

SURVEY OF COST OF PRODUCTION OF RAW COTTON



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Introduction

During the past three years, and since the ICAC's last survey on cotton production cost in 1972, the cost of producing cotton has significantly increased. In the aftermath of the energy crisis of 1973, inflation rates and consequently the cost of most agricultural inputs, notably fertilizers, pesticides and other chemicals, have been well above their earlier levels.

This document updates the ICAC's Document 13 of the 31st Plenary Meeting (Survey of Cost of Production of Raw Cotton) and is based on replies to a questionnaire which was sent out by the Secretariat to cotton producing countries.

The Secretariat acknowledges with appreciation the cooperation of the various member and non-member countries which made this survey possible.

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Country ANGOLACrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer <u>1/</u>	Average producer <u>2/</u>
Yield used (kilos per hectare) (Seed cotton)		600	1,750
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	73.30	135.50	
Power and equipment	113.30	143.96	
Seed	5.00	4.00	
Fertilizer	--	--	
Herbicides	--	--	
Insecticides and fungicides	58.28	85.92	
Defoliant and other chemicals	--	--	
Irrigation	--	--	
Custom or contract work	--	--	
Other (specify) _____	--	--	
Subtotal	249.88	369.38	
<u>Harvesting:</u>			
Labor	54.00	104.00	
Power and equipment	--	--	
Custom or contract work	--	--	
Other (specify) _____	--	--	
Subtotal	54.00	104.00	
<u>Off farm direct costs</u>			
Transportation to gin	7.20	28.00	
Ginning (including bagging and ties)	18.24	53.20	
Other (specify) _____	--	--	
Subtotal	25.44	81.20	
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	87.32	128.48	
Land cost (typical rental value)	--	--	
Other (specify) _____	10.53	21.54	
TOTAL COSTS	427.17	704.60	

1/ Semi-arid zone. 2/ Sub-humid zone.

Country AUSTRALIACrop year 1973/74

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones <u>1/</u>	
		Average producer	Above average producer
Yield used (kilos per hectare)		1,057	
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor		140.00	
Power and equipment		220.00	
Seed		16.00	
Fertilizer		27.00	
Herbicides		27.00	
Insecticides and fungicides		140.00	
Defoliant and other chemicals		20.00	
Irrigation		48.00	
Custom or contract work		8.00	
Other (specify) _____			
Subtotal		646.00	
<u>Harvesting:</u>			
Labor		93.00	
Power and equipment		77.00	
Custom or contract work			
Other (specify) _____			
Subtotal		170.00	
<u>Off farm direct costs</u>			
Transportation to gin		16.00	
Ginning (including bagging and ties)		140.00	
Other (specify) _____			
Subtotal		156.00	
Total direct costs		972.00	
<u>Overhead costs:</u>			
Management and administration		97.00	
Land cost (typical rental value)			
Other (specify) _____			
TOTAL COSTS		1,069.00	

1/ In the State of New South Wales

Country AUSTRALIACrop year 1973/74

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones ^{1/}	
		Average producer	Above average producer
Yield used (kilos per hectare)		1,000	1,300
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor			17.00
Power and equipment			50.00
Seed			8.00
Fertilizer			23.00
Herbicides			13.00
Insecticides and fungicides			112.00
Defoliant and other chemicals			7.00
Irrigation			33.00
Custom or contract work			33.00
Other (specify) <u>Fuel</u>			17.00
Subtotal			313.00
<u>Harvesting:</u>			
Labor			10.00
Power and equipment			28.00
Custom or contract work			
Other (specify) <u>Fuel</u>			5.00
Subtotal			43.00
<u>Off farm direct costs</u>			
Transportation to gin			32.00
Ginning (including bagging and ties)			178.00
Other (specify) <u>Storage, marketing administration at ginnery</u>			154.00
Subtotal			364.00
Total direct costs			720.00
<u>Overhead costs:</u>			
Management and administration			100.00
Land cost (typical rental value)			
Other (specify) <u>Insurance</u>			14.00
<u>Rates</u>			14.00
Sundry			8.00
Depreciation			204.00
TOTAL COSTS			1,060.00

^{1/} In the State of Queensland

Country ColombiaCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton ^{1/}		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	1,650	1,500	1,800
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	--	--	--
Power and equipment	--	--	--
Seed	6.33	6.33	6.33
Fertilizer	56.91	47.16	66.66
Herbicides	23.33	23.33	23.33
Insecticides and fungicides	193.50	193.50	193.50
Defoliant and other chemicals	--	--	--
Irrigation	9.33	2.00	16.66
Custom or contract work	32.63	32.63	32.63
Other (specify) <u>Stalk destruction</u>	20.66	20.66	20.66
<u>Land preparation - interest</u>	40.63	40.63	40.63
Subtotal	383.32	366.24	400.40
<u>Harvesting:</u>			
Labor	60.53	60.53	60.53
Power and equipment	--	--	--
Custom or contract work	--	--	--
Other (specify) _____	--	--	--
Subtotal	60.53	60.53	60.53
<u>Off farm direct costs</u>			
Transportation to gin	11.83	11.83	11.83
Ginning (including bagging and ties)	30.26	30.26	30.26
Other (specify) <u>Loans, insurance,</u> <u>unions</u>	18.33	18.33	18.33
Subtotal	60.42	60.42	60.42
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	20.43	20.43	20.43
Land cost (typical rental value)	57.33	48.00	66.66
Other (specify) <u>Technical assistance,</u> <u>interest</u>	61.20	61.20	61.20
TOTAL COSTS	643.23	616.82	669.64

^{1/} Data is for coastal crop - however, interior crop cost is comparable to "Above average producer".

