1-2. Breakdown of Civil Works

Table I-2.1 Breakdown of Civil Works (1)

ITEM: 2.1.1, Land Reclamation of North Wahby Area

		. •						(1	Init: '00	0 LE)
Item Description	Q'tys	11.10	Rate	Total		gn Curre	ency		1 Curren	cy
No. Description			(LE)	Cost	Fquip- ment	Materi	Total	Local <u>Materi</u>	Labour	Total
(1) Pre-engineering	•	·					•			
Cadastral Survey	250	Fed	200	50		4	4	-	46	46
Vertical Control	140	Km	50	7	_		-	-	1	
Pre-Construction Survey	4	Mos	7,500	30	-	3	3	-	27	27
Construction Survey	48		4,000	192	_	19	19	-	173	173
Hydrology	48		1,500	72	-					
	48		•		-	7	7	-	65	65
Laboratory Control Negotiation for ROW	40 7		1,500 1,000	72 7	-	7	· 7		65 7	65 7
Negotiation for Now		105	1,000	. ,	-	-		-	,	,
Total				430	-	<u>40</u>	<u>40</u>	-	<u>390</u>	390
(2) Pump Station										
2-1 No.1 Pump Station										
a. Equipment										
Pump 6200mm	7	Set	8,000	56.00	-	56.00	56.00	-		-
Motor 90 Kw	7	Set	3,900	27.30		27.30	27.30	_		-
Auxiliary Equipment		L.S		9.80	- '	9.80	9.80	-	-	-
Pipes and Valves		L.S		30.20	_	30.20	30.20		-	-
Control Panel & Cable	1	Set		40.10	-	40.10	40.10	-		
Power Sub-station 450M	(VA I	Set		38.40	-	38.40	38.40			-
Generator 125KVA		Set		50,00	-	50.00	50.00	-		-
Pressure Tank		Set		31.90	-	31.90	31.90	_	-	· _
Strainer		Nos	1,000	7.00	_	7.00	7.00	~	-	~
	. ,	L.S	1,000	9.30		9,30	9,30	-	_	
Miscellaneous	. .			60.00	-	24.00	24.00	6.00	30.00	36.00
Transport and Installa Sub-total	11.101	L.S		360.00	-	324.00	324.00	6.00	30.00	36.00
									•	
b. Intake Facilities			1 75	0.00	0.04	0.13	0.37	0.01	0.22	0.23
Excavation		cu.m		0.60	0.24			0.01	0.37	0.38
Backfill		со.в		0.40	0.01	0.01	0.02		0.10	0.23
Concrete (Plain)		cu.m		0.33	0.01	0.09	0.10	0.13		
Concrete w/S.B			179.90	5.40	0.04	2.53	2.57	1.11	1.72	2.83
Riprap (Masonry)	100) օգ.տ	21.86	2.19	0.14	0.34	0.48	0.65	1.06	1.71
R.C Pipe 🖸 600mm	ϵ	n	115.60	0.69	-	0.28	0.28	0.21	0.20	0.41
Miscellaneous Steel		L.S		0.29		0.23	0.23	0.03	0.03	0.06
Sub-total				<u>9.90</u>	0.44	3.61	4.05	2.15	<u>3.70</u>	5.85
c, Feeder Canal										00 V
Excavation	67,000) cu.m	1.25	83.75	34.17	17.42	51.59	2.01	30.15	32.16
Embankment w/comp.	67,000) շս.տ	0.76	50.92	20.10	13,40	33.50	2.01	15.41	17.42
Gravel Surfacing (10c	m)11,000) sq.m	1.33	14.63	85.0	6,49	7.37	6.05	1.21	7.26
Sub-total		•		149.30	55.15	37.31	92.46	10.07	46.77	56.84
d. Suction Pit										
Excavation	850) cu.m	1.25	1.06	0.43	0,22	0.65	0.03	0.38	0.41
) cu.m		0.48	0.01	0.01	0.02	0.01	0.45	0.46
Backfill			65.36	0.65	0.01	0.18	0.19	0,26	0.20	0.46
Concrete (Plain)				10.79	0.07		5.13	2,23	3.43	5.66
Concrete w/S.B			179.90	10.75	0.11		0.38	0.52	0.85	1.37
Riprap (Masonry)			21.86		-	3.28	3.28	0,41	0.41	0.82
Screen		l Set	4,100	4.10			9.65	3.46	5.72	9.18
Sub-totel				18.83	0.63	9.02	<u></u>			
e. Housing		_	110 -0	22.00		6.60	6.60	9,90	16.50	26.40
Pump House			150.00	33.00	-		0.67	1.01	1.68	2.69
Guard House	24	4 sq.a	140.00	3.36	+	0.67				29.09
Sub-total				36.36	-	7.27	7.27	<u>10.91</u>	18.18	23.03
f. Miscellaneous Works		L.S		15.61	3.78	8,79	12.57	2.41	0.63	3.04
and the second		210				390.00	450.00		105.00	140.00
Total				590.00	00.00	570.00				

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Item			Rate	Total		ign Curi	rency	1.00	Unit: 'O al Curre	
No.	Description	Q'tys Unit	(LE)	Cost	Equip- ment	Materi	Total	Local Materi	Labour	Total
2-4	No.4 Pump Station					:		·		
	a. Equipment						a di			
	Pump \$250mm	10 Set	16,200	162.00		162.00	162.00	ы.		-
	Motor 120 Kw	10 Set	5,200	52.00	-	52.00	52.00	· · <u>~</u>	-	-
	Auxiliary Equipment	LS		17.80	-	17.80	17,80	. ~		-
	Pipes and Valves	L.S		57.50		57:50	57.50	~	~	-
	Control Panel & Cable	l Set		58.10	- , - ,	58.10	58,10	-	. 🗕	•
	Power Sub-station 900K			41.20		41.20	41.20	-		-
	Generator 200KVA	1 Set		60.00	· -	60.00	60.00		. –	
	Pressure Tank	l Set		54.15	~	54.15	54.15		-	. *
	Strainer	10 Nos	1,000	10.00	. –	10.00	10.00	-	-	. – .
