

A. Pilot Project

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE (Rs.)	TOTAL COST DEPRECIATION (Rs'000)	FOREIGN CURRENCY			LOCAL CURRENCY			
						(Rs'000)	MATERIAL (Rs'000)	TOTAL (Rs'000)	LOCAL MATERIAL (Rs'000)	LABOUR (Rs'000)	TOTAL (Rs'000)	
A	Pilot Project											
A-1	Construction of Facilities											
	(i) Engineering Quarters											
	(i) Building											
	Office	4,500	sq-ft	200	900.0	-	-	-	720.0	180.0	900.0	
	Researcher's Office & Laboratory	6,500	"	200	1,300.0	-	-	-	1,040.0	260.0	1,300.0	
	Training Center	2,250	"	200	450.0	-	-	-	360.0	90.0	450.0	
	Rest House	3,800	"	250	950.0	-	-	-	760.0	190.0	950.0	
	Garage	1,625	"	200	325.0	-	-	-	260.0	65.0	325.0	
	Warehouse	3,000	"	200	600.0	-	-	-	480.0	120.0	600.0	
	Warehouse & Workshop	8,000	"	200	1,600.0	-	-	-	1,280.0	320.0	1,600.0	
	Warehouse & Seed Processing Plant	11,700	"	200	2,340.0	-	-	-	1,872.0	468.0	2,340.0	
	Staff Quarters	40,800	"	250	10,200.0	-	-	-	8,160.0	2,040.0	10,200.0	
	Sub-total				18,665.0	-	-	-	14,932.0	3,733.0	18,665.0	
	(ii) Parking Space		L.S.		23.0	0.1	0.2	0.3	21.5	1.2	22.7	
	(iii) Fuel Station		"		200.0	-	100.0	100.0	70.0	30.0	100.0	
	(iv) Water Purification Facilities											
	Concrete with Steel Bar	6	cu-ft	5,670	340.2	-	165.0	165.0	139.2	36.0	175.2	
	Excavation	5	cu-ft	476	2.4	0.6	1.1	1.7	0.6	0.1	0.7	
	Purification Unit	1	unit		314.3	-	285.7	285.7	11.4	17.2	28.6	
	Raw Water Pump 1 1/4" 0.4kw	2	"	31.4	62.8	-	57.1	57.1	2.7	3.0	5.7	
	Clean Water Pump 1 5/8" 2.2kw	2	"	157.2	314.4	-	285.7	285.7	11.5	17.2	28.7	
	Chemicals & Spareparts	10%			37.7	-	34.3	34.3	1.4	2.0	3.4	
	Delivery Pipes 3 1/4" (80mm) 4	3,000	ft	75.0	225.0	-	120.0	120.0	42.0	63.0	105.0	
	(v) Planting & Miscellaneous		L.S.		129.7	-	94.9	94.9	20.9	13.9	34.8	
	Sub-total of Engineering Quarters				20,314.5	0.7	1,144.0	1,144.7	15,253.2	3,916.6	19,169.8	
	(2) Demonstration of Irrigation Facilities											
	(i) Farm Pond											
	Excavation	210	cu-ft	476	100.0	23.3	47.3	70.6	24.8	4.6	29.4	
	Brick Revetment	7	50-ft	4,045	28.3	-	1.3	1.3	15.9	11.1	27.0	
	Concrete	6	cu-ft	2,812	16.9	-	7.1	7.1	6.2	3.6	9.8	
	R.C. Pipe 12" 4	150	ft	355	50.3	-	-	-	48.0	2.3	50.3	
	Miscellaneous		L.S.		4.5	0.7	0.3	1.0	0.1	3.4	3.5	
	Sub-total of Farm Pond				200.0	24.0	56.0	80.0	95.0	25.0	120.0	
	(ii) Pump Station											
	Pump Station Building	640	sq-ft	200	128.0	-	-	-	102.4	25.6	128.0	
	Single Suction Volute Pump											
	6" x 5" 4 37kw w/Panel Value	3	units	523,810	1,571.4	-	1,414.3	1,414.3	78.5	78.6	157.1	
	Single Suction Volute Pump											
	3 5/8" x 2 1/2" 4 11kw w/Panel Value	2	"	362,381	724.8	-	651.7	651.7	36.5	36.6	73.1	
	Installation of Pumps		L.S.		238.1	-	-	-	142.9	95.2	238.1	
	Electric Transmission Line	2,000	ft		500.0	-	50.0	50.0	300.0	150.0	450.0	
	Miscellaneous Works		L.S.		316.2	-	211.6	211.6	66.0	38.6	104.6	
	Sub-total of Pump Station				3,478.5	-	2,327.6	2,327.6	726.3	424.6	1,150.9	
	(iii) Main Pipe Lines											
	Pipe w/Installation 12" 4	590	ft	255	150.5	-	-	-	144.6	5.9	150.5	
	" 10" 4	920	"	194	178.5	-	-	-	170.2	8.3	178.5	
	" 8" 4	4,170	"	153	638.0	-	-	-	604.7	33.3	638.0	
	" 6" 4	2,540	"	122	310.0	-	-	-	292.2	17.8	310.0	
	" 5" 4	840	"	105	102.9	-	-	-	97.0	5.9	102.9	
	" 4" 4	980	"	89	87.2	-	-	-	82.3	4.9	87.2	
	" 3" 4	270	"	68	18.4	-	-	-	17.3	1.1	18.4	
	Miscellaneous Works		L.S.		114.5	-	-	-	91.7	22.8	114.5	
	Sub-total of Main Pipe Lines				1,600.0	-	-	-	1,500.0	100.0	1,600.0	
	(iv) Sprinkler Irrigation (Fixed)											
	Pipe w/Installation 1 1/2" 4	9,750	ft	48	468.0	-	-	-	429.0	39.0	468.0	
	" 2" 4	2,900	"	55	159.5	-	-	-	147.9	11.6	159.5	
	Sprinkler (Fixed) (3/16" x 3/32")	350	sets	510	178.5	-	161.0	161.0	8.8	8.7	17.5	
	Sub-total of				806.0	-	161.0	161.0	585.7	59.3	645.0	
	Sprinkler Irrigation (Fixed)											
	(v) Sprinkler Irrigation (Portable)											
	Portable Pipe 1 1/2" 4	1,056	ft	30	31.7	-	28.5	28.5	1.6	1.6	3.2	
	Portable Pipe 2" 4	1,320	"	40	52.8	-	47.5	47.5	2.2	3.1	5.3	

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						DEPRECIATION (Rs'000)	MATERIAL (Rs'000)	TOTAL (Rs'000)	LOCAL MATERIAL (Rs'000)	LABOUR (Rs'000)	TOTAL (Rs'000)
	Sprinkler (Portable)(1/4" x 1/8")	40	sets	1,550	62.0		55.8	55.8	3.1	3.1	6.2
	Sub-total of Sprinkler Irrigation (Portable)				146.5		131.8	131.8	6.9	6.8	13.7
(vi)	Raingum Irrigation										
	Pipe w/installation 2 5/8"	1,770	ft	62	109.7				102.7	7.0	109.7
	" 3"	3,540	"	68	240.7				226.6	14.1	240.7
	" 4"	2,655	"	89	236.3				223.0	13.3	236.3
	Raingum (1/2")	75	sets	7,300	547.5		492.8	492.8	27.4	27.3	54.7
	Miscellaneous Works		L.S.		113.4		49.3	49.3	58.0	6.1	64.1
	Sub-total Raingum Irrigation				1,247.6		542.1	542.1	637.7	67.8	705.5
(vii)	Trickler Irrigation										
	Tube	306,000	ft	2.0	612.0		550.8	550.8	30.6	30.6	61.2
	Emitter	102,600	sets	6.0	615.6		554.0	554.0	30.8	30.8	61.6
	Miscellaneous Works		L.S.		122.8		110.5	110.5	6.1	6.2	12.3
	Sub-total of Trickler Irrigation				1,350.4		1,215.3	1,215.3	67.5	67.6	135.1
	Sub-total of Demonstration of Irrigation Facilities				8,829.0	24.0	4,433.8	4,457.8	3,619.1	752.1	4,371.2
(5)	On Farm Facilities										
(i)	Road										
	Metal Road Width 25ft	20,000	ft	273.0	5,460.0	20.0	1,418.0	1,438.0	3,640.0	382.0	4,022.0
	Gravel Road Width 20ft	120,000	"	95.8	11,496.0	48.0	72.0	120.0	10,764.0	612.0	11,376.0
	Miscellaneous Works		L.S.		1,695.6		149.6	149.6	1,446.2	99.8	1,546.0
	Sub-total of Road				18,651.6	68.0	1,639.6	1,707.6	15,850.2	1,093.8	16,944.0
(ii)	Irrigation Canal										
	Off Take	1	unit		37.3	0.4	13.6	14.0	16.3	7.0	23.0
	Minor Canal	29,000	ft		681.2	130.1	344.7	474.8	171.0	35.4	206.4
	Outlet	11	units	4,093	45.0		19.0	19.0	16.3	9.7	26.0
	Main Water Course	33,000	ft	5,029.3	166.0	16.6	49.8	66.4	74.4	25.2	99.6
	Nakka	41	units	1,063	43.6		18.4	18.4	15.8	9.4	25.2
	Internal Water Course	100,000	ft	1,955	195.5	19.6	28.7	48.3	110.4	36.8	147.2
	Division Box	202	units	45	9.1		3.8	3.8	3.3	2.0	5.3
	Link Water Course	234,000	ft		475.5	45.8	137.3	183.1	205.8	68.6	274.4
	Miscellaneous Works		L.S.		163.5		70.7	70.7	70.5	22.3	92.8
	Sub-total of Irrigation Canal				1,798.7	212.5	686.0	898.5	683.8	216.4	900.2
(iii)	Drainage Canal										
	Farm Drain	81,000	ft		94.4	9.4	28.3	37.7	42.5	14.2	56.7
	Branch Drain	100,000	"		1,317.8	251.7	666.8	918.5	330.8	68.5	399.3
	Miscellaneous		L.S.		141.2		85.3	85.3	45.8	10.1	55.8
	Sub-total of Drainage Canal				1,553.4	261.1	780.4	1,041.5	419.1	92.8	511.9
(iv)	Check Structure										
	Excavation	11	CU-YD	476	5.2	1.3	2.4	3.7	1.3	0.2	1.5
	Concrete	78	CU-YD	1,687	131.6		55.7	55.7	47.8	28.1	75.9
	Rubber Dam		L.S.		1,619.1		1,428.6	1,428.6	190.5		190.5
	Steel Sheet Pile	100	PCS		120.3		52.4	52.4	46.5	21.4	67.9
	Brick Building	71	sq-ft	19	1.3				1.0	0.3	1.3
	Miscellaneous Works		L.S.		187.8		154.1	154.1	28.7	5.0	33.7
	Sub-total Check Structure				2,065.3	1.3	1,693.2	1,694.5	315.8	55.0	370.8
	Sub-total of On Farm Facilities				24,069.0	542.9	4,799.2	5,342.1	17,268.9	1,458.0	18,726.9
	Total of A-1				53,212.5	567.6	10,377.0	10,944.6	36,141.2	6,126.7	42,267.9
A-2	Land Acquisition & Compensation										
	Land Acquisition	300	ac	4,000	1,200.0				1,200.0		1,200.0
	"	350	ac	1,000	350.0				350.0		350.0
	Compensation		L.S.		150.0				150.0		150.0
	Total of A-2				1,700.0				1,700.0		1,700.0
A-3	Agricultural Development										
(i)	Vehicles										
	Micro-Bus	1	unit	200,000	200.0		180.0	180.0	10.0	10.0	20.0
	Jeep	5	"	111,700	558.5		452.3	452.3	53.1	53.1	106.2
	Truck	3	"	380,000	1,140.0		1,026.0	1,026.0	57.0	57.0	114.0
	Spare Parts & Others (10%)				189.9		165.9	165.9	12.0	12.0	24.0
	Sub-total of Vehicles				2,088.4		1,824.2	1,824.2	132.1	132.1	264.2

