

TABLE 1. Acreage Summary, Curry County,
Projected 2017

BUDGET AREA.....	CURRY COUNTY		
FARM SIZE.....	640 ACRES		
IRRIGATION TYPE.....	SPRINKLER		
NUMBER OF CROPS.....	2		
	WATER USE		
		AC. IN. PER ACRE	TOTAL AC. IN.
ACREAGE SUMMARY:			
WHEAT	255	10	2,550
ARP	0		
FLEX IN WHEAT	45	10	450
GRAIN SORGHUM	170	16	2,720
ARP	0		
FLEX IN WHEAT	30	10	300
CORNERS, ROADS, HOMESTEAD	140		
TOTAL	640		6,020
ACRE FEET PER ACRE OF WATER RIGHTS			0.78

TABLE 2. Basic cost information for Curry County,
Projected 2017

Item			
Labor Wage Rate:			
Equipment operators	\$/hour		\$7.75
General Irrigators	\$/hour		\$7.50
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)	\$/pound		\$0.22
Phosphate (P205)	\$/pound		\$0.27
Seed:			
Grain Sorghum	\$/pound		\$1.70
Wheat	\$/pound		\$0.44
Diesel fuel	\$/gallon		\$2.35
Gasoline	\$/gallon		\$2.10
Electricity (SWPS)	cents/KwH		7.74
LP gas	\$/gallon		\$2.55
Natural gas (Gas NM)	\$/MCF		\$4.00
Employee Liability Insurance	\$/\$1,000 wages		\$20.00
Employee Benefits	percent/wages		18.00%
Labor Downtime	percent		25.00%
Financial Rates:			
Operating Capital Interest Rate	percent		5.50%
Land Interest Rate	percent		5.00%
Equipment Interest Rate	percent		5.50%
Real Interest Rate	percent		3.00%
Land Taxes	\$109.00 /acre (full value)		\$109.00
Personal Property Tax Rate	- NR	\$/\$1,000	(Assessed Value)
	- R		\$20.26
Supervision Factors			
Field Crop-Irrigation	\$/labor hour		\$1.00
Field Crop-Equipment & General	\$/labor hour		\$0.50
Management Rate	percent		7.00%

TABLE 3. Overhead cost information for Curry County,
Projected 2017

Item			
Electricity (Domestic & Shop)		\$242.00 per month	\$2,904
Telephone		\$121.00 per month	\$1,452
Accounting & Legal			\$1,773
Misc. Supplies & Hand Tools			\$2,656
Pickup and Auto			
miles	24,200	@	\$0.500 per mile
Insurance			
- general liability (non-employee)			\$2,384
- fire/theft			\$1,912
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$0
Building repairs and maintenance			\$1,579
Dues, fees, publications			\$424
Farmstead Equipment			\$182
		Total	\$27,364
		Total Per Planted Acre	\$54.73

TABLE 4. Pumping costs and data for Curry County, Oregon 2017

INPUT DATA	
DELIVERY PSI	40
DEPTH CHARACTERISTICS	300
SPRINKLER	40
	STATIC _____ 35
	DRAW DOWN _____ 35
	TOTAL HEAD _____ 305
	CAVING _____ 360
GALLONS PER MINUTE (GPM)	550
WORK-HORSEPOWER	59
EFFICIENCY FACTOR:	
ELECTRICITY	0.592
NATURAL GAS	0.156
LP GAS	0.156
DIESEL	0.160
FUEL COST PER UNIT:	
ELECTRICITY	7.74 CENTS/KWH
NATURAL GAS	\$4.03 \$/BTU
LP GAS	\$2.55 \$/GAL
DIESEL	\$2.35 \$/GAL

TABLE 5. Equipment summary for a 640 acre sprinkler-irrigated wheat/grain sorghum farm with above average management, Curry County, Oregon 2017