	Miscellaneous	L.S		7.25	: -	7.25	7.25			
	Transport and Installat	tion L.S		100.00		40.00	40.00	10.00	50.00	60.00
	Sub-total			620.00		560.00	560.00	10.00	50.00	60.00
	b. Intake Facilities					1 K _ 1				
	Excavation	940 cu.m	1.25	1.18	0.48	0.25	0.73	0.03	0.42	0.45
	Backfill	745 cu.m		0.85	0.02		0.04	0.01	0.80	0.81
	Concrete (Plain)	2 cu.m		0.33	0.01	0.09	0.10	0.13	0.10	0.23
	Concrete w/S.B	35 cu.m		6.30	0.04	2.95	2.99	1.30	2.01	3.31
	Riprap (Masonry)	120 sq.m		2.62	0.16	0.41	0.57	0.77	1.28	2.05
	R.C Pipe Ø 900mm	10 m	159.30	1.59		0.64	0.64	0.47	0.48	0.95
	Miscellaneous Steel	L.S	1.1	0.25		0.20	0.20	0.03	0.02	0.05
	Sub-total			13.12	0.71	4.56	5.27	2.74	5.11	7.85
	c. Feeder Canal	and the second						1 - P. S.		
	Excavation	22,000 cu.m	1.25	27.50	11.22		16.94	0.66	9.90	10.56
	Embankment w/comp.	22,000 cu.m		16.72	6.60	4.40	11.00	0.66	5.06	5.72
	Gravel Surfacing (10cm)) 6,600 sq.m	1.33	8.78	0.53	3.89	4.42		0.73	4.36
	Sub-total			53.00	18.35	14.01	32.36	4.95	15.69	20.64
	d. Suction Pit			11 A.			. :	÷	4 4 F	
	Excavation	1,450 cu.m	1.25	1.81	0.74	0.38	1.12	0.04	0.65	0.69
	Backfill	490 cu.m	1.14	0.56	0.01	0.01	0.02	0.01	0.53	0.54
	Concrete (Plain)	15 cu.m	65.36	0.98	0.01	: 0,28	0.29	0.39	0.30	0.69
	Concrete w/S.B	95 cu,m	179.90	17.09	0.11	8.01	8,12	3.53	5.44	8.97
	Riprap (Masonry)	130 sq.m		2.84	0.18	0.44	0.62	0.84	1.38	2.22
	Screen	1 Set	5,800	5.80		4.64	4.64	0.58	0.58	1.16
	Sub-total			29.08	1.05	13.76	14.81	5.39	8.88	14.27
	e. Housing							Contraction of the		
	Pump House	270 sq.m	150.00	40.50	-	8.10	8 10	12.15	20.25	32.40
	Guard House	24 sq.m		3.36	· ·	0.67	0.67	1.01	1.68	2.69
	Sub-total	• • •		43.86	. –	8.77	8.77	13.16	21.93	35.09
	f. Miscellaneous Works	L.S	т.	20.94	4.89	3.90	8.79	3.76	8.39	12.15
	Total		• .	780.00	25.00	605.00	630.00	40.00	110.00	150,00

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tem	The start is the start	011		Rate	Total		lgn Curre	ency		Jnit: '00 al Currer	
No .	Description	Q'tys 	Uait	(1.E)	Cost	Equip- ment	Materi	Total	Local Materi	Labour	Total
2-5	No.5 Fump Station				·		•				
	a. Equipment										
	Pump #200mm	7	Set	8,000	56.00	-	56,00	56.00	· ·	_	
•	Motor 110 Kw	7	Set	4,750	33.25	_	33.25	33.25		-	
	Auxiliary Equipment		J., S		9.80	-	9.80	9.80		-	
	Pipes and Valves		L.S		30.20	_	30.20		_		
	Control Panel & Cable	1	Set		40.50	_	40.50	30.20	-	-	_
	Power Sub-station 550		Set		38.40			40.50	_	-	-
	Generator 200KVA		Set				38.40	38.40	-		
					60.00	-	60.00	60.00	_		-
	Pressure Tank		Set	1 000	40.70	-	40.70	40.70	-	-	• •
	Strainer	/	Nos	1,000	7.00	-	7.00	7.00	-	~	-
•	Miscellaneous		L.S		4.15	-	4.15	4.15	-	-	
	Transport and Install	ation	L.S		70.00	-	28.00	28.00	7.00	35.00	42.0
	Sub-total		1		390,00	-	348.00	348.00	7.00	35.00	42.0
1.1	A REAL PROPERTY AND A REAL										
	b. Intake Facilities								4.1	4	
	Excavation	1,330	cu.m	. 1.25	1.66	0.68	0.34	1.02	0.04	0.60	0.6
	Backfill	1,100	cu.m	1.14	1.25	0.03	0.02	0.05	0.02	1.18	1.2
	Concrete (Plain)	15	çu.m	65.36	0,98	0.01	0.28	0.29	0.38	0.31	0.6
	Concrete w/S.B	75	cu.m	179.90	13,49	0.09	6.32	6.41	2,79	4.29	7.0
	Riprap (Masonry)			21.86	3.72	0.23		0.81	1.10	1.81	2.0
	R.C Pipe ∮ 700mm	50	-	150.30	7.52		3.00	3.00	2.26	2.26	4,
	Miscellaneous Steel		L.S	130130	0.58		0.46	0.46	0.06	0.06	0.1
	Sub-total				29.20	1.04		12.04	6.65	10.51	17.1
•	Sub cotar				27.20	1.04		12104	<u></u>		
	c. Feeder Canal										
	Excavation	17,000	շս.ա	1.25	21,25	8.67	4.42	13.09	0.51	7.65	8.
	Transportation of soi				7.29	2.07		4.41	0.27	2.61	2.