B. Stage I Implementation (Cases 1 & 3)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE (Rs.)	TOTAL COST (Rs.'000)	FOREIGN CURRENCY			LOCAL CURRENCY			
						DEPRECIATION (Rs.'000)	MATERIAL (Rs.'000)	TOTAL (Rs.'000)	DEPRECIATION (Rs.'000)	MATERIAL (Rs.'000)	LABOUR (Rs.'000)	TOTAL (Rs.'000)
B	Stage I											
B-1	Desert-Pat Feeder Canal											
B-1-1	Earth Work											
	(1) Excavation	58,030	cu-ft 1,000	561	32,554.8	6,847.5	14,855.7	21,703.2	10,097.2	754.4	10,851.6	
	(2) Dredging	65,350	"	608	39,732.8	8,103.4	19,931.8	28,035.2	9,606.4	2,091.2	11,697.6	
	Sub-total of Earth Work				72,287.6	14,950.9	34,787.5	49,738.4	19,703.6	2,845.6	22,549.2	
	Total of B-1				72,287.6	14,950.9	34,787.5	49,738.4	19,703.6	2,845.6	22,549.2	
B-2	Pat Feeder Canal											
B-2-1	Earth Work											
	(1) Excavation	245,200	cu-ft 1,000	561	137,557.2	28,933.6	62,771.2	91,704.8	42,664.8	3,187.6	45,852.4	
	(2) Dredging	15,700	"	608	9,545.6	1,946.8	4,788.5	6,735.3	2,307.9	502.4	2,810.3	
	Sub-total of Earth Work				147,102.8	30,880.4	67,559.7	98,440.1	44,972.7	3,690.0	48,662.7	
	Regulators											
	(1) Head Regulator at RD 0				3,683.0	50.4	1,001.4	1,051.8	1,960.0	671.2	2,631.2	
	(2) Cross Regulator at RD 109				2,980.8	41.7	936.7	978.4	1,485.9	516.5	2,002.4	
	(3) " at RD 238				2,980.8	41.7	936.7	978.4	1,485.9	516.5	2,002.4	
	Sub-total of Regulators				9,644.6	133.8	2,874.8	3,008.6	4,931.8	1,704.2	6,636.0	
B-2-3	Road Bridges											
	(1) Road Bridge at RD 42				1,180.8	8.4	449.0	457.4	548.4	175.0	723.4	
	(2) " at RD 76				1,180.8	8.4	449.0	457.4	548.4	175.0	723.4	
	(3) " at RD 91				1,180.8	8.4	449.0	457.4	548.4	175.0	723.4	
	(4) " at RD 171				1,582.2	28.6	411.2	439.8	861.9	280.5	1,142.4	
	(5) " at RD 205				1,582.2	28.6	411.2	439.8	861.9	280.5	1,142.4	
	(6) " at RD 280				1,582.2	28.6	411.2	439.8	861.9	280.5	1,142.4	
	(7) " at RD 317				1,356.2	24.5	352.5	377.0	738.8	240.4	979.2	
	Sub-total of Road Bridge				9,645.2	135.5	2,933.1	3,068.6	4,969.7	1,606.9	6,576.6	
B-2-4	Canal Lining											
	Brick Lining	8,755	sq-ft 1,000	8,105	70,959.3	-	3,353.2	3,353.2	39,826.5	27,779.6	67,606.1	
	Sub-total of Canal Lining				70,959.3	-	3,353.2	3,353.2	39,826.5	27,779.6	67,606.1	
B-2-5	Plantation											
	Plantation	8,505	sq-ft 1,000	73	620.9	-	-	-	408.3	212.6	620.9	
	Sub-total of Plantation				620.9	-	-	-	408.3	212.6	620.9	
B-2-6	Paving											
	Metal Road	2,080	sq-ft 1,000	10,920	22,713.6	83.2	5,894.7	5,977.9	15,142.4	1,593.3	16,735.7	
	Sub-total of Paving				22,713.6	83.2	5,894.7	5,977.9	15,142.4	1,593.3	16,735.7	
	Total of B-2				260,686.4	31,232.9	82,615.5	113,848.4	110,251.4	36,586.6	146,838.0	
B-3	Distributaries											
B-3-1	Earth Work											
	Earth Work	4,755	cu-ft 1,000	717	3,409.3	651.4	1,726.1	2,377.5	855.9	175.9	1,031.8	
	Sub-total of Earth Work				3,409.3	651.4	1,726.1	2,377.5	855.9	175.9	1,031.8	
B-3-2	Regulators											
	(1) Adio Disty				2,023.3	26.1	478.8	504.9	1,110.5	407.9	1,518.4	
	(2) Khallan Disty				566.8	19.0	231.2	250.2	223.8	92.8	316.6	
	Sub-total of Regulators				2,590.1	45.1	710.0	755.1	1,334.3	500.7	1,835.0	
B-3-3	Plain Falls											
	(1) Bitti Disty at RD 46.72				76.3	1.6	19.0	20.6	41.2	14.5	55.7	
	" at RD 50.50				76.3	1.6	19.0	20.6	41.2	14.5	55.7	
	" at RD 53.50				64.8	1.3	16.1	17.4	35.1	12.3	47.4	
	(2) Khallan Disty at RD 40.20				94.8	2.0	23.5	25.5	51.3	18.0	69.3	
	Sub-total of Plain Falls				312.2	6.5	77.6	84.1	168.8	59.3	228.1	
B-3-4	Off Takes											
	Off Takes	31	Nos.	37,300	1,156.3	12.4	621.6	438.0	505.3	217.0	722.3	
	Sub-total of Off Takes				1,156.3	12.4	621.6	438.0	505.3	217.0	722.3	
	Total of B-3				7,467.9	715.4	2,935.3	3,650.7	2,864.3	952.9	3,817.2	