EQUIPMENT	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VARIABLE COSTS			FIXED COSTS		TOTAL PER ACRE	
				FUEL OIL LBS/GAL	REPAIR PER HR	FUEL OIL PER HR	REPAIR PER HR	DEPRECIATION		TAXES
TRACTOR 140 HP	119	1	\$38,367	\$2,144	\$917	\$18.36	\$4.36	\$4,834	\$349	\$4,775
TRACTOR 186 HP	254	1	\$43,057	\$6,173	\$1,434	\$24.34	\$5.68	\$6,244	\$323	\$28.96
DISC 18 FT OFFSET	165	1	\$7,500	\$1,500		\$9.30		\$1,000	\$61	\$8.37
DRILL 20 FT	43	1	\$3,600	\$74		\$7.73		\$720	\$25	\$7.38
FERT SPREADER CALDEX FURNISHED	25									
CHESEL 9 PT	75	1	\$1,650	\$153		\$2.05		\$220	\$11	\$3.08
CULTIVATOR 8 ROW	22	1	\$3,000	\$402		\$3.72		\$440	\$21	\$10.03
PLANTER 6 ROW	29	1	\$4,250	\$59		\$2.04		\$820	\$29	\$9.42
ROW REEIDER	14			\$63		\$0.78		\$93	\$4	\$6.44
INJECTOR PUMP	4,954	1	\$600			\$1.20		\$120	\$2	\$6.02
SPRINKLER	4,954	1	\$15,000					\$2,000	\$103	\$6.42
ELECTRIC WELL	4,954	1	\$13,000	\$28,841		\$5.82		\$1,460	\$89	\$9.23
TOTAL			\$130,638	\$27,127	\$3,866			\$7,550	\$208	

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUIP CODE	MAX HOURS	FUEL LBS/TON	LUBE COEFF	ACCLM HOURS	AGE	INTEREST EXPENSE
TRACTOR 140 HP	72,515	38,367	15	1	800	7.10	0.10	1548.70	13	1,994.16
TRACTOR 186 HP	54,285	43,057	15	1	800	9.42	0.10	2789.60	11	2,552.29
DISC	15,000	7,500	15	3	300			2640.00	16	412.50
DRILL	7,200	3,600	10	8	100			557.70	13	166.00
FERT SPREADER CALDEX FURNISHED										0.00
CHESEL	3,300	1,650	15	3	300			1125.00	15	90.75
CULTIVATOR	8,000	3,000	10	3	300			353.60	16	165.00
PLANTER	6,500	4,250	10	8	100			375.70	13	233.75
ROW REEIDER	1,200	600	15	0	300			204.00	10	34.26
INJECTOR PUMP	600	600	5	0	742			4925.48	10	16.50
SPRINKLER	30,000	15,000	15	0	8,742			7433.22	15	825.00
ELECTRIC WELL	26,000	13,000	25	0	8,742			7433.22	15	715.00

USAGE LIST		
WHEAT	MILD	PER ACRE TOTALS
-----Hours per acre-----		
0.18	0.36	0.53
0.48	0.56	1.04
0.33	0.33	0.66
0.13	0.20	0.33
0.05	0.16	0.21
0.15	0.15	0.30
0.00	0.13	0.13
0.00	0.17	0.17
0.00	0.28	0.28
8.23	13.17	21.39
8.23	13.17	21.39
8.23	13.17	21.39

INTEREST PROCRATION		
WHEAT	MILD	PER ACRE TOTALS
-----Hours per acre-----		
3.02	5.87	8.89
4.01	5.72	9.73
0.83	0.83	1.66
0.62	0.00	0.62
0.00	0.00	0.00
0.18	0.15	0.33
0.00	0.37	0.37
0.00	1.38	1.38
0.00	0.20	0.20
0.03	0.04	0.07
1.37	2.19	3.56
1.37	2.19	3.56
1.37	2.19	3.56