Based on reply received March 1975.

Country ColombiaCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer <u>1/</u>	Above average producer
Yield used (kilos per hectare)		1,419	
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor		5.00	
Power and equipment		108.67	
Seed		6.50	
Fertilizer		55.00	
Herbicides		18.47	
Insecticides and fungicides		116.80	
Defoliant and other chemicals		--	
Irrigation		--	
Custom or contract work		33.67	
Other (specify) <u>Roads, fences, drainage</u>		6.00	
Subtotal		350.11	
<u>Harvesting:</u>			
Labor		60.13	
Power and equipment*		13.33	
Custom or contract work		--	
Other (specify) <u>Bagging and ties</u>		8.33	
Subtotal		81.79	
(*On farm transportation)			
<u>Off farm direct costs</u>			
Transportation to gin		7.67	
Ginning		25.08	
Other (specify) _____			
Subtotal		32.75	
Total direct costs		464.65	
<u>Overhead costs:</u>			
Management and administration		16.67	
Land cost (typical rental value)		66.67	
Other (specify) <u>Technical assistance, Unions, insurance, interest, etc.</u>		41.34	
TOTAL COSTS		589.33	

1/ Coastal region, including Meta. Based on reply received June 1975.

Country EcuadorCrop year 1974

Item	Estimated cost of producing a hectare of cotton	
	Irrigated	Non-irrigated
	<u>US \$ per hectare</u>	
<u>Direct costs:</u>		
Labor	289.00	269.00
Seed	8.00	8.00
Fertilizer	98.00	98.00
Herbicides	--	24.00
Insecticides	119.00	119.00
Machinery - insecticide application	56.00	39.00
soil preparation . . .	--	40.00
Transport and materials (bags) . . .	12.00	12.00
<u>Indirect costs</u>	114.00	119.00
 TOTAL COSTS . . .	 696.00	 728.00

Country EgyptCrop year 1973/74

Item	Estimated cost of producing a hectare of cotton
	<u>US \$ per hectare</u>
Workers' wages and equipment . . .	194.2
Planting seed	5.9
Fertilizer	72.9
Pesticides	60.8
Rents	157.9
Ginning fee and relevant transport .	42.2
Management and other expenses . .	12.1
TOTAL COSTS	546.0
Above costs may be distributed in accordance with the type of agricultural procedure, as follow:	
Soil preparation	30.4
Planting seed and relevant procedure	12.1
Land taxes after sowing, including irrigation, fertilizer, etc.	139.3
Pesticides and pest control	79.1
Picking and soil cleaning	60.8
Rents	157.9
Ginning and relevant transport . . .	42.2
Management and other expenses . .	24.2
TOTAL COSTS	546.0

Country EL SALVADORCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)			
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	96.47	96.47	96.47
Power and equipment	142.33	113.86	170.80
Seed	5.14	5.14	5.14
Fertilizer	122.28	97.82	146.75
Herbicides	--	--	--
Insecticides and fungicides	313.08	250.05	375.70
Defoliant and other chemicals	--	--	--
Irrigation	--	--	--
Custom or contract work	--	--	--
Other (specify) <u>Stalk destruction</u>	5.70	5.70	5.70
Subtotal	685.00	569.04	800.56
<u>Harvesting:</u>			
Labor	91.98	73.58	110.38
Power and equipment			
Custom or contract work			
Other (specify) <u>Crop super-vision</u>	9.97	7.98	11.96
Subtotal	101.95	81.56	122.34
<u>Off farm direct costs</u>			
Transportation to gin	20.00	16.00	24.00
Ginning (including bagging and ties)	38.50	30.80	46.20
Other (specify) _____			
Subtotal	58.50	46.80	70.20
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	71.52	71.52	71.52
Land cost (typical rental value)	100.00	100.00	100.00
Other (specify) <u>Interest on cost before and after harvest</u>	47.22	39.04	55.37
TOTAL COSTS	1,064.19	907.96	1,219.99

Country GREECECrop year 1974

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare) (Seed cotton)	2,500		
<u>On farm direct costs</u>	<u>US \$ per hectare</u>		
<u>Preharvesting:</u>			
Labor	221.80		
Power and equipment	145.55		
Seed	24.70		
Fertilizer	36.20		
Herbicides	21.30		
Insecticides and fungicides	22.30		
Defoliant and other chemicals	--		
Irrigation	151.70		
Custom or contract work	--		
Other (specify) _____			
Subtotal	623.55		
<u>Harvesting:</u>			
Labor	333.30		
Power and equipment	42.00		
Custom or contract work			
Other (specify) <u>Transportation</u> <u>of workers</u>	50.00		
Subtotal	425.30		
<u>Off farm direct costs</u>			
Transportation to gin			
Ginning (including bagging and ties)			
Other (specify) _____			
Subtotal			
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	--		
Land cost (typical rental value)	266.70		
Other (specify) <u>Local tax</u>	35.00		
<u>Interest on operating capital</u>	27.30		
2% harvesting and preharvesting costs	22.30		
TOTAL COSTS	1,400.15		