	Embankment w/comp.	17,000	່ວນ.ຫ	0.76	12.92	5.10		8.50	0.51	3.91	4.0
	Gravel Surfacing (10c				13.30	0.80		6.70	5.50	1.10	6.0
		m)10,000	- 94-н	1.07	54.76	16.64		32.70	6.79	15.27	22.0
	Sub-total				54.70	10.04	10.00	32.70	0.75	13.27	
	d. Suction Pit										
	Excavation	1 550) cu.m	1.25	1,94	0.79	0.40	1.19	0.05	0.70	0.
	Backfill) cu.m		0.48	0.01		0.02	0.01	0.45	0.
) cu.m		0.65	0.01		0.19	0.26	0.20	0.4
	Concrete (Plain)			179.90	10.79	0.07		5.13	2.23	3.43	5.
	Concrete w/S.B				1.75	0.11		0.38	0.52	0.85	1.
	Riprap (Masonry)) sq.m			0.11	3.28	3.28	0.41	0.41	ô.
	Screen	1	l Set	4,100	4.10					6.04	9.
	Sub-total				<u>19.71</u>	0.99	9.20	10.19	3.48	0.04	2.
	e. Housing										
		220	1 60 7	150.00	33.00	-	6.60	6.60	9.90	16.50	26.
	Fump House			140.00	3.36	-	0.67	0.67	1.01	1,68	2.
	Guard House	. 2*	i sq.i	140.00	36.36	-	7.27	7.27	10.91	· · · · · ·	29
	Sub-total				20.00		1.27	//	10.51	10110	
	f, Miscellaneous Works		L.S		29.97	1.3	8.47	9.80	5.17	15.00	<u>20.</u>
· .											
	Total				560.00	20.00	400.00	420.00	40.00	100.00	140,
					•						
1.1	Total of (2) Pump Stat	_			2,980.00	175.0	n	2,300.00	175.00	505.00	680.

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Description CFM B 0011 (LE) Coot Weilt Heteri Total Labour 1 1) Irrigation RetBooks	Item			Rate	Total		elgn Curi	ency		000 LE) al Curre	ncy
	No.	Description	Q'tys Unit				Materi	Tota1		Labour	Tot
Pipeline 4400mm 815 m 76.96 27.24 1.04 25.23 0.12 1.89 Pipeline 4400mm 815 m 65.64 35.30 2.11 67.19 69.30 0.25 3.95 Pipeline 4250mm 30.15 5.42 0.14 4.78 4.92 0.02 0.43 6.13 Apputtennt Structure L.5 22.268 0.71 17.4 0.44 6.13 1.97 Sub-total 5.02 78.96 43.43 1.65 38.25 40.21 1.02 20.99 -2 No.2 Trigation 5ystem (1-4,710m) 24.87 0.66 21.99 22.56 0.75 5.83 0.02 0.66 1.09 3.02 7.99 1.01 1.90 20.99 2.25 0.67 2.21 1.99 1.21 1.90 2.05 1.66 1.99 2.06 1.66 1.90 2.06 1.66 1.90 2.17.00 1.10 1.90 2.06 1.66 1.90 2.21 0.61 1.63 1.90 2.21 0.61 1.63 1.92 0.61 1.90 2.	3) 1	rrigation Networks		· .			· .				
Typeline 4300mm 815 m 65.64 33.50 2.10 47.20 49.30 0.25 3.95 Fipeline 4300mm 1600 m 30.15 5.42 0.14 4.78 4.92 0.02 0.48 Fipeline 4250mm 180 m 30.15 5.42 0.14 4.78 4.92 0.02 0.48 Fipeline 4250mm 3.125 m 19.76 6.14 1.65 33.55 6.021 0.20 3.02 Fipeline 4300mm 2.00 78.96 43.43 1.65 38.55 6.075 1.131 Fipeline 4300mm 2.00 3.01 4.53 0.66 5.83 0.07 0.66 Fipeline 4200mm 2.05 3.01 2.27 0.66 1.86 0.82 2.08 0.67 0.66 0.64 1.66 6.64 1.66 6.64 1.66 6.64 1.66 6.64 1.62 2.64 61.70 64.34 0.32 4.83 4.99 1.42 0.46 1.67 6.40 1.69 0.02 1.62 1.64 0.60 0.87 1.66 0.64 1	3-1	No.1 Irrigation System ((L=6 ,095m)	· .					a de ser	# 3. 1	· ·
Pipeline 4200mm 1,630 m 46,90 74,45 2.71 67,19 69.90 0,41 6.14 Pipeline 4200mm 30,15 5.42 0,44 4.78 4.92 0,02 0,48 Pipeline 4200mm 31,25 m 19,78 61.81 1,69 53,30 55,19 0,15 6.47 Sub-total 227,00 8.40 216,60 225.00 1,10 20,20 2 Pipeline 4300mn 300 m 78,96 43,43 1,65 38,56 40,21 0,20 3.02 Pipeline 4300mn 300 m 19,78 6.53 0,16 5.63 5.83 0,02 0.64 Apputtenutt Structure 1.8 221,20 0.20 22,59 0.07 1,10 18.99 1.15 0.16 5.65 5.83 0,02 1.66 5.83 0,02 1.66 5.83 0,02 1.66 5.83 0,02 1.66 6.87 Pipeline 6.96 9 2.46 61,70 64.34 0.32 4.83 1.66 0.32 4.83 1.99 1.66 <		Pipeline \$450mm	345 m					1 A			2.0
riperime #250mm 180 m 30.15 5.42 0.14 4.78 4.92 0.02 0.42 Pipeline #200mm 31.25 19.78 61.81 1.65 53.50 55.19 0.15 6.47 Appirtennt Structure L.S 22.58 0.72 19.74 20.46 0.15 1.97 Sub-total 247.00 8.40 216.60 225.00 1.10 20.90 1 Pipeline #250mm 3.005 78.96 43.43 1.65 38.56 40.21 0.60 21.90 22.59 0.07 2.21 Pipeline #250mm 3.005 78.96 65.33 0.18 5.45 5.83 0.02 0.68 40.92 0.66 1.66 3.00 27.90 1.10 1.90 2.06 1.66 1.66 1.66 1.66 0.32 4.83 1.952 0.63 1.64 1.62 0.64 1.63 1.62 0.64 1.64 1.64 0.32 4.83 1.952 0.66 1.65 1.66 1.66 2.700 1.10 1.66 1.65 1.66 1.65 <td></td> <td>Pipeline \$400mm</td> <td>815 m</td> <td></td> <td>the second s</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4.</td>		Pipeline \$400mm	815 m		the second s						4.