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C	Stage II											
C-1	Pat Feeder Canal											
C-1-1	Earth Work											
	(1) Earth Work	189,000	cu-ft 1,000	561	106,029.0	22,302.0	48,384.0	70,686.0	32,886.0	2,457.0	35,343.0	
	(2) Dredging	22,400	"	608	13,619.2	2,777.6	6,832.0	9,609.6	3,292.8	716.8	4,009.6	
	(3) Banking	65,100	"	266	17,316.6	3,385.2	8,202.6	11,587.8	4,947.6	781.2	5,728.8	
	Sub-total of Earth Work				136,964.8	28,464.8	63,418.6	91,883.4	41,126.4	3,955.0	45,081.4	
C-1-2	Regulators											
	(1) Cross Regulator at RD 342				2,980.8	41.7	936.7	978.4	1,485.9	516.5	2,002.4	
	(2) " at RD 418				2,565.3	36.5	772.9	809.4	1,302.7	453.2	1,755.9	
	(3) " at RD 505				2,140.7	31.4	604.5	635.9	1,116.6	388.2	1,504.8	
	(4) " at RD 558				2,332.7	31.4	668.3	699.7	1,196.7	436.3	1,633.0	
	Sub-total of Regulators				10,019.5	141.0	2,982.4	3,123.4	5,101.9	1,794.2	6,896.1	
C-1-3	Road Bridges											
	(1) Road Bridge at RD 365				1,356.2	24.5	352.5	377.0	738.8	240.4	979.2	
	(2) " at RD 441				1,347.0	25.8	325.9	351.7	749.9	245.4	995.3	
	(3) " at RD 530				1,231.3	24.3	285.3	309.6	686.7	235.0	921.7	
	(4) " at RD 585				1,112.3	22.9	241.7	264.6	636.9	210.8	847.7	
	(5) National Highway Bridge				1,338.2	20.1	454.6	474.7	663.1	200.4	863.5	
	Sub-total of Road Bridges				6,385.0	117.6	1,660.0	1,777.6	3,475.4	1,132.0	4,607.4	
C-1-4	Canal Lining											
	Brick Lining	3	sq-ft 1,000	8,105	24.3	-	1.1	1.1	13.7	9.5	23.2	
	Sub-total of Brick Lining				24.3	-	1.1	1.1	13.7	9.5	23.2	
C-1-5	Cross Drainage											
	Cross Drainage				21,325.7	154.9	9,474.1	9,629.0	9,181.8	2,514.9	11,696.7	
	Sub-total of Cross Drainage				21,325.7	154.9	9,474.1	9,629.0	9,181.8	2,514.9	11,696.7	
C-1-6	Plantation											
	Plantation	6,310	sq-ft 1,000	73	460.6	-	-	-	302.9	157.7	460.6	
	Sub-total of Plantation				460.6	-	-	-	302.9	157.7	460.6	
C-1-7	Paving											
	Metal Road	5,660	sq-ft 1,000	10,920	61,807.2	226.4	16,040.4	16,266.8	41,204.8	4,335.6	45,540.4	
	Sub-total of Paving				61,807.2	226.4	16,040.4	16,266.8	41,204.8	4,335.6	45,540.4	
	Total of C-1				236,987.1	29,104.7	93,576.6	122,681.3	100,406.9	13,898.9	114,305.8	
C-2	Distributaries											
C-2-1	Earth Work											
	(1) Earth Work	106,275	cu-ft 1,000	717	76,199.2	14,559.7	38,577.8	53,137.5	19,129.5	3,932.2	23,061.7	
	(2) Banking	42,068	"	340	14,303.1	2,692.3	6,983.3	9,675.6	3,786.1	841.4	4,627.5	
	Sub-total of Earth Work				90,502.3	17,252.0	45,561.1	62,813.1	22,915.6	4,773.6	27,689.2	
C-2-2	Regulators											
	(1) Lower Uch Disty				1,949.5	26.1	461.2	487.3	1,074.9	387.3	1,462.2	
	(2) Umrain Disty				950.0	13.7	253.1	266.8	504.4	178.8	683.2	
	(3) Qabula Disty				1,912.0	29.6	575.5	605.1	969.5	337.4	1,306.9	
	(4) Mirad Disty				2,390.0	37.0	719.5	756.5	1,212.0	421.5	1,633.5	
	Sub-total of Regulators				7,201.5	106.4	2,009.3	2,115.7	3,760.8	1,325.0	5,085.8	
C-2-3	Road Bridges											
	(1) Lower Uch Disty at RD 15.28				686.4	14.4	153.6	168.0	384.0	134.4	518.4	
	" at RD 36.40				514.8	10.8	115.2	126.0	288.0	100.8	388.8	
	(2) Nasirabad Disty at RD 37.00				286.0	6.0	64.0	70.0	160.0	56.0	216.0	
	" at RD 50.00				257.4	5.4	57.6	63.0	144.0	50.4	194.4	
	(3) Temple Disty at RD 23.99				686.4	14.4	153.6	168.0	384.0	134.4	518.4	
	(4) Ballan Disty at RD 87.00				257.4	5.4	57.6	63.0	144.0	50.4	194.4	
	Sub-total of Road Bridges				2,688.4	56.4	601.6	658.0	1,504.0	526.4	2,030.4	
C-2-4	Plain Falls											
	(1) Lower Uch Disty at RD 2.00				40.7	-	19.2	19.2	16.7	4.8	21.5	
	" at RD 4.00				40.7	-	19.2	19.2	16.7	4.8	21.5	
	" at RD 8.00				57.6	-	27.3	27.3	23.6	6.7	30.3	
	(2) Nasirabad Disty at RD 7.60				85.0	1.1	28.6	29.7	41.7	13.6	55.3	
	" at RD 10.90				83.3	1.0	28.1	29.1	40.8	13.4	54.2	
	" at RD 16.00				3.0	-	1.0	1.0	1.0	1.0	2.0	
	" at RD 22.00				3.0	-	1.0	1.0	1.0	1.0	2.0	
	" at RD 30.40				3.0	-	1.0	1.0	1.0	1.0	2.0	

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE (Rs.)	TOTAL COST (Rs'000)	FOREIGN CURRENCY			LOCAL CURRENCY		
						DEPRECIATION (Rs'000)	MATERIAL (Rs'000)	TOTAL (Rs'000)	MATERIAL (Rs'000)	LABOUR (Rs'000)	TOTAL (Rs'000)
(3)	Jhuder Disty at RD 29.37				717.7	14.9	178.6	193.5	388.1	136.1	524.2
	" at RD 34.40				98.9	1.1	35.4	34.5	48.4	16.0	64.4
	" at RD 52.93				85.0	1.1	28.6	29.7	41.7	13.6	55.3
	" at RD 60.91				85.0	1.1	28.6	29.7	41.7	13.6	55.3
	" at RD 69.93				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 78.67				62.5	0.7	21.1	21.8	30.6	10.1	40.7
	" at RD 89.66				48.6	0.6	16.4	17.0	23.8	7.8	31.6
(4)	Temple Disty at RD 33.52				85.0	1.1	28.6	29.7	41.7	13.6	55.3
	" at RD 45.50				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 67.74				41.6	0.5	14.0	14.5	20.4	6.7	27.1
	" at RD 76.17				34.7	0.4	11.7	12.1	17.0	5.6	22.6
(5)	Jharpat Disty at RD 9.90				156.2	1.8	52.7	54.5	76.5	25.2	101.7
	" at RD 27.10				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 40.00				104.1	1.2	35.1	36.3	51.0	16.8	67.8
	" at RD 51.84				430.5	8.9	107.1	116.0	232.8	81.7	314.5
	" at RD 61.50				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 69.90				59.0	0.7	19.9	20.6	28.9	9.5	38.4
(6)	Mohabadpur Disty at RD 3.90				104.1	1.2	35.1	36.3	51.0	16.8	67.8
	" at RD 19.30				97.2	1.1	32.8	33.9	47.6	15.7	63.3
	" at RD 30.90				85.3	1.0	28.1	29.1	40.8	13.4	54.2
	" at RD 43.60				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 54.50				55.5	0.6	18.7	19.3	27.2	9.0	36.2
	" at RD 67.00				3.0	-	1.0	1.0	1.0	1.0	2.0
(7)	Bari Disty at RD 40.00				104.1	1.2	35.1	36.3	51.0	16.8	67.8
	" at RD 59.00				83.3	1.0	28.1	29.1	40.8	13.4	54.2
	" at RD 70.00				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 80.00				69.4	0.8	23.4	24.2	34.0	11.2	45.2
	" at RD 90.00				69.4	0.8	23.4	24.2	34.0	11.2	45.2
	" at RD105.00				55.5	0.6	18.7	19.3	27.2	9.0	36.2
(8)	Ballar Disty at RD 11.00				104.1	1.2	35.1	36.3	51.0	16.8	67.8
	" at RD 24.00				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 37.00				83.3	1.0	28.1	29.1	40.8	13.4	54.2
	" at RD 49.00				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 57.00				69.4	0.8	23.4	24.2	34.0	11.2	45.2
	" at RD 66.50				48.6	0.6	16.4	17.0	23.8	7.8	31.6
	" at RD 80.20				96.6	2.0	24.0	26.0	52.3	18.3	70.6
(9)	Umrani Disty at RD 9.68				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 31.47				613.1	12.7	152.6	165.3	331.5	116.3	447.8
	" at RD 45.17				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 59.00				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 69.26				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 79.36				24.3	0.3	8.2	8.5	11.9	3.9	15.8
(10)	Rupa Disty at RD 9.40				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 17.30				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 27.00				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 41.80				27.8	0.3	9.4	9.7	13.6	4.5	18.1
(11)	Mangsi at RD 40.00				3.0	-	1.0	1.0	1.0	1.0	2.0
	" at RD 50.00				3.0	-	1.0	1.0	1.0	1.0	2.0
(12)	Qebula Disty at RD 19.02				888.0	18.4	221.2	239.6	480.6	168.6	649.2
	" at RD 28.02				779.5	16.2	193.9	210.1	421.5	147.9	569.4
	" at RD 38.02				679.7	14.1	169.1	183.2	367.5	129.0	496.5
	" at RD 49.02				545.0	11.3	135.6	146.9	294.7	103.4	398.1
	" at RD 59.02				389.7	8.0	97.0	105.0	210.7	74.0	284.7
	" at RD 71.02				236.1	4.9	58.7	63.6	127.6	44.9	172.5
	" at RD 86.02				69.7	1.4	17.4	18.8	37.7	13.2	50.9
(13)	Murad Disty at RD 20.02				1,414.8	29.3	352.0	381.3	765.0	268.5	1,033.5
	" at RD 40.02				1,286.5	26.8	320.0	346.8	695.6	244.1	939.7
	" at RD 60.02				1,042.5	21.6	259.4	281.0	563.7	197.8	761.5
	" at RD 80.02				814.3	16.9	202.6	219.5	440.3	154.5	594.8
	" at RD100.02				584.6	12.1	145.5	157.6	316.1	110.9	427.0
	" at RD115.02				416.7	8.6	103.7	112.3	225.3	79.1	304.4
	" at RD127.52				152.1	3.2	37.8	41.0	82.2	28.9	111.1
	Sub-Total of Plain Falls				13,468.1	256.2	3,573.7	3,829.9	7,144.1	2,494.1	9,638.2

