.27	62.13
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
FERT SPREADER (2X)	60 HP	.40 HR		1.00	1.22	1.42	3.64
IRRIGATE (10X)		6.10 HR		12.20	9.26	6.01	27.47
SUBTOTAL			6.76 HR	13.85	11.16	7.96	32.97
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.16 HR		.41			.41
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			12.10				12.10
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				12.93			12.93
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.16 HR	27.10	15.41	5.00	47.51
TOTAL OPERATING EXPENSES		6.92 HR	77.96	29.26	11.16	24.23	142.61
NET OPERATING PROFIT							0.19
INTEREST ON OPERATING CAPITAL							4.88
INTEREST ON EQUIPMENT INVESTMENT							7.28
RETURN TO LAND AND RISK							-11.97

TABLE 217. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICALE)

PLANTING DATES: JAN. 15 - FEB. 1		YIELD: 430.00 CTN					
HARVEST DATES: MAY 1 - MAY 31		PRICE: \$2.52/CTN		GROSS RETURNS: \$1083.60			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		225.00 LB	40.50				40.50
PHOSPHORUS (P)		80.00 LB	16.80				16.80
LETTUCE SEED		2.00 LB	46.00				46.00
CANAL WATER		8.04 AC. IN.	3.70				3.70
PUMP WATER		18.10 AC. IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
INSECTICIDE (CUSTOM)		1.00 ACRE	90.00				90.00
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			222.80				222.80
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDOBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	.72	.47	2.59
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
THIN & HOE (CUSTOM)			90.00				90.00
IRRIGATE (10X)		3.50 HR		7.00	4.77	3.09	14.86
SUBTOTAL			90.00	20.87	23.03	19.93	153.83
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			838.50				838.50
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				3.13			3.13
FARM INSURANCE			12.14				12.14
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				80.79			80.79
OTHER EXPENSES			15.00				15.00
SUBTOTAL			27.14	87.03		5.00	119.17
TOTAL OPERATING EXPENSES			10.42 HR	1178.44	107.90	24.93	1334.30
NET OPERATING PROFIT							-250.70
INTEREST ON OPERATING CAPITAL							24.58
INTEREST ON EQUIPMENT INVESTMENT							14.60
RETURN TO LAND AND RISK							-289.88

TABLE 218. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 580.00 CTN					
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: .6.39/CTN		GROSS RETURNS: \$3706.20			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	41.40				41.40
PHOSPHORUS (P)		80.00 LB	16.80				16.80
LETTUCE SEED		2.00 LB	46.00				46.00
CANAL WATER		12.00 AC. IN.	5.52				5.52
PUMP WATER		13.34 AC. IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	22.50				22.50
INSECTICIDE (CUSTOM)		1.00 ACRE	120.00				120.00
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			258.02				258.02
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDEBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
PERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	.86	.56	2.82
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
THIN & HOE (CUSTOM)			90.00				90.00
IRRIGATE (8X)		2.80 HR		5.60	3.19	2.07	10.86
SUBTOTAL			90.00	19.47	21.59	19.00	150.06
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			1131.00				1131.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				2.92			2.92
FARM INSURANCE			12.13				12.13
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				95.17			95.17
OTHER EXPENSES			15.00				15.00
SUBTOTAL			27.13	101.20		5.00	133.33
TOTAL OPERATING EXPENSES		9.72 HR	1506.15	120.67	21.59	24.00	1672.41
NET OPERATING PROFIT							2033.79
INTEREST ON OPERATING CAPITAL							28.93
INTEREST ON EQUIPMENT INVESTMENT							13.71
RETURN TO LAND AND RISK							1991.15

TABLE 219. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 20.00 TON		GROSS RETURNS: \$2600.00				
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$130.00/TON						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	36.00				36.00	
PHOSPHORUS (P)		70.00 LB	14.70				14.70	
ONION SEED		4.00 LB	60.00				60.00	
CANAL WATER		12.00 AC. IN.	5.52				5.52	
PUMP WATER		23.10 AC. IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00	
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50	
ISS		1.00 ACRE	5.80				5.80	
SUBTOTAL			154.52				154.52	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27	
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88	
PKE-IRRIGATE		.70 HR		1.40	.71	.46	2.57	
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67	
THIN & HOE (CUSTOM)			120.00				120.00	
IRRIGATE (14X)		4.90 HR		9.80	6.29	4.09	20.18	
SUBTOTAL			10.58 HR	120.00	23.67	24.54	20.92	189.13
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM) ONIONS			960.00				960.00	
PACK ONIONS (CUSTOM)			960.00				960.00	
SUBTOTAL			1920.00				1920.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				3.55			3.55	
FARM INSURANCE			12.16				12.16	
LAND TAXES					5.00		5.00	
SUPERVISION AND MANAGEMENT				136.86			136.86	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			1.24 HR	27.16	143.52	5.00	175.68	
TOTAL OPERATING EXPENSES			11.82 HR	2221.68	167.19	24.54	2439.33	
NET OPERATING PROFIT							160.67	
INTEREST ON OPERATING CAPITAL							32.93	
INTEREST ON EQUIPMENT INVESTMENT							15.58	
RETURN TO LAND AND RISK							112.16	