Country HONDURASCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)		1,945	
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor		50.71	
Power and equipment		71.42	
Seed		8.57	
Fertilizer		85.71	
Herbicides		--	
Insecticides and fungicides		142.85	
Defoliant and other chemicals		--	
Irrigation		--	
Custom or contract work		58.56	
Other (specify) <u>Stalk destruction</u>		7.14	
<u>Sacks and hemp cord for picking</u>		9.99	
Subtotal		434.95	
<u>Harvesting:</u>			
Labor		84.28	
Power and equipment		--	
Custom or contract work		--	
Other (specify) _____		--	
Subtotal		84.28	
<u>Off farm direct costs</u>			
Transportation to gin		42.85	
Ginning (including bagging and ties)		72.85	
Other (specify) _____		--	
Subtotal		115.70	
Total direct costs			
<u>Overhead costs:</u>			
		53.56	
Management and administration		--	
Land cost (typical rental value)		42.85	
Other (specify) _____		--	
TOTAL COSTS		731.34	

Country INDIACrop year 1973/74

Item	Estimated cost of producing a hectare of cotton		
	Irrigated MCU-5	Rainfed H-4	Rainfed Laxmi
Yield used (kilos per hectare) (Seed cotton)	2,282	1,096	340
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	163.18	34.08	30.85
Power and equipment	--	--	--
Seed	2.97	28.79	5.42
Fertilizer	129.62	51.90	10.97
Herbicides	--	--	--
Insecticides and fungicides . .)	147.56	20.78	5.16
Defoliant and other chemicals .)			
Irrigation	2.97	--	--
Custom or contract work	--	--	--
Other (specify) _____	--	--	--
Subtotal	446.30	135.75	52.40
<u>Harvesting:</u>			
Labor	34.86	20.66	9.04
Power and equipment	--	--	--
Custom or contract work	--	--	--
Other (specify) _____	--	--	--
Subtotal	34.86	20.66	9.04
<u>Off farm direct costs</u>			
Transportation to gin	5.68	1.81	.77
Ginning (including bagging and ties)	58.09	30.98	8.39
Other (specify) _____	--	--	--
Subtotal	63.77	32.79	9.16
Total direct costs	544.93	189.00	70.60
<u>Overhead costs:</u>			
Management and administration . .	N.A.	N.A.	N.A.
Land cost (typical rental value) . .	--	--	--
Other (specify) <u>Land revenue,</u>	1.42	.64	.64
Interest on fixed and operational capital	77.07	25.43	11.10
TOTAL COSTS	623.42	215.07	82.34

Note: Though there are different producing zones, currently no zone-wide cost assessment has been undertaken. The report from the comprehensive cost study schemes, being implemented during the current year, is expected only during the ensuing years.

Country IndiaCrop year 1973/74

Item	Average cost of cultivation of cotton		
	Maharashtra - Rainfed		
	L. 147	MCU - 5	H - 4
Yield - (kg. /ha.) seed cotton	547	848	1,096
		<u>US \$</u>	
Labour	33.69	39.50	52.41
Seed	2.32	2.84	28.79
Manure	13.68	22.98	23.37
Fertilizer	7.75	34.08	28.53
Pesticides	7.62	19.24	20.78
Irrigation	--	--	--
Land revenue . . . .	.65	.65	.65
Interest on operational and fixed capital . .	10.72	19.62	25.43
Marketing . . . . .	.77	1.42	1.81
TOTAL COSTS . .	77.20	140.33	181.77

Country IndiaCrop year 1973/74

Item	Average cost of cultivation of cotton		
	Tamil Nadu	Andhra Pradesh	Karnataka
	Irrigated MCU-5	Rainfed Hampi	Rainfed Jayadhar
Yield - (kg. /ha.) seed cotton	2,282	329	348
		<u>US \$</u>	
Labour	198.04	28.01	38.34
Seed	2.97	5.42	2.45
Manure	46.22	5.80	10.72
Fertilizer	83.40	9.30	9.68
Pesticides	147.56	5.03	10.72
Irrigation	2.97	--	--
Land revenue	1.42	2.58	.77
Interest on operational and fixed capital.	77.07	9.17	11.88
Marketing	5.68	.65	.90
TOTAL COSTS	565.33	65.96	85.46

Country IRANCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare) (Seed cotton)	1,700	2,000	2,500 -- 3,000
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	141.79	134.32	134.32
Power and equipment	22.38	29.85	37.31
Seed	5.97	5.97	5.97
Fertilizer	29.85	29.85	37.31
Herbicides	--	--	--
Insecticides and fungicides	44.78	59.70	104.47
Defoliant and other chemicals	--	--	--
Irrigation	44.77	44.77	74.62
Custom or contract work			
Other (specify) _____			
Subtotal	289.54	304.46	394.00
<u>Harvesting:</u>			
Labor	104.47	119.40	149.25
Power and equipment			
Custom or contract work			
Other (specify) _____			
Subtotal	104.47	119.40	149.25
<u>Off farm direct costs</u>			
Transportation to gin.	7.46	8.95	11.19
Ginning (including bagging and ties)	22.44	33.00	49.50
Other (specify) _____	8.95	8.95	10.40
Subtotal	38.85	50.90	71.09
Total direct costs	432.86	474.76	614.34
<u>Overhead costs:</u>			
Management and administration	22.38	29.85	29.85
Land cost (typical rental value)	119.40	119.40	119.40
Other (specify) _____			
TOTAL COSTS	574.64	624.01	763.59

