

SURVEY OF COST OF PRODUCTION OF RAW COTTON



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The XXIX Plenary Meeting of the ICAC (1970) directed the Secretariat to conduct a survey of the cost of producing raw cotton in the various countries. The results of the original inquiry were presented as Document 17 of the XXX ICAC Plenary Meeting, held in June 1971. After consideration by that meeting, the Secretariat was instructed to re-examine the document, make any necessary adjustments, and attempt to obtain information from countries which did not respond to the earlier questionnaire. Accordingly, this revised version contains data from ten additional countries, as well as adjusted figures in certain cases for countries which had submitted replies to the first survey.

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

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TABLE I

Cotton yields, farm prices, and government payments

Year	Cotton yield (bales per acre)	Farm price (cents per pound)	Government payment (cents per pound)	Total price (cents per pound)
1954	1.00	12.00	0.00	12.00
1955	1.00	12.00	0.00	12.00
1956	1.00	12.00	0.00	12.00
1957	1.00	12.00	0.00	12.00
1958	1.00	12.00	0.00	12.00
1959	1.00	12.00	0.00	12.00
1960	1.00	12.00	0.00	12.00
1961	1.00	12.00	0.00	12.00
1962	1.00	12.00	0.00	12.00
1963	1.00	12.00	0.00	12.00
1964	1.00	12.00	0.00	12.00
1965	1.00	12.00	0.00	12.00
1966	1.00	12.00	0.00	12.00
1967	1.00	12.00	0.00	12.00
1968	1.00	12.00	0.00	12.00
1969	1.00	12.00	0.00	12.00
1970	1.00	12.00	0.00	12.00
1971	1.00	12.00	0.00	12.00
1972	1.00	12.00	0.00	12.00
1973	1.00	12.00	0.00	12.00
1974	1.00	12.00	0.00	12.00
1975	1.00	12.00	0.00	12.00
1976	1.00	12.00	0.00	12.00
1977	1.00	12.00	0.00	12.00
1978	1.00	12.00	0.00	12.00
1979	1.00	12.00	0.00	12.00
1980	1.00	12.00	0.00	12.00
1981	1.00	12.00	0.00	12.00
1982	1.00	12.00	0.00	12.00
1983	1.00	12.00	0.00	12.00
1984	1.00	12.00	0.00	12.00
1985	1.00	12.00	0.00	12.00
1986	1.00	12.00	0.00	12.00
1987	1.00	12.00	0.00	12.00
1988	1.00	12.00	0.00	12.00
1989	1.00	12.00	0.00	12.00
1990	1.00	12.00	0.00	12.00
1991	1.00	12.00	0.00	12.00
1992	1.00	12.00	0.00	12.00
1993	1.00	12.00	0.00	12.00
1994	1.00	12.00	0.00	12.00
1995	1.00	12.00	0.00	12.00
1996	1.00	12.00	0.00	12.00
1997	1.00	12.00	0.00	12.00
1998	1.00	12.00	0.00	12.00
1999	1.00	12.00	0.00	12.00
2000	1.00	12.00	0.00	12.00
2001	1.00	12.00	0.00	12.00
2002	1.00	12.00	0.00	12.00
2003	1.00	12.00	0.00	12.00
2004	1.00	12.00	0.00	12.00
2005	1.00	12.00	0.00	12.00
2006	1.00	12.00	0.00	12.00
2007	1.00	12.00	0.00	12.00
2008	1.00	12.00	0.00	12.00
2009	1.00	12.00	0.00	12.00
2010	1.00	12.00	0.00	12.00
2011	1.00	12.00	0.00	12.00
2012	1.00	12.00	0.00	12.00
2013	1.00	12.00	0.00	12.00
2014	1.00	12.00	0.00	12.00
2015	1.00	12.00	0.00	12.00
2016	1.00	12.00	0.00	12.00
2017	1.00	12.00	0.00	12.00
2018	1.00	12.00	0.00	12.00
2019	1.00	12.00	0.00	12.00
2020	1.00	12.00	0.00	12.00
2021	1.00	12.00	0.00	12.00
2022	1.00	12.00	0.00	12.00

Table 1 - Cotton yields, farm prices, and government payments

QUESTION	Algeria	Angola	Australia (1966/67 data)	Cameroon	Colombia
<u>For farmers who sell their cotton as seed cotton (unginned):</u>					
A. Yield of seed cotton per unit of land - kilos/hectare	600	1,000		700	1,500
B. Percentage of lint outturn under normal commercial conditions	33%	38%		37.5%	
C. Average price received by farmer for seed cotton (unginned cotton) per unit of weight	\$0.24 kg.	\$0.18 kg.		\$0.114	\$0.24 kg.
<u>For farmers who sell their cotton as lint cotton:</u>					
A. Yield of lint per unit of land - kilos/hectare		380	874 (Ord) 953 (Namoi)		540
B. Yield of seed per unit of land - kilos/hectare		610	1,796 (Ord) 1,814 (Namoi)		900
C. Average price received by farmer for ginned cotton per kilo		\$0.62	\$0.582 (Ord) \$0.626 (Namoi)		\$0.539
D. Average price received by farmer for cotton-seed for crushing per kilo		\$0.06 (export) \$0.05 (local)	\$0.046 (Ord) \$0.053 (Namoi)		\$0.088
Government payment received by farmer. Specify payment rate, on what basis paid, and whether or not any overall upper limit.			Ave. payment 23.8-24.0 US cents per kilo, lint basis. Upper limit 32.6 cents for M 1", with premiums and discounts for other grades.		

Costa Rica	Greece	Guatemala	Honduras	Iran	Ivory Coast	Malawi	Mexico
1,811	2,500	2,267	2,227	1,200 - 1,300	800	493	1,995
40%	35.9%	35.7%	--	30 - 32%	40%	33%	38.0%
\$0.58 kg.	\$0.31 kg.	\$0.25 kg.	\$0.179 kg.	\$0.19 kg.	\$0.141	\$0.118 kg.	\$0.176 - 0.208 kg.
719	897	810	--	500 - 550	--	--	752
1,088	1,500	1,328	--	950 - 1,050	--	--	1,236
\$0.507	\$0.785	\$0.68	--	--	--	--	\$0.49 - \$0.57
\$0.082	\$0.11	\$0.07	--	--	--	--	\$0.044 - \$0.051
	4.66 US cents/kg. for seed cotton or 12.96 cents/kg. for lint.			Low interest loan rate - \$26 per hectare at 6%, 40-50 kgs of im- proved seed per hectare, 1/3rd of it free and 2/3rds on interest free credit distribution of 125- 150 kgs of fertilizer per hectare.			None

Continued . . .

Table 1 - Cotton yields, farm prices, and government payments (continued)

QUESTION	Morocco	Mozambique	Nicaragua
<u>For farmers who sell their cotton as seed cotton (unginned):</u>			
A. Yield of seed cotton per unit of land - kilos/hectare	1,250	362	2,300
B. Percentage of lint outturn under normal commercial conditions	30 - 35%	32%	33.9%
C. Average price received by farmer for seed cotton (unginned cotton) per unit of weight	\$0.26 kg.	\$0.161 (mill) \$0.124 (rural areas)	\$0.20 kg.
<u>For farmers who sell their cotton as lint cotton:</u>			
A. Yield of lint per unit of land - kilos/hectare	--	224	372
B. Yield of seed per unit of land - kilos/hectare	--	448	615
C. Average price received by farmer for ginned cotton per kilo	--	\$0.62	\$0.579
D. Average price received by farmer for cotton-seed for crushing per kilo . .	--	\$0.019	\$0.07
Government payment received by farmer. Specify payment rate, on what basis paid, and whether or not any overall upper limit.	Credit-\$30 per farmer; in addition special operations performed by agents from the Min. of Agriculture (ploughing, seeding, fertilization, chemical treatment and irrigation).	Technical help and some free services provided by the government (seed treatment and fibre distribution, classification, etc.).	None

Niger	Nigeria	Pakistan	Paraguay	Sudan	Syria	Spain
450	280-336	919	778	1,383	1,538 (irrigated) 296 (rainfed)	2,200 (irrigated) 700 (rainfed)
36%	33 - 35%	33% roller gin 29% saw gin		36%	39%	33% (irrigated) 35% (rainfed)
\$0.11 kg.	\$0.132 kg.	\$0.282 kg.	\$0.108 kg.	\$0.10 kg.	\$0.205 kg.	\$0.35 kg.
		1,052 (long staple cotton)		498		
		2,105 (long staple cotton)		896		
		\$0.732 (long staple cotton)		\$0.68		
		Seed for long staple cotton normally not crushed.		\$0.030		
	Official price to growers ranges from 9.9 - 13.2 US cents per kilo of seed cotton depending on quality.			\$12.81 equivalent for various services (land clearance, sowing, weeding picking, etc.)		

Continued

Table 1 - Cotton yields, farm prices, and government payments (continued)

QUESTION	Thailand	Upper Volta	United States	Venezuela	Yemen, People's Dem. Rep.	Zaire - Rep.
<u>For farmers who sell their cotton as seed cotton (unginned):</u>						
A. Yield of seed cotton per unit of land - kilos/hectare	1,850	291	Insignificant quantity sold as seed cotton.	1,050	925	500 kg/ha.
B. Percentage of lint outturn under normal commercial conditions	33%	36.08%		34.77%	35%	35.35%
C. Average price received by farmer for seed cotton (unginned cotton) per unit of weight		\$0.112 kg.		\$0.29 kg.	\$0.188	\$0.09 kg. 1st quality \$0.06 kg. 2nd quality
<u>For farmers who sell their cotton as lint cotton:</u>						
A. Yield of lint per unit of land - kilos/hectare			494			
B. Yield of seed per unit of land - kilos/hectare			841			
C. Average price received by farmer for ginned cotton per kilo			\$0.494 (1970-71 average through November 1970). (\$0.472 in the Southwest to \$0.538 in the West).			
D. Average price received by farmer for cotton-seed for crushing per kilo			\$0.056			None
Government payment received by farmer. Specify payment rate, on what basis paid, and whether or not any overall upper limit.		None	See Annex 1	\$0.227 per kilo for long staple varieties; no maximum.		None