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE (Rs.)	TOTAL COST (Rs. '000)	FOREIGN CURRENCY			LOCAL CURRENCY			
						DEPRECIATION (Rs. '000)	MATERIAL (Rs. '000)	TOTAL (Rs. '000)	LOCAL MATERIAL (Rs. '000)	LABOUR (Rs. '000)	TOTAL (Rs. '000)	
C-2-5	Off Takes											
	Off Takes	244	Nos.	37,300	9,101.2	97.6	3,318.4	3,416.0	3,977.2	1,708.0	5,685.2	
	Sub-total of Off Takes				9,101.2	97.6	3,318.4	3,416.0	3,977.2	1,708.0	5,685.2	
C-2-6	Paving											
	Gravel Road	13,306	sq-ft 1,000	4,792	63,762.4	266.1	399.2	665.3	59,677.4	3,419.7	63,097.1	
	Sub-total of Paving				63,762.4	266.1	399.2	665.3	59,677.4	3,419.7	63,097.1	
	Total of C-2				186,723.9	18,034.7	55,463.3	73,498.0	98,979.1	14,246.8	113,225.9	
C-3	Minor Canal											
	(1) Earth Work	3,630,000	ft	23.5	85,305.0	13,431.0	40,656.0	54,087.0	23,958.0	7,260.0	31,218.0	
	(2) Out Let	1,570	Nos.	4,022	6,314.5	-	458.4	458.4	4,411.7	1,444.4	5,856.1	
	Total of C-3				91,619.5	13,431.0	41,114.4	54,545.4	28,369.7	8,704.4	37,074.1	
	Ground Total of C				515,330.5	60,570.4	190,154.3	250,724.7	227,755.7	36,850.1	264,605.8	

D. Stage I Implementation (Cases 2 & 4)

ITEM	DESCRIPTION	QUANTITY	UNIT	RATE (Rs.)	TOTAL COST (Rs'000)	FOREIGN CURRENCY			LOCAL CURRENCY			
						DEPRECIATION (Rs'000)	MATERIAL (Rs'000)	TOTAL (Rs'000)	LOCAL MATERIAL (Rs'000)	LABOUR (Rs'000)	TOTAL (Rs'000)	
B	State I											
B-1	Desert Pat Feeder Canal											
B-1-1	Earth Work											
	(1) Excavation	31,060	cu-ft 1,000	561	17,424.7	3,665.1	7,951.4	11,616.5	5,404.4	403.8	5,808.2	
	(2) Dredging	65,350	"	608	39,732.8	8,103.4	19,931.8	28,035.2	9,606.4	2,091.2	11,697.6	
	Sub-total of Earth Work				57,157.5	11,768.5	27,883.2	39,651.7	15,010.8	2,495.0	17,505.8	
	Total of B-1				57,157.5	11,768.5	27,883.2	39,651.7	15,010.8	2,495.0	17,505.8	
B-2	Pat Feeder Canal											
B-2-1	Earth Work											
	(1) Excavation	174,200	cu-ft 1,000	561	97,726.2	20,555.6	44,595.2	65,150.8	30,310.8	2,264.6	32,575.4	
	(2) Dredging	17,800	"	608	10,822.4	2,207.2	5,429.0	7,636.2	2,616.6	569.6	5,186.2	
	Sub-total of Earth Work				108,548.6	22,762.8	50,024.2	72,787.0	32,927.4	2,834.2	35,761.6	
B-2-2	Regulators											
	(1) Cross Regulator at RD 109				1,298.5	21.1	272.0	293.1	746.0	259.4	1,005.4	
	(2) " at RD 238				1,722.5	26.3	439.9	466.2	932.3	324.0	1,256.3	
	Sub-total of Regulators				3,021.0	47.4	711.9	759.3	1,678.3	583.4	2,261.7	
B-2-3	Road Bridges											
	(1) Road Bridge at RD 42				947.5	8.0	351.8	359.8	444.9	142.8	587.7	
	(2) " at RD 76				947.5	8.0	351.8	359.8	444.9	142.8	587.7	
	(3) " at RD 91				947.5	8.0	351.8	359.8	444.9	142.8	587.7	
	(4) " at RD 171				1,460.5	27.2	366.8	394.0	804.0	262.5	1,066.5	
	(5) " at RD 205				1,460.5	27.2	366.8	394.0	804.0	262.5	1,066.5	
	(6) " at RD 280				1,460.5	27.2	366.8	394.0	804.0	262.5	1,066.5	
	(7) " at RD 317				1,217.1	22.7	305.7	328.4	670.0	218.7	888.7	
	Sub-total of Road Bridges				8,441.1	128.3	2,461.5	2,589.8	4,416.7	1,434.6	5,851.3	
B-2-4	Canal Lining											
	Brick Lining	7,591	sq-ft 1,000	8,105	61,525.1	-	2,907.4	2,907.4	54,531.5	24,086.2	58,617.7	
	Sub-total of Canal Lining				61,525.1	-	2,907.4	2,907.4	54,531.5	24,086.2	58,617.7	
B-2-5	Plantation											
	Plantation	12,770	sq-ft 1,000	73	932.2	-	-	-	613.0	319.2	932.2	
	Sub-total of Plantation				932.2	-	-	-	613.0	319.2	932.2	
B-2-6	Paving											
	Metal Road	2,080	sq-ft 1,000	10,920	22,713.6	83.2	5,894.7	5,977.9	15,142.4	1,593.3	16,735.7	
	Sub-total of Paving				22,713.6	83.2	5,894.7	5,977.9	15,142.4	1,593.3	16,735.7	
	Total of B-2				205,181.6	23,021.7	61,999.7	85,021.4	89,509.5	30,850.9	120,160.2	
B-3	Distributaries											
B-3-1	Earth Work											
	Earth Work	3,305	cu-ft 1,000	717	2,369.7	452.8	1,199.7	1,652.5	594.9	122.3	717.2	
	Sub-total of Earth Work				2,369.7	452.8	1,199.7	1,652.2	594.9	122.3	717.2	
B-3-2	Regulators											
	Khallan Disty				566.8	19.0	231.2	250.2	223.8	92.8	316.6	
	Sub-total of Regulators				566.8	19.0	231.2	250.2	223.8	92.8	316.6	
B-3-3	Plain Falls											
	(1) Bitti Disty at RD 46.72				61.8	1.3	15.4	16.7	33.4	11.7	45.1	
	" at RD 50.50				61.8	1.3	15.4	16.7	33.4	11.7	45.1	
	" at RD 53.50				50.7	1.1	12.6	13.7	27.4	9.6	37.0	
	(2) Khallan Disty at RD 40.20				77.6	1.6	19.3	20.9	42.0	14.7	56.7	
	Sub-total of Plain Falls				251.9	5.3	62.7	68.0	136.2	47.7	183.9	
B-3-4	Off Takes											
	Off Takes	31	Nos.	37,300	1,156.3	12.4	421.6	434.0	505.3	217.0	722.3	
	Sub-total of Off Takes				1,156.3	12.4	421.6	434.0	505.3	217.0	722.3	
	Total of B-3				4,344.7	489.5	1,915.2	2,404.7	1,460.2	479.8	1,940.0	
B-4	Minor Canal											
	(1) Earth Work	405,000	ft	23.5	9,517.5	1,498.5	4,536.0	6,034.5	2,673.0	810.0	3,483.0	
	(2) Out Let	195	Nos.	4,022	784.3	-	56.9	56.9	548.0	179.4	727.4	
	Total of B-4				10,301.8	1,498.5	4,592.9	6,091.4	3,221.0	989.4	4,210.4	
	Grand Total of B				276,955.6	36,778.2	96,391.0	133,169.2	109,001.3	34,815.1	143,816.4	

F. Pre Engineering

Stage I	Lenfth of Canal	Unit Cost	Cost
Pat Feeder Canal	64.77 (km)	50,000 Rs./km	3,238,500
Distry	56.39 (km)	30,000 Rs./km	1,691,700
		Total	4,930,200
			₹ 5,000 (10 ³ Rs.)
Stage II			
Pat Feeder Canal	53.41 (km)	50,000 Rs./km	2,670,500
Distry	324.97 (km)	30,000 Rs./km	9,749,100
		Total	12,419,100
			₹ 12,000 (10 ³ Rs.)