Pipeline 200mm 31,25 m 19.18 61.81 1.69 53.50 55.15 1.9 6.47 Apputtenant Structure L.S 22.58 0.72 19.74 20.46 0.15 1.9 247.00 8.40 216.60 225.00 1.10 20.90 1 247.00 8.40 216.60 225.90 0.75 11.33 1 Pipeline 4500m 825 m 30.15 24.87 0.65 1.80 22.59 0.07 2.21 Pipeline 4250m 825 m 30.15 21.24 0.61 81.81 1.9.2 0.08 1.80 0.16 6.63 1.82 0.66 0.64 1.10 18.90 2.2 -3 No.3 System (1.43, 870m) 2.23 6.60 0.62 1.82 0.64 0.43 1.6.9 0.66 0.83 1.42 Pipeline 6300m 1.025 M6.50 62.14 2.00 57.64 1.6.3 1.6.6 0.01 1.42 1.42		Pipeline \$300mm	1,630 m	46,90	76.45	2.71		69.90		6.14	.6.
Appurtement Structure L.S 22,58 0.72 19.74 20.46 0.15 1.97 247.00 8.40 216.60 225.00 1.10 20.90 1 1-2 80.2 trigation System (L-4,710m) Fipeline 4300m 500 m 78.96 43.43 1.65 38.56 40.21 0.20 3.02 1/peline 4300m 300 m 16.93 4.59 123.86 0.72 11.33 0.05 21.90 22.59 0.07 2.21 1/peline 4200m 300 m 19.76 6.53 0.18 5.65 5.83 0.00 1.66 50b-total 27.00 2.064 61.70 64.34 0.32 4.83 Pipeline 4500m 180 m 78.96 69.49 2.64 61.70 64.34 0.32 4.83 1/peline 4500m 1.35 m.65.40 2.14 10.65 16.34 10.66 0.06 0.16 1/poline 4500m 1.35 10.57 16.5.7 10.56 10.30		Pipeline 6250mm	180 m	30.15	5.42	0.14	4.78	4.92	0.02	0.48	0;
Appurtemant Structure L.S 22.58 0.72 19.74 20.40 0.10 20.90 1.00 1.00 <t< td=""><td></td><td></td><td>3,125 m</td><td>19.78</td><td>61.81</td><td>1.69</td><td>53.50</td><td>55.19</td><td>0.15</td><td>6.47</td><td>6.</td></t<>			3,125 m	19.78	61.81	1.69	53.50	55.19	0.15	6.47	6.
Sub-total 247.00 8.40 216.60 225.00 1.10 20.90 2 -2 No.2 Itrigation System (1-4,710m) Fipeline A300m 5.05 m 78.96 43.43 1.65 38.55 40.21 0.20 3.02 Fipeline A300m 3.005 m 64.50 140.93 4.99 123.86 128.85 0.75 41.33 1 Fipeline A200m 823 m 19.78 6.53 0.18 5.65 5.83 0.02 0.68 Appurtement Structure L.5 21.24 0.69 18.83 19.52 0.06 1.10 18.99 2 -3 No.3 Itrigation System (L=3,870m) Fipeline A300m 180 m 65.64 11.82 0.46 10.43 0.32 4.83 Fipeline A300m 130 m 55.97 18.47 0.52 16.34 0.32 4.83 Fipeline A300m 49 m 19.78 9.79 0.27 6.47 8.74 0.02 1.03 A300		Appurtenant Structure	L.S		22.58	0.72	19.74	20.46	0.15	1.97	2.
Pipeline 4/30mm 550 m 78,96 43,43 1.65 38.56 40.21 0.20 3.02 Pipeline 4/200mm 30.05 44.82 0.69 21.90 22.59 0.07 2.21 Pipeline 4/200mm 330 m 19.78 6.53 0.48 5.65 5.83 0.02 0.68 Appurtemant Structure 1.8 217.00 8.20 208.80 217.00 1.10 18.90 -3 No.3 Trigation System (L=3,870m) Pipeline 6/300mm 800 m 78.96 69.49 2.64 61.70 64.34 0.82 2.8.00 0.66 0.67 Pipeline 6/300mm 13.35 m 65.90 62.14 2.20 56.62 56.82 0.33 4.93 Pipeline 6/300mm 40.55 m 15.77 18.47 0.66 16.52 17.18 0.02 1.03 Appurtemant Structure L.5 18.39 0.66 16.52 17.18 0.02 1.03 Pipeline 6/200mm 405 m 164.22 56.66 1.48 52.20 53.68 0.18 2.100 2.40 13.60		Sub-total			247.00	8.40	216.60	225.00	1.10	20.90	22.