TABLE 2

Information relating to production and marketing costs of cotton

Year	Production	Marketing	Total
1946	1,234,567	87,654	1,322,221
1947	1,345,678	98,765	1,444,443
1948	1,456,789	109,876	1,566,665
1949	1,567,890	120,987	1,688,877
1950	1,678,901	132,098	1,811,099
1951	1,789,012	143,209	1,932,221
1952	1,890,123	154,320	2,044,443
1953	1,901,234	165,431	2,066,665
1954	2,012,345	176,542	2,188,887
1955	2,123,456	187,653	2,311,109
1956	2,234,567	198,764	2,433,331
1957	2,345,678	209,875	2,555,553
1958	2,456,789	220,986	2,677,775
1959	2,567,890	232,097	2,800,000
1960	2,678,901	243,208	2,922,221
1961	2,789,012	254,319	3,044,443
1962	2,890,123	265,430	3,166,665
1963	2,901,234	276,541	3,177,775
1964	3,012,345	287,652	3,300,000
1965	3,123,456	298,763	3,422,221
1966	3,234,567	309,874	3,544,443
1967	3,345,678	320,985	3,666,665
1968	3,456,789	332,096	3,788,887
1969	3,567,890	343,207	3,911,109
1970	3,678,901	354,318	4,033,331
1971	3,789,012	365,429	4,155,553
1972	3,890,123	376,540	4,277,775
1973	3,901,234	387,651	4,288,887
1974	4,012,345	398,762	4,411,109
1975	4,123,456	409,873	4,533,331
1976	4,234,567	420,984	4,655,553
1977	4,345,678	432,095	4,777,775
1978	4,456,789	443,206	4,899,997
1979	4,567,890	454,317	5,022,207
1980	4,678,901	465,428	5,144,429
1981	4,789,012	476,539	5,266,651
1982	4,890,123	487,650	5,388,873
1983	4,901,234	498,761	5,410,095
1984	5,012,345	509,872	5,522,317
1985	5,123,456	520,983	5,644,539
1986	5,234,567	532,094	5,766,761
1987	5,345,678	543,205	5,888,983
1988	5,456,789	554,316	6,011,205
1989	5,567,890	565,427	6,133,427
1990	5,678,901	576,538	6,255,649
1991	5,789,012	587,649	6,377,871
1992	5,890,123	598,760	6,499,993
1993	5,901,234	609,871	6,522,205
1994	6,012,345	620,982	6,644,427
1995	6,123,456	632,093	6,766,649
1996	6,234,567	643,204	6,888,871
1997	6,345,678	654,315	7,011,093
1998	6,456,789	665,426	7,133,315
1999	6,567,890	676,537	7,255,537
2000	6,678,901	687,648	7,377,759
2001	6,789,012	698,759	7,499,981
2002	6,890,123	709,870	7,622,203
2003	6,901,234	720,981	7,644,425
2004	7,012,345	732,092	7,766,647
2005	7,123,456	743,203	7,888,869
2006	7,234,567	754,314	8,011,091
2007	7,345,678	765,425	8,133,313
2008	7,456,789	776,536	8,255,535
2009	7,567,890	787,647	8,377,757
2010	7,678,901	798,758	8,499,979
2011	7,789,012	809,869	8,622,201
2012	7,890,123	820,980	8,744,423
2013	7,901,234	832,091	8,766,645
2014	8,012,345	843,202	8,888,867
2015	8,123,456	854,313	9,011,089
2016	8,234,567	865,424	9,133,311
2017	8,345,678	876,535	9,255,533
2018	8,456,789	887,646	9,377,755
2019	8,567,890	898,757	9,499,977
2020	8,678,901	909,868	9,622,200
2021	8,789,012	920,979	9,744,421
2022	8,890,123	932,090	9,866,643
2023	8,901,234	943,201	9,888,865
2024	9,012,345	954,312	9,966,657
2025	9,123,456	965,423	10,088,879
2026	9,234,567	976,534	10,211,101
2027	9,345,678	987,645	10,333,323
2028	9,456,789	998,756	10,455,545
2029	9,567,890	1,009,867	10,577,767
2030	9,678,901	1,020,978	10,700,000

Table 2 - Information relating to production and marketing costs of cotton

QUESTION	Algeria	Angola
1. What approximate percentage of the cotton in your country is sold by the farmer in the form of seed cotton? What percentage as lint?	100% seed cotton	92% seed cotton 8% lint
2. Please state the average, or most typical ginning charges per bale, including bagging and ties.	\$12.00	\$12.48
3. If no independent ginning in country what is estimated cost of ginning a bale of cotton, including bagging and ties?		
4. Average or typical net weight of bale - kgs.	250	208
5. Average or typical weight of bagging and ties - kgs.	4.6	5
6. Amount of charges, if any gins make for sampling, handling, and storing cotton until shipped to mill or port - per bale.		Included in 2. above
7. Cost of storage, if any, after cotton has been moved from gin.		
8. Transportation charge per bale for moving cotton from gin to port or mill.	\$1.00	\$1.66
9. Port handling charges.	\$4.60	\$0.62 bale
10. Other charges, fees, taxes, insurance, etc. (typical amounts charged before cotton reaches domestic mill or hold of ship).		\$6.24 bale
11. What percentage of cotton acreage is fertilized?	100%	
12. What is typical kind of fertilizer applied, where used?	Ammonium Nitrate Superphosphate	
13. What is typical amount of fertilizer applied, where used?	4Qx/ha. Superphos. and 3Qx/ha. Amm. Nitrate (irrigated land). 2Qx/ha. Superphos. and 1Q/ha. Amm. Nitrate (non-irrigated).	
14. What percentage of cotton acreage receives insecticide?	100%	71.56% (1969)
15. What are typical kinds of insecticides applied, where used?	Métasystémax, Kilval and Endrin	Carbaryl 85% DDT 75% Paratiao 50% Endos sulfao 35%
16. What is typical number of applications of insecticides, where applied?	6	6 - 10
17. To what percentage of cotton acreage are herbicides applied?		
18. What herbicides are most frequently used?		
19. Approximate number of man days to produce one hectare of cotton.	120	37 (coastal) 64 (interior) (1968)
20. Approximate number of man days to harvest one hectare of cotton.	50	35 (coastal) 50 (interior) (1968)

Australia (1966/67 data)	Cameroon	Colombia	Costa Rica
100% lint	100% seed cotton	100% lint	100% seed cotton
\$60 (Ord) \$35 (Namoi)	\$10.83	\$7.78	\$16.35
NA			
227	200-205	246	218
NA	3	4.4	2.3
Included in 2. above			\$2.51
NA		\$1.30 per bale per month	
Included in 2. above	\$10.80	\$3.25	Included in 6. above
NA	\$1.81	\$1.20 bale	Included in 6. above
NA	\$5.05	\$2.35 bale	Included in 6 above
100%	40%	45%	100%
Nitrogenous and phosphatic	Ammonium Sulphate Ammonium Phosphate	Nitrogen (Urea 46%)	N. P. K.
208 kgs. Nitrogen per ha. in Ord area; 147 kgs. in Namoi	50% Ammonium Sulphate 50% Ammonium Phosphate	100 kgs/ha.	191 - 255 kg/ha.
100%	5%	100%	100%
Ord: DDT, endrin, parathion, endosulphan, toxaphene. Namoi: DDT, endrin, demeton- 5-methyl, dimethoate.	DDT, Endrin		Dusting type
15 (Ord) 12 (Namoi)	4	10 - 12	13
85% Ord 80% Namoi		80%	100%
Trifluran and either diuron or flumeturon		Herbam, Karmex, Lazo, Treflan and Cotoran	Pre-emergence and post- emergence
NA			52
Approximately 2-1/2 hours to harvest one ha. with a two- row spindle cotton picker.		15	29

Continued

Table 2 - Information relating to production and marketing costs of cotton (continued)

QUESTION	Dominican Republic	Egypt, Arab Republic
1. What approximate percentage of the cotton in your country is sold by the farmer in the form of seed cotton? What percentage as lint?		100% seed cotton
2. Please state the average, or most typical ginning charge per bale, including bagging and ties.		\$22.42 (long staple) \$17.72 (medium long)
3. If no independent ginning in country what is estimated cost of ginning a bale of cotton, including bagging and ties?	\$7.12	
4. Average or typical net weight of bale - kgs.	227	327
5. Average or typical weight of bagging and ties - kgs.	5.4	5
6. Amount of charges, if any, gins make for sampling, handling, and storing cotton until shipped to mill or port - per bale.		Included in 2. above
7. Cost of storage, if any, after cotton has been moved from gin.		Alexandria \$0.23 - \$0.81 per day Elsewhere - Nil
8. Transportation charge per bale for moving cotton from gin to port or mill.		\$1.50
9. Port handling charges.		\$0.03 (\$0.16 for fumigated bales)
10. Other charges, fees, taxes, insurance, etc. (typical amounts charged before cotton reaches domestic mill or hold of ship)		Fees \$0.09, Taxes \$0.37, Insurance \$0.46 (inside the gin) - \$0.21 from gin to Alexandria
11. What percentage of cotton acreage is fertilized?	100%	100%
12. What is typical kind of fertilizer applied, where used?	Ammonium Sulphate 16-20-10; 16-20-0	Nitrogenous and phosphatic
13. What is typical amount of fertilizer applied, where used?	45 lbs per application	N: 72 - 108 kgs/ha. P2 O5 - 36 kgs/ha.
14. What percentage of cotton acreage receives insecticide?	100%	100%
15. What are typical kinds of insecticides applied, where used?		Chlorinated hydrocarbons, Organophosphorous and carbonate
16. What is typical number of applications of insecticides, where applied?	10 passes per application	3 - 4
17. To what percentage of cotton acreage are herbicides applied?	Nil (used earlier)	Experimental stage
18. What herbicides are most frequently used?	Treflan, Gesagard 50	Cotoran and Treflan
19. Approximate number of man days to produce one hectare of cotton.		117
20. Approximate number of man days to harvest one hectare of cotton.		65

Greece	Guatemala	Honduras (1969/70 data)	Iran
99.5% seed cotton 0.5% lint	95% seed cotton 5% lint	100% seed cotton	90% seed cotton 10% lint
\$9.85 per bale of 226.5 kgs.		\$21.30	\$7.1 - \$8.4
\$8.32 per bale of 226.5 kgs.			
257	227	227	200
3	3.2	2.3	5 - 6
	None	\$1.75	\$0.25 (handling) \$0.64 sampling and classification)
	None		\$0.38 - \$0.45 bale first 3 months. \$0.25 bale each additional month.
\$17.99	\$3.75	\$0.40 (port)	\$2.5 - \$3.2
\$10.28 bale	\$1.35 bale	\$0.10 bale	\$0.64 bale
			\$0.50 bale
80%	80%	80%	60 - 70%
16-20-0 0-16/18-0; 21-0-0; 0-0-48 83 kgs/ha. Nitrogen on 80% of plant- ings; 70 kgs/ha. phosphorous on 70% of plantings; 3 kgs/ha. potash on 1% of plantings.	130-194 kgs/ha.	Ammonium Sulphate; Urea 10-20-0; 10-20-20; 20-20-0; 12-24-12 328 kgs/ha.	Ammonium Sulphate, Urea 120 - 150 kgs/ha.
90%	100%		80 - 90%
Chlorinated; derivates of carbonic acid; organo phosphorous.			Metasistox, Sevin, Guthion, Diptrex and Thedion
2 - 6	24	Once in 3 days depending upon degree of infestation	1 - 4
30-35%	50%	5%	
Treflan, Cotoran, Gesagard, Planavin		Herban	
70		NA	37 - 47
35		30	20 - 25