G. Land Acquisition and Compensation

1. Stage I

1) Canals	ft	ft	A.	Unit Cost	Cost
a) Minor (450,000 x 31)	L.	B.	320 Acre	4,000/Acre	1,280.0 (10 ³ Rs.)
b) Disty			7.8 Acre	4,000/Acre	31.2 (")
c) Main			2.5 Acre	4,000/Acre	10.0 (")
				Sub-total	1,321.2 (")

2) Project Facilities

Office Building & Quarters about 1.1 Acre

1.1 x 4,000	4.4 (10 ³ Rs.)
Total	1,325.6 (")

2. Stage II

1) Canals	ft	ft	A.	Unit Cost	Cost
a) Minor (3,630,000 x 31)	L.	B.	2,583	4,000/Acre	10,332 (10 ³ Rs.)
b) Distry			96.7	4,000/Acre	386.8 (10 ³ Rs.)
c) Main			38.4	4,000/Acre	139.2 (")
				Sub-total	10,858.0 (")

2) Project Facilities & Quarter	6.6	4,000/Acre	26.4 (10 ³ Rs.)
Total			10,884.4 (")

H. Construction Equipments

<u>Description</u>	<u>QTY</u>	<u>Unit</u>	<u>Rate</u> (Rs'000)	<u>Cost</u> (Rs'000)
Case 1				
Dragline 3.1 m ³	15	Unit	6,759.6	101,394.0
Bulldozer 32 t	15	"	2,080.8	31,212.0
Dredger	5	"	7,782.8	38,914.0
Hydraulic Backhoe 1.2 m ³	11	"	1,609.8	17,707.8
Bulldozer 11 t	24	"	658.3	15,799.2
Dump Truck 11 t	8	"	462.6	3,700.8
Motor Grader	4	"	646.7	2,586.8
Magadam Roller 12 t	2	"	381.8	763.6
Tire Roller	2	"	430.7	861.4
Generator 80 kw	20	"	206.6	4,132.0
Truck 11 t	8	"	479.4	3,835.2
Truck 4 t	8	"	271.5	2,172.0
Water Truck	6	"	437.8	2,676.8
Jeep	13	"	111.6	1,450.8
Station Wagon	3	"	122.8	368.4
Miscellaneous				2,156.2
<u>Total</u>				<u>229,870.0</u>
Foreign Currency				206,883.0
Local Currency				22,987.0
Case 2				
Dragline 3.1 m ³	8	Unit	6,759.6	54,076.8
Bulldozer 32 t	10	"	2,080.8	20,808.0
Dredger	4	"	7,782.8	31,131.2
Hydraulic Backhoe 1.2 m ³	10	"	1,609.8	16,098.0
Bulldozer 11 t	19	"	658.3	12,507.7
Dump Truck 11 t	8	"	462.6	3,700.8
Motor Grader	4	"	646.7	2,586.8
Magadam Roller	2	"	381.8	763.6
Tire Roller	2	"	430.7	861.4
Generator 80 kw	8	"	206.6	1,652.8
Truck 11 t	6	"	479.4	2,875.8
Truck 4 t	6	"	271.5	1,629.0
Water Truck	4	"	437.8	1,751.2
Jeep	10	"	111.6	1,116.0
Station Wagon	2	"	122.8	245.6
Miscellaneous				1,610.1
<u>Total</u>				<u>149,714.0</u>
Foreign Currency				134,743.0
Local Currency				14,971.0

I. Agricultural Development

1. Renewal of Codasted Maps	Number	Unit Cost (Rs.)	Cost (Rs '000)
1) Preparation of Maps	60,000	32	1,920
2) Renewal of Maps	190,000	32	6,080
Sub-total			<u>8,000</u>
2. Strengthening of Extension Services			
1) Oversea and Domestic Training	(O.S) 15 (D.T) 100	35 2	525 200
2) Subsidy for Extension Farm	4	75	300
Sub-total			<u>1,025</u>
3. Operation and Maintenance Cost for Three Years			
1) Salary and Weges			9,422
2) Transportation Facilities			2,533
Sub-total			<u>11,955</u>
Total			<u>20,980</u> Rs.

Note;

Stage I	4,562 (10 ³ Rs.)
Stage II	16,418 (")
Total	<u>20,980 (")</u>

J. Project Facilities Cost

1. Stage I

1) for Irrigation

a) Office Building	$910 + 1,330 = 2,240$
b) Quarter	$4,200 + 6,300 = 10,500$
Sub-total	<u>12,740 sq.f</u>

2) for Extension

a) Office Building	$270 + (560 \times 3) = 1,950$
b) Quarter	$1,100 + 800 + 400 + (3,600 \times 3)$ $= 13,100 \text{ sq.f}$
Sub-total	<u>15,050 sq.f</u>
Total	<u>27,790 sq.f</u>

2. Stage II

1) for Irrigation

a) Office Building	$3,010 + 3,010 + 2,100 = 8,120$
b) Quarter	$4,500 + 11,400 + 11,400 + 8,000 = 36,300$
Sub-total	<u>44,420 sq.f</u>

2) for Extension

a) Office Building	$980 + (560 \times 22) = 13,300$
b) Quarter	$10,100 + (3,600 \times 22) = 89,300$
Sub-total	<u>102,600 sq.f</u>
Total	<u>147,020 sq.f</u>

3. Cost Estimation for Stage I & Stage II

		(10 ³ Rs.)
Stage I	$27,790 \times 200 =$	5,558
Stage II	$147,020 \times 200 =$	29,404
Total		<u>34,962</u>

4. Telecommunication Facilities

One Systems for Project Area

L.S. 750 (10³Rs.)

K. Operation and Maintenance Cost

The operation and maintenance cost of the mentioned facilities is computed as follows:

1) Salary and Wage for the irrigation

a) Unit Cost

The Salary and Wage for staffs are hired in monthly and yearly basis as follows.

Executive Engineer	2,000 ^{RS/month}	24,000 ^{RS/year}
Irrigation Inspector	1,500	18,000
Asst Irrigation Inspector	1,200	14,400
Irrigation Oreerseer	900	10,800
Administrative Officer	800	9,600
Gate Keeper, Chief Labours	600	7,200
Labours	500	6,000

b) Annual Cost of Salary and Wage for the Irrigation

i) Executive Eng, Office

Ex. Eng.	1 × 24,000 =	24,000 ^{R.S}
Other Staff	35 × 9,600 =	336,000 "
Sub-Total		<u>360,000</u> "

ii) Sub-Divisional Office

I.I	6 × 18,000 =	108,000 ^{R.S}
A.I.I	11 × 14,400 =	158,400 "
I.O	39 × 10,800 =	421,200 "
Administrative Staffs	20 × 9,600 =	192,000 "
G.K.E.C.L.	41 × 7,200 =	295,200 "
Labours	45 × 6,000 =	270,000 "
Sub-Total		<u>1,444,800</u> "
Total		<u>1,804,800</u> ^{R.S}

2) Salary and Wage for the Extension Works

a) Unit Cost

The salry and wage for staffs are hired in monthly and yearly basis as follows.

Extra Asst Director	2,000 ^{RS/month}	24,000 ^{RS/year}
Chief of Agricultural Officer	1,500 "	18,000 "

Asst Chief Agricultural Officer	1,200 ^{RS/month}	14,400 ^{RS/year}
Agricultural Officer in Village		
Officer	1,000	12,000
Field Asst	900	10,800
Administrative Officer	800	9,600

b) Annual Cost of Salary and Wage for the Extension Works

i) Extra Asst Director Office

Extra Asst Director	1 × 24,000 =	24,000 ^{R.S}
Other Staff	35 × 9,600 =	336,000 ["]
Sub-Total		<u>360,000^{R.S}</u>

ii) Extension Office

C.A.O.	4 × 18,000 =	72,000 ^{R.S}
A.A.O	7 × 14,400 =	100,800 ["]
Clerks	6 × 9,600 =	57,600 ["]
Sub-Total		<u>230,400^{R.S}</u>

ii) Village Office

A.O	25 × 12,000 =	300,000 ^{R.S}
F.A	125 × 10,800 =	1,350,000 ["]
Administrative Officer	50 × 9,600 =	480,000 ["]
Sub-Total		<u>2,130,000^{R.S}</u>
Total		<u>2,720,400^{R.S}</u>

3) Transportation Facilities

a) Sub-Divisional Office

Station Wagon	19 ^{unit} × 106,000 =	2,014,000 ^{R.S}
Motor Cycles	71 " × 13,100 =	930,100
Sub-Total		<u>2,944,100</u>

b) Extension Offices

Station Wagon	4 × 106,000 =	424,000 ^{R.S}
Motor Cycles	161 × 13,100 =	2,109,100
Sub-Total		2,533,100
Total		<u>5,477,200</u>

4) Miscellaneous (Fuel, Electrics, Water etc. Charge)

8 Percent for Total cost of 1), 2), and 3)

a) for Irrigation

i) 1,804,800
ii) 2,944,100
Sub-Total 4,748,900
x 0,08
379,912^{R.S}

b) for Extension Works

i) 2,720,400
ii) 2,533,100
Sub-Total 5,253,500
x 0,08
420,280^{R.S}

Total 800,192^{R.S}

5) Maintenance Cost of the irrigation Canals

In case of consideration of the maintenance for canals in the governmental territory of the project area, the length of the canals the sediment yield and unit cost of maintenance are shown as follows.