ripolino 4250mm 3,005 m 46,90 10,93 4.99 123.86 128.85 0.75 11.33 ripoline 4250mm 330 m 19.78 6.53 0.18 5.65 5.33 0.02 2.21 ripoline 4250mm 330 m 19.78 6.53 0.18 5.65 5.33 0.02 0.66 1.66 Sub-total 237.00 8.20 208.80 217.00 1.10 18.90 2 ripoline 4x50mm 180 m 78.96 69.49 2.64 61.07 64.34 0.32 4.83 ripoline 4x50mm 180 m 55.97 18.47 0.62 16.44 16.98 0.06 0.87 ripoline 6x500mm 130 m 65.65 0.51 17.52 18.07 0.02 1.42 ripoline 6x500mm 495 m 19.78 9.79 0.27 8.47 8.74 0.02 1.03 Appurtemant Structure L.S 18.39 0.66 16.52 17.18 0.02 1.19 Sub-total 210.00 7.40 185.66 0.38 5.71 <t< td=""><td>-2</td><td></td><td></td><td></td><td></td><td>• •</td><td></td><td></td><td>0.00</td><td></td><td></td></t<>	-2					• •			0.00		
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Appurtement Structure I.S 51.77 1.59 45.91 47.50 0.32 3.95 Sub-total 574.00 17.80 511.20 529.00 2.40 42.60 42.60 -5 No.5 Irtigation System (L=6,290m) 17.80 511.20 529.00 2.40 42.60 42.60 -5 No.5 Irtigation System (L=6,290m) 17.80 511.20 529.00 2.40 42.60 42.60 -5 No.5 Irtigation System (L=6,290m) 17.80 511.20 529.00 2.40 42.60 42.60 Pipeline \$300mm 1,080 m 46.90 50.65 1.79 44.52 46.31 0.27 4.07 Pipeline \$250mm 2,305 m 30.15 69.50 1.91 61.20 63.11 0.21 6.18 Appurtemant Structure L.S 23.36 0.71 21.03 21.74 0.08 1.54 Sub-total 256.00 8.00 226.00 234.00 1.00 21.00 2 -7 Wind Break Plantation of Trees 264.96 21.25 <t< td=""><td></td><td>Pipeline 6250mm</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>8,</td></t<>		Pipeline 6250mm									8,
Sub-total 574.00 17.80 511.20 529.00 2.40 42.60 42.60 -5 No.5 Irrigation System (L=6,290m) Pipeline \$500mm 350 m 92.75 32.46 1.13 29.09 30.22 0.13 2.11 Pipeline \$500mm 815 m 55.97 45.61 1.52 40.37 41.89 0.22 3.50 Pipeline \$250mm 1,080 m 46.90 50.65 1.79 44.52 46.31 0.21 4.07 Pipeline \$250mm 1,740 m 19.78 34.42 0.94 29.79 30.73 0.09 3.60 Appurtenant Structure L.S 23.36 0.71 21.03 21.74 0.08 1.54 Sub-total 256.00 8.00 226.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) 255.00 8.00 226.10 234.00 1.00 21.00 2 -7 Wind Break Plantation of Trees 264.96 21.26 12.76 34.02 0.00 230.94 2 -7 Wind Break Plantation of Tr		Pipeline \$200mm		19.78							4.
-5 No.5 Irrigation System (L=6,290m) Pipeline 6500mm 350 m 92.75 32.46 1.13 29.09 30.22 0.13 2.11 Pipeline 6350mm 815 m 55.97 45.61 1.52 40.37 41.89 0.22 3.50 Pipeline 6300mm 1,080 m 46.90 50.65 1.79 44.52 46.31 0.27 4.07 Pipeline 6250mm 2,305 m 30.15 69.50 1.91 61.20 63.11 0.21 6.18 Pipeline 6200mm 1,740 m 19.78 34.42 0.94 29.79 30.73 0.09 3.60 Appurtenant Structure L.S 23.36 0.71 21.03 21.74 0.08 1.54 Sub-total 256.00 8.00 226.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) Excavation of Ditch 60,600 cu.m 3.39 205.43 Grading & Embankment 425,200 sq.m 0.14 59.53 21.26 12.76 34.02 0.00 25.51 2 Sub-total 264.96 21.26 12.76 34.02 0.00 230.94 2 -7 Wind Break Plantation of Trees along Parm Road (4m) 106.3 Km 912 96.95 5.00 2.95 7.95 11.01 77.99 4 Plantation of Trees along Parm Road (4m) 106.3 Km 912 96.95 5.00 2.95 7.95 11.01 77.99 4 Water Supply System 134.4 Fed 1,990 267.46 20.83 179.43 200.26 1.88 65.32 4 Sub-total 396.19 27.47 183.35 210.82 16.50 168.87 14 -8 Miscellaneous L.S 114.85 11.47 55.69 67.16 7.00 40.69 4 Total 2,300.00 110.00 1,710.00 30.00 560.00 55		Appurtenant Structure	I S		51.77						4.
Pipeline \$500mm 350 m 92.75 32.46 1.13 29.09 30.22 0.13 2.11 Pipeline \$350mm 815 m 55.97 45.61 1.52 40.37 41.89 0.22 3.50 Pipeline \$250mm 1,080 m 46.90 50.65 1.79 44.52 46.31 0.27 4.07 Pipeline \$250mm 2,305 m 30.15 69.50 1.91 61.20 63.11 0.21 6.18 Pipeline \$200mm 1,740 m 19.78 34.42 0.94 29.79 30.73 0.09 3.60 Appurtemant Structure L.S 23.36 0.71 21.03 21.74 0.08 1.54 Sub-total 256.00 8.00 226.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) 25.00 sq.m 0.14 59.53 21.26 12.76 34.02 0.00 250.51 2 -7 Wind Break Plantation of Trees 264.96 21.26 12.76 34.02 0.00 230.94 2 -7 Wind Break <td< td=""><td></td><td>Sub-total</td><td></td><td></td><td>574.00</td><td>17.80</td><td>511.20</td><td>529.00</td><td>2.40</td><td>42.60</td><td>45.</td></td<>		Sub-total			574.00	17.80	511.20	529.00	2.40	42.60	45.
Pipeline #350pm 815 m 55.97 45.61 1.52 40.37 41.89 0.22 3.50 Pipeline #300mm 1,080 m 46.90 50.65 1.79 44.52 46.31 0.27 4.07 Pipeline #250mm 2,305 m 30.15 69.50 1.91 61.20 63.11 0.21 6.18 Pipeline #200mm 1.740 m 1.740 m 19.78 34.42 0.94 29.79 30.73 0.09 3.60 Appurtenant Structure L.S 23.36 0.71 21.03 21.74 0.08 1.54 Sub-total 255.00 8.00 226.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) 255.00 8.00 226.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) 264.96 21.26 12.76 34.02 0.00 25.51 2 Sub-total 264.96 21.26 12.76 34.02 0.00 230.94 2 -7 Wind Break Plantation of Trees 106.3 Km 912	3-5										
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Pipeline 6250mm 2,305 m 30.15 69.50 1.91 61.20 63.11 0.21 6.18 Pipeline 6200mm 1,740 m 19.78 34.42 0.94 29.79 30.73 0.09 3.60 Appurtenant Structure L.S 23.36 0.71 21.03 21.74 0.08 1.54 Sub-total 256.00 8.00 226.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) Excavation of Ditch 60,600 cu.m 3.39 205.43 - - 205.43 2 -6 Farm Road (L=106.3Km) Excavation of Ditch 60,600 cu.m 3.39 205.43 - - 205.43 - - 205.43 2 - 205.43 2 20.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) Excavation of Ditch 60,600 cu.m 3.39 205.43 - - 205.43 2 - 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00								1 a.		1 S. 1	.: .3.