Continued

Table 2 - Information relating to production and marketing costs of cotton (continued)

QUESTION	Ivory Coast	Malawi	Mexico
1. What approximate percentage of the cotton in your country is sold by the farmer in the form of seed cotton? What percentage as lint?	100% seed cotton	100% seed cotton	20% seed cotton 80% lint
2. Please state the average, or most typical ginning charges per bale, including bagging and ties.	\$14.44		\$15.60
3. If no independent ginning in country what is estimated cost of ginning a bale of cotton, including bagging and ties?		\$10.18	
4. Average or typical net weight of bale - kgs.	222	186.4	230
5. Average or typical weight of bagging and ties - kgs.	3	1.8	3.1 - 9.0
6. Amount of charges, if any, gins make for sampling, handling, and storing cotton until shipped to mill or port - per bale.	Included in 2. above	Included in 3. above	
7. Cost of storage, if any, after cotton has been moved from gin.	None	DNA	
8. Transportation charge per bale for moving cotton from gin to port or mill	\$5.09 (port)	DNA	\$5.15-\$7.20 (port) \$7.30-12.50 (mill)
9. Port handling charges	\$1.77 bale	DNA	
10. Other charges, fees, taxes, insurance, etc. (typical amounts charged before cotton reaches domestic mill or hold of ship)	\$5.84 bale		
11. What percentage of cotton acreage is fertilized?	80%	Only research plots & one special project	96 - 99%
12. What is typical kind of fertilizer applied, where used?	NPS 20-20-16	Compound 20-20-0	Nitrogen and phosphorous
13. What is typical amount of fertilizer applied, where used?	160 kgs/ha.	224 kgs/ha.	80, 100, 120 and 160 kgs/ha. of nitrogen; 40 kgs/ha. of phosphorous
14. What percentage of cotton acreage receives insecticide?	100%	100% with Settlement Schemes; outside 14%	100%
15. What are typical kinds of insecticides applied, where used?	Endrin DDT 45-12 Thiodon DDT 24-42	Carbaryl, Sevin, DDT, Menazon, Binapacryl	
16. What is typical number of applications of insecticides, where applied?	4-6	12 within Settlement Scheme, outside 8	4-8
17. To what percentage of cotton acreage are herbicides applied?	Nil		25 - 30%
18. What herbicides are most frequently used?	DNA		Gesarol, Karmex, Treflan, Cotoran, Afalon
19. Approximate number of man days to produce one hectare of cotton.	150	148	42 - 50
20. Approximate number of man days to harvest one hectare of cotton.	35	37	12 - 15

Morocco (1969/70 data)	Mozambique	Nicaragua	Niger	Nigeria
100% seed cotton	81.4% seed cotton 18.6% lint	33.5% seed cotton 66.5% lint	100% seed cotton	100% seed cotton
\$33	\$14.90 per bale of 216.8 kgs.	\$13.90	\$12.94	
250	210	227	202	
	5	3.6	5.4	
\$7.00 (borne by the Marketing and Export Office)	Included in 2. above - up to 3 months	Nil	\$1.84	
Included in 6. above	First 7 days - free. Next 7 days - \$0.022 per bale per day. After 14 days - \$0.044 per bale per day.	\$2.57 (Including handling)	\$0.55 bale	
\$2.0 (to mill) \$0.4 (to port)	\$2.21	\$0.71	\$4.00	
\$2.00 bale	\$0.14 bale		\$1.39 bale	
\$18.00 bale	Land insurance 2.15% Tax \$0.027 ton, Duty 0.8% ad valorem	\$0.59	\$3.83	
95%	Only experimental plots	100%	3.5%	Very small
Ternary MPK	Ternary composts	10-30-10, 10-40-10, and Urea	Azote and Superphosphate	Single superphosphate and ammonium sul- phate
500 kgs/ha.	NPK 40-60-20		150 kgs/ha.	125 kg/ha. of each
95%	13%	100%	7.2%	Very small
Against Earias and pink bollworm	Carbaril 85% F, DDT 95% WP, Endosulfan 35% EC, Monocrotopos (Azodrin 5), Metasisstox 25% EC		Endrin and DDT	DDT/BHC or Carbaryl
6	8 - 10	20 - 25	4	6
Nil		35%	None	None
DNA		Treflan, Cotoran, Herban, Planavin, Karmex		
44.5	63 (average producer) 127 (above av. producer)		47	
16.5	20 (average producer) 75 (above av. producer)	20	37	

Continued

Table 2 - Information relating to production and marketing costs of cotton (continued)

QUESTION	Pakistan	Paraguay	Syria
1. What approximate percentage of the cotton in your country is sold by the farmer in the form of seed cotton? What percentage as lint?	100% seed cotton		100% seed cotton
2. Please state the average, or most typical ginning charge per bale, including bagging and ties.	\$17.14		
3. If no independent ginning in country what is estimated cost of ginning a bale of cotton, including bagging and ties?			\$8.16
4. Average or typical net weight of bale - kgs.	178	200	202
5. Average or typical weight of bagging and ties - kgs.	4	4.4	5
6. Amount of charges, if any, gins make for sampling, handling, and storing cotton until shipped to mill or port - per bale.	\$0.11		Included in 3. above
7. Cost of storage, if any, after cotton has been moved from gin	\$2.52 per annum		Included in 9. below
8. Transportation charge per bale for moving cotton from gin to port or mill.	\$2.10	\$0.40	\$1.14
9. Port handling charges	\$0.21 bale	\$1.08 bale	\$0.95 bale
10. Other charges, fees, taxes, insurance, etc. (typical amounts charged before cotton reaches domestic mill or hold of ship)	Cess \$0.42, Insurance, Term. Tax & Octroi \$2.63	\$8.46 bale	\$21.98 bale
11. What percentage of cotton acreage is fertilized?	75%	24%	85% (irrigated areas) None in rain-fed areas
12. What is typical kind of fertilizer applied, where used?	Ammonium Sulphate 21% N. Urea 46% N	15-15-15	NP and Farm Yard Manure
13. What is typical amount of fertilizer applied, where used?	125-250 kgs/ha.	150 kgs/ha.	NP - up to 80 kgs P ₂ O ₅ up to 80 kgs Farm Yard Manure up to 3 tons
14. What percentage of cotton acreage receives insecticide?	15 - 20%	100%	25 - 60%
15. What are typical kinds of insecticides applied, where used?	Phosphatic insecticides, Organophosphorous plus Chlorinated hydrocarbons	Mineral dusting types	Cotton dust, Sevin, Toxaphene
16. What is typical number of applications of insecticides, where applied?	2 - 4	3	2
17. To what percentage of cotton acreage are herbicides applied?	Nil		1%
18. What herbicides are most frequently used?	DNA		Treflan
19. Approximate number of man days to produce one hectare of cotton		53	164
20. Approximate number of man days to harvest one hectare of cotton		22	40 - 60

N. A. - Not available. DNA - Does not apply.

Spain	Thailand	Upper Volta	United States
99% seed cotton 1% lint	100% seed cotton	100% seed cotton	Less than 0.5% seed cotton Over 99.5% lint
Included in 3.		\$11.30	\$19.15 bale - gross weight 227 kgs.
\$16	\$7.5		
250		200	219
4		3	9.5
\$10		\$1.48	None
\$0.35 per bale per month		\$0.73 bale	Receiving at compress/warehouse \$0.97 (1969/70). Storage for first month \$0.63 (1969/70) (details Annex 2). Description of regions Annex 3).
	\$1.5	\$2.90	\$2.50 - \$10.45 (details Annex 2)
	Sold to local mills	\$1.52 bale	\$4.90 (high density compression) - (details Annex 2)
1 centavo per kilo per month		\$0.62 bale	\$8.85 - \$17.55 (details Annex 2)
90%	Nil	17%	74% (details Annex 4)
Urea, nitrogen sulphate, NPK		Ammonium sulphate (30%) & ammonium phosphate (70%)	N. P. K. (details Annex 4)
150 kgs/ha. N 150 kgs/ha. P 60 kgs/ha. K		100 kg/ha.	137 kgs. of nutrients per hectare - (details Annex 4)
	100%	32%	54% (1966 survey) - (details Annex 6)
Metasistox, Sevin, Rogor	Toxaprime 40% DDT 20% Methyl 10%	DDT, Endrin	Numerous kinds (details Annex 6)
5 - 7	6	2.15	1 - 8 (details Annex 6)
60%		None	52% (1966 survey) - (details Annex 6)
Treflan and Cotoran			Trifluralin, Diuron (details Annex 6)
100 irrigated 60 raingrown	181	105	50.7 (details Annex 5)
50 irrigated 25 raingrown	50	25	10.4 (details Annex 5)

Table 2 - Information relating to production and marketing costs of cotton (Continued)

QUESTION	Venezuela	Yemen, People's Dem. Rep.	Zaire - Rep.
1. What approximate percentage of the cotton in your country is sold by the farmer in the form of seed cotton? What percentage as lint?	100% seed cotton	100% seed cotton	100% seed cotton
2. Please state the average, or most typical ginning charges per bale, including bagging and ties.	\$15.21		
3. If no independent ginning in country what is estimated cost of ginning a bale of cotton, including bagging and ties?		\$16.8	
4. Average or typical net weight of bale - kgs.	232	178.5	99
5. Average or typical weight of bagging and ties - kgs.	4	4.46	1
6. Amount of charges, if any, gins make for sampling, handling, and storing cotton until shipped to mill or port - per bale.	\$0.08	Nil	
7. Cost of storage, if any, after cotton has been moved from gin.	\$0.011 per kilo per month.	Nil	
8. Transportation charge per bale for moving cotton from gin to port or mill	\$2.27	\$0.24	
9. Port handling charges.	None	\$0.60	
10. Other charges, fees, taxes, insurance, etc. (typical amounts charged before cotton reaches domestic mill or hold of ship).	None	\$0.78	
11. What percentage of cotton acreage is fertilized?	55%	10%; no fertilization earlier	
12. What is typical kind of fertilizer applied, where used?	NPK (10-20-10; 12-12-17; 15-15-15; & 12-12-6), Urea, amm. sulphate, phosphate of amm. & potassium sulphate.	Urea	None
13. What is typical amount of fertilizer applied, where used?	350 kgs/ha.	50 kgs.	None
14. What percentage of cotton acreage receives insecticide?	90%	Negligible	
15. What are typical kinds of insecticides applied, where used?		Sevin	Liquid and cotton dust
16. What is typical number of applications of insecticides, where applied?	6		2
17. To what percentage of cotton acreage are herbicides applied?	40%		None
18. What herbicides are most frequently used?	Lazo, Treflan, Cotoran, Altain, Karmex and Daconate.		None
19. Approximate number of man days to produce one hectare of cotton.	45	25	
20. Approximate number of man days to harvest one hectare of cotton	25	45	

N. A. Not available. DNA Does not apply.

Government payments received by farmers in the United States

In 1970, the total value of the upland cotton crop produced was about \$1,142,185,000. In addition, direct government price support payments to producers totaled about 890 million dollars. Prices received by farmers to December 1, 1970 averaged 22.4 cents per pound of lint. When government price support payments are included with prices received, the producer's average receipt per pound of lint produced in 1970 was about 39.9 cents.