Country ISRAELCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	4,000		
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	97.00		
Power and equipment	48.00		
Seed	7.00		
Fertilizer	37.00		
Herbicides	25.00		
Insecticides and fungicides	50.00		
Defoliant and other chemicals	8.00		
Irrigation	58.00		
Custom or contract work	32.00		
Other (specify) _____			
Subtotal	362.00		
<u>Harvesting:</u>			
Labor	20.00		
Power and equipment	65.00		
Custom or contract work			
Other (specify) _____			
Subtotal	85.00		
<u>Off farm direct costs</u>			
Transportation to gin	20.00		
Ginning (including bagging and ties)	80.00		
Other (specify) _____			
Subtotal	100.00		
Total direct costs	547.00		
<u>Overhead costs:</u>			
Management and administration	50.00		
Land cost (typical rental value)	10.00		
Other (specify) Insurance	8.00		
Research	4.00		
Depreciation-irrigation equipment	85.00		
Marketing	40.00		
TOTAL COSTS	744.00		

Country ITALYCrop year 1973/74

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	700		
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor		101.26	
Power and equipment		63.29	
Seed		47.47	
Fertilizer		99.68	
Herbicides		12.66	
Insecticides and fungicides		--	
Defoliant and other chemicals		--	
Irrigation		--	
Custom or contract work		--	
Other (specify) _____		--	
Subtotal		324.36	
<u>Harvesting:</u>			
Labor		142.40	
Power and equipment		--	
Custom or contract work		--	
Other (specify) _____		5.54	
Subtotal		147.94	
<u>Off farm direct costs</u>			
Transportation to gin		31.64	
Ginning (including bagging and ties)		7.91	
Other (specify) _____			
Subtotal		39.55	
Total direct costs		511.85	
<u>Overhead costs:</u>			
Management and administration		31.64	
Land cost (typical rental value)		79.11	
Other (specify) _____			
TOTAL COSTS		622.60	

Country IVORY COASTCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	1,000		
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	101.00		
Power and equipment	5.00		
Seed	1.00		
Fertilizer	68.00		
Herbicides	--		
Insecticides and fungicides	70.00		
Defoliant and other chemicals			
Irrigation			
Custom or contract work			
Other (specify) _____			
Subtotal	244.00		
<u>Harvesting:</u>			
Labor	45.00		
Power and equipment			
Custom or contract work			
Other (specify) <u>Shipping</u> _____	5.00		
Stalk destruction _____	11.00		
Subtotal	61.00		
<u>Off farm direct costs</u>			
Transportation to gin	24.00		
Ginning (including bagging and ties)	57.00		
Other (specify) <u>Purchasing costs</u> _____	7.00		
Subtotal	88.00		
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	--		
Land cost (typical rental value)	--		
Other (specify) <u>Supervision</u> _____	55.00		
TOTAL COSTS	448.00		

Country KENYACrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	800	1,000	2,200
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	130.85		
Power and equipment	51.82		
Seed	1.75		
Fertilizer	--		
Herbicides	5.60		
Insecticides and fungicides	38.66		
Defoliant and other chemicals	6.86		
Irrigation	210.08		
Custom or contract work	--		
Other (specify) <u>Handling charges</u> <u>at 40/= per ton Seed Cotton</u>	5.60		
Subtotal	451.22		
<u>Harvesting:</u>			
Labor	14.01		
Power and equipment	--		
Custom or contract work	--		
Other (specify) _____	--		
Subtotal			
<u>Off farm direct costs</u>			
Transportation to gin	--		
Ginning (including bagging and ties)	78.91		
Other (specify) _____			
Subtotal			
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	6.80		
Land cost (typical rental value)			
Other (specify) _____			
TOTAL COSTS			
			550.94

Country MALAWICrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	900	900	2,500
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	17.89		
Power and equipment	--		
Seed	--		
Fertilizer	--		
Herbicides	--		26.30
Insecticides and fungicides	11.87		
Defoliant and other chemicals	--		
Irrigation	--		
Custom or contract work	--		
Other (specify) <u>Knapsack</u>			
<u>sprayer</u>	2.29		
Subtotal			
<u>Harvesting:</u>			
Labor	26.49		
Power and equipment	--		
Custom or contract work	--		
Other (specify) _____	--		
Subtotal			
<u>Off farm direct costs</u>			
Transportation to gin	2.47		6.87
Ginning (including bagging and ties)	10.36		28.80
Other (specify) <u>Marketing</u>	22.48		62.49
Subtotal			
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	9.52		26.47
Land cost (typical rental value)	--		
Other (specify) _____	--		
TOTAL COSTS			

Country MexicoCrop year 1974

Item	Estimated cost of producing a hectare of cotton <u>1/</u>			
	Delicias Chihuahua	El Fuerte Sinaloa	Navjoa Sonora	C. Obregon Sonora
	<u>US \$ per hectare</u>			
Labor	268.17	262.86	274.71	232.23
Machinery and equipment	82.08	77.04	80.91	60.20
Seed	14.31	12.49	12.48	14.58
Fertilizer	69.09	44.96	51.58	36.20
Herbicides	-	3.55	-	3.81
Insecticides and fungicides	108.28	16.97	10.23	14.04
Defoliantes	4.01	-	6.24	-
Ginning and packing	82.97	-	97.32	-
Applications of para- siticides and fertilizer	42.29	27.91	19.87	24.22
Water	10.35	18.27	22.45	15.84
Interest	22.24	8.46	13.46	11.50
Land	40.00	43.48	60.00	43.76
Taxes, etc.	78.38	57.97	28.87	31.62
TOTAL COSTS .	822.17	573.96	678.12	488.00

1/ Gravity irrigated.