TABLE 220. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 16.75 TON		GROSS RETURNS: 1876.00				
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: \$112.00/TON						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
-(DOLLARS)-								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	36.00				36.00	
PHOSPHORUS (P)		70.00 LB	14.70				14.70	
ONION SEED		4.00 LB	60.00				60.00	
CANAL WATER		30.00 AC. IN.	13.80				13.80	
PUMP WATER		6.82 AC. IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00	
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50	
ISS		1.00 ACRE	5.80				5.80	
SUBTOTAL			167.80				167.80	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDEBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27	
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88	
PRE-IRRIGATE		.70 HR		1.40	.74	.48	2.62	
BED SHAPEK	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67	
THIN & HOE (CUSTOM)			120.00				120.00	
IRRIGATE (14X)		4.90 HR		9.80	1.33	.86	11.99	
SUBTOTAL			120.00	23.67	19.61	17.71	180.99	
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM) ONIONS			804.00				804.00	
PACK ONIONS (CUSTOM)			804.00				804.00	
SUBTOTAL			1608.00				1608.00	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				3.55			3.55	
FARM INSURANCE			12.16				12.16	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				121.52			121.52	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			27.16	128.18		5.00	160.34	
TOTAL OPERATING EXPENSES			11.82 HR	1922.96	151.85	19.61	22.71	2117.13
NET OPERATING PROFIT							-241.13	
INTEREST ON OPERATING CAPITAL							30.39	
INTEREST ON EQUIPMENT INVESTMENT							12.37	
RETURN TO LAND AND RISK							-283.89	

TABLE 221. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD: 39.90 CWT		GROSS RETURNS: 5231.42			
HARVEST DATES: MAY 1 - MAY 15		PRICE: 5.80/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
		116.00 LB	20.88				20.88
NITROGEN (N)		92.00 LB	19.32				19.32
PHOSPHORUS (P)		110.00 LB	6.05				6.05
SEED		1.00 ACRE	5.00				5.00
INSECTICIDE (CUSTOM)		20.56 AC. IN.	9.46				9.46
CANAL WATER		14.68 AC. IN.					
PUMP WATER		1.00 ACRE	5.80				5.80
ISS							
SUBTOTAL			66.51				66.51
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (8X)		4.88 HR		9.76	4.45	2.89	17.10
SUBTOTAL			7.42 HR	16.13	14.78	14.10	45.01
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			17.64				17.64
HAUL (TRUCK) (CUSTOM)	2 TON		7.94				7.94
SUBTOTAL			25.58				25.58
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.63 HR		1.58			1.58
EMPLOYEE BENEFITS				2.42			2.42
FARM INSURANCE			12.11				12.11
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				17.10			17.10
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.63 HR	27.11	21.11	5.00	53.22
TOTAL OPERATING EXPENSES		8.05 HR	119.20	37.24	14.78	19.10	190.32
NET OPERATING PROFIT							41.10
INTEREST ON OPERATING CAPITAL							6.16
INTEREST ON EQUIPMENT INVESTMENT							10.83
RETURN TO LAND AND RISK							24.11

TABLE 222. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD:	36.75 CWT		GROSS RETURNS: \$205.80		
HARVEST DATES: JULY 1 - JULY 15		PRICE:	\$5.60/CWT				
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	20.88				20.88
PHOSPHORUS (P)		40.00 LB	8.40				8.40
SEED		110.00 LB	19.80				19.80
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		23.00 AC. IN.	10.58				10.58
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			71.46				71.46
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (6X)		3.66 HR		7.32			7.32
SUBTOTAL			6.20 HR	13.69	10.33	11.21	35.23
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.96				15.96
HAUL (TRUCK) (CUSTOM)	2 TON		7.18				7.18
SUBTOTAL			23.14				23.14
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.63 HR		1.59			1.59
EMPLOYEE BENEFITS				2.05			2.05
FARM INSURANCE			12.09				12.09
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				14.73			14.73
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.63 HR	27.09	18.37	5.00	50.46
TOTAL OPERATING EXPENSES			6.83 HR	121.69	32.06	16.21	180.29
NET OPERATING PROFIT							25.51
INTEREST ON OPERATING CAPITAL							6.09
INTEREST ON EQUIPMENT INVESTMENT							7.91
RETURN TO LAND AND RISK							11.51

TABLE 223. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 13.97 TON		GROSS RETURNS: \$1047.75			
HARVEST DATES: SEPT. 1 - OCT. 30		PRICE: 75.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL

PURCHASED INPUTS							

(DOLLARS)							

NITROGEN (N)		63.00 LB	11.34				11.34
PHOSPHORUS (P)		161.00 LB	33.81				33.81
TOMATO SEED		2.00 LB	30.00				30.00
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				20.00
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				25.00
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		10.37 AC.IN.					
ISS		1.00 ACRE	5.80				5.80
			-----				-----
SUBTOTAL			139.75				139.75

PREHARVEST OPERATIONS							

DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
PLow (MOLDBOARD,	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTEK	80 HP	.53 HR		1.33	1.67	1.88	4.88
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
PRE-IRRIGATE		.70 HR		1.40	1.02	.66	3.08
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.12	8.89
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
HOEING (2X)		6.00 HR		15.00			15.00
IRRIGATE (11X)		4.40 HR		8.80	2.13	1.38	12.31
			-----	-----	-----	-----	-----
SUBTOTAL		16.40 HR		38.47	21.58	18.94	78.99

HARVEST OPERATIONS							

HARVEST (CUSTOM)			253.35				253.35
FORK LIFT (2X)		.70 HR		1.75	2.23	1.34	5.32
HAUL (TRUCK) (2X),	2 TON	3.50 HR		8.75	11.59	4.52	24.86
			-----	-----	-----	-----	-----
SUBTOTAL		4.20 HR	253.35	10.50	13.82	5.86	283.53

OVERHEAD EXPENSES							

DOWNTIME		3.87 HR		9.69			9.69
EMPLOYEE BENEFITS				7.35			7.35
FARM INSURANCE			12.31				12.31
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				66.76			66.76
OTHER EXPENSES			15.00				15.00
			-----	-----	-----	-----	-----
SUBTOTAL		3.87 HR	27.31	83.80		5.00	116.11