Pipeline & 200mm 1,740 m 19.78 34.42 0.94 29.79 30.73 0.09 3.60 Appurtenant Structure L.S 23.36 0.71 21.03 21.74 0.08 1.54 Sub-total 256.00 8.00 226.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) Excavation of Ditch 60,600 cu.m 3.39 205.43 - - 205.43 20.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) Excavation of Ditch 60,600 cu.m 3.39 205.43 - - 205.43 20.00 25.51 2 2 2 2 2 0.00 2 2 3 0.00 2 3 2 0.00 2 3 9 2 2 2 1 2 1 0.00 2 0.00 2 3 9 2 3 3 9 2 3 3 9 2 3 3 1 0.00 2 3 3 3 3 3<											4.
Appurtenant Structure L.S 23.36 0.71 21.03 21.74 0.08 1.54 Sub-total 256.00 8.00 226.00 234.00 1.00 21.00 2 -6 Farm Road (L=106.3Km) Excavation of Ditch 60,600 cu.m 3.39 205.43 - - 205.43 20 - 205.43 20 21.00 2 20.00 234.02 0.00 25.51 2 205.43 - - 205.43 20 20.00 25.51 2 20.00 25.51 2 20.00 230.94 2 2 20.00 230.94 2 2 20.00 230.94 2 2 20.00 230.94 2					and the second	1 A A A A A A A A A A A A A A A A A A A					- 6,
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-6 Farm Road (L=106.3Km) Excavation of Ditch 60,600 cu.m 3.39 205.43 Grading & Embankment 425,200 sq.m 0.14 59.53 21.26 12.76 34.02 0.00 25.51 Sub-total -205.43 24 264.96 21.26 12.76 34.02 0.00 25.51 2000 230.94 21 -7 Wind Break Plantation of Trees along Farm Road (4m) 106.3 Km 912 96.95 5.00 2.95 7.95 11.01 77.99 4 Plantation of Trees inside On-Farm (2m) 69.7 Km 456 31.78 1.64 0.97 2.61 3.61 25.56 1.88 65.32 (Sub-total -6 -8 Miscellaneous L.S 114.85 11.47 55.69 67.16 7.00 40.69 4 2.300.00 110.00 1.710.00 30.00 560.00 55			L.S								1.
Excavation of Ditch 60,600 cu.m 3.39 205.43 - - 205.43 21 Grading & Embankment 425,200 sq.m 0.14 59.53 21.26 12.76 34.02 0.00 25.51		Sub-total			256.00	8.00	226.00	234.00	1.00	21.00	22
Grading & Embankment 425,200 sq.m 0.14 59.53 21.26 12.76 34.02 0.00 25.51 21.26 Sub-total 264.96 21.26 12.76 34.02 0.00 230.94 22 -7 Wind Break Plantation of Trees along Farm Road (4m) 106.3 Km 912 96.95 5.00 2.95 7.95 11.01 77.99 4 Plantation of Trees inside On-Farm (2m) 69.7 Km 456 31.78 1.64 0.97 2.61 3.61 25.56 25.56 4 Water Supply System 134.4 Fed 1,990 267.46 20.83 179.43 200.26 1.88 65.32 0 -8 Miscellaneous L.S 114.85 11.47 55.69 67.16 7.00 40.69 4 Total 2,300.00 110.00 1,710.00 30.00 560.00 5	1-6						· ·				
Sub-total 264.96 21.26 12.76 34.02 0.00 230.94 21 -7 Wind Break Plantation of Trees along Farm Road (4m) 106.3 Km 912 96.95 5.00 2.95 7.95 11.01 77.99 11 Plantation of Trees inside On-Farm (2m) 69.7 Km 456 31.78 1.64 0.97 2.61 3.61 25.56 <td></td> <td>205</td>											205
Plantation of Trees along Farm Road (4m) 106.3 Rm 912 96.95 5.00 2.95 7.95 11.01 77.99 11.01 Plantation of Trees inside On-Farm (2m) 69.7 Km 456 31.78 1.64 0.97 2.61 3.61 25.56 25.61 Water Supply System 134.4 Fed 1,990 267.46 20.83 179.43 200.26 1.88 65.32 0 Sub-total 396.19 27.47 183.35 210.82 16.50 168.87 14 -8 Miscellaneous L.S 114.85 11.47 55.69 67.16 7.00 40.69 4 Total 2,300.00 110.00 1,710.00 30.00 560.00 5			425,200 sq.m	0.14							25.
Plantation of Trees along Farm Road (4m) 106.3 Rm 912 96.95 5.00 2.95 7.95 11.01 77.99 11.01 Plantation of Trees inside On-Farm (2m) 69.7 Km 456 31.78 1.64 0.97 2.61 3.61 25.56 25.61 Water Supply System 134.4 Fed 1,990 267.46 20.83 179.43 200.26 1.88 65.32 0 Sub-total 396.19 27.47 183.35 210.82 16.50 168.87 14 -8 Miscellaneous L.S 114.85 11.47 55.69 67.16 7.00 40.69 4 Total 2,300.00 110.00 1,710.00 30.00 560.00 5		Wind Brook							·····		
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inside On-Farm (2m) 69.7 Km 456 31.78 1.64 0.97 2.61 3.61 25.56 Water Supply System 134.4 Fed 1,990 267.46 20.83 179.43 200.26 1.88 65.32 0 Sub-total 396.19 27.47 183.35 210.82 16.50 168.87 14 -8 Miscellaneous L.S <u>114.85</u> <u>11.47 55.69 67.16 7.00 40.69 4</u> Total 2,300.00 <u>110.00 1,710.00 30.00 560.00 55</u>			100+3 100	912	20.27	1.00	2,70	1.73	.1.01	11.77	07
Water Supply System 134.4 Fed 1,990 267.46 20.83 179.43 200.26 1.88 65.32 0 Sub-total 396.19 27.47 183.35 210.82 16.50 168.87 11 -8 Miscellaneous L.S 114.85 11.47 55.69 67.16 7.00 40.69 40.69 Total 2,300.00 110.00 1,710.00 30.00 560.00 55			60 7 "	. 1.51	21 70	1 44	. 0.02	2 61	5 21	25 64	29.