Country Mexico (continued)Crop year 1974

Item	Estimated cost of producing a hectare of cotton <u>1/</u>		
	Sto. Domingo Baja California	Hermosillo Sonora	Caborca Sonora
	<u>US \$ per hectare</u>		
Labor	283.31	260.32	201.54
Machinery and equipment	99.00	71.96	68.25
Seed	13.21	12.24	11.07
Fertilizer	55.94	38.84	58.04
Herbicides	7.11	11.28	10.90
Insecticides and fungicides	34.34	66.93	55.27
Defoliant	-	6.12	-
Ginning and packing	130.54	163.62	99.08
Applications of para- siticides and fertilizer	25.76	48.74	44.85
Water	134.52	67.96	135.78
Interest	17.14	17.37	16.77
Land	41.38	40.00	40.00
Taxes, etc.	61.18	38.33	39.15
TOTAL COSTS . .	903.43	843.71	780.70

1/ Pump irrigated.

Item	Estimated cost of producing a hectare of cotton					
	Mexicali Baja California		Comarca Laguna		Juarez Chihuahua	
	Irrigation		Irrigation		Irrigation	
	Pump	Gravity	Pump	Gravity	Pump	Gravity
	<u>US \$ per hectare</u>					
Labor	271.77	206.56	247.33	253.81	161.31	261.99
Machinery and equipment.	77.90	67.32	69.87	72.36	44.14	66.68
Seed	17.73	7.86	16.74	12.68	11.83	12.41
Fertilizer	38.67	35.68	49.87	56.80	23.45	35.37
Herbicides	-	2.60	-	-	-	-
Insecticides and fungicides.	78.55	58.97	57.06	82.61	-	1.00
Defoliant	-	-	-	-	-	-
Ginning and packing	93.90	111.03	84.76	93.30	54.42	63.98
Applications of para- siticides and fertilizer	61.07	55.97	20.04	30.75	6.72	22.07
Water	85.35	30.22	115.44	9.09	107.12	5.66
Interest	16.95	13.59	17.88	16.64	13.31	16.75
Land	40.00	40.00	40.00	40.00	40.00	40.00
Taxes, etc.	20.62	25.55	66.65	60.96	54.48	45.21
TOTAL COSTS	802.51	655.35	785.64	729.00	516.78	571.12

Country MOROCCOCrop year 1974

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	1,400	1,400	2,000
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor		75.00	97.50
Power and equipment		27.50	27.50
Seed		6.00	9.00
Fertilizer		37.50	37.50
Herbicides		--	--
Insecticides and fungicides		77.50	87.50
Defoliant and other chemicals		--	--
Irrigation		50.00	62.50
Custom or contract work		--	--
Other (specify) _____		--	--
Subtotal		273.50	321.50
<u>Harvesting:</u>			
Labor		114.00	160.00
Power and equipment		--	--
Custom or contract work		--	--
Other (specify) _____			
Subtotal		114.00	160.00
<u>Off farm direct costs</u>			
Transportation to gin		4.00	5.00
Ginning (including bagging and ties)		175.00	250.00
Other (specify) _____		--	--
Subtotal			
Total direct costs			
<u>Overhead costs:</u>			
Management and administration		11.00	11.00
Land cost (typical rental value)		62.50	62.50
Other (specify) _____		--	--
TOTAL COSTS		640.00	810.00

Country NICARAGUACrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer a/	Above average producer b/
Yield used (kilos per hectare)	1,109.41	1,204.51	1,299.60
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	95.70	89.28	87.85
Power and equipment	56.14	59.72	61.71
Seed	6.57	6.57	6.29
Fertilizer	92.86	98.29	90.71
Herbicides	9.00	9.00	14.29
Insecticides and fungicides	177.86	177.86	199.57
Defoliant and other chemicals	--	--	--
Irrigation	--	--	--
Custom or contract work	--	--	--
Other (specify) <u>Hired labour.</u>			
<u>insecticide application and other costs</u>	51.43	47.00	58.58
Subtotal	489.56	487.72	519.00
<u>Harvesting:</u>			
Labor	107.29	116.57	122.71
Power and equipment	--	--	--
Custom or contract work	--	--	--
Other (specify) _____			
Subtotal	107.29	116.57	122.71
<u>Off farm direct costs</u>			
Transportation to gin.	7.14	5.71	7.57
Ginning (including bagging and ties)	66.00	71.71	75.57
Other (specify) <u>Penalty, transport to port, loading and classification</u>	33.57	37.00	39.43
Subtotal	106.71	114.42	122.57
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	11.29	11.43	12.00
Land cost (typical rental value)	102.29	107.57	95.29
Other (specify) <u>Tax, bank interest, and owned capital</u>	45.57	48.00	48.29
TOTAL COSTS	862.71	885.71	919.86

a/ Average producer - 50 - 300 manzanas in best area of country. b/ Above average producer - over 300 manzanas in best producing area.