TOTAL OPERATING EXPENSES		24.47 HR	420.41	132.77	35.40	29.80	618.38

NET OPERATING PROFIT							429.37

INTEREST ON OPERATING CAPITAL							14.83
INTEREST ON EQUIPMENT INVESTMENT							17.86

RETURN TO LAND AND RISK							396.68

TABLE 224. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS AND TRICKLE)

PLANTING DATES:		YIELD: 1365.00 LB		GROSS RETURNS: \$887.25			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.65/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	26.10				26.10
PHOSPHORUS (P)		48.00 LB	10.08				10.08
ZINC SULFATE		12.00 LB	3.36				3.36
MANGANESE SULFATE		24.00 LB	4.80				4.80
HERBICIDE		2.00 LB	2.30				2.30
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				25.00
CANAL WATER		AC. IN.					
PUMP WATER		30.70 AC. IN.					
ESTABLISHMENT		1/12				208.43	208.43
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			77.44			208.43	285.87
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PRUNE (MACHINE)	60 HP	2.00 HR		5.00	9.40	11.56	25.96
HAUL (TRUCK)	2 TON	2.00 HR		5.00	6.62	2.58	14.20
BORDEK	40 HP	.27 HR		.68	.71	.72	2.11
FERT SPREADER	60 HP	.20 HR		.50	.61	.71	1.82
DRILL HERBICIDE	80 HP	.24 HR		.60	.70	1.20	2.50
SPRAYER (MTD) (4X)	60 HP	2.00 HR		5.00	5.16	5.48	15.64
HOEING (2X)		4.00 HR		10.00			10.00
IRRIGATE		2.12 HR		4.24	15.56	35.57	55.37
SUBTOTAL			13.59 HR	32.92	42.21	61.08	136.21
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		5.00	15.34	17.42	37.76
SWEEP	40 HP	2.00 HR		5.00	6.98	9.12	21.10
CLEAN & SACK		8.14 HR		16.28			16.28
HAND LABOR		15.75 HR		31.50			31.50
HAUL NUTS	60 HP	2.50 HR		6.25	5.55	4.60	16.40
SUBTOTAL			30.39 HR	64.03	27.87	31.14	123.04
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.49 HR		11.23			11.23
EMPLOYEE BENEFITS				14.54			14.54
FARM INSURANCE			12.66				12.66
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				127.79			127.79
OTHER EXPENSES			15.00				15.00
SUBTOTAL			4.49 HR	27.66	153.56	5.00	186.22
TOTAL OPERATING EXPENSES			48.47 HR	105.10	250.51	70.08	305.65
							155.91
<u>NET OPERATING PROFIT</u>							
INTEREST ON OPERATING CAPITAL							14.38
INTEREST ON EQUIPMENT INVESTMENT							50.56
RETURN TO LAND AND RISK							90.97

TABLE 225. ALFALFA ESTABLISHMENT, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: AUG. 1 - SEPT. 15		YIELD:					
HARVEST DATES:		PRICE:					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- -(DOLLARS)----- -----							
<u>PURCHASED INPUTS</u>							
PHOSPHORUS (P ₁)		90.00 LB	18.90				18.90
ALFALFA SEED		15.00 LB	26.25				26.25
CANAL WATER		11.00 AC. IN.	5.06				5.06
PUMP WATER		4.30 AC. IN.					
SUBTOTAL			50.21				50.21
<u>PREHARVEST OPERATIONS</u>							
PLow (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (3X)		1.83 HR		3.66	1.30	.89	5.85
SUBTOTAL			3.68 HR	8.29	9.23	9.99	27.51
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.46 HR		1.16			1.16
EMPLOYEE BENEFITS				1.24			1.24
FARM INSURANCE			12.06				12.06
SUPERVISION AND MANAGEMENT				6.42			6.42
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.46 HR	27.06	8.82		35.88
TOTAL OPERATING EXPENSES			4.14 HR	77.27	17.11	9.99	113.60

TABLE 226. ALFALFA (BALED), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES:		YIELD: 6.30 TON		GROSS RETURNS: \$352.80			
HARVEST DATES: JUNE 1 - OCT 1		PRICE: \$56.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
		92.00 LB	19.32				19.32
PHOSPHORUS (P)							
WIRE		12.60 LB	13.23				13.23
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		34.88 AC.IN.					
ESTABLISHMENT		1/5				29.21	29.21
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			52.15			29.21	81.36
<u>PREHARVEST OPERATIONS</u>							
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
IRRIGATE (11X)		6.71 HR		13.42	10.58	7.18	31.18
SUBTOTAL			6.83 HR	13.72	10.94	7.61	32.27
<u>HARVEST OPERATIONS</u>							
SWATHER (5X)	14 FT	2.20 HR		5.50	5.57	5.90	16.97
BALER (AUX ENG) (5X)	80 HP	1.60 HR		4.00	9.33	9.02	22.35
HAUL (TRAILER) (5X)	60 HP	1.75 HR		4.38	4.03	3.78	12.19
SUBTOTAL			5.55 HR	13.88	18.93	18.70	51.51
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.42 HR		3.54			3.54
EMPLOYEE BENEFITS				4.14			4.14
FARM INSURANCE			12.19				12.19
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				26.23			26.23
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.42 HR	27.19	33.91	5.00	66.10
TOTAL OPERATING EXPENSES		13.80 HR	79.34	61.51	29.87	60.52	231.24
NET OPERATING PROFIT							121.56
INTEREST ON OPERATING CAPITAL							6.01
INTEREST ON EQUIPMENT INVESTMENT							19.86
RETURN TO LAND AND RISK							95.69