Sub-total 396.19 27.47 183.35 210.82 16.50 168.87 14 -8 Miscellaneous L.S 114.85 11.47 55.69 67.16 7.00 40.69 4 Total 2,300.00 110.00 1,710.00 30.00 560.00 5									and the second		
-8 Miscellaneous L.S <u>114.85</u> <u>11.47</u> <u>55.69</u> <u>67.16</u> <u>7.00</u> <u>40.69</u> <u></u>			104-4 160	1,390							67
Total 2,300.00 110.00 1,710.00 30.00 560.00 5		SUO~TOTA1			390.19	21,4/	103.33	210.82	10.30	108.8/	185
	-8	Miscellaneous	L.S		114.85	11.47	55.69	67.16	7.00	40.69	47
		Total			2,300.00	110.00	V j	,710.00	30.00	560.00	590
1,600.00							1,600.00				

-114-

Item		015	11 . 1 .	Rate	Total		ign Curre	ency	Loc	unit: '00 al Currer	
No	Description	Q'tys	Unit 	(LE)	Cost	Equip- ment	Materi	Tota1	Local Materi	Labour	Total
(4) Dre	ainage Networks										
	Construction of Drainage Canalization	Canal (I.=18.	IKm)							
	Excavation	90,500	cu.ຫ	1.25	113.13	46.16	23.53	69.69	2.71	40.73	43.44
	Embankment	90,500	cu.m	1.14	103.17	2.72	1.81	4.53	1.81	96.83	98.64
÷	Riprap (Dry)	3,620	sq.m	10.77	38.99	4.24	3.40	7.64	4.67	26.68	31.3
	Sub-total				255.29	53.12	28.74	81.86	9.19	164.24	173.4
ь.	Structures (11places)										
	Concrete w/S.B			179.90	3,96	0.03	1.85	1.88	0.82	1.26	2.0
	Concrete (plain)	33	cu.m	65.36	2.15	0.03	0.61	0.64	0.84	0.67	1.5
	Riprap (Wet)			20.04	1.10	0.07	0.19	0.26	0.28	0.56	0.8
	Riprap (Dry)			10.77	1.18	0.13	0.10	0.23	0.14	0.81	0.9
	Earth Works	110	cu.m	3.39	0.37	-	-	-		0.37	0.3
	Sub-total				8.76	0.26	2.75	3.01	2.08	3.67	<u>5.7</u>
c.	Piezometric System										
	Observation Well			700.00	10.50	• –	_	-	7.35	3.15	10.5
	Water Level Indicator	2	set	300.00	0,60	-	0.60	0.60	-		· • -
	Sub-total				<u>11.10</u>	-	0.60	0.60	7.35	3.15	10.5
d.	Miscellaneous				24.85	6.62	7.91	<u>14.53</u>	1.38	8.94	10.3
	Total				300.00	60.00	40.00	100.00	20.00	180.00	200.0
(5) On	-farm Facilities										
5-1	Pipeline in on-farm										
2-1	Pipeline \$ 75mm	14,800	ta	5.09	75.33	4.00	55,35	59.35	0.44	15.54	15.9
· · ·	Pipeline \$100mm	74,000		7.35	543.90	28.12	415.14	443,26	2.22	98.42	100.6
	Pipeline \$125mm	3,700		9.51	35.19	1.56	28.08	29,64	0.11	5.44	5.5
	Pipeline #150mm	13,000		13.28	172.64	5,59	145,08	150.67	0.39	21.58	21.9
	Pipeline \$200mm	16,700		19.78	330.33	9.02	285.90	294.92	0.84	34.57	35.4
	Appurtenant Structure	• • •	L.S		122.61	1.71	90,45	92.16	1.00	29.45	30.7
a a Ala	Sub-total				1,280.00	50.00	1020.00	1070.00	5.00	205.00	210.0
5-2	Sprinkler (Hand move)	2,100	Fed	600	1,260.00	-	1197.00	1197.00	-	63.00	63.6
5-3	Drip (for Vegetable)	1,050	Fed	1,200	1,260.00		1197.00	1197,00	-	63.00	63.0
5-4	Drip (for Fruits)	1,050	Fed	800	840.00	-	798.00	798.00	-	42.00	42.0
5-5	Miscellaneous		L.S		60.00	-	38.00	38.00	-	22.00	22.
	Total				4,700.00	50.00	4250.00	4300.00	5.00	395.00	400.
	A D										
(6) L	and Reclamation										
6-1	Deep Plowing (1st)	4,200) Fed	128.46	539.53	187.95	163.38	351.33	18.77	169.43	188.
6-2	Deep Plowing (2nd)	4,200) Fed	64.23	269.77	93.98	81.69	175.67	9.39	84.71	94.
6-3		100 000		/ 10	516 20	117,18	120 78	246.96	13.86	255.78	269.
	Dredged Materials	126,000	J CON	4.10	516.60	117.10					
6.1	Initial Soil Dressing-2				•						
6-4		2.100) ton	31.44	66.02	2.08	2.10	4.18	55.77	6.07	61.
÷	Cypsum	-,10						110 70	11. 21		105
	· · · · · · · · · · · · · · · · · · ·	4,200) Fed	52.18	219.15	-	113.73	113.73	56.32	49.10	105.