Note: 1 hectare = 1.431 manzanas.

Country PAKISTANCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	313		
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	15.35		
Power and equipment	52.78		
Seed	2.25		
Fertilizer	28.37		
Herbicides)	5.26		
Insecticides and fungicides)			
Defoliants and other chemicals)			
Irrigation	4.00		
Custom or contract work	--		
Other (specify) _____	--		
Subtotal	108.01		
<u>Harvesting:</u>			
Labor	18.23		
Power and equipment	--		
Custom or contract work	--		
Other (specify) _____	--		
Subtotal	18.23		
<u>Off farm direct costs</u>			
Transportation to gin	2.50		
Ginning (including bagging and ties)	14.48		
Other (specify) _____	--		
Subtotal	16.98		
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	13.89		
Land cost (typical rental value)	78.63		
Other (specify) <u>Bank interest</u>	10.06		
TOTAL COSTS	245.80		

Country PARAGUAYCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	950		
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	38.00	29.23	
Power and equipment	25.50	19.60	
Seed	6.50	5.00	
Fertilizer	--	--	
Herbicides	--	--	
Insecticides and fungicides	35.50	27.30	
Defoliant and other chemicals	--	--	
Irrigation	--	--	
Custom or contract work	--	--	
Other (specify) <u>Stalk destruction</u>	6.00	4.60	
Subtotal	111.50	85.73	
<u>Harvesting:</u>			
Labor	95.00	73.10	
Power and equipment	--	--	
Custom or contract work	3.00	2.30	
Other (specify) _____	--	--	
Subtotal	98.00	75.40	
<u>Off farm direct costs</u>			
Transportation to gin.	9.50	7.30	
Ginning (including bagging and ties)	--	--	
Other (specify) _____	--	--	
Subtotal	9.50	7.30	
Total direct costs		168.43	
<u>Overhead costs:</u>			
Management and administration	--	--	
Land cost (typical rental value)	6.00	4.60	
Other (specify) <u>10% on operating capital</u>		16.84	
TOTAL COSTS	225.00	189.87	

Country SPAINCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones ^{1/}	
		Average producer	Above average producer
Yield used (kilos per hectare)	650	750	1,200
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	109.00	112.00	120.00
Power and equipment	53.00	55.00	65.00
Seed	23.00	23.00	23.00
Fertilizer	142.00	148.00	160.00
Herbicides	24.00	24.00	32.00
Insecticides and fungicides	98.00	102.00	110.00
Defoliant and other chemicals	--	--	--
Irrigation	27.00	27.00	27.00
Custom or contract work	174.00	180.00	190.00
Other (specify) _____	--	--	--
Subtotal	650.00	671.00	727.00
<u>Harvesting:</u>			
Labor	262.00	300.00	420.00
Power and equipment	--	--	--
Custom or contract work	--	--	--
Other (specify) _____	--	--	--
Subtotal	262.00	300.00	420.00
<u>Off farm direct costs</u>			
Transportation to gin	11.00	13.00	16.00
Ginning (including bagging and ties)	60.00	70.00	90.00
Other (specify) _____	--	--	--
Subtotal	71.00	83.00	106.00
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	73.00	76.00	83.00
Land cost (typical rental value)	220.00	240.00	280.00
Other (specify) _____	--	--	--
TOTAL COSTS	1,276.00	1,370.00	1,616.00

^{1/} Andalucia

Country SUDANCrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones <u>1/</u>	
		Average producer	Above average producer
Yield used (kilos per hectare)		536	
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor		21.09	
Power and equipment		15.26	
Seed		3.90	
Fertilizer		20.54	
Herbicides (Weeding)		23.97	
Insecticides and fungicides		68.48	
Defoliant and other chemicals		--	
Irrigation		14.38	
Custom or contract work		--	
Other (specify) _____		--	
Subtotal		167.62	
<u>Harvesting:</u>			
Labor		94.55	
Power and equipment			
Custom or contract work		2.05	
Other (specify) _____			
Subtotal		96.60	
<u>Off farm direct costs</u>			
Transportation to gin		26.51	
Ginning (including bagging and ties)		27.21	
Other (specify) <u>Transport to Port Sudan,</u> <u>sacks, stores, loading and off-loading</u>		15.06	
Marketing . . . . .		.85	
Insurance and auditing		12.07	
Subtotal		81.70	
<u>Overhead costs:</u>			
Management and administration		35.06	
Land cost (typical rental value) . . . . .		.68	
Other (specify) <u>Tax</u>		25.68	
<u>Research and experiments</u>		26.24	
TOTAL COSTS		433.58	

1/ Gezira is an average producer. (a) Planting starts in the Gezira Scheme on July 25th.
(b) Harvest commences mid January through April.