TABLE 227. CHILE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: MARCH 15 - APRIL 10		YIELD: GREEN:	6.39 TON	RED:	475.00 LB	GROSS RETURNS: \$1051.35	
HARVEST DATES: JULY 10 - NOV 30		PRICE: GREEN:	\$140.00/TON	RED:	\$0.33/LB		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		140.00 LB	25.20				25.20
PHOSPHORUS (P)		60.00 LB	12.60				12.60
CHILE SEED		5.00 LB	60.00				60.00
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		10.42 AC.IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE		2.00 LB	24.00				24.00
ISS		1.00 ACRE	5.80				5.80
SPRINKLER SYSTEM		1.00	25.00				25.00
SUBTOTAL			181.40				181.40
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.35	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE (2X)		.92 HR		1.84	1.89	1.28	5.01
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
THINNING		10.60 HR		26.50			26.50
HOEING (2X)		16.00 HR		40.00			40.00
IRRIGATE (11X)		4.73 HR		9.46	1.27	.86	11.59
SUBTOTAL			37.24 HR	90.29	20.67	18.29	129.25
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			227.46				227.46
HAUL (TRAILER) (3X)	40 HP	2.73 HR		6.83	6.96	4.97	18.76
FORK LIFT (3X)		1.11 HR		2.78	3.53	1.99	8.30
HAUL (TRUCK) (3X)	2 TON	5.55 HR		13.88	18.37	6.94	39.19
SUBTOTAL			9.39 HR	23.49	28.86	13.90	293.71
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		10.24 HR		25.61			25.61
EMPLOYEE BENEFITS				17.07			17.07
FARM INSURANCE			12.70				12.70
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				119.95			119.95
OTHER EXPENSES			15.00				15.00
SUBTOTAL			10.24 HR	27.70	162.63	5.00	195.33
TOTAL OPERATING EXPENSES			56.87 HR	436.56	276.41	49.53	799.69
NET OPERATING PROFIT							251.66
INTEREST ON OPERATING CAPITAL							21.44
INTEREST ON EQUIPMENT INVESTMENT							23.24
RETURN TO LAND AND RISK							206.98

TABLE 228. CORN SILAGE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: MAY 1 - MAY 15		YIELD: 17.33 TON	GROSS RETURNS: \$233.96				
HARVEST DATES: SEPT. 1 - SEPT. 15		PRICE: 13.50/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
PHOSPHORUS (P)		60.00 LB	12.60				12.60
HERBICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
INSECTICIDE (CUSTOM)		1.00 ACRE	9.00				9.00
CORN SEED		17.00 LB	14.62				14.62
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		8.78 AC.IN.					5.80
ISS		1.00 ACRE	5.80				
SUBTOTAL			76.22				76.22
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.31	.89	3.60
CORN PLANTER	40 HP	.33 HR		.83	1.14	5.75	7.72
CULTIVATOR	40 HP	.32 HR		.80	.89	.53	2.22
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
IRRIGATE (8X)		4.40 HR		8.80	1.36	.92	11.08
SUBTOTAL			8.28 HR	18.17	14.26	17.30	49.73
<u>HARVEST OPERATIONS</u>							
FORAGE CHOPPER (CUSTOM)			21.65				21.65
HAUL (TRUCK) (CUSTOM)	2 TON		15.75				15.75
SUBTOTAL				37.40			37.40
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.79 HR		1.99			1.99
EMPLOYEE BENEFITS				2.73			2.73
FARM INSURANCE			12.12			5.00	12.12
LAND TAXES				17.72			17.72
SUPERVISION AND MANAGEMENT			15.00				15.00
OTHER EXPENSES							54.56
SUBTOTAL			.79 HR	27.12	22.44	5.00	54.56
TOTAL OPERATING EXPENSES			9.07 HR	140.74	40.61	14.26	217.91
NET OPERATING PROFIT							16.05
INTEREST ON OPERATING CAPITAL							6.78
INTEREST ON EQUIPMENT INVESTMENT							12.42
RETURN TO LAND AND RISK							-3.15

TABLE 229. COTTON, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: APRIL 15 - APRIL 30		YIELD: LINT:	756.00 LB	SEED:	1260.00 LB	GROSS RETURNS: \$599.76	
HARVEST DATES: NOV. 15 - NOV. 30		PRICE: LINT:	0.71/LB	SEED:	50.05/LB		
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		100.00 LB	18.00				18.00
PHOSPHORUS (P)		40.00 LB	8.40				8.40
COTTON SEED		25.00 LB	7.00				7.00
HERBICIDE (CUSTOM)		1.00 ACRE	13.00				13.00
CROP INSURANCE		1.00 DOLLARS	20.00				20.00
CANAL WATER		29.88 AC. IN.	13.74				13.74
PUMP WATER		7.66 AC. IN.					9.50
INSECTICIDE (CUSTOM)		1.00 ACRE	9.50				5.80
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			95.44				95.44
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.63	1.10	4.13
COTTON PLANTER	40 HP	.33 HR		.83	1.14	1.22	3.19
SLED	40 HP	.25 HR		.63	.60	.41	1.64
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.12	8.89
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
IRRIGATE (6X)		3.30 HR		6.60	.70	.47	7.77
HOEING		3.09 HR		7.73			7.73
SUBTOTAL			12.34 HR	28.88	20.32	17.53	66.73
<u>HARVEST OPERATIONS</u>							
COTTON PICKER (2X)	2-ROW	2.14 HR		5.35	10.87	13.38	29.60
COTTON TRAILER (2X)	0.5 TON	2.00 HR		5.00	7.62	3.70	16.32
GIN COTTON (CUSTOM)			50.40				50.40
SUBTOTAL			4.14 HR	50.40	10.35	18.49	96.32
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		3.12 HR		7.80			7.80
EMPLOYEE BENEFITS				5.88			5.88
FARM INSURANCE			12.25				12.25
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				39.21			39.21
OTHER EXPENSES			15.00				15.00
SUBTOTAL			3.12 HR	27.25	52.89	5.00	85.14
TOTAL OPERATING EXPENSES			19.60 HR	173.09	92.12	38.81	343.63
NET OPERATING PROFIT							256.13
INTEREST ON OPERATING CAPITAL							9.71
INTEREST ON EQUIPMENT INVESTMENT							23.21
RETURN TO LAND AND RISK							223.21