The price support payment rate in 1970 was 16.8 cents per pound of lint. This payment was earned on the farm's domestic allotment which was 65 percent of the total effective allotment. The payment of 16.8 cents per pound was made on the farm's projected yield multiplied by the farm's domestic allotment, or the acreage planted if it were less than 90 percent of the domestic allotment. Projected yields for a farm were based on the average yield per harvested acre on the farm for the three preceding years, adjusted for trends in yield and other factors.

Special provisions in the 1970 program were made to benefit small farms-- those with cotton allotments of 10 acres or less or farms with projected production from the allotment of 3,600 pounds or less. In addition to qualifying for the regular price-support payments, as stated above, on the domestic allotment, these farms were also eligible for a small farm payment of 11.95 cents per pound multiplied by the farm projected yield and multiplied, in turn, by 35 percent of the farm allotment. Small farms could receive this payment without planting any cotton.

No payment limitations were imposed on the 1970 crop.

Important changes were made in the 1971 upland cotton program. A payment limitation of \$55,000 per person per crop was imposed. A national average loan rate of 19.5 cents per pound (net weight) for Middling one-inch upland cotton was established. In addition to this loan rate, a "set-aside" payment of at least 15 cents per pound will be made. The latter payment, when added to the national average market price for Middling one-inch cotton, must be high enough to equal the higher of (1) 35.0 cents, or (2) 65 percent of parity as of August 1, 1971. Payments will be made on the basis of the acreage planted within the farm base acreage allotment. Payments will, in general, be made on the average yield of acreage harvested during the three preceding years. To be eligible for loans and payments, cotton producers must set aside and devote to conserving uses an acreage of cropland equal to 20 percent of the farm base acreage allotment. For 1971, allotments were reduced so that the farm base acreage allotment in 1971 is about equal to the domestic allotment (65 percent of total) in 1970.

Details regarding answers to questions 7, 8, 9 and 10 (USA)

7.¹ Receiving at compress/warehouse - \$0.97 - average 1969 - 70

Storage for first month - 0.63 - " "

(Grower or merchant pays storage for number of months bale is in storage.)

Standard density charge - \$2.08 = average 1969 - 70

8. Pure transportation charge - 1970

Southeast to mill	50 points
Mid-South	106 " "
Southwest	
Houston	120 " "
El Paso	156 " "
West	209 " "

9. Port handling charges (based on tariffs of two large port facilities in 1968)

1. Receiving, tagging, weighing, drawing one set of samples, issuing individual warehouse receipts, picking out numbers, marking and delivering shipside or loading to cars, per bale -----\$1.75

2. Item 1 services, above, plus compression to high density, per bale -----\$3.10

NOTE: When compression to high density is not performed in connection with any other services, the compression charge per bale is \$2.00

3. Storage, including fire insurance per bale per month or fraction thereof -----\$0.55

4. Unloading and delivering cotton from consolidated cars or trucks to shipside terminal -----\$1.25

10.² Charges to land cotton at mill door, 1970

23 points receiving-- this charge rebated to mill in final settlement.

16 points storage for current month.

45 points compression

25 points loading (30 in El Paso - 40 in West)

50-209 points transportation (see answer to question 8)

20 points commission

3 points exchange

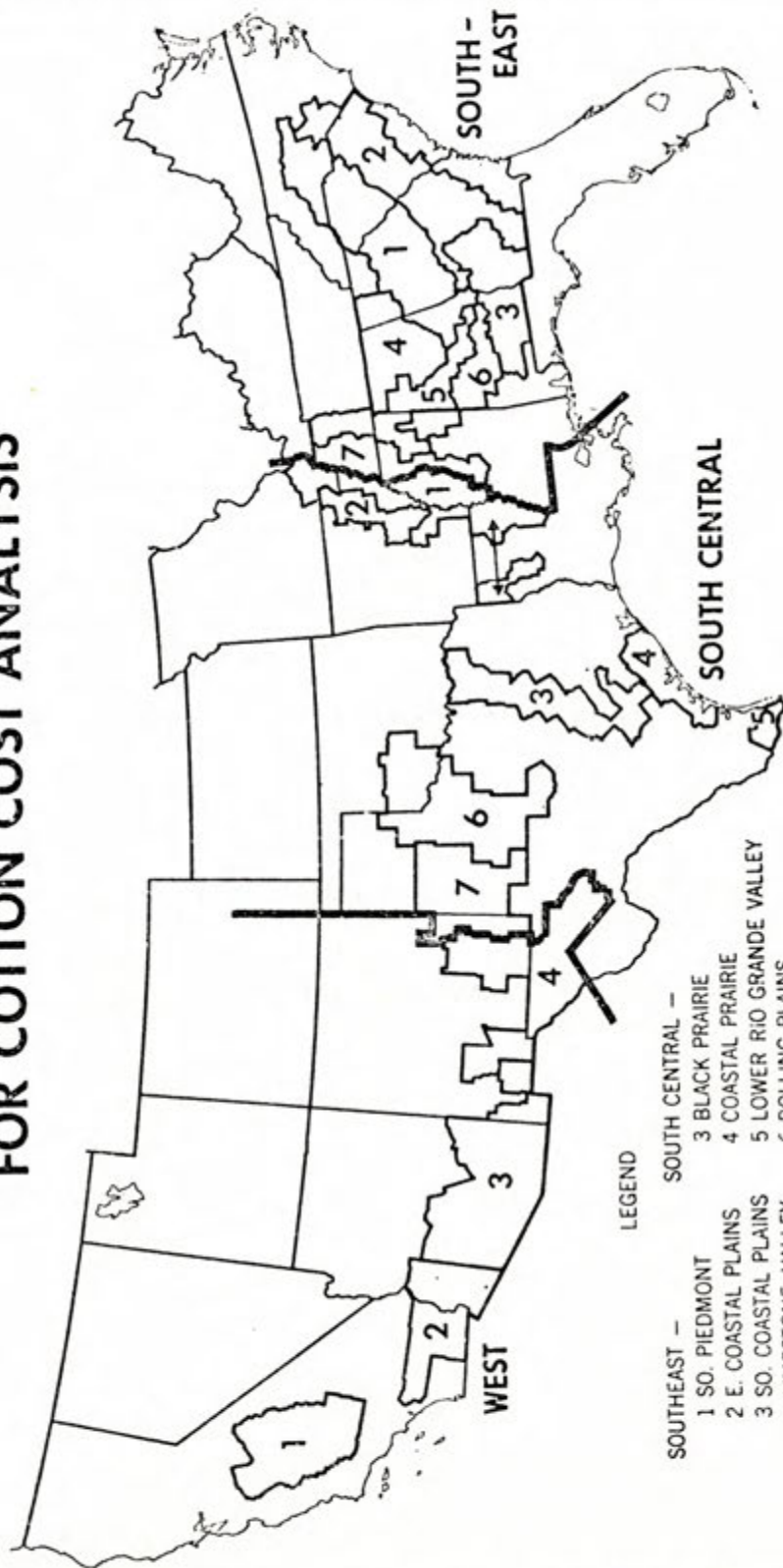
18 points one month interest.

¹ SOURCE: Ginning Charges & Related Data, 1969-70

² Based on actual records of Dec-Jan 1971 for large firm.

NOTE: One "point" = 5 cents per bale.

COTTON PRODUCTION REGIONS FOR COTTON COST ANALYSIS



LEGEND

- SOUTHEAST -
- 1 SO. PIEDMONT
- 2 E. COASTAL PLAINS
- 3 SO. COASTAL PLAINS
- 4 LIMESTONE VALLEY
- 5 SAND MTN.
- 6 CLAY HILLS
- 7 BLACK BELT
- 8 BROWN LOAM
- SOUTH CENTRAL -
- 1 MISSISSIPPI DELTA
- 2 N. E. ARKANSAS
- SOUTH CENTRAL -
- 3 BLACK PRAIRIE
- 4 COASTAL PRAIRIE
- 5 LOWER RIO GRANDE VALLEY
- 6 ROLLING PLAINS
- 7 HIGH PLAINS
- WEST -
- 1 SAN JOAQUIN VALLEY
- 2 SO. CALIFORNIA AND S.W. ARIZONA
- 3 SO. ARIZONA
- 4 UPPER RIO GRANDE-TRANS PECOS

Fertilizer use on Cotton acreage, U. S. and selected regions

Region	% of Cotton Acres receiving Fert. total (%)	Average Rates of application kgs per ha.			
		N	P ^{2/}	K	Total
Southwest-----	49	61	21	19	100
Southeast-----	98	86	33	73	221
Delta-----	97	90	25	50	131
Western-----	89	140	31	17	154
U. S. average	74	85	27	53	137

1/ Source: Derived from Data collected by S.R.S. on the Objective Yield Survey- Crop Production U.S.D.A., SRS., CrPr 2-2 (1-71) P. 13

2/ Nutrients are shown in terms of the elements N, P, and K.

ANNEX 5

Labor use on cotton, U. S. and selected regions, 1970 ^{1/}

Region	Hours labor per ha. harvested		
	Preharvest	Harvest	Total
	Hours	Hours	Hours
Southeast	62.5	16.1	78.6
Delta	53.6	15.1	68.7
Southwest	43.0	6.7	49.7
West	61.0	6.7	67.7
United States	50.7	10.4	61.1

1/ Based on extrapolation of 1969 estimates for major production regions.