Country SYRIACrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	2,000		
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	157.92		
Power and equipment	180.29		
Seed	15.79		
Fertilizer	140.29		
Herbicides			
Insecticides and fungicides	7.90		
Defoliant and other chemicals			
Irrigation	39.48		
Custom or contract work			
Other (specify) <u>Sacks and threads</u>	26.32		
Other	2.63		
Subtotal	570.62		
<u>Harvesting:</u>			
Labor	78.96		
Power and equipment			
Custom or contract work			
Other (specify) <u>Warehousing</u>	5.26		
Subtotal	84.22		
<u>Off farm direct costs</u>			
Transportation to gin	19.74		
Ginning (including bagging and ties)	37.77		
Other (specify) _____			
Subtotal	57.51		
Total direct costs	712.35		
<u>Overhead costs:</u>			
Management and administration			
Land cost (typical rental value)	144.76		
Other (specify) <u>Interest on capital</u>	26.32		
TOTAL COSTS	883.43		

Country TURKEYCrop year 1974

Item	Estimated cost of producing a hectare of cotton		
	Region of Çukurova average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)			
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	38.21		
Power and equipment	44.28		
Seed	9.82		
Fertilizer	40.53		
Herbicides	--		
Insecticides and fungicides	85.71		
Defoliant and other chemicals	--		
Irrigation	26.46		
Custom or contract work	53.57		
Other (specify) _____	14.28		
Subtotal	312.86		
<u>Harvesting:</u>			
Labor	103.71		
Power and equipment	28.57		
Custom or contract work	12.00		
Other (specify) _____	21.43		
Subtotal	165.71		
<u>Off farm direct costs</u>			
Transportation to gin	4.50		
Ginning (including bagging and ties)	187.50		
Other (specify) _____			
Subtotal	192.00		
Total direct costs			
<u>Overhead costs:</u>			
Management and administration	88.57		
Land cost (typical rental value)	178.57		
Other (specify) _____	77.86		
TOTAL COSTS	1,015.57		

Country TURKEYCrop year 1974

Item	Estimated cost of producing a hectare of cotton		
	Region of Ege average	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	891		
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	--		
Power and equipment	69.44		
Seed	12.50		
Fertilizer	45.00		
Herbicides	22.22		
Insecticides and fungicides	17.50		
Defoliant and other chemicals	--		
Irrigation	44.44		
Custom or contract work	--		
Other (specify) _____	131.94		
Subtotal	343.04		
<u>Harvesting:</u>			
Labor	173.61		
Power and equipment	--		
Custom or contract work	--		
Other (specify) _____	17.36		
Subtotal	190.97		
<u>Off farm direct costs</u>			
Transportation to gin	3.47		
Ginning (including bagging and ties)	59.37		
Other (specify) _____	2.62		
Subtotal	65.46		
Total direct costs	599.47		
<u>Overhead costs:</u>			
Management and administration	38.65		
Land cost (typical rental value)	208.33		
Other (specify) _____	73.05		
TOTAL COSTS	919.50		

Country UNITED STATESCrop year 1974 1/

Item	Estimated cost of producing a hectare of cotton		
	National average	Southeast	
		Average producer	Above average producer <u>2/</u>
Yield used (kilos per hectare)	526	453	667
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	42.80	34.82	30.05
Power and equipment	62.07	133.48	97.93
Seed	18.75	15.79	8.10
Fertilizer	43.39	95.43	84.80
Herbicides	19.03	36.03	34.96
Insecticides and fungicides . .	23.82	81.42	54.02
Defoliant and other chemicals .	6.18	8.20	6.80
Irrigation	33.88	.09	0
Custom or contract work . . .	13.51	10.11	6.72
Other (specify) _____			
Subtotal	263.43	415.37	323.38
<u>Harvesting:</u>			
Labor	14.26	16.38	14.13
Power and equipment	67.23	57.20	41.98
Custom or contract work . . .	22.04	22.49	14.92
Other (specify) _____			
Subtotal	103.53	96.07	71.03
<u>Off farm direct costs</u>			
Transportation to gin	11.29	11.96	14.70
Ginning (including bagging and ties)	75.27	63.16	93.03
Other (specify) <u>Interest, operating capital</u>	11.74	14.97	11.91
Subtotal	98.30	90.09	119.64
Total direct costs	465.26	601.53	514.05
<u>Overhead costs:</u>			
Management and administration . .	10.87	5.93	6.92
Land cost (typical rental value) . .	126.81	115.69	104.65
Other (specify) <u>General farm overhead <u>3/</u></u>	39.04	38.84	31.13
TOTAL COSTS	641.98	761.99	656.75

- Footnotes given on pages 34 and 35.

UNITED STATES
 Country _____ (continued) _____

Crop year 1974 1/ _____

Item	Estimated cost of producing a hectare of cotton		
	National average	Mississippi Delta	
		Average producer	Above average producer
Yield used (kilos per hectare)	526	648	875
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	42.80	43.17	42.43
Power and equipment	62.07	78.45	69.44
Seed	18.75	13.94	14.83
Fertilizer	43.39	39.44	36.00
Herbicides	19.03	36.25	34.25
Insecticides and fungicides	23.82	34.40	28.29
Defoliant and other chemicals	6.18	7.88	17.22
Irrigation	33.88	.22	0
Custom or contract work	13.51	20.41	29.65
Other (specify) _____			
Subtotal	263.43	274.16	272.11
<u>Harvesting:</u>			
Labor	14.26	16.80	16.51
Power and equipment	67.23	92.12	81.52
Custom or contract work	22.04	23.97	34.59
Other (specify) _____			
Subtotal	103.53	132.89	132.62
<u>Off farm direct costs</u>			
Transportation to gin	11.29	14.26	19.30
Ginning (including bagging and ties)	75.27	84.41	114.26
Other (specify) <u>Interest, operating capital</u>	11.74	11.22	12.50
Subtotal	98.30	109.89	146.06
Total direct costs	465.26	516.94	550.79
<u>Overhead costs:</u>			
Management and administration	10.87	17.72	17.42
Land cost (typical rental value)	126.81	124.69	112.36
Other (specify) <u>General farm overhead 3/</u>	39.04	44.33	44.77
TOTAL COSTS	641.98	703.68	725.34