TABLE 230. GRAIN SORGHUM, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: MAY 1 - JUNE 30		YIELD: 47.25 CWT		GROSS RETURNS: \$214.99			
HARVEST DATES: SEP. 1 - OCT. 30		PRICE: \$4.55/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		80.00 LB	14.40				14.40
GRAIN SORGHUM SEED		8.00 LB	1.68				1.68
HERBICIDE		2.00 LB	6.30				6.30
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		3.94 AC.IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			41.98				41.98
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE		.70 HR		1.40	1.19	.81	3.40
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
CORN PLANTER	40 HP	.33 HR		.83	1.14	5.75	7.72
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR	40 HP	.32 HR		.80	.89	.53	2.22
IRRIGATE (6X)		3.30 HR		6.60			6.60
SUBTOTAL			8.04 HR	18.13	15.75	19.02	52.90
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			18.90				18.90
HAUL (TRUCK) (CUSTOM)	2 TON		8.50				8.50
SUBTOTAL			27.40				27.40
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.01 HR		2.53			2.53
EMPLOYEE BENEFITS				2.72			2.72
FARM INSURANCE			12.12			5.00	12.12
LAND TAXES							5.00
SUPERVISION AND MANAGEMENT				16.17			16.17
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.01 HR	27.12	21.42	5.00	53.54
TOTAL OPERATING EXPENSES			9.05 HR	96.50	39.55	24.02	175.82
NET OPERATING PROFIT							39.17
INTEREST ON OPERATING CAPITAL							5.15
INTEREST ON EQUIPMENT INVESTMENT							13.06
RETURN TO LAND AND RISK							20.96

TABLE 231. IRRIGATED PASTURE, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES:		YIELD:		7.14 CWT BEEF		GROSS RETURNS: \$142.80	
HARVEST DATES: MAY 1 - OCT. 30		PRICE:		20.00/CWT BEEF			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		120.00 LB	21.60				21.60
PHOSPHORUS (P)		46.00 LB	9.66				9.66
ESTABLISHMENT		1/10				11.27	11.27
CANAL WATER		30.00 AC.IN.	13.80				13.80
PUMP WATER		30.50 AC.IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			50.86			11.27	62.13
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
FERT SPREADER (2X)	60 HP	.40 HR		1.00	1.22	1.42	3.64
IRRIGATE (10X)		6.10 HR		12.20	9.26	6.29	27.75
SUBTOTAL			6.76 HR	13.85	11.16	8.24	33.25
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.16 HR		.41			.41
EMPLOYEE BENEFITS				2.08			2.08
FARM INSURANCE			12.10				12.10
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				12.93			12.93
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.16 HR	27.10	15.41	5.00	47.51
TOTAL OPERATING EXPENSES		6.92 HR	77.96	29.26	11.16	24.51	142.89
NET OPERATING PROFIT							-0.09
INTEREST ON OPERATING CAPITAL							4.88
INTEREST ON EQUIPMENT INVESTMENT							7.53
RETURN TO LAND AND RISK							-12.50

TABLE 232. LETTUCE (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: JAN. 15 - FEB. 1		YIELD: 452.00 CTN	GROSS RETURNS: \$1139.04					
HARVEST DATES: MAY 1 - MAY 31		PRICE: 2.52/CTN						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
-(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		225.00 LB	40.50				40.50	
PHOSPHORUS (P)		80.00 LB	16.80				16.80	
LETTUCE SEED		2.00 LB	46.00				46.00	
CANAL WATER		8.04 AC. IN.	3.70				3.70	
PUMP WATER		14.18 AC. IN.						
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				20.00	
INSECTICIDE (CUSTOM)		1.00 ACRE	90.00				90.00	
ISS		1.00 ACRE	5.80				5.80	
SPRINKLER SYSTEM		1.00	25.00				25.00	
SUBTOTAL			247.80				247.80	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27	
LLISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88	
PRE-IRRIGATE (3X)		1.38 HR		2.76	1.56	1.06	5.38	
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67	
THIN & HOE (CUSTOM)			90.00				90.00	
IRRIGATE (10X)		3.50 HR		7.00	2.74	1.86	11.60	
SUBTOTAL			90.00	22.23	21.84	19.29	153.36	
<u>HARVEST OPERATIONS</u>								
HARVEST (CUSTOM)			880.43				880.43	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				3.33			3.33	
FARM INSURANCE			12.15			5.00	12.15	
LAND TAXES							5.00	
SUPERVISION AND MANAGEMENT			15.00	85.89			85.89	
OTHER EXPENSES							15.00	
SUBTOTAL			27.15	92.34		5.00	124.49	
TOTAL OPERATING EXPENSES			11.10 HR	1245.38	114.57	21.84	24.29	1406.08
NET OPERATING PROFIT							-267.04	
INTEREST ON OPERATING CAPITAL							26.26	
INTEREST ON EQUIPMENT INVESTMENT							13.95	
RETURN TO LAND AND RISK							-307.25	