ANNEX 6

Insecticide and herbicide use on cotton, U. S. selected regions, 1966

Description	Southwest	West	United States
Percentage of cotton acreage treated with one or more insecticides --	69	63	54
Typical insecticides used and average number of applications during yr.:	DDT 5.3 Toxaphene 5.3 Methyl-parathion 6.5	Toxaphene 3.8 DDT 4.4 Bidrin 1.0 Trichlorofon (Dipterex) 4.3 Parathion (ethyl) 5.0 Strobane 5.2	Toxaphene 4.4 DDT 5.0 Methyl-parathion 5.0 Parathion (ethyl) 5.0 Strobane 5.2
Percentage of cotton acreage treated with one or more herbicides --	76	45	52
Typical herbicides used --	Toxaphene 4.2 DDT 5.1 Strobane 5.6 Methyl-parathion 5.7 Carbaryl 2.5	Toxaphene 3.5 DDT 3.5 Methyl-parathion 5.2 Parathion (ethyl) 8.0 Carbaryl 4.6 Bidrin 2.0	Trifluralin Diuron

Country: ALGERIA

Year: 1967

Product: Wheat

Unit: US \$/ha

COST OF PRODUCTION DATA FOR INDIVIDUAL COUNTRIES

On farm direct costs (US \$/ha)			Total direct costs (US \$/ha)		
Other (specify)	Custom or contract work	Subtotal	Other (specify)	Custom or contract work	Subtotal
		44.58			44.58
		42.95			42.95
		81.03			81.03
		50.58			50.58
		24.99			24.99
		14.58			14.58
		18.25			18.25
		40.94			40.94
		55.18			55.18
		72.58			72.58
		87.97			87.97
		101.38			101.38
		5.93			5.93
		98.20			98.20
		104.78			104.78
		151.61			151.61
		4.48			4.48
		52.11			52.11
		56.59			56.59
		60.77			60.77
		95.71			95.71
		99.81			99.81
		103.78			103.78
		143.90			143.90
		150.43			150.43

Excluded and non-eligible... (faint text)

Country ALGERIACrop year 1967/68

Item	Estimated cost of producing a hectare of cotton		
	National average <u>1/</u>	In major producing zones	
		Average producer <u>3/</u>	Above average producer <u>3/</u>
Yield used (kilos per hectare)	870	520	1,260
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	129.02	118.29	139.76
Power and equipment			
Seed	14.58	14.58	14.58
Fertilizer	54.69	50.64	56.71
Herbicides			
Insecticides and fungicides	30.38	20.26	40.51
Defoliant and other chemicals			
Irrigation	90.94	81.02	162.04
Custom or contract work			
Other (specify) <u>Maintenance</u>	44.36	43.95	44.36
<hr/>			
Subtotal	363.97	328.74	457.96
<u>Harvesting:</u>			
Labor	101.28	91.15	121.53
Power and equipment			
Custom or contract work			
Other (specify) <u>Picking</u>	5.47	4.05	6.08
<hr/>			
Subtotal	106.75	95.20	127.61
<u>Off farm direct costs</u>			
Transportation to gin	5.47	4.46	6.08
Ginning (including bagging and ties)	38.89	24.31	58.33
Other (specify) _____			
<hr/>			
Subtotal	44.36	28.77	64.41
Total direct costs	515.08	452.71	649.98
<u>Overhead costs:</u>			
Management and administration	6.08	5.06	7.09
Land cost (typical rental value)			
Other (specify) <u>Unforeseen 5%</u>	26.74	23.70	33.83
<hr/>			
TOTAL COSTS	547.90	481.47	690.90

1/ Irrigated and non-irrigated. 2/ Non-irrigated. 3/ Irrigated.

Country ANGOLACrop year 1968

Item	Estimated cost of producing a hectare of cotton		
	Average producer	In major producing zones	
		Average producer	Above average producer
Yield used (kilos per hectare)	Coastal 900 kgs	Interior 1,300 kgs	3,000 kgs
<u>On farm direct costs</u>	US \$ per hectare		
<u>Preharvesting:</u>			
Labor	19.55	33.47	
Power and equipment	28.30	34.95	
Seed	00.84	1.60	
Fertilizer	--	--	
Herbicides			
Insecticides and fungicides	26.66	33.33	
Defoliant and other chemicals			
Irrigation			
Custom or contract work			
Other (specify) _____			
Subtotal	75.35	103.35	
<u>Harvesting:</u>			
Labor	19.17	27.57	
Power and equipment	--	--	
Custom or contract work	--	--	
Other (specify) _____	--	--	
Subtotal	19.17	27.57	
<u>Off farm direct costs</u>			
Transportation to gin	4.50	8.67	
Ginning (including bagging and ties)	21.60	31.20	
Other (specify) _____	5.33	8.00	
Subtotal	31.43	47.87	
Total direct costs	125.95	178.79	
<u>Overhead costs:</u>			
Management and administration	22.28	30.72	
Land cost (typical rental value)			
Other (specify) _____			
TOTAL COSTS	148.23	209.51	

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Ord average	Namoi average
Yield used (kilos per hectare)		2497	2723
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting (and harvesting):</u>			
Labor		49	132
Power and equipment (inc. depreciation and repairs)		77	192
Seed		1	11
Fertilizer		64	35
Herbicides)	93	79
Insecticides and fungicides)		
Defoliant and other chemicals)		
Irrigation		25	4
Custom or contract work		62	49
Other (specify) <u>Freight & cartage</u>		2	9
<u>Insurance</u>		2	12
<u>Other</u>		5	21
Subtotal		380	544
<u>Harvesting: (included above)</u>			
Labor			
Power and equipment			
Custom or contract work			
Other (specify) _____			
Subtotal			
<u>Off farm direct costs</u>			
Transportation to gin (included above)			
Ginning (including bagging and ties))	232	141
Other (specify) <u>and marketing</u>)		
Subtotal			
Total direct costs		612	685
<u>Overhead costs:</u>			
Management and administration (included in other)			
Land cost (typical rental value)			
Other (specify) <u>Interest on total capital including land at fair market value</u>		38	76
TOTAL COSTS		650	761

Country CAMEROON *

Crop year _____

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)	700	600	800/900
		US \$ per hectare	
On-farm direct costs			
Labor	20	18	25
Power and equipment	4	3	6
Seed	--	--	--
Fertilizer	4	2	12
Herbicides			
Insecticides and fungicides			
Other chemicals			
Irrigation			
Other			
Subtotal	28	23	43
Off-farm direct costs			
Transportation to gin	45	40	55
Ginning (including bagging and ties)	35	33	54
Other			
Subtotal	80	73	109
Total direct costs	108	96	152
Overhead costs			
Land			
General overhead			
Total overhead costs			
Total Costs	108	96	152

* Response to an earlier draft of the questionnaire.

Country COLOMBIA

Crop year _____

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)	1,500		
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	23.70		
Power and equipment	--		
Seed	4.80		
Fertilizer	15.87		
Herbicides	19.20		
Insecticides and fungicides	94.90		
Defoliant and other chemicals	--		
Irrigation *			
Custom or contract work	28.82		
Other (specify) _____			
Subtotal	187.29		
<u>Harvesting:</u>			
Labor	40.36		
Power and equipment	--		
Custom or contract work	--		
Other (specify) <u>Local transportation</u>	1.29		
Subtotal	41.65		
<u>Off farm direct costs</u>			
Transportation to gin	6.83		
Ginning (including bagging and ties)	27.73		
Other (specify) _____	12.37		
Subtotal	46.93		
Total direct costs	275.87		
<u>Overhead costs:</u>			
Management and administration	13.72		
Land cost (typical rental value)	38.00		
Other (specify) _____	39.65		
TOTAL COSTS	367.24		

* Omitted.

Country COSTA RICA

Crop year _____

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)			
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor) 105.19		
Power and equipment)		
Seed	3.89		
Fertilizer	27.89		
Herbicides	16.76		
Insecticides and fungicides	61.34		
Defoliant and other chemicals	-		
Irrigation			
Custom or contract work			
Other (specify) <u>Bales</u>	1.92		
Subtotal	216.99		
<u>Harvesting:</u>			
Labor	60.00		
Power and equipment			
Custom or contract work			
Other (specify) <u>Baling, insurance</u>			
<u>etc.</u>	5.94		
Subtotal	65.94		
<u>Off farm direct costs</u>			
Transportation to gin	7.26		
Ginning (including bagging and ties)	46.74		
Other (specify) <u>transportation to mills</u>			
<u>and ports, insurance, etc.</u>	11.96		
Subtotal	65.96		
Total direct costs	348.89		
<u>Overhead costs:</u>			
Management and administration			
Land cost (typical rental value)	36.84		
Other (specify) <u>Other expenses</u>	37.42		
TOTAL COSTS	423.15		

Country EGYPT, Arab RepublicCrop year 1969/70

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)			
<u>On farm direct costs</u>		<u>US \$ per hectare</u>	
<u>Preharvesting:</u>			
Labor	52.56		
Power and equipment			
Seed	10.57		
Fertilizer	58.64		
Herbicides)	65.04		
Insecticides and fungicides)			
Defoliant and other chemicals			
Irrigation	28.64		
Custom or contract work			
Other (specify) _____			
Subtotal	215.45		
<u>Harvesting:</u>			
Labor	52.01		
Power and equipment			
Custom or contract work			
Other (specify) _____			
Subtotal	52.01		
<u>Off farm direct costs</u>			
Transportation to gin			
Ginning (including bagging and ties)			
Other (specify) _____			
Subtotal			
Total direct costs	267.46		
<u>Overhead costs:</u>			
Management and administration			
Land cost (typical rental value)	130.80		
Other (specify) _____	4.65		
TOTAL COSTS	402.91		

Country GREECECrop year 1971

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)	2,500 kg/ha seed cotton		
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	116.90		
Power and equipment	68.28		
Seed	5.00		
Fertilizer	24.60		
Herbicides	6.40		
Insecticides and fungicides	12.50		
Defoliant and other chemicals	.50		
Irrigation	19.63		
Custom or contract work	-		
Other (specify) <u>2% misc. charge</u>	5.14		
<u>Subtotal</u>	258.95		
<u>Harvesting:</u>			
Labor	170.69		
Power and equipment	2.72		
Custom or contract work	-		
Other (specify) <u>transportation of workers</u>	3.40		
<u>Subtotal</u>	176.81		
<u>Off farm direct costs</u>			
Transportation to gin			
Ginning (including bagging and ties)			
Other (specify) _____			
<u>Subtotal</u>			
Total direct costs			
<u>Overhead costs:</u>			
Management and administration			
Land cost (typical rental value)	155.20		
Other (specify) <u>Interest on circulating capital</u>	17.43		
<u>Local tax</u>	20.40		
TOTAL COSTS	628.79		