Length of the main canals 97.5 miles (157,1km)
Length of the Distry 261.6 " (421,0km)
Length of the Minor 776.4 " (1,249.4km)
Total sediment yeild at Canals in a year 9.2 M.C.F (260.00 C.M)

Unit Cost for maintenance 1,000 ft/10 person ÷ 0.19mile/300 R.S
of the main canal (1 mile/1,579 R.S)

Unit Cost for Distry 1,000 ft/5 person ÷ 0.19 mile /150 R.S
(1 mile/789 R.S)

Uni Cost for Minor 1,000 ft/1 person ÷ 0.19 mile/30 R.S
(1 mile/158 R.S)

Unit Cost of dredger
for the sediment yeild 4 R.S/m

<u>Remarks</u>	
Fuel and Oil	338 R.S/hour
Reparing	275 R.S/hour
Operator	45 R.S/hour
Production	150 C.M/hour
Unit cost	$\frac{658}{150} = 4.3$ R.S

a) Cost estimation;

Main Canal 95.7 x 1.579 = 151,110
Distry 261.6 x 789 = 206,402
Minor 776.4 x 158 = 122,671
Sub-Total 480,183^{R.S}

Sedimentation	$260,000 \times 4 = 1,040,000$	R.S
	Total	<u>1,520,183</u>

7) Total Cost of Operation and Maintenance

	a) for Irrigation	b) for Extension Works
Salary and Wage	1,804,800	2,720,400
Transportation Facilities	2,944,100	2,533,100
Miscellaneous	379,912	420,280
Dreading of Sediment	1,520,183	
Total	<u>6,648,995</u>	<u>5,673,780</u>

c) Estimation of O & M cost during the Construction period

i) for Irrigation

Salary and Wage	$1,804,800 \times 3 = 5,414,400$
Miscellaneous	$379,912 \times 3 = 1,139,736$
Dreading of Sediment	$1,520,183 \times 3 = 4,560,549$
Transportation	2,944,100
Total Cost	<u>14,058,785</u>

Separation of the cost due to the construction stage Ratio of the separation;

Stage I. 0.11 (11%)

Stage II. 0.89 (89%)

Stage I. Cost;

Stage II. Cost

$5,414,400 \times 0.11 = 595,584$	4,818,816
$1,139,736 \times 0.11 = 125,370$	1,014,366
$4,560,549 \times 0.11 = 501,660$	4,058,889
2,944,100	
Total	<u>4,166,714</u>
	<u>9,892,071</u>

ii) for Extension Works

Salary and Wage	$2,729,400 \times 3 = 8,161,200$
Miscellaneous	$420,280 \times 3 = 1,260,840$
Transportation Facilities	2,533,100
Total	<u>11,955,140</u>

Stage I. Cost

Stage II. Cost

$8,160,200 \times 0.11 = 897,732$	7,263,468
$1,260,840 \times 0.11 = 138,692$	1,122,148
2,533,100	
Total	<u>3,569,524</u>
	<u>8,385,616</u>

K. Cost Estimate on Consulting Services.

I.	Final Design	Qty	UNIT COST (US \$)	AMOUNT (US \$)
I-1	Foreign Currency			
	Remuneration	62 M-M	10,000	620,000
	-do- (Local)	180 M-M	5,000	900,000
	International Travel	8 Times	2,200	17,600
	Miscellaneous	12 Mon	L.S.	62,400
	Sub-Total			1,500,000
				(Rs. 16,500,000)
I-2	Local Currency			
	Per diem allowance	1,590 days	50	79,500
	-do-	5,400 days	30	162,000
	Miscellaneous	12 Mon	L.S.	58,500
	Sub-Total			300,000
				(Rs. 3,300,000)
	Total			US \$ 1,800,000
				(Rs. 19,800,000)
II.	Pilot Project			
II-1	Foreign Currency			
	Remuneration	46M-M	10,000	460,000
	-do- (Local)	52M-M	5,000	260,000
	International Travel	4 Times	2,200	8,800
	Miscellaneous	20 Mon	L.S.	41,200
	Sub-Total			770,000
				(Rs. 8,470,000)
II-2	Local Currency.			
	Per diem allowance	1,380 days	50	69,000
	-do-	1,560 days	30	46,800
	Miscellaneous	20 Mon	L.S.	64,200
	Sub-Total			180,000
				(Rs. 1,980,000)
	Total			US \$ 950,000.
				(Rs. 10,450,000)

III. Stage-I Implementation

III-1 Foreign Currency

Remuneration	93 M-M	10,000	930,000
-do- (Local)	174 M-M	5,000	870,000
International Travel	8 Times	2,200	17,600
Miscellaneous	33 Mon	L.S.	82,400
Sub-Total			1,900,000
			(Rs. 20,900,000)

III-2 Local Currency

Per diem allowance.	2,790 days	50	139,500
-do-	5,220 days	30	156,600
Miscellaneous	33 Mon	L.S.	83,900
Sub-Total			380,000
			(Rs. 4,180,000)

Total 2,280,000
(Rs. 25,080,000)

IV. Stage-II Implementation

IV-1 Foreign Currency

Remuneration	84 M-M	10,000	840,000
-do- (Local)	174 M-M	5,000	870,000
International Travel	7 Times	2,200	15,400
Miscellaneous	33 Mon	L.S.	74,600
Sub-Total			1,800,000
			(Rs. 19,800,000)

IV-2 Local Currency

Per diem allowance	2,520 days	50	126,000
-do-	5,220 days	30	156,600
Miscellaneous	33 Mon	L.S.	87,400
Sub-Total			370,000
			(Rs. 4,070,000)

Total 2,170,000
(Rs. 23,870,000)

Grand Total US \$. 7,200,000
(Rs. 79,200,000)

Table IV.6-2 Disbursement Schedule (Case 1 & Case 3)

Description	Total			1983			1984			1985			1986			1987			1988			1989			
	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	
A. Pilot Project																									
1. Construction of Facilities	10,945	42,268	53,213	5,473	21,134	26,607	5,472	21,134	26,606																
2. Land Aquisition & Compensation	-	1,700	1,700	-	1,700	1,700																			
3. Agricultural Development	8,786	1,150	9,936	8,786	1,150	9,936																			
4. Operation & Maintenance	-	10,000	10,000					1,000	1,000	-	3,000	3,000	-	3,000	3,000	-	3,000	3,000							
5. Consulting Services	8,470	1,980	10,450	3,303	910	4,213	4,066	832	4,898	1,101	238	1,339													
Sub-total (1 - 5)	28,201	57,098	85,299	17,562	24,894	42,456	9,538	22,966	32,504	1,101	3,238	4,339	-	3,000	3,000	-	3,000	3,000							
6. Contingency	3,799	8,902	12,701	2,198	4,076	6,274	1,432	3,444	4,876	169	482	651	-	450	450	-	450	450							
Sub-total (1 - 6)	32,000	66,000	98,000	19,760	28,970	48,730	10,970	26,410	37,380	1,270	3,720	4,990	-	3,450	3,450	-	3,450	3,450							
7. Price Escalation	3,000	12,000	15,000	1,240	2,630	3,870	1,530	4,990	6,520	230	1,080	1,310	-	1,450	1,450	-	1,850	1,850							
Total	35,000	78,000	113,000	21,000	31,600	52,600	12,500	31,400	33,900	1,500	4,800	6,300	-	4,900	4,900	-	5,300	5,300							
B. Stage - I Implementation																									
1. Civil Works																									
(1) Main Canal	111,509	152,651	264,160							16,726	22,898	39,624	39,028	53,428	92,456	39,028	53,428	92,456	16,727	22,897	39,624				
(2) Distributaries	2,935	3,817	6,752							440	573	1,013	1,027	1,336	2,363	1,027	1,336	2,363	441	572	1,013				
(3) Minor Canals	5,097	4,597	9,694							764	690	1,454	1,784	1,609	3,393	1,784	1,609	3,393	765	689	1,454				
(4) Road	5,895	16,736	22,631							884	2,510	3,394	2,063	5,858	7,921	2,063	5,858	7,921	885	2,510	3,395				
(5) Pre-Engineering	-	5,000	5,000				-	1,250	1,250	-	1,250	1,250	-	1,250	1,250	-	500	500	-	500	500	-	250	250	
2. Land Aquisition & Compensation	-	1,326	1,326							-	1,326	1,326													
3. Construction Equipment	206,883	22,987	229,870							206,883	22,987	229,870													
4. Agricultural Development	2,533	2,029	4,562							2,533	345	2,878	-	670	670	-	670	670	-	344	344				
5. Project Facilities	750	5,558	6,308				750	5,558	6,308																
6. Operation & Maintenance	2,944	1,223	4,167							2,944	201	3,145	-	410	410	-	410	410	-	202	202				
7. Project Administration	-	17,873	17,873				-	809	809	-	4,329	4,329	-	5,252	5,252	-	5,192	5,192	-	2,271	2,271	-	20	20	
8. Consulting Services																									
(1) Final Design	16,500	3,300	19,800				16,500	3,300	19,800																
(2) Supervision	20,900	4,180	25,080							6,270	1,338	7,608	5,643	1,086	6,729	5,643	1,086	6,729	3,344	670	4,014				
Sub-total (1 - 8)	375,946	241,277	617,223				17,250	10,917	28,167	237,444	58,447	295,891	49,545	70,899	120,444	49,545	70,089	119,634	22,162	30,655	52,817	-	270	270	
9. Contingency	45,054	34,723	79,777				2,550	1,683	4,233	24,556	7,553	32,109	7,455	10,601	18,056	7,455	10,411	17,866	3,038	4,445	7,483	-	30	30	
Sub-total (1 - 9)	421,000	276,000	697,000				19,800	12,600	32,400	262,000	66,000	328,000	57,000	81,500	138,500	57,000	80,500	137,500	25,200	35,100	60,300	-	300	300	
10. Price Escalation	115,000	122,000	237,000				2,900	2,400	5,300	59,000	19,500	78,500	17,700	33,500	51,200	23,000	43,400	66,400	12,400	23,000	35,400	-	200	200	
Total	536,000	398,000	934,000				22,700	15,000	37,700	321,000	85,500	406,500	74,700	115,000	189,700	80,000	123,900	203,900	37,600	58,100	95,700	-	500	500	
C. Stage - II Implementation																									
1. Civil Works																									
(1) Main Canal	77,536	68,765	146,301													11,630	10,315	21,945	27,138	24,068	51,206	27,138	24,068	51,206	11,630
(2) Distributaries	55,064	50,129	105,193													8,260	7,519	15,779	19,272	17,545	36,817	19,272	17,545	36,817	8,260
(3) Minor Canals	41,115	37,074	78,189													6,167	5,561	11,728	14,390	12,976	27,366	14,390	12,976	27,366	6,168
(4) Road	16,439	108,637	125,076													2,466	16,296	18,762	5,754	38,023	43,777	5,754	38,023	43,777	2,465
(5) Pre-Engineering	-	12,000	12,000										-	1,200	1,200	-	2,400	2,400	-	2,400	2,400	-	2,400	2,400	-
2. Land Aquisition & Compensation	-	10,884	10,884													-	10,884	10,884							
3. Construction Equipment																									
4. Agricultural Development	-	16,418	16,418													-	2,739	2,739	-	5,470	5,470	-	5,470	5,470	-
5. Project Facilities	-	29,404	29,404										-	29,404	29,404										
6. Operation & Maintenance	-	9,892	9,892													-	1,646	1,646	-	3,300	3,300	-	3,300	3,300	-
7. Project Administration	-	27,783	27,783										-	2,448	2,448	-	4,628	4,628	-	8,404	8,404	-	8,404	8,404	-
8. Consulting Services	19,800	4,070	23,870													1,980	488	2,468	5,148	1,262	6,410	6,336	1,262	7,598	4,950
Sub-total (1 - 8)	209,954	375,056	585,010										-	33,052	33,052	30,503	62,476	92,979	71,702	113,448	185,150	72,890	113,448	186,338	33,472
9. Contingency	31,046	55,944	86,990										-	4,948	4,948	4,497	9,424	13,921	10,698	16,852	27,550	10,810	16,852	27,662	4,927
Sub-total (1 - 9)	241,000	431,000	672,000										-	38,000	38,000	35,000	71,900	106,900	82,400	130,300	212,700	83,700	130,300	214,000	38,400
10. Price Escalation	135,000	311,000	446,000										-	15,700	15,700	14,100	38,700	52,800	41,300	88,100	129,400	50,700	107,700	158,400	27,600
Total	376,000	742,000	1,118,000										-	53,700	53,700	49,100	110,600	159,700	123,700	218,400	342,100	134,400	238,000	372,400	66,000