TABLE 233. LETTUCE (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: AUG. 1 - AUG. 15		YIELD: 609.00 CTN		GROSS RETURNS: 73891.51			
HARVEST DATES: OCT. 10 - NOV. 15		PRICE: 46.39/CTN					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		230.00 LB	41.40				41.40
PHOSPHORUS (P)		80.00 LB	16.80				16.80
LETTUCE SEED		2.00 LB	46.00				46.00
CANAL WATER		12.00 AC. IN.	5.52				5.52
PUMP WATER		9.54 AC. IN.					
HERBICIDE (CUSTOM)		1.00 ACRE	22.50				22.50
INSECTICIDE (CUSTOM)		1.00 ACRE	120.00				120.00
ISS		1.00 ACRE	5.80				5.80
SPRINKLER SYSTEM		1.00	25.00				25.00
SUBTOTAL			283.02				283.02
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE (3X)		1.38 HR		2.76	1.78	1.21	5.75
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
THIN & HOE (CUSTOM)			90.00				90.00
IRRIGATE (8X)		2.80 HR		5.60	1.11	.75	7.46
SUBTOTAL			90.00	20.83	20.43	18.33	149.59
<u>HARVEST OPERATIONS</u>							
HARVEST (CUSTOM)			1187.55				1187.55
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				3.12			3.12
FARM INSURANCE			12.14				12.14
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				100.99			100.99
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.24 HR	27.14	107.23	5.00	139.37
TOTAL OPERATING EXPENSES			10.40 HR	1587.71	128.06	20.43	1759.53
NET OPERATING PROFIT							2131.98
INTEREST ON OPERATING CAPITAL							30.75
INTEREST ON EQUIPMENT INVESTMENT							13.03
RETURN TO LAND AND RISK							2088.20

TABLE 234. ONIONS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: OCT. 1 - OCT. 15		YIELD: 21.00 TON		GROSS RETURNS: \$2730.00			
HARVEST DATES: JUNE 1 - JULY 15		PRICE: \$130.00/TON					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)							
<u>PURCHASED INPUTS</u>							
NITROGEN (H)		200.00 LB	36.00				36.00
PHOSPHORUS (P)		70.00 LB	14.70				14.70
ONION SEED		4.00 LB	60.00				60.00
CANAL WATER		12.00 AC. IN.	5.52				5.52
PUMP WATER		17.84 AC. IN.					
INSECTICIDE (CUSTOM)		1.00 ACRE	15.00				15.00
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50
ISS		1.00 ACRE	5.80				5.80
SPRINKLER SYSTEM		1.00	25.00				25.00
SUBTOTAL			179.52				179.52
<u>PREHARVEST OPERATIONS</u>							
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88
PRE-IRRIGATE (3X)		1.38 HR		2.76	1.81	1.23	5.80
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67
THIN & HOE (CUSTOM)			120.00				120.00
IRRIGATE (12X)		4.20 HR		8.40	3.60	2.44	14.44
SUBTOTAL			10.56 HR	120.00	23.63	20.04	186.62
<u>HARVEST OPERATIONS</u>							
HARVEST & HAUL (CUSTOM) ONIONS			1008.00				1008.00
PACK ONIONS (CUSTOM)			1008.00				1008.00
SUBTOTAL			2016.00				2016.00
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		1.24 HR		3.11			3.11
EMPLOYEE BENEFITS				3.54			3.54
FARM INSURANCE			12.16				12.16
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				142.73			142.73
OTHER EXPENSES			15.00				15.00
SUBTOTAL			1.24 HR	27.16	149.39	5.00	181.55
TOTAL OPERATING EXPENSES			11.80 HR	2342.68	173.02	22.95	2563.69
NET OPERATING PROFIT							166.31
INTEREST ON OPERATING CAPITAL							35.00
INTEREST ON EQUIPMENT INVESTMENT							14.74
RETURN TO LAND AND RISK							116.57

TABLE 235. ONIONS (FALL), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: FEB. 1 - FEB. 15		YIELD: 17.59 TON		GROSS RETURNS: 1970.08				
HARVEST DATES: OCT. 1 - OCT. 15		PRICE: 112.00/TON						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
(DOLLARS)								
<u>PURCHASED INPUTS</u>								
NITROGEN (N)		200.00 LB	36.00				36.00	
PHOSPHORUS (P)		70.00 LB	14.70				14.70	
ONION SEED		4.00 LB	60.00				60.00	
CANAL WATER		25.03 AC.IN.	11.51				11.51	
PUMP WATER		6.27 AC.IN.						
INSECTICIDE (CUSTOM)		1.00 ACRE	20.00				20.00	
HERBICIDE (CUSTOM)		1.00 ACRE	17.50				17.50	
ISS		1.00 ACRE	5.80				5.80	
SPRINKLER SYSTEM		1.00	25.00				25.00	
SUBTOTAL			190.51				190.51	
<u>PREHARVEST OPERATIONS</u>								
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.24	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	3.27	
LISTER	80 HP	.53 HR		1.33	1.67	1.88	4.88	
PRE-IRRIGATE (3X)		1.38 HR		2.76	1.90	1.29	5.95	
BED SHAPER	40 HP	.25 HR		.63	.71	.75	2.09	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	3.92	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	4.34	
CULTIVATOR (3X)	40 HP	.96 HR		2.40	2.68	1.59	6.67	
THIN & HOE (CUSTOM)			120.00				120.00	
IRRIGATE (12X)		4.20 HR		8.40			8.40	
SUBTOTAL			120.00	23.63	19.44	17.66	180.73	
<u>HARVEST OPERATIONS</u>								
HARVEST & HAUL (CUSTOM) ONIONS			844.20				844.20	
PACK ONIONS (CUSTOM)			844.20				844.20	
SUBTOTAL			1688.40				1688.40	
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		1.24 HR		3.11			3.11	
EMPLOYEE BENEFITS				3.54			3.54	
FARM INSURANCE			12.16				12.16	
LAND TAXES						5.00	5.00	
SUPERVISION AND MANAGEMENT				126.61			126.61	
OTHER EXPENSES			15.00				15.00	
SUBTOTAL			27.16	133.27		5.00	165.43	
TOTAL OPERATING EXPENSES			11.80 HR	2026.07	156.90	19.44	22.66	2225.07
NET OPERATING PROFIT							-254.99	
INTEREST ON OPERATING CAPITAL							32.24	
INTEREST ON EQUIPMENT INVESTMENT							12.31	
RETURN TO LAND AND RISK							-299.54	