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		Zone 1	Zone 2
Yield used (kilos per hectare)			
	US \$ per hectare		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor (soil preparation)	5.71	5.71	
Power and equipment	-	-	
Seed (30 lbs)	4.28	4.28	
Fertilizer (2 sacks)	17.13	17.13	
Herbicides	-	-	
Insecticides and fungicides (labor cost)	85.70	54.28	
Defoliant and other chemicals	5.71	4.28	
Irrigation	-	-	
Custom or contract work	7.14	5.71	
Other (specify) <u>Seeding</u>	1.43	1.43	
<u>Land maintenance</u>	14.28	11.43	
<u>Fertilizer application</u>	1.43	1.43	
Subtotal	142.81	105.68	
<u>Harvesting:</u>			
Labor	74.99	53.56	
Power and equipment			
Custom or contract work			
Other (specify) <u>Cleaning after harvest</u>	2.86	2.86	
Subtotal	77.85	56.42	
<u>Off farm direct costs</u>			
Transportation to gin	10.00 <u>a/</u>	14.28 <u>b/</u>	
Ginning (including bagging and ties)	60.87	44.68	
Other (specify) <u>Machinery upkeep</u>	7.14	7.14	
Subtotal	78.01	66.10	
Total direct costs	298.67	228.20	
<u>Overhead costs:</u>			
Management and administration	28.28	14.28	
Land cost (typical rental value)	28.57	14.28	
Other (specify) <u>6 months interest</u>	10.80	7.88	
<u>Special benefits to workers</u>	11.43	10.00	
<u>Commercialization & paper work</u>	18.68	14.57	
TOTAL COSTS	396.43	289.21	

a/ 1,588 kgs. b/ 1,134 kgs.

Country HONDURAS

Cost of producing one hectare of cotton

Crop year _____

TOTAL COST National average \$250
Average producer \$225

Only total costs are given as the Cooperativa Algodonera does not have sufficient information on these items. The Cooperativa would have to obtain data from each individual producer in order to fill the detailed table. Costs are about the same in the two producing regions of the country.

Country IRANCrop year 1970/71

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)	1,200 - 1,300		
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	52	52	65
Power and equipment	18.8	16.8	15.5
Seed	7.1	6.4	4.5
Fertilizer	3.8	12.9	19.4
Herbicides	--	--	--
Insecticides and fungicides	5.2	12.9	25.8
Defoliant and other chemicals	--	--	--
Irrigation	6.4	19.4	38.7
Custom or contract work	1.9	1.9	1.9
Other (specify) _____	--	--	--
Subtotal	95.2	122.3	170.8
<u>Harvesting:</u>			
Labor	32.4	38.7	58.4
Power and equipment	--	--	--
Custom or contract work	--	--	--
Other (specify) <u>Transportation (from farm to the store in village)</u>	0.60	0.90	1.30
Subtotal	33.00	39.60	59.70
<u>Off farm direct costs</u>			
Transportation to gin	1.5	1.9	3.2
Ginning (including bagging and ties)	15.5	19.4	31.1
Other (specify) <u>1) Handling in gin</u>	0.30	0.40	0.60
<u>2) Cotton seed sorting & brokerage</u>	1.30	1.60	2.50
<u>3) Cost of classification of bales</u>	1.30	1.60	2.50
Subtotal	19.90	24.90	39.90
Total direct costs	148.1	186.8	270.4
<u>Overhead costs:</u>			
Management and administration	23.3	22	16.8
Land cost (typical rental value)	38.7	52	52
Other (specify) _____	--	--	--
TOTAL COSTS	210.1	260.8	339.2

Country IVORY COASTCrop year 1970/71

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	1,500
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor		107.00	117.00
Power and equipment		--	--
Seed		.58	.58
Fertilizer		15.90	15.90
Herbicides			
Insecticides and fungicides		19.90	19.90
Defoliant and other chemicals			
Irrigation			
Custom or contract work			
Other (specify) _____			
Subtotal		143.38	153.38
<u>Harvesting:</u>			
Labor		25.10	35.80
Power and equipment			
Custom or contract work			
Other (specify) _____			
Subtotal		25.10	35.80
<u>Off farm direct costs</u>			
Transportation to gin		13.90	26.10
Ginning (including bagging and ties)		20.80	39.10
Other (specify) _____			
Subtotal		34.70	65.20
Total direct costs		203.18	254.38
<u>Overhead costs:</u>			
Management and administration			
Land cost (typical rental value)			
Other (specify) _____			
TOTAL COSTS		203.18	254.38

Country MALAWICrop year 1969/70

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)	493		
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	26.64		
Power and equipment	--		
Seed	1.48		
Fertilizer	--		
Herbicides	--		
Insecticides and fungicides	5.00		
Defoliant and other chemicals	--		
Irrigation	--		
Custom or contract work	--		
Other (specify) <u>Knaprach sprayer cost (including repair)</u>	2.40		
Subtotal	35.52		
<u>Harvesting:</u>			
Labor	33.30		
Power and equipment	--		
Custom or contract work	--		
Other (specify) _____	--		
Subtotal	33.30		
<u>Off farm direct costs</u>			
Transportation to gin	2.85		
Ginning (including bagging and ties)	8.88		
Other (specify) <u>Marketing costs of statutory board</u>	9.09		
Subtotal	20.82		
Total direct costs	89.64		
<u>Overhead costs:</u>			
Management and administration + Land cost (typical rental value)	--		
Other (specify) <u>+ Overheads (Admin.)</u>			
<u>Financing and subsidy of statutory marketing board</u>	9.03		
TOTAL COSTS	98.67		

*Major producing zone (Southern Region and Salima Lakeshore) covers 95% of total area, therefore, equable with national average.

Country MEXICO

Crop year _____

Item	Estimated cost of producing a hectare of cotton		
	In major producing zones		
	Mexicali	La Paz	Sonora
Yield used (kilos per hectare)			
	<u>US \$ per hectare</u>		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor)	93.40	70.40	62.88
Power and equipment)			
Seed	13.36	13.36	13.12
Fertilizer	40.96	43.92	38.64
Herbicides			
Insecticides and fungicides	80.00	78.00	63.00
Defoliant and other chemicals			
Irrigation	14.40	100.42	9.20
Custom or contract work			
Other (specify) _____			
<u>Subtotal</u>	242.12	306.10	186.84
<u>Harvesting:</u>			
Labor	76.80	81.60	72.48
Power and equipment			
Custom or contract work			
Other (specify) _____	23.00	15.20	14.40
<u>Subtotal</u>	99.80	96.80	86.88
<u>Off farm direct costs</u>			
Transportation to gin	12.00	12.00	12.00
Ginning (including bagging and ties)	62.93	75.70	71.94
Other (specify) _____			
<u>Subtotal</u>	74.93	87.70	83.94
Total direct costs	416.85	490.60	357.66
<u>Overhead costs:</u>			
Management and administration	13.34	14.88	18.72
Land cost (typical rental value)			
Other (specify) <u>Interest, taxes, cost</u> <u>of water, etc.</u>	64.31	52.90	94.71
TOTAL COSTS	494.50	558.38	471.09

Item	Estimated cost of producing a hectare of cotton In major producing zones		
	Sinaloa	Apatzingan	Tapachula
Yield used (kilos per hectare)			
	US \$ per hectare		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor)			
Power and equipment)	72.30	106.80	74.40
Seed	14.00	12.08	9.20
Fertilizer	50.82	56.00	38.00
Herbicides			
Insecticides and fungicides	41.92	104.80	96.00
Defoliant and other chemicals			
Irrigation	16.65	9.60	--
Custom or contract work			
Other (specify) _____			
Subtotal	195.69	289.28	217.60
<u>Harvesting:</u>			
Labor	93.60	63.10	51.20
Power and equipment			
Custom or contract work			
Other (specify) _____	12.80	14.40	10.80
Subtotal	106.40	77.50	62.00
<u>Off farm direct costs</u>			
Transportation to gin	6.00	14.40	9.60
Ginning (including bagging and ties)	51.34	66.24	46.08
Other (specify) _____			
Subtotal	57.34	80.64	55.68
Total direct costs	359.43	447.42	335.28
<u>Overhead costs:</u>			
Management and administration	9.60	18.40	8.95
Land cost (typical rental value)			
Other (specify) <u>Interest, taxes, cost</u> <u>of water, etc.</u>	68.78	65.20	39.16
TOTAL COSTS	437.81	531.02	383.39

Country MEXICO (continued)

Crop year _____

Item	Estimated cost of producing a hectare of cotton		
	In major producing zones		
	Juarez	Laguna	
Gravity irrigation		Pump irrigation	
Yield used (kilos per hectare)			
	US \$ per hectare		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor)	61.60	69.60	81.20
Power and equipment)			
Seed	11.60	9.80	9.80
Fertilizer	59.20	45.67	53.53
Herbicides			
Insecticides and fungicides	72.40	84.80	84.80
Defoliant and other chemicals			
Irrigation	11.20	10.00	96.00
Custom or contract work			
Other (specify) _____			
Subtotal	216.00	219.87	325.33
<u>Harvesting:</u>			
Labor	42.31	87.60	87.60
Power and equipment			
Custom or contract work			
Other (specify) _____	12.80	11.20	11.20
Subtotal	55.11	98.80	98.80
<u>Off farm direct costs</u>			
Transportation to gin	4.00	14.80	14.80
Ginning (including bagging and ties)	38.09	68.80	68.80
Other (specify) _____			
Subtotal	42.09	83.60	83.60
Total direct costs	313.20	402.27	507.73
<u>Overhead costs:</u>			
Management and administration	15.56	16.00	16.00
Land cost (typical rental value)			
Other (specify) <u>Interest, taxes cost</u> <u>of water, etc.</u>	53.71	67.98	68.28
TOTAL COSTS	382.47	486.25	592.01

Country MOROCCOCrop year 1969/70

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)	1,250	1,500	2,000 - 2,500
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor		30.25	
Power and equipment		41.324	
Seed		25.432	
Fertilizer		25.16	
Herbicides			
Insecticides and fungicides		34.	
Defoliant and other chemicals			
Irrigation		43.88	
Custom or contract work			
Other (specify) _____			
Subtotal		200.046	
<u>Harvesting:</u>			
Labor		95.70	
Power and equipment		4.77	
Custom or contract work			
Other (specify) _____			
Subtotal		100.47	
<u>Off farm direct costs</u>			
Transportation to gin		2.50	
Ginning (including bagging and ties)		50	
Other (specify) _____			
Subtotal		52.50	
Total direct costs		353.016	
<u>Overhead costs:</u>			
Management and administration			
Land cost (typical rental value)		20	(land rent)
Other (specify) <u>Taxes</u> _____		5	
TOTAL COSTS		378.016	

Country MOZAMBIQUECrop year 1970

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)		400	1,500
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor (family)		16.33	
Power and equipment (mechanical work)			18.37
Seed		.68	.68
Fertilizer		--	--
Herbicides		--	--
Insecticides and fungicides		--	43.30
Defoliant and other chemicals		--	--
Irrigation		--	--
Custom or contract work		--	18.64
Other (specify) _____		--	--
Subtotal		17.01	80.99
<u>Harvesting:</u>			
Labor (family)		6.80	--
Power and equipment		--	--
Custom or contract work		--	25.51
Other (specify) <u>Bagging: family work</u>		.54	--
<u>contract work</u>		--	2.18
Subtotal		7.34	27.69
<u>Off farm direct costs</u>			
Transportation to gin		a/	12.14
Ginning (including bagging and ties)			32.98
Other (specify) _____			
Subtotal			45.12
Total direct costs		24.35	153.80
<u>Overhead costs:</u>			
Management and administration		--	20.41
Land cost (typical rental value)			
Other (specify) _____			
TOTAL COSTS		24.35	174.21

a/ These farmers sell their seed cotton in the rural markets, so that these costs do not apply to them.