COMBINE (CUSTOM) BASE RATE		
ACRES	PUMP WATER	16.00
330		0.19
		0.16

COMBINE (CUSTOM) PER ACRE		
ACRES	PUMP WATER	16.00
170		0.19
		0.16

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE									
Hours of Use	1	2	3	4	5	6	7	8	9
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
200	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
300	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
400	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
500	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
800	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
900	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1200	0.00045	0.00046	0.00036	0.00025	0.00045	0.00040	0.00046	0.00135	0.00070
1400	0.00045	0.00070	0.00020	0.00020	0.00045	0.00042	0.00040	0.00120	0.00065
1600	0.00010	0.00070	0.00030	0.00020	0.00045	0.00050	0.00040	0.00120	0.00065
1800	0.00010	0.00030	0.00020	0.00020	0.00045	0.00050	0.00040	0.00120	0.00065
2000	0.00010	0.00025	0.00020	0.00025	0.00045	0.00050	0.00040	0.00120	0.00065
2500	0.00050								
3000	0.00050								
3500	0.00050								
4000	0.00050								
4500	0.000108								
5000	0.000132								
5500	0.000136								
6000	0.000148								
6500	0.000152								
7000	0.000156								
7500	0.000188								
8000	0.000204								

* Based on unpublished data of D. R. Hunt, Department of Agricultural Engineering, University of Illinois.

** Based on "Agricultural Machinery Data" in Agricultural Engineers Yearbook, 1983.

Codes

- 1 tractors
- 2 balers, combines, forage harvesters, windrowers, pick-ups
- 3 rotary hay disks, windrowers, plows, chisels, field cultivators, row cultivators, laser plows
- 4 harrows, sweeps, disks, row hoes, ches, other water hammers, bed shapers
- 5 balers/pickers, cotton pickers, cotton strippers, corn pickers
- 6 mowers, cutters, rotary mowers, rotary rakes, rotary choppers, feed augers, farm trucks
- 7 disk mowers, mowers
- 8 planters, drills, seeding equipment, mounted sprayers
- 9 fertilizer distributing equipment

TABLE 6. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Curry County, Projected 2017
 Planting Dates: August 15 - September 15
 Harvesting Dates: June 15 - July 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
WHEAT	\$4.20	75.00	BUSHEL	\$315.00
DIRECT PAYMENT	\$0.00	75.00	BUSHEL	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00			\$0.00
GRAZING	\$40.00	1.00	ACRE	\$40.00
TOTAL				\$355.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.44	80 LBS	\$35.20		\$35.20
LIQUID FERT (28-0-0)	\$0.09	460 LBS	\$41.40		\$41.40
NITROGEN (N)	\$0.22	18 LBS	\$3.96		\$3.96
PHOSPHATE (P205)	\$0.27	46 LBS	\$12.42		\$12.42
INSECTICIDE (CUSTOM)	\$10.00	1 ACRE	\$10.00		\$10.00
HERBICIDE (CUSTOM)	\$11.17	1 ACRE	\$11.17		\$11.17
PUMP WATER*		10 AC. IN.			
CROP INSURANCE	\$0.15		\$0.15		\$0.15
SUBTOTAL			\$114.30		\$114.30

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
CHISEL	185 HP	0.15 HR		\$1.16	\$3.65	\$1.16	\$4.37	\$10.34
DISC (3X)	185 HP	0.33 HR		\$2.56	\$8.03	\$4.94	\$10.70	\$26.23
FERT S/ SPREADER	140 HP	0.05 HR		\$0.39	\$0.92	\$0.22	\$2.14	\$3.66
DRILL	140 HP	0.13 HR		\$1.01	\$2.39	\$0.79	\$7.81	\$12.00
IRRIGATE (7X)		0.70 HR		\$5.25	\$47.91	\$0.00	\$5.57	\$58.73
SUBTOTAL		1.36 HR		\$10.37	\$62.90	\$7.10	\$30.60	\$110.96

HARVEST OPERATIONS								
COMBINE (CUSTOM)				\$24.55				\$24.55
HAUL (C (CUSTOM)				\$12.00				\$12.00
SUBTOTAL				\$36.55				\$36.55

OVERHEAD EXPENSES								
DOWNTIME		0.17 HR		\$1.28				\$1.28
EMPLOYEE BENEFITS				\$1.87				\$1.87
INSURANCE				\$0.21				\$0.21
LAND TAXES							\$109.00	\$109.00
SUPERVISION AND MANAGEMENT				\$25.81				\$25.81
OTHER EXPENSES				\$54.73				\$54.73
SUBTOTAL		0.17 HR		\$54.94	\$28.95		\$109.00	\$192.89