Table IV.6-3 Disbursement Schedule (Case 2 & Case 4)

Description	Total			1983			1984			1985			1986			1987			1988			1989						
	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total				
A. Pilot Project																												
1. Construction of Facilities	10,945	42,268	53,213	5,473	21,134	26,607	5,472	21,134	26,606																			
2. Land Aquisition & Compensation	-	1,700	1,700	-	1,700	1,700																						
3. Agricultural Development	8,786	1,150	9,936	8,786	1,150	9,936																						
4. Operation & Maintenance	-	10,000	10,000				-	1,000	1,000	-	3,000	3,000	-	3,000	3,000	-	3,000	3,000										
5. Consulting Services	8,470	1,980	10,450	3,303	910	4,213	4,066	832	4,898	1,101	238	1,339																
Sub-total (1 - 5)	28,201	57,098	85,299	17,562	24,894	42,456	9,538	22,966	32,504	1,101	3,238	4,339																
6. Contingency	3,799	8,902	12,701	2,198	4,076	6,274	1,432	3,444	4,876	169	482	651																
Sub-total (1 - 6)	32,000	66,000	98,000	19,760	28,970	48,730	10,970	26,410	37,380	1,270	3,720	4,990																
7. Price Estalation	3,000	12,000	15,000	1,240	2,630	3,870	1,530	4,990	6,520	230	1,080	1,310																
Total	35,000	78,000	113,000	21,000	21,600	52,600	12,500	31,400	33,900	1,500	4,800	6,300																
B. Stage - I Implementation																												
1. Civil Works																												
(1) Main Canal	83,988	120,930	204,918							12,598	18,140	30,738	29,396	42,325	71,721	29,396	42,325	71,721	12,598	18,140	30,738							
(2) Distributaries	1,915	1,940	3,855							288	291	579	670	679	1,349	670	679	1,349	287	291	578							
(3) Minor Canals	4,593	4,210	8,803							689	632	1,321	1,608	1,473	3,081	1,608	1,473	3,081	688	632	1,320							
(4) Road	5,895	16,736	22,631							884	2,510	3,394	2,063	5,858	7,921	2,063	5,858	7,921	885	2,510	3,395			250	250			
(5) Pre-Engineering	-	5,000	5,000							-	1,250	1,250	-	1,250	1,250	-	500	500	-	500	500							
2. Land Aquisition & Compensation	-	1,326	1,326							-	1,326	1,326																
3. Construction Equipment	134,742	14,972	149,714							134,742	14,972	149,714																
4. Agricultural Development	2,533	2,029	4,562							2,533	345	2,878	-	670	670	-	670	670	-	344	344							
5. Project Facilities	750	5,558	6,308				750	5,558	6,308																			
6. Operation & Maintenance	2,944	1,223	4,167							2,944	201	3,145	-	410	410	-	410	410	-	202	202							
7. Project Administration	-	13,683	13,683							-	3,280	3,280	-	4,300	4,300	-	4,240	4,240	-	1,863	1,863							
8. Consulting Services																												
(1) Final Design	16,500	3,300	19,800				16,500	3,300	19,800																			
(2) Supervision	20,900	4,180	25,080							6,270	1,338	7,608	5,643	1,086	6,729	5,643	1,086	6,729	3,344	670	4,014							
Sub-total (1 - 8)	274,760	195,087	469,847				17,250	10,108	27,358	160,948	44,285	205,233	39,380	58,051	97,431	39,380	57,241	96,621	17,802	25,152	42,954	-	250	250				
9. Contingency	34,240	28,913	63,153				2,550	1,492	4,042	17,152	6,015	23,167	5,920	8,749	14,669	5,920	8,759	14,679	2,698	3,848	6,546	-	50	50				
Sub-total (1 - 9)	309,000	224,000	533,000				19,800	11,600	31,400	178,100	50,300	228,400	45,300	66,800	112,100	45,300	66,000	111,300	20,500	29,000	49,500	-	300	300				
10. Price Escalation	86,000	101,000	187,000				2,900	2,200	5,100	40,100	15,800	55,900	14,200	27,600	41,800	18,400	35,600	54,000	10,400	19,600	30,000	-	200	200				
Total	395,000	325,000	720,000				22,700	13,800	36,500	218,200	66,100	284,300	59,500	94,400	153,900	63,700	101,600	165,300	30,900	48,600	79,500	-	500	500				
C. Stage - II Implementation																												
1. Civil Works																												
(1) Main Canal	69,723	62,031	131,754													10,458	9,305	19,763	24,403	21,711	46,114	24,403	21,711	46,114	10,459			
(2) Distributaries	52,815	45,965	98,780													7,922	6,895	14,817	18,485	16,088	34,573	18,485	16,088	34,573	7,923			
(3) Minor Canals	37,049	33,952	71,001													5,557	5,093	10,650	12,967	11,883	24,850	12,967	11,883	24,850	5,558			
(4) Road	16,439	108,637	125,076													2,466	16,296	18,762	5,754	38,023	43,777	5,754	38,023	43,777	2,465			
(5) Pre-Engineering	-	12,000	12,000													-	2,400	2,400	-	2,400	2,400	-	2,400	2,400	-			
2. Land Aquisition & Compensation	-	10,884	10,884													-	10,884	10,884										
3. Construction Equipment																												
4. Agricultural Development	-	16,418	16,418													-	2,739	2,739	-	5,470	5,470	-	5,470	5,470	-			
5. Project Facilities	-	29,404	29,404													-												
6. Operation & Maintenance	-	9,892	9,892													-	1,646	1,646	-	3,300	3,300	-	3,300	3,300	-			
7. Project Administration	-	24,055	24,055																									
8. Consulting Services	19,800	4,070	23,870													1,980	488	2,468	5,148	1,262	6,410	6,336	1,262	7,598	4,950			
Sub-total (1 - 8)	195,826	357,308	553,134													30,604	30,604	28,383	60,206	88,589	66,757	108,148	174,905	67,945	108,148	176,093	31,355	
9. Contingency	29,174	53,692	82,866													-	4,596	4,596	4,217	8,994	13,211	9,943	16,252	26,195	10,155	16,252	26,407	4,645
Sub-total (1 - 9)	225,000	411,000	636,000																									
10. Price Escalation	126,000	297,000	423,000																									
Total	351,000	708,000	1,059,000													49,700	49,700	45,700	106,500	152,200	115,100	208,600	323,700	125,400	227,400	352,800	61,900	

ment Schedule (Case 2 & Case 4)