Country NICARAGUACrop year 1968/69

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)	2,301		
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor - mechanical	34.16		
Labor - manual	25.88		
Power and equipment			
Seed	6.09		
Fertilizer	29.99		
Herbicides			
Insecticides and fungicides	101.32		
Defoliant and other chemicals			
Irrigation			
Custom or contract work -pest control	7.09		
Other (specify) <u>Insecticide equipment</u>	1.79		
<u>Application of insecticide</u>	34.46		
Subtotal	240.78		
<u>Harvesting:</u>			
Labor)			
Power and equipment)	69.38		
Custom or contract work)			
Other (specify) <u>Interest</u>	2.24		
Subtotal	71.62		
<u>Off farm direct costs</u>			
Transportation to gin			
Ginning (including bagging and ties)			
Other (specify) _____			
Subtotal			
Total direct costs	312.40		
<u>Overhead costs:</u>			
Management and administration	20.27		
Land cost (typical rental value)	40.53		
Other (specify) <u>Interest on money lent for crops etc. and commission</u>	16.77		
<u>Miscellaneous administration costs</u>	12.02		
TOTAL COSTS	401.99		

Country NIGERCrop year 1970/71

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)	450 kgs	500 kgs	1,500 kgs
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	8.63	12.94	40.57
Power and equipment	--	--	--
Seed	0.97	1.07	3.23
Fertilizer	--	--	16.18
Herbicides	--	--	--
Insecticides and fungicides	--	--	26.97
Defoliant and other chemicals	--	--	--
Irrigation	--	--	--
Custom or contract work	--	--	--
Other (specify) _____	--	--	--
Subtotal	9.60	14.01	86.95
<u>Harvesting:</u>			
Labor	8.63	10.35	31.94
Power and equipment	--	--	--
Custom or contract work	--	--	--
Other (specify) _____	--	--	--
Subtotal	8.63	10.35	31.94
<u>Off farm direct costs</u>			
Transportation to gin	5.05	5.61	16.84
Ginning (including bagging and ties)	10.48	11.65	34.96
Other (specify) _____	--	--	--
Subtotal	15.53	17.26	51.80
Total direct costs	33.76	41.62	170.69
<u>Overhead costs:</u>			
Management and administration	--	--	--
Land cost (typical rental value)	18.00	18.00	18.00
Other (specify) _____	--	--	--
TOTAL COSTS	51.76	59.62	188.69

Cost of producing one hectare of cotton * 1/

Item	Bullock cultivation	Partially mechanized cultivation	
	Yield 370 kgs	Yield 555 kgs	Yield 932 kgs
	US \$		
On-farm direct costs			
Labor	41.51	43.80	67.46
Power and equipment	20.76	46.70	56.04
Indigenous power	2.91	--	--
Seeds	4.15	4.15	4.15
Fertilizer	13.49	13.49	13.49
Manure	Nil	Nil	46.70
Herbicides, insecticides fungicides and other chemicals	3.84	5.71	5.97
Irrigation (water rates)	8.72	17.64	17.64
Subtotal	95.38	131.49	211.45
Overhead costs			
Land rent	56.04	77.84	77.84
Land revenue	4.48	4.48	4.48
Other cesses	1.56	--	--
Subtotal	62.08	82.32	82.32
TOTAL	157.46	213.81	293.77
Interest on running capital (at the rate of 8% for 6 months)	6.29	8.55	11.77
GRAND TOTAL . .	163.75	222.36	305.54

* Response to an earlier draft of the questionnaire.

1/ Cost of production is a controversial issue and subject to varied condition. It varies from area to area depending on climatic conditions, land fertility, inputs used, agronomic practices and its management. Moreover, data are not available with us. However, the figures recorded here are for Multan in West Pakistan. Transportation and ginning costs have not been included in the cost of production.

Country PAKISTAN

Estimated local cost to producer of specified items of production *

Item	Unit	Point of delivery <u>1/</u> to farmer	Price				
			1966/ 67	1967/ 68	1968/ 69	1969/ 70	1970/ 71
Major insecticides (Specify)			US \$				
1 Chlorinated hydrocarbons		25% cost to be recovered from the farmer. It approximates \$1.00 per acre for galaxy of pesticides.					
2 plus Organo Phosphorous							
3 _____							
Major fungicide (Specify)			Nil				
Major herbicide (Specify)			Nil				
Seed (cost per hectare)			3.11	3.11	3.63	3.63	4.15
Daily rate for unskilled Labor <u>2/</u> _____			.63	.63	.68	.74	.79
Daily rate for skilled labor <u>2/</u> _____			.84	.84	.95	1.05	1.16
Major fertilizers (Specify analysis)		Sellers ex godown					
1 Ammonium Sulphate (21% Nitrogen)							
2 Urea (46% Nitrogen)							
3 _____							
Selling price of land suitable for cotton in a major producing zone			1,038	1,297	1,557	1,816	2,076
Annual rent of cotton land in major producing zone			51.89	64.86	64.86	77.84	77.84

1/ Indicate point of delivery to farmer, i. e. delivered to farm, ex-warehouse, etc.2/ Includes non-cash cost

* Response to an earlier draft of the questionnaire.

Country PARAGUAYCrop year 1970

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		
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	23.84		
Power and equipment	12.20		
Seed	1.84		
Fertilizer	--		
Herbicides	--		
Insecticides and fungicides	16.92		
Defoliant and other chemicals	--		
Irrigation	--		
Custom or contract work	--		
Other (specify) _____	--		
Subtotal	54.80		
<u>Harvesting:</u>			
Labor	16.92		
Power and equipment	--		
Custom or contract work	2.30		
Other (specify) _____	--		
Subtotal	19.22		
<u>Off farm direct costs</u>			
Transportation to gin	3.68		
Ginning (including bagging and ties)	--		
Other (specify) _____	--		
Subtotal	3.68		
Total direct costs	77.70		
<u>Overhead costs:</u>			
Management and administration	--		
Land cost (typical rental value)	2.30		
Other (specify) <u>10% over operating capital</u>	7.40		
TOTAL COSTS	87.40		

Country SPAINCrop year 1971/72

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)	600	700	1,000
	US \$ per hectare		
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	74.00	85.00	88.00
Power and equipment	36.00	40.00	50.00
Seed	22.00	22.00	22.00
Fertilizer	88.00	92.00	100.00
Herbicides)			
Insecticides and fungicides)	34.00	38.00	42.00
Defoliant and other chemicals			
Irrigation	19.00	22.00	22.00
Custom or contract work	14.00	5.00	20.00
Other (specify) _____			
Subtotal	287.00	304.00	344.00
<u>Harvesting:</u>			
Labor	125.00	140.00	200.00
Power and equipment			
Custom or contract work			
Other (specify) _____			
Subtotal	125.00	140.00	200.00
<u>Off farm direct costs</u>			
Transportation to gin	5.50	6.00	10.00
Ginning (including bagging and ties)	44.00	51.00	74.00
Other (specify) _____			
Subtotal	49.50	57.00	84.00
Total direct costs	461.50	501.00	628.00
<u>Overhead costs:</u>			
Management and administration	45.00	48.00	60.00
Land cost (typical rental value)	170.00	200.00	230.00
Other (specify) _____			
TOTAL COSTS	676.50	749.00	918.00

* Andaluca

Country SYRIACrop year 1969/70

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	3,000
		<u>US \$ per hectare</u>
<u>On farm direct costs</u>		
<u>Preharvesting:</u>		
Labor	131.41	172.77
Power and equipment	17.80	20.94
Seed	9.16	9.16
Fertilizer	22.25	41.88
Herbicides		
Insecticides and fungicides	7.85	7.85
Defoliant and other chemicals		
Irrigation	44.50	52.35
Custom or contract work		
Other (specify) <u>Capital interest</u> <u>and others.</u>	15.70	18.32
Subtotal	248.67	323.27
<u>Harvesting:</u>		
Labor	31.41	47.11
Power and equipment		
Custom or contract work		
Other (specify) <u>Sacks</u>	15.70	26.17
Subtotal	47.11	73.28
<u>Off farm direct costs</u>		
Transportation to gin	7.85	11.78
Ginning (including bagging and ties)	31.02	47.35
Other (specify) _____		
Subtotal	38.87	59.13
Total direct costs	334.65	455.68
<u>Overhead costs:</u>		
Management and administration		
Land cost (typical rental value) - 20% of the cotton value	78.53	117.80
Other (specify) _____		
TOTAL COSTS	413.18	573.48

Country THAILANDCrop year 1969/70

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)	1,850		
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	84.00	--	--
Power and equipment	1.25	--	--
Seed	--	--	--
Fertilizer	--	--	--
Herbicides	46.87	--	--
Insecticides and fungicides	--	--	--
Defoliant and other chemicals	--	--	--
Irrigation	--	--	--
Custom or contract work	--	--	--
Other (specify) _____	--	--	--
Subtotal	132.12		
<u>Harvesting:</u>			
Labor	25.00	--	--
Power and equipment	--	--	--
Custom or contract work	--	--	--
Other (specify) _____	--	--	--
Subtotal	25.00		
<u>Off farm direct costs</u>			
Transportation to gin			
Ginning (including bagging and ties)		Paid by ginners	
Other (specify) _____			
Subtotal			
Total direct costs	157.12		
<u>Overhead costs:</u>			
Management and administration	--	--	--
Land cost (typical rental value)	Farmer owned		--
Other (specify) <u>Interest paid to middlemen for cash loans</u>	22.50	--	--
TOTAL COSTS	179.62		