UNITED STATES
 Country (continued)

 Crop year 1974 1/

Item	Estimated cost of producing a hectare of cotton		
	National average	Southwest	
		Average producer	Above average producer
Yield used (kilos per hectare)	526	449	657
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	42.80	40.28	36.15
Power and equipment	62.07	36.00	28.24
Seed	18.75	18.80	14.55
Fertilizer	43.39	23.38	24.09
Herbicides	19.03	11.51	7.22
Insecticides and fungicides	23.82	2.40	1.32
Defoliant and other chemicals	6.18	1.68	.99
Irrigation	33.88	50.26	26.96
Custom or contract work	13.51	6.03	5.63
Other (specify) _____			
Subtotal	263.43	190.34	145.15
<u>Harvesting:</u>			
Labor	14.26	13.44	12.06
Power and equipment	67.23	43.98	33.16
Custom or contract work	22.04	17.20	16.06
Other (specify) _____			
Subtotal	103.53	74.62	61.28
<u>Off farm direct costs</u>			
Transportation to gin	11.29	9.44	14.48
Ginning (including bagging and ties)	75.27	63.18	96.94
Other (specify) <u>Interest, operating capital</u>	11.74	6.20	5.54
Subtotal	98.30	78.82	116.96
Total direct costs	465.26	343.78	323.39
<u>Overhead costs:</u>			
Management and administration	10.87	6.65	5.96
Land cost (typical rental value)	126.81	109.09	98.07
Other (specify) <u>General farm overhead 3/</u>	39.04	30.48	23.55
TOTAL COSTS	641.98	490.00	450.97

1/ Based on an update of 1966 survey data.

2/ Represents roughly the top 20 percent of producers.

UNITED STATES
 Country _____ (continued) _____

Crop year _____ 1974 1/ _____

Item	Estimated cost of producing a hectare of cotton		
	National average	West	
		Average producer	Above average producer
Yield used (kilos per hectare)	526	972	1,154
<u>US \$ per hectare</u>			
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	42.80	85.08	102.84
Power and equipment	62.07	75.09	80.95
Seed	18.75	11.98	6.45
Fertilizer	43.39	37.71	15.38
Herbicides	19.03	10.45	7.73
Insecticides and fungicides	23.82	31.85	35.71
Defoliant and other chemicals	6.18	21.69	21.89
Irrigation	33.88	193.18	169.24
Custom or contract work	13.51	36.59	7.36
Other (specify) _____			
Subtotal	263.43	503.62	447.55
<u>Harvesting:</u>			
Labor	14.26	31.48	38.05
Power and equipment	67.23	91.77	98.94
Custom or contract work	22.04	38.10	7.66
Other (specify) _____			
Subtotal	103.53	161.35	144.65
<u>Off farm direct costs</u>			
Transportation to gin	11.29	20.43	25.45
Ginning (including bagging and ties)	75.27	121.60	151.42
Other (specify) <u>Interest, operating capital</u>	11.74	14.68	14.23
Subtotal	98.30	156.71	191.10
Total direct costs	465.26	821.68	783.30
<u>Overhead costs:</u>			
Management and administration	10.87	33.66	39.73
Land cost (typical rental value)	126.81	271.66	183.48
Other (specify) <u>General farm overhead 3/</u>	39.04	81.89	62.54
TOTAL COSTS	641.98	1,208.89	1,069.05

3/ Includes farm real estate and personal property taxes, insurance, repairs on buildings and fences and miscellaneous items such as telephone, electricity, maintenance and drainage ditches and terraces, and use of personal auto for farm business.

Country UPPER VOLTACrop year 1974/75

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones <u>1/</u>	
		Average producer	Above average producer
Yield used (kilos per hectare) (Seed cotton)	470	800	1,500
<u>On farm direct costs</u>	<u>US \$ per hectare</u>		
<u>Preharvesting:</u>			
Labor	45.07	66.90	78.87
Power and equipment . . . . .	.94	1.41	1.41
Seed	--	--	--
Fertilizer	4.46	9.63	17.84
Herbicides	--	--	--
Insecticides and fungicides	4.73	7.77	12.68
Defoliant and other chemicals	--	--	--
Irrigation	--	--	--
Custom or contract work	--	--	--
Other (specify) _____	--	--	--
Subtotal			
<u>Harvesting:</u>			
Labor	13.38	22.53	42.25
Power and equipment	--	--	--
Custom or contract work	--	--	--
Other (specify) <u>Labor - stalk destruction and burning</u>	7.04	7.04	8.45
Subtotal			
<u>Off farm direct costs</u>			
Loan for seeds	2.18	3.71	3.71
Loan for fertilizer and insecticides	22.48	38.32	71.84
Purchase costs seed cotton	4.76	8.11	15.20
Shipping costs	10.43	17.75	33.29
Processing costs	15.95	27.15	50.91
Overhead costs	18.63	31.71	59.45
TOTAL COSTS	150.05	242.03	395.90

1/ Cotton project West Volta.