TOTAL OPERATING EXPENSES		1.53 HR		\$205.79	\$39.31	\$62.90	\$7.10	\$139.60	\$454.70
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NET OPERATING PROFIT									(\$99.70)
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INTEREST ON OPERATING CAPITAL	(\$77.70	@	5.50%)				\$4.27
INTEREST ON EQUIPMENT INVESTMENT									\$12.12

RETURN TO LAND AND RISK									(\$116.09)
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* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$355.00		
VARIABLE OPERATING EXPENSES	\$275.79			
RETURN OVER VARIABLE EXPENSES		\$79.21	(GROSS MARGIN)	
FIXED EXPENSES	\$139.60			
NET FARM INCOME		(\$60.38)	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$39.31			
NET OPERATING PROFIT		(\$99.70)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$16.39			
RETURN TO LAND AND RISK		(\$116.09)		

TABLE 7. Grain sorghum, sprinkler-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Curry County, Projected 2017
 Planting Dates: May 15 - June 15
 Harvesting Dates: October 15 - November 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
GRAIN SORGHUM	\$5.91	65.00 CWT		\$384.43
DIRECT PAYMENT	\$0.00	65.00 CWT	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT		\$0.00
GRAZING	\$9.00	1.00 ACRE		\$9.00
TOTAL				\$393.43

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$1.70	5 LBS	\$8.50		\$8.50
LIQUID FERT (28-0-0)	\$0.09	500 LBS	\$45.00		\$45.00
NITROGEN (N)	\$0.22	25 LBS	\$5.50		\$5.50
PHOSPHATE (P205)	\$0.27	50 LBS	\$13.50		\$13.50
HERBICIDE (CUSTOM)	\$11.57	1 X/ACRE	\$11.57		\$11.57
INSECTICIDE (CUSTOM)	\$5.68	1 X/ACRE	\$5.68		\$5.68
TRACE ELEMENTS	\$16.00	1 ACRE	\$16.00		\$16.00
PUMP WATER*		16 AC. IN.			
CROP INSURANCE	\$0.29		\$0.29		\$0.29
SUBTOTAL			\$106.05		\$106.05

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	185 HP	0.11 HR		\$0.85	\$2.68	\$1.65	\$3.57	\$8.74
CHISEL	185 HP	0.15 HR		\$1.16	\$3.65	\$1.16	\$4.37	\$10.34
DISC (2X)	185 HP	0.22 HR		\$1.71	\$5.36	\$3.29	\$7.13	\$17.48
FERT SPREADER	140 HP	0.05 HR		\$0.39	\$0.92	\$0.22	\$2.14	\$3.66
ROD WEEDER	185 HP	0.08 HR		\$0.62	\$1.95	\$0.51	\$2.60	\$5.68
PLANT ER	140 HP	0.17 HR		\$1.32	\$3.12	\$1.09	\$12.44	\$17.97
CULTIVATOR	140 HP	0.13 HR		\$1.01	\$2.39	\$1.05	\$8.03	\$12.48
IRRIGATE (10X)		1.00 HR		\$7.50	\$76.65	\$0.00	\$8.91	\$93.07
SUBTOTAL		1.91 HR		\$14.55	\$96.71	\$8.96	\$49.19	\$169.42

HARVEST OPERATIONS								
COMBINE (CUSTOM)			\$28.43					\$28.43
HAUL (CUSTOM)			\$12.35					\$12.35
SUBTOTAL			\$40.78					\$40.78

OVERHEAD EXPENSES								
DOWNTIME		0.22 HR		\$1.67				\$1.67
EMPLOYEE BENEFITS				\$2.62				\$2.62
INSURANCE			\$0.29					\$0.29
LAND TAXES						\$109.00		\$109.00
SUPERVISION AND MANAGEMENT				\$29.00				\$29.00
OTHER EXPENSES			\$54.73					\$54.73
SUBTOTAL		0.22 HR		\$55.02	\$33.28		\$109.00	\$197.30

TOTAL OPERATING EXPENSES		2.13 HR		\$201.85	\$47.83	\$96.71	\$8.96	\$158.19	\$513.55
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NET OPERATING PROFIT									(\$120.12)
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INTEREST ON OPERATING CAPITAL	(\$82.84	@	5.50%)				\$4.56
INTEREST ON EQUIPMENT INVESTMENT									\$19.29