Country UNITED STATESCrop year 1970 1/

Item	Estimated cost of producing a hectare of cotton		
	National average	southeast	
		Average producer	Above average producer 2/
Yield used (kilos per hectare) - lint	494	497	769
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	48.51	54.24	48.06
Power and equipment	42.75	75.02	61.01
Seed	8.95	8.70	8.08
Fertilizer	28.34	53.27	70.45
Herbicides	9.66	15.37	15.69
Insecticides and fungicides	15.25	27.77	47.05
Defoliant and other chemicals	3.04	2.20	3.21
Irrigation	26.54	.17	0
Custom or contract work	8.03	7.29	8.28
Other (specify) _____			
Subtotal	191.07	244.03	261.83
<u>Harvesting:</u>			
Labor	16.16	24.96	22.09
Power and equipment	46.48	32.77	26.66
Custom or contract work	13.15	16.53	17.64
Other (specify) _____			
Subtotal	75.79	74.26	66.39
<u>Off farm direct costs</u>			
Transportation to gin	5.12	4.74	7.96
Ginning (including bagging and ties)	51.22	40.08	53.97
Other (specify) <u>Interest, operating capital</u>	7.66	10.06	7.76
Subtotal	64.00	54.88	69.69
Total direct costs	330.86	373.17	397.91
<u>Overhead costs:</u>			
Management and administration	12.33	9.19	10.75
Land cost (typical rental value)	60.93	47.17	56.14
Other (specify) <u>General farm over-head 3/</u>	36.20	35.98	39.56
TOTAL COSTS	440.32	465.51	504.36

Country (continued)

Cost of producing one hectare of cotton

Crop year 1970 1/

Item	Estimated cost of producing a hectare of cotton		
	National average	Delta	
		Average producer	Above average producer 2/
Yield used (kilos per hectare) - lint	494	639	1,019
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	48.51	50.16	38.00
Power and equipment	42.75	51.42	48.60
Seed	8.95	9.74	8.06
Fertilizer	28.34	36.99	28.42
Herbicides	9.66	17.25	17.87
Insecticides and fungicides	15.25	21.65	24.46
Defoliants and other chemicals	3.04	3.88	5.12
Irrigation	26.54	2.59	3.98
Custom or contract work	8.03	9.24	14.53
Other (specify) _____			
Subtotal	191.07	202.92	189.04
<u>Harvesting:</u>			
Labor	16.16	19.52	14.78
Power and equipment	46.48	60.14	56.83
Custom or contract work	13.15	10.85	12.48
Other (specify) _____			
Subtotal	75.79	90.51	84.09
<u>Off farm direct costs</u>			
Transportation to gin	5.12	6.33	10.53
Ginning (including bagging and ties)	51.22	55.55	76.60
Other (specify) <u>Interest, operating capital</u>	7.66	9.46	6.38
Subtotal	64.00	71.34	93.51
Total direct costs	330.86	364.77	366.64
<u>Overhead costs:</u>			
Management and administration	12.33	20.73	17.32
Land cost (typical rental value)	60.93	66.69	86.98
Other (specify) <u>General farm overhead 3/</u>	36.20	39.19	41.51
TOTAL COSTS	440.32	491.38	512.45

Cost of producing one hectare of cotton

Crop year 1970 1/

Item	Estimated cost of producing a hectare of cotton		
	National average	Southwest	
		Average producer	Above average producer ^{2/}
Yield used (kilos per hectare) -lint	494	359	662
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	48.51	36.22	30.39
Power and equipment	42.75	25.77	25.45
Seed	8.95	8.55	8.50
Fertilizer	28.34	10.87	16.56
Herbicides	9.66	3.34	4.45
Insecticides and fungicides	15.25	5.36	.82
Defoliant and other chemicals	3.04	1.46	.62
Irrigation	26.54	34.99	46.01
Custom or contract work	8.03	3.29	1.63
Other (specify) _____			
Subtotal	191.07	129.85	134.43
<u>Harvesting:</u>			
Labor	16.16	12.06	10.13
Power and equipment	46.48	31.48	31.13
Custom or contract work	13.15	9.39	6.08
Other (specify) _____			
Subtotal	75.79	52.93	47.34
<u>Off farm direct costs</u>			
Transportation to gin	5.12	3.58	6.84
Ginning (including bagging and ties)	51.22	43.00	63.01
Other (specify) <u>Interest, operating capital</u>	7.66	4.65	3.41
Subtotal	64.00	51.23	73.26
Total direct costs	330.86	234.01	255.03
<u>Overhead costs:</u>			
Management and administration	12.33	5.96	3.90
Land cost (typical rental value)	60.93	43.51	61.82
Other (specify) <u>General farm overhead ^{3/}</u>	36.20	23.99	22.39
TOTAL COSTS	440.32	307.47	343.14

1/ Based on an update of 1966 survey data.

2/ Represents roughly the top 20 percent of producers.

UNITED STATES

Country (continued)

Cost of producing one hectare of cotton

Crop year 1970 1/

Item	Estimated cost of producing a hectare of cotton		
	National average	West	
		Average producer	Above average producer 2/
Yield used (kilos per hectare) - lint	494	933	1,267
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	48.51	67.61	59.45
Power and equipment	42.75	60.71	55.47
Seed	8.95	8.85	7.04
Fertilizer	28.34	43.74	46.31
Herbicides	9.66	8.90	7.17
Insecticides and fungicides	15.25	22.41	24.14
Defoliants and other chemicals	3.04	8.15	7.78
Irrigation	26.54	85.20	83.30
Custom or contract work	8.03	26.49	21.45
Other (specify) _____			
Subtotal	191.07	332.06	312.11
<u>Harvesting:</u>			
Labor	16.16	24.88	21.89
Power and equipment	46.48	75.39	68.89
Custom or contract work	13.15	27.23	15.54
Other (specify) _____			
Subtotal	75.79	127.50	106.32
<u>Off farm direct costs</u>			
Transportation to gin	5.12	9.22	13.10
Ginning (including bagging and ties)	51.22	87.35	105.12
Other (specify) <u>Interest, operating capital</u>	7.66	12.01	8.60
Subtotal	64.00	108.58	126.82
Total direct costs	330.86	568.14	545.25
<u>Overhead costs:</u>			
Management and administration	12.33	26.69	21.50
Land cost (typical rental value)	60.93	133.04	158.29
Other (specify) <u>General farm overhead 3/</u>	36.20	77.10	61.60
TOTAL COSTS	440.32	804.97	786.64

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.

Item	Estimated cost of producing a hectare of cotton		
	National average	In major producing zones	
		O. R. D. Volta Noire	Pointe
Yield used (kilos per hectare)	291 kgs	511 kgs	1,000 kgs
		<u>US \$ per hectare</u>	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	10.00	16.30	19.00
Power and equipment	.92	.27	10.80
Seed	-	-	-
Fertilizer	2.31	3.85	14.50
Herbicides	-	-	-
Insecticides and fungicides	2.54	4.61	16.70
Defoliant and other chemicals			
Irrigation			
Custom or contract work			
Other (specify) _____			
Subtotal	15.77	25.03	61.00
<u>Harvesting:</u>			
Labor	2.72	4.71	9.06
Power and equipment			
Custom or contract work			
Other (specify) _____			
Subtotal	2.72	4.91	9.06
<u>Off farm direct costs</u>			
Transportation to gin	6.60	11.60	22.70
Ginning (including bagging and ties)	6.20	10.90	21.40
Other (specify) <u>Commercial charges</u>	3.30	5.80	11.30
Subtotal	16.10	28.30	55.40
Total direct costs	34.59	58.04	125.46
<u>Overhead costs:</u>			
Management and administration	5.60	9.80	19.10
Land cost (typical rental value)			
Other (specify) _____			
TOTAL COSTS	40.19	67.84	144.56

Country VENEZUELACrop year 1971/72

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)	1,050		1,500
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor	36.36		36.36
Power and equipment	54.54		54.54
Seed	5.68		5.68
Fertilizer	44.32		44.32
Herbicides	18.18		18.18
Insecticides and fungicides	34.09		34.09
Defoliant and other chemicals	-		-
Irrigation	-		-
Custom or contract work	-		-
Other (specify) <u>Stalk destruction</u>	9.09		9.09
Subtotal	202.26		202.26
<u>Harvesting:</u>			
Labor	-		-
Power and equipment	-		-
Custom or contract work	90.68		129.55
Other (specify) _____	-		-
Subtotal	90.68		129.55
<u>Off farm direct costs</u>			
Transportation to gin	10.74		15.34
Ginning (including bagging and ties)	(22.73)		(22.73)
Other (specify) _____	-		-
Subtotal	10.74		15.34
Total direct costs	303.68		347.15
<u>Overhead costs:</u>			
Management and administration	22.73		30.68
Land cost (typical rental value)	11.36		18.18
Other (specify) <u>Personnel transportation</u>	11.36		14.32
Interest	9.09		9.09
5% miscellaneous	17.91		21.08
TOTAL COSTS	376.13		440.50

YEMEN, People's
Country Democratic Republic

Crop year 1969/70

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)	882	1,047.5	1,266.8
		US \$ per hectare	
<u>On farm direct costs</u>			
<u>Preharvesting:</u>			
Labor			16.055
Power and equipment			
Seed			
Fertilizer			
Herbicides			
Insecticides and fungicides			
Defoliant and other chemicals			
Irrigation			4.446
Custom or contract work			30.825
Other (specify) _____			

Subtotal			51.326
<u>Harvesting:</u>			
Labor			39.124
Power and equipment			
Custom or contract work			
Other (specify) _____			

Subtotal			39.124
<u>Off farm direct costs</u>			
Transportation to gin			6.817
Ginning (including bagging and ties)			
Other (specify) _____			

Subtotal			6.817
Total direct costs			97.267
<u>Overhead costs:</u>			
Management and administration			
Land cost (typical rental value)			54.537
Other (specify) <u>Tax</u>			23.860

TOTAL COSTS			175.664

Note: Figures quoted represent the Wadi Tuban area (which accounts for 22-30% of the total production of the country), where an agro-economic structure study was conducted for the 1969/70 season. No zones in the normal sense of the word are in existence but minor differences apart from yield and source of irrigation are observed between the different producing areas. However, indications of appreciable differences between spate and underground water irrigations occur frequently. N.B. Figures quoted represent spate irrigated cotton only, the study on underground irrigation is still under analysis.