	1983			1985			1986			1987			1988			1989			1990			1991			1992							
	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total	F.C.	L.C.	Total				
	53,213	5,473	21,134	26,607	5,472	21,134	26,606																									
	1,700	-	1,700	1,700																												
	9,936	8,786	1,150	9,936																												
	10,000					1,000	1,000			3,000	3,000			3,000	3,000																	
	10,450	3,303	910	4,213	4,066	832	4,898	1,101	238	1,339																						
	85,299	17,562	24,894	42,456	9,538	22,966	32,504	1,101	3,238	4,339				3,000	3,000																	
	12,701	2,198	4,076	6,274	1,432	3,444	4,876	169	482	651				450	450																	
	98,000	19,760	28,970	48,730	10,970	26,410	37,380	1,270	3,720	4,990				3,450	3,450																	
	15,000	1,240	2,630	3,870	1,530	4,990	6,520	230	1,080	1,310				1,450	1,450																	
	113,000	21,000	21,600	52,600	12,500	31,400	33,900	1,500	4,800	6,300				4,900	4,900																	
	204,918							12,598	18,140	30,738	29,396	42,325	71,721	29,396	42,325	71,721	12,598	18,140	30,738													
	3,855							288	291	579	670	679	1,349	670	679	1,349	287	291	578													
	8,803							689	632	1,321	1,608	1,473	3,081	1,608	1,473	3,081	688	632	1,320													
	22,631							884	2,510	3,394	2,063	5,858	7,921	2,063	5,858	7,921	885	2,510	3,395													
	5,000								1,250	1,250		1,250	1,250		500	500			250	250												
	1,326								1,326	1,326																						
	149,714							134,742	14,972	149,714																						
	4,562							2,533	345	2,878					670	670																
	6,308				750	5,558	6,308																									
	4,167							2,944	201	3,145					410	410			202	202												
	13,683								3,280	3,280					4,300	4,300			1,863	1,863												
	19,800				16,500	3,300	19,800																									
	25,080							6,270	1,338	7,608	5,643	1,086	6,729	5,643	1,086	6,729	3,344	670	4,014													
	469,847				17,250	10,108	27,358	160,948	44,285	205,233	39,380	58,051	97,431	39,380	57,241	96,621	17,802	25,152	42,954	-	250	250										
	63,153				2,550	1,492	4,042	17,152	6,015	23,167	5,920	8,749	14,669	5,920	8,759	14,679	2,698	3,848	6,546	-	50	50										
	533,000				19,800	11,600	31,400	178,100	50,300	228,400	45,300	66,800	112,100	45,300	66,000	111,300	20,500	29,000	49,500	-	300	300										
	187,000				2,900	2,200	5,100	40,100	15,800	55,900	14,200	27,600	41,800	18,400	35,600	54,000	10,400	19,600	30,000	-	200	200										
	720,000				22,700	13,800	36,500	218,200	66,100	284,300	59,500	94,400	153,900	63,700	101,600	165,300	30,900	48,600	79,500	-	500	500										
	131,754													10,458	9,305	19,763	24,403	21,711	46,114	24,403	21,711	46,114	10,459	9,304	19,763							
	98,780													7,922	6,895	14,817	18,485	16,088	34,573	18,485	16,088	34,573	7,923	6,894	14,817							
	71,001													5,557	5,093	10,650	12,967	11,883	24,850	12,967	11,883	24,850	5,558	5,093	10,651							
	125,076													2,466	16,296	18,762	5,754	38,023	43,777	5,754	38,023	43,777	2,465	16,295	18,760							
	12,000														1,200	1,200		2,400	2,400		2,400	2,400		1,800	1,800		1,200	1,200				
	10,884															10,884	10,884															
	16,418															2,739	2,739		5,470	5,470		5,470	5,470		2,739	2,739						
	29,404															29,404	29,404															
	9,892															1,646	1,646		3,300	3,300		3,300	3,300		1,646	1,646						
	24,055															4,460	4,460		8,011	8,011		8,011	8,011		3,573	3,573						
	23,870															1,980	488	2,468	5,148	1,262	6,410	6,336	1,262	7,598	4,950	895	5,845	1,386	163	1,549		
	553,134															30,604	30,604	28,383	60,206	88,589	66,757	108,148	174,905	67,945	108,148	176,093	31,355	48,239	79,594	1,386	1,363	2,749
	82,866															4,596	4,596	4,217	8,994	13,211	9,943	16,252	26,195	10,155	16,252	26,407	4,645	7,261	11,906	214	237	451
	636,000															35,200	35,200	32,600	69,200	101,800	76,700	124,400	201,100	78,100	124,400	202,500	36,000	55,500	91,500	1,600	1,600	3,200
	423,000															14,500	14,500	13,100	37,300	50,400	38,400	84,200	122,600	47,300	103,000	150,300	25,900	55,100	81,000	1,300	1,900	3,200
	1,059,000															49,700	49,700	45,700	106,500	152,200	115,100	208,600	323,700	125,400	227,400	352,800	61,900	110,600	172,500	2,900	3,500	6,400

TABLE IV.6-3 Annual Phasing of Expenditures and Interest^{1/}

(Unit: Million Rs.)

Description	Period	Capital ^{2/} Cost	Interest	
			at 3% ann.	at 8% ann.
1. Case 1 & 3				
A. Pilot Project	1st Year	48.730	0.731	1.949
	2nd Year	37.380	1.719	4.598
	3rd Year	4.990	0.384	1.063
	4th Year	3.450	0.376	1.070
	5th Year	3.450	0.493	1.428
<u>Sub-total</u>		<u>98.000</u>	<u>3.703</u>	<u>10.108</u>
B. Stage-I Impl.	1st Year	32.400	0.486	1.296
	2nd Year	328.000	15.088	40.344
	3rd Year	138.500	10.665	29.501
	4th Year	137.500	14.988	42.625
	5th Year	60.300	8.623	24.964
	6th Year	0.300	0.053	0.158
<u>Sub-total</u>		<u>697.000</u>	<u>49.903</u>	<u>138.888</u>
C. Stage-II Impl.	1st Year	38.000	0.570	1.520
	2nd Year	106.900	4.917	13.149
	3rd Year	212.700	16.378	45.305
	4th Year	214.000	23.326	66.340
	5th Year	96.500	13.800	39.951
	6th Year	3.200	0.566	1.686
	7th Year	0.700	0.148	0.455
<u>Sub-total</u>		<u>672.000</u>	<u>59.705</u>	<u>168.406</u>
<u>Total</u>		<u>1,467.000</u>	<u>113.311</u>	<u>317.402</u>
		Say	<u>114.000</u>	<u>318.000</u>
2. Case 2 & 4				
A. Pilot Project	1st Year	48.730	0.731	1.949
	2nd Year	37.380	1.719	4.598

Description	Period	Capital ^{2/} Cost	Interest	
			at 3% ann.	at 8% ann.
	3rd Year	4.990	0.384	1.063
	4th Year	3.450	0.376	1.070
	5th Year	3.450	0.493	1.428
	<u>Sub-total</u>	<u>98.000</u>	<u>3.703</u>	<u>10.108</u>
B. Stage-I Impl.	1st Year	31.400	0.471	1.256
	2nd Year	228.400	10.506	28.093
	3rd Year	112.100	8.632	23.877
	4th Year	111.300	12.132	34.503
	5th Year	49.500	7.079	20.493
	6th Year	0.300	0.053	0.158
	<u>Sub-total</u>	<u>533.000</u>	<u>38.873</u>	<u>108.380</u>
C. Stage-II Imple	1st Year	35.200	0.528	1.408
	2nd Year	101.800	4.683	12.521
	3rd Year	201.100	15.485	42.834
	4th Year	202.500	22.073	62.775
	5th Year	91.500	13.085	37.881
	6th Year	3.200	0.566	1.686
	7th Year	0.700	0.148	0.455
	<u>Sub-total</u>	<u>636.000</u>	<u>56.568</u>	<u>159.560</u>
	<u>Total</u>	<u>1,267.000</u>	<u>99.144</u>	<u>278.048</u>
		Say	<u>100.000</u>	<u>279.000</u>

Note: 1/ Interest on capital investment during construction at 3% and 8% annual are calculated.

2/ Annual phasing of expenditure are quoted from Table IV.6-2 for Case-3 and Table IV.6-3 for Case-4. However, the cost for price escalation is not included into the capital cost.

TABLE IV.6-4 INVESTMENT COST OF THE PROJECT
INCLUDING INTEREST DURING CONSTRUCTION

(Unit: Million Rs.)

Description	Case-3	Case-4	Staged Develop- ment Plan
A. Pilot Project			
1. Local Costs	57.098	57.098	-
2. Foreign Exchange Costs	28.201	28.201	-
Sub-total	85.299	85.299	-
3. Contingency	12.701	12.701	-
Sub-total (1 to 3)	98.000	98.000	-
4. Interest at 8%	10.000	10.000	-
Total (1 to 4)	<u>108.000</u>	<u>108.000</u>	-
5. Price Escalation	15.000	15.000	-
Total (excluding 4)	<u>113.000</u>	<u>113.000</u>	-
B. Stage-I Implementation			
1. Local Costs	241.277	195.087	172.399
2. Foreign Exchange Costs	375.946	274.760	266.332
Sub-total	617.223	469.847	438.731
3. Contingency	79.777	63.153	57.969
Sub-total (1 to 3)	697.000	533.000	496.700
4. Interest at 8%	139.000	109.000	99.800
Total (1 to 4)	<u>836.000</u>	<u>642.000</u>	<u>596.500</u>
5. Price Escalation	237.000	187.000	169.300
Total (excluding 4)	<u>934.000</u>	<u>720.000</u>	<u>666.000</u>
C. Stage-II Implementation			
1. Local Costs	375.056	357.308	202.688
2. Foreign Exchange Costs	209.954	195.826	179.387
Sub-total	585.010	553.134	382.075
3. Contingency	86.990	82.866	57.025
Sub-total (1 to 3)	672.000	636.000	439.100
4. Interest at 8%	169.000	160.000	112.700
Total (1 to 4)	<u>841.000</u>	<u>796.000</u>	<u>551.800</u>
5. Price Escalation	446.000	423.000	283.900
Total (excluding 4)	<u>1,118.000</u>	<u>1,059.000</u>	<u>723.000</u>
Grand Total (A+B+C)			
1. Local Costs	673.431	609.493	375.087
2. Foreign Exchange Costs	614.101	498.787	445.719
3. Contingency	179.468	158.720	114.994
4. Interest at 8%	318.000	279.000	212.500
5. Price Escalation	698.000	625.000	453.200
Total of 1,2,3 and 4	<u>1,785.000</u>	<u>1,546.000</u>	<u>1,148.300</u>
Total of 1,2,3 and 5	<u>2,165.000</u>	<u>1,892.000</u>	<u>1,389.000</u>

Note: Investment Cost for Staged Development Plan is discussed in detail in Volume IV (Supplementary Study).