RETURN TO LAND AND RISK									(\$143.96)
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* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$393.43		
VARIABLE OPERATING EXPENSES	\$307.52			
RETURN OVER VARIABLE EXPENSES		\$85.91	(GROSS MARGIN)	
FIXED EXPENSES	\$158.19			
NET FARM INCOME		(\$72.29)	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$47.83			
NET OPERATING PROFIT		(\$120.12)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$23.84			
RETURN TO LAND AND RISK		(\$143.96)		

TABLE 8. Summary of per acre costs and returns for a 640 acre farm with above average management, Curry County, Projected 2017

	WHEAT	GRAIN SORGHUM
	BUSHEL	CWT
PRIMARY YIELD	75.00	65.00
PRIMARY PRICE	\$4.20	\$5.91
GOVERNMENT PAYMENTS	\$0.00	\$0.00
SECOND INCOME	\$40.00 ACRE	\$9.00 ACRE
GROSS RETURN	\$355.00	\$393.43
CASH OPERATING EXPENSES		
SEED	\$35.20	\$8.50
FERTILIZER	\$57.78	\$80.00
CHEMICALS	\$21.17	\$17.25
CROP INSURANCE	\$0.15	\$0.29
OTHER PURCHASED INPUTS		
CANAL WATER		
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$14.99	\$20.06
FUEL-IRRIGATION	\$47.91	\$76.65
REPAIRS	\$7.10	\$8.96
CUSTOM CHARGES	\$36.55	\$40.78
LAND TAXES	\$109.00	\$109.00
OTHER EXPENSES	\$54.94	\$55.02
TOTAL CASH EXPENSES	\$384.79	\$416.52
RETURN OVER CASH EXPENSES	(\$29.79)	(\$23.09)
FIXED EXPENSES	\$30.60	\$49.19
TOTAL EXPENSES	\$415.38	\$465.72
NET FARM INCOME	(\$60.38)	(\$72.29)
LABOR AND MANAGEMENT COSTS	\$39.31	\$47.83
NET OPERATING PROFIT	(\$99.70)	(\$120.12)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL	\$4.27	\$4.56
INTEREST ON EQUIPMENT INVESTMENT	\$12.12	\$19.29
TOTAL CAPITAL COSTS	\$16.39	\$23.84
RETURN TO LAND AND RISK	(\$116.09)	(\$143.96)
Flex Computation	-73.37	-75.48

TABLE 9. Whole farm summary, Curry County,
Projected 2017

GROSS RETURNS		
WHEAT	255 ACRES	
CROP		\$80,325
GRAZING		\$10,200
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GRAIN SORGHUM	170 ACRES	
CROP		\$65,353
GRAZING		\$1,530
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$157,408</u>
CASH OPERATING EXPENSES		
SEED		\$13,061
FERTILIZER		\$32,667
CHEMICALS		\$9,920
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$0
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$8,357
FUEL-IRRIGATION		\$28,841
REPAIRS		\$3,865
CUSTOM CHARGES		\$18,995
LAND TAXES		\$54,500
OTHER EXPENSES		\$27,482
TOTAL CASH EXPENSES		<u>\$197,788</u>
RETURN OVER CASH EXPENSES		(\$40,380)
FIXED EXPENSES		\$18,460
TOTAL EXPENSES		\$216,247
NET FARM INCOME		(\$58,839)
LABOR AND MANAGEMENT COSTS		\$21,105
NET OPERATING PROFIT		(\$79,945)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$2,185
INTEREST ON EQUIPMENT INVESTMENT		\$7,277
TOTAL CAPITAL COSTS		<u>\$9,462</u>
RETURN TO LAND AND RISK		<u>(\$89,407)</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$500 /ACRE	(\$99,007)	-17.74%
\$1,000 /ACRE	(\$108,607)	-10.37%
\$1,500 /ACRE	(\$118,207)	-7.33%
\$2,000 /ACRE	(\$127,807)	-5.67%
\$2,500 /ACRE	(\$137,407)	-4.62%

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)