TABLE 236. SMALL GRAINS (WINTER), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: SEPT. 1 - SEPT. 15		YIELD: 39.90 CWT					
HARVEST DATES: MAY 1 - MAY 15		PRICE: \$5.80/CWT		GROSS RETURNS: \$231.42			
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	20.88				20.88
PHOSPHORUS (P)		92.00 LB	19.32				19.32
SEED		110.00 LB	6.05				6.05
INSECTICIDE (CUSTOM)		1.00 ACRE	5.00				5.00
CANAL WATER		20.56 AC.IN.	9.46				9.46
PUMP WATER		14.68 AC.IN.					
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			66.51				66.51
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
FEET SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (8X)		4.88 HR		9.76	4.45	3.02	17.23
SUBTOTAL			7.42 HR	16.13	14.78	14.23	45.14
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			17.64				17.64
HAUL (TRUCK) (CUSTOM)	2 TON		7.94				7.94
SUBTOTAL			25.58				25.58
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.63 HR		1.59			1.59
EMPLOYEE BENEFITS				2.42			2.42
FARM INSURANCE			12.11				12.11
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				17.10			17.10
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.63 HR	27.11	21.11	5.00	53.22
TOTAL OPERATING EXPENSES			8.05 HR	119.20	37.24	14.78	190.45
NET OPERATING PROFIT							40.97
INTEREST ON OPERATING CAPITAL							6.16
INTEREST ON EQUIPMENT INVESTMENT							10.94
RETURN TO LAND AND RISK							23.87

TABLE 237. SMALL GRAINS (SPRING), BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: JAN. 1 - JAN. 15		YIELD: 36.75 CWT		GROSS RETURNS: \$205.80			
HARVEST DATES: JULY 1 - JULY 15		PRICE: \$5.60/CWT					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
----- (DOLLARS) -----							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		116.00 LB	20.88				20.88
PHOSPHORUS (P)		40.00 LB	8.40				8.40
SEED		110.00 LB	19.80				19.80
INSECTICIDE (CUSTOM)		1.00 ACRE	6.00				6.00
CANAL WATER		23.00 AC.IN.	10.58				10.58
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			71.46				71.46
<u>PREHARVEST OPERATIONS</u>							
SHREDDER	40 HP	.26 HR		.65	.68	.53	1.86
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.81
FERT SPREADER	60 HP	.12 HR		.30	.36	.43	1.09
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	4.55
HARROW	40 HP	.17 HR		.43	.42	.33	1.18
FLOAT	60 HP	.17 HR		.43	.46	.75	1.64
DRILL	60 HP	.27 HR		.68	1.19	2.30	4.17
IRRIGATE (6X)		3.66 HR		7.32			7.32
SUBTOTAL			6.20 HR	13.69	10.33	11.21	35.23
<u>HARVEST OPERATIONS</u>							
COMBINE (CUSTOM)			15.96				15.96
HAUL (TRUCK) (CUSTOM)	2 TON		7.18				7.18
SUBTOTAL			23.14				23.14
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		.63 HR		1.59			1.59
EMPLOYEE BENEFITS				2.05			2.05
FARM INSURANCE			12.09				12.09
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				14.73			14.73
OTHER EXPENSES			15.00				15.00
SUBTOTAL			.63 HR	27.09	18.37	5.00	50.46
TOTAL OPERATING EXPENSES			6.83 HR	121.69	32.06	16.21	180.29
NET OPERATING PROFIT							25.51
INTEREST ON OPERATING CAPITAL							6.09
INTEREST ON EQUIPMENT INVESTMENT							7.91
RETURN TO LAND AND RISK							11.51

