

N

SAMPLE INPUTS AND COSTS FOR SNAP BEANS FOR PROCESSING
Blue Lakes Variety, with a Yield of 10 Tons per Acre
Watsonville Area - Santa Cruz County, 1961

	Man	40 h.p.	Wheel	Truck	Cost per Acre	Cost per Ton
	Labor	Tractor	Tractors			
Hours per acre						
Land preparation, total	4.0	4.0			15.80	
Preplant irrigation & preparation	2.5	.5	.5		5.28	
Planting 2 men, planter \$1.00	2.0		1.0		5.10	
Prestaking cultivation, 2 times	1.0		1.0		2.85	
Irrigation, 6 times	12.0				15.00	
Staking 7 men, Tractor & Staker \$10	7.0			1.0	21.25	
Anchor post work	2.0				2.50	
Stringing & stringer, \$5.00	7.5				15.63	
Cultivation after staking	6.0		6.0(s)		15.00	
Hoe, weed and train vines	5.0				6.25	
Miscellaneous other cultural work	6.0		0.5	1.0	11.05	
Total cultural labor	55.0	4.5	3, 6 (s)	2.0	115.71	11.57
Picking 2½¢ per lb. & ½¢ supervision, transportation & housing					600.00	60.00
Extra supervision and miscellaneous	5.0				8.75	.88
Labor procurement overhead					45.00	4.50
Hauling is by buyer					-	
Total harvesting cost	5.0				653.75	65.38
Post harvest - remove wire	2.0		1.0		4.10	
Remove and store stakes	12.0			3.0	22.50	
Disk once	0.5	0.5			1.98	
Total labor and field power	74.5	5.0	4, 6 (s)	5.0	798.04	79.80
Irrigation water, power to pump 20 acre inches at 40¢					8.00	
Seed, 40 lbs. at 42¢					13.60	
Fertilizers, applied: Manure 2.5 T \$20.00, 400 lb. 16-20 \$19.75, 70 lb. ammonia \$12.00					51.75	
Stake rent 800 at 2¢					16.00	
Wire cost \$20 for 4 year use, \$5 year, plus staples, sleeves \$2					7.00	
String and twine					26.00	
Dusts - 50 lbs. phosdrine \$11 plus 2 applications \$6					17.00	
Total material costs					139.35	13.94
Total labor and material costs					937.39	93.74
General expense, estimated at 5% of above					46.87	
County taxes, land and equipment					30.00	
Compensation and other insurance \$3.00, other repairs \$3.00					6.00	
Total cash overhead costs					82.87	8.29
Total cash costs					1020.26	102.03
Equipment overhead based on a 100 farm unit with around 25 acres of beans	Original cost 100 A.	Av. value	6% int. ciation	Depre- ciation		
		Dollars per acre				
Building for equipment	\$2000	10.00	.60	1.00		
Irrigation system and pipe	9200	46.00	2.76	4.20		
Tractors and truck	18000	90.00	5.40	12.00		
Tillage and miscel. equipment	3200	16.00	.96	1.90		
Land, at agricultural value	-	1500.00	90.00	-		
Total investment and deprec.		1662.00		19.10	19.10	1.91
Total cash costs and depreciation					1039.36	103.94
Interest on investment at 6%			99.72		99.72	9.97
Total all costs					1139.08	113.91

Labor costs above are figured at the following hourly rates, tractor driver \$1.75, other labor \$1.25. Cash costs of fuel, oil, repairs and also license and insurance for the truck were figured as follows: 40 h.p. diesel crawler tractor \$2.20, 30 h.p. wheel tractor \$1.10, slim tractor \$0.75 and truck \$2.00.

SNAP BEANS (BLUE LAKES) FOR PROCESSING
Santa Cruz County

Among the irrigated crops of Santa Cruz County, green beans for processing now occupy an important position in the Pajaro Valley. Acreages have increased from 60 acres in 1953 to an estimated 4,000 acres in 1961. The main reasons for this increase is the improved quality and yield in the cooler climate of Santa Cruz County. Beans arrive at the processing plant without heating. Good water and soil and a dependable labor supply are added advantages. Green beans make their best growth on deep fertile soils. They require fairly warm daytime temperatures and a frost free growing season.

Irrigation - An abundant supply of irrigation water is required for this crop. A minimum of five irrigations is needed with a total application of at least 18 acre inches. Green beans need water of good quality.

Cultural Practice - Green beans are seeded at about 40 pounds per acre from May 1st till June 30th. Distance between rows varies, but 50-54 inches is common. Time and frequency of cultivation depends on the amount of weeds, but usually one cultivation before staking and three after staking is adequate. Picking begins the first of August. Five pickings are common, usually 4-5 days apart. When the plants have become established, stakes are inserted every 15 feet in the row and a wire-twine trellis is mechanically attached to the stakes for support of the growing vines. Fertilizer is side dressed when plants are 8-10" high and anhydrous ammonia is applied to the water after the first picking.

Varieties - The variety grown is Blue Lakes, but the most accepted strain for use in the Pajaro Valley is the F.M.1. It is a stringless, smooth, full, uniformly shaped bean. The color is consistent throughout and the bean is well adapted for processing.

Yields - The State average yield has increased from 6.1 tons per acre (average - 1945-1954) to 8.5 tons per acre in 1958. Locally, yields of 14 tons have been reported, but the average yield appears to be close to 10 tons per acre, which was used in the example on the other side of this sheet. Yields vary considerably from farm to farm and year to year.

Costs - To furnish growers and others interested in cost information, we have prepared the sample schedule on the back of this sheet in considerable detail. These are not represented as average costs but are for use as a guide in refiguring costs for any time and place using more applicable methods, wage rates and prices. This schedule was based on information obtained from six local growers.

Price - This crop is grown under contract at specified prices for several grades so in any year the average price received can vary widely with the quality of each picking delivered. Average yield and price in this county were estimated for 1960 by the Agricultural Commissioner at 11 tons per acre and \$127 a ton. Harvesting is a vital operation greatly influencing the price. The following table shows how varying yields and prices can affect the net income or profit per acre with costs as shown on the other side of this sheet.

Sample Costs and Returns at Different Yields and Prices

Yield tons per acre	8 T	9 T	10 T	12 T	14 T
Growing and overhead costs	452.64	452.64	452.64	452.64	452.64
Harvesting costs incl. 5% gen'l exp.	549.12	617.76	686.44	823.68	960.96
Total cost per acre	1001.76	1070.40	1139.08	1276.32	1413.60
Cost per ton	125.22	118.93	113.91	106.36	100.97
Net Income or profit per acre at \$100 a T	-201.76	-170.40	-139.08	-76.32	-13.60
at 120	-41.76	9.60	60.92	163.68	266.40
at 140	118.24	189.60	260.92	403.68	546.40