TABLE 238. TOMATOES, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES: MAR. 15 - APR. 15		YIELD: 14.67 TON		GROSS RETURNS: \$1100.25				
HARVEST DATES: SEPT. 1 - OCT. 30		PRICE: \$75.00/TON						
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL	
-(DOLLARS)-								
<u>PURCHASED INPUTS</u>							11.34	
NITROGEN (N)		63.00 LB	11.34				33.81	
PHOSPHORUS (P)		161.00 LB	33.81				30.00	
TOMATO SEED		2.00 LB	30.00				20.00	
HERBICIDE (CUSTOM)		1.00 ACRE	20.00				25.00	
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				12.14	
CANAL WATER		26.39 AC.IN.	12.14					
PUMP WATER		7.92 AC.IN.					5.80	
ISS		1.00 ACRE	5.80				25.00	
SPRINKLER SYSTEM		1.00	25.00					
SUBTOTAL			163.09				163.09	
<u>PREHARVEST OPERATIONS</u>							8.61	
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	4.81	
CHISEL	120 HP	.43 HR		1.08	1.87	1.86	4.55	
PLOW (MOLDBOARD)	120 HP	.36 HR		.90	1.90	1.75	3.24	
LAND PLANE	80 HP	.34 HR		.85	1.03	1.36	3.27	
FERT SPREADER (3X)	60 HP	.36 HR		.90	1.09	1.28	4.88	
LISTER	80 HP	.53 HR		1.33	1.67	1.88	2.09	
BED SHAPER	40 HP	.25 HR		.63	.71	.75	6.79	
PRE-IRRIGATE (3X)		1.38 HR		2.76	2.40	1.63	3.92	
VEGETABLE PLANTER	40 HP	.40 HR		1.00	1.42	1.50	8.89	
CULTIVATOR (4X)	40 HP	1.28 HR		3.20	3.57	2.12	4.34	
CULT & SIDEDRESS	40 HP	.59 HR		1.48	1.72	1.14	15.00	
HOEING (2X)		6.00 HR		15.00			8.00	
IRRIGATE (10X)		4.00 HR		8.00				
SUBTOTAL			16.68 HR	39.03	20.83	18.53	78.39	
<u>HARVEST OPERATIONS</u>							266.02	
HARVEST (CUSTOM)			266.02				5.52	
FORK LIFT (2X)		.74 HR		1.85	2.35	1.32	25.98	
HAUL (TRUCK) (2X)	2 TON	3.68 HR		9.20	12.18	4.60		
SUBTOTAL			4.42 HR	266.02	11.05	5.92	297.52	
<u>OVERHEAD EXPENSES</u>							9.83	
DOWNTIME		3.93 HR		9.83			7.51	
EMPLOYEE BENEFITS			12.32	7.51			12.32	
FARM INSURANCE						5.00	5.00	
LAND TAXES				69.72			69.72	
SUPERVISION AND MANAGEMENT			15.00				15.00	
OTHER EXPENSES								
SUBTOTAL			3.93 HR	27.32	87.07	5.00	119.39	
TOTAL OPERATING EXPENSES			25.03 HR	456.43	137.15	35.36	29.45	658.39
NET OPERATING PROFIT							441.86	
INTEREST ON OPERATING CAPITAL							16.13	
INTEREST ON EQUIPMENT INVESTMENT							17.51	
RETURN TO LAND AND RISK							408.22	

TABLE 239. PECANS, BUDGETED PER ACRE COSTS AND RETURNS FOR THE MESILLA VALLEY, NEW MEXICO, 1976
(ISS, SPRINKLER, AND TRICKLE)

PLANTING DATES:		YIELD: 1365.00 LB		GROSS RETURNS: \$887.25			
HARVEST DATES: NOV. 1 - DEC. 30		PRICE: \$0.65/LB					
ITEM	POWER UNIT	QUANTITY	PURCHASED INPUTS	LABOR	FUEL, OIL, REPAIRS	FIXED COST	TOTAL
-(DOLLARS)-							
<u>PURCHASED INPUTS</u>							
NITROGEN (N)		145.00 LB	26.10				26.10
PHOSPHORUS (P)		48.00 LB	10.08				10.08
ZINC SULFATE		12.00 LB	3.36				3.36
MANGANESE SULFATE		24.00 LB	4.80				4.80
HERBICIDE		2.00 LB	2.30				2.30
INSECTICIDE (CUSTOM)		1.00 ACRE	25.00				25.00
CANAL WATER		AC. IN.					
PUMP WATER		30.70 AC. IN.					
ESTABLISHMENT		1/12				208.43	208.43
ISS		1.00 ACRE	5.80				5.80
SUBTOTAL			77.44			208.43	285.87
<u>PREHARVEST OPERATIONS</u>							
DISC (2X)	120 HP	.76 HR		1.90	3.45	3.26	8.61
PRUNE (MACHINE)	60 HP	2.00 HR		5.00	9.40	11.56	25.96
HAUL (TRUCK,	2 TON	2.00 HR		5.00	6.62	2.50	14.12
BORDER	40 HP	.27 HR		.68	.71	.72	2.11
FERT SPREADER	60 HP	.20 HR		.50	.61	.71	1.82
DRILL HERBICIDE	80 HP	.24 HR		.60	.70	1.20	2.50
SPRAYER (MTD) (4X,	60 HP	2.00 HR		5.00	5.16	5.48	15.64
HOEING (2X)		4.00 HR		10.00			10.00
IRRIGATE		2.12 HR		4.24	15.56	35.57	55.37
SUBTOTAL			13.59 HR	32.92	42.21	61.00	136.13
<u>HARVEST OPERATIONS</u>							
SHAKE	80 HP	2.00 HR		5.00	15.34	17.42	37.76
SWEEP	40 HP	2.00 HR		5.00	6.98	9.12	21.10
CLEAN € SACK		8.14 HR		16.28			16.28
HAND LABOR		15.75 HR		31.50			31.50
HAUL NUTS	60 HP	2.50 HR		6.25	5.55	4.60	16.40
SUBTOTAL			30.39 HR	64.03	27.87	31.14	123.04
<u>OVERHEAD EXPENSES</u>							
DOWNTIME		4.49 HR		11.23			11.23
EMPLOYEE BENEFITS				14.54			14.54
FARM INSURANCE			12.66				12.66
LAND TAXES						5.00	5.00
SUPERVISION AND MANAGEMENT				127.78			127.78
OTHER EXPENSES			15.00				15.00
SUBTOTAL			4.49 HR	27.66	159.55	5.00	186.21
TOTAL OPERATING EXPENSES			48.47 HR	105.10	250.50	70.08	731.25
NET OPERATING PROFIT							156.00
INTEREST ON OPERATING CAPITAL							14.38
INTEREST ON EQUIPMENT INVESTMENT							50.50
RETURN TO LAND AND RISK							91.12