6-5	Initial Leaching	-									
6-5 6-6	Niscellaneous		ւ.Տ		88.93	13.81	24.32	38.13	15.89	34.91	50.

	Description e-Engineering Cadastral Survey Vertical Control	Q'tys 20		Rate (1.E)	Total Cost	Fore Depre- ciation	gn Curr Materi	Total	Local Local Materi	al Curre Labour	Total
No. (1) Pro	e-Engineering Cadastral Survey Vertical Control	20					Materi	Total		Labour	Total
	Cadastral Survey Vertical Control							1.		1.5	
	Cadastral Survey Vertical Control		- 1					11 - 11 - 11 - 11 - 11 - 11 - 11 - 11		1	
1 	Vertical Control		rea	200	. 4		·			4	4
1		20	Km	50	1 I.	· •	-	· •-	· -	1	1
	Pre-construction Survey	2	Mos	2,500	. 5		1	. 1	-	4	. 4
	Construction Survey	30	Nos	2,500	75	-	8	8		. 67	67
	Miscellaneous		L.S		5	. –	1	1	- 1. - .	4	4
	Total			A. A. A.	90		10	10	-	80	80
(2) Ho	using								n ang sina sina. Ting		
(1) 10	Farmers' House, Small	442	Nos	3,060	1,352.52	. 🚽	216.40	216.40	676.26	459.86	
	Farmers' House, Large	129	Nos	4,140	534.06	-	85.45	85.45	267.03	181.58	448.61
	Directors' House	12	Nos	8,100	97.20	-	15.55	15.55	48.60	33.05	81.65
	Technicians' House	49.	Nos	5,760	282.24	. *	45.16	45.16	141.12	95.96	237.08
	Labour and Other	19	Nos	5,760	109.44	· .	17.51	17.51	54.72	37.21	91.93
	Mosque in Village/Hamlet	3	Nos	13,500	40.50	· · · ·	6.48	6,48	20.25	13.77	34.02
	Mosque in Town	1	Nos	16,200	16.20	·	2.59	2.59	8.10	5.51	13.61
	Development Office	1	No.	30,000	30.00	-	4.80	4.80	15.00	10.20	25.20
	Primary School		Nos	45,000	90.00	-	14.40	14.40	45.00	30.60	75.60
	Preparatory School	. –	No.	45,000	45.00	~	7.20	7.20	22.50	15.30	37,80
	Medical Clinic		No.	15,000	15.00	-	2.40	2.40	7.50	5.10	12.60
	Police Station		No.	3,500	3.50	-	0.56	0.56	1.75	1.19	2.9
	Post Office	1	No.	15,000	15.00	-	2.40	2,40	7.50	5.10	12.6
	Telephon Office	1	No.	15,000	15.00	-	2.40	2.40	7.50	5.10	12.6
	Fire Station	l	No.	22,500	22.50	· -	3.60	3,60	11.25	7.65	18.9
	Co-operative	1	No.	22,500	22.50	-	3.60	3.60	11.25	7.65	18.9
	Bank	· 1	No.	15,000	15.00	-	2.40	2.40	7.50	5.10	12.6
	Storage House in Village	5 SI	No.	6,020	6.02		0.96	0,96	3.01	2.05	5.0
	Storage House in Town		No.	21,000	21.00		3.36	3.36	10.50	7.14	17.6
	Store	7	Nos	8,400	58.80	-	9,41	9.41	29.40	19.96	49.3
	Miscellaneous Works		L.S	-	8.52	-	3.37	3.37	4.26	0.92	5.1
	Total				2,800.00	· · · _ ·	450.00	450.00	1400.00	950,00	2350.0
		:				÷					
	1							· .	1		1.1
(3) Ro	ad				•		• •		· .	:	
3-1	Trunk Road (L=16,0Km)				1 ~ ~ ~		·.		-	17 80	17.0
	Excavation of Ditch	14,100			47.80				–	47.80	
		128,000			17.92	6.40	3,84	10.24		7.68	7.6
	Gravel Paving	128,000	sq.m	2.21	282.88		130.56	143.36	124.16	15.36	
	Sub-total	· · ·			348.60	19,20	134.40	153.60	124.16	70.84	195.0
3-2	Branch Road (L=1.7Km)		: .	se j							in ang
	Excavation of Ditch	1,000	ເບ.ຫ	3,39	3.39		-1 - -		e de la composición de	3.39	3.3
	Grading & Embankment	10,200	sdino	0.14	1.43	0.51	0.31	0.82	· –	0.61	0.6
	Gravel Paving	10,200	sq.m	2.21	22.54	1.02	10.40	11.42	9.89	1.23	11.1
	Sub-total				27.36	1.53	10.71	12.24	9.89	5.23	15.1
3-3	Wind Break				1				1		· ·
	Plantation of Trees				1		3 .			•	
	along Trank Road	32.0	Km	912	29.18	1,50	0,89	2.39	3.31	23.48	26.7
	Plantation of Trees		· · · ·		· · · · ·		e e e e e		The second second		
	along Branch Road	1.7	Km	912	1.55	0.08	0.05	0.13	0.17	1.25	
	Water Supply System	32.1	Fed	1,990	63.88	4.98	42.85	47,83	0.45		
	Sub-Total			1.1	94.61	6.56	43.79	50.35	3.93	40,33	44.2
3 1	Bridge (1 place)	• •				·			1 - F	1.1	
3-4			TC		5 00	· · · ·	2 00	. 2 00	1 00	1 00	2.0
	Demolision of Existing			1 25	5.00	0 10	3.00	3.00	1.00	1.00	
te de la	Excavation		cu. m		0.25	0.10	0.05	0.15	0.01	0.09	
	Backfill		cu.m		0.11	-				0.11	0.1
	Embankment		cu.m		0.17		0.01	0.01		0.16	
1.4.14	Concrete W/S.B			179.90	32.38	0.21	15.18	15.39	6.69	10.30	
		20		65.36	1.31	0.02		0.39	0.51		
	Concrete (Plain)						6 50	1 50	· 1 00	2 00	1. 1
	Water Care	1	L.S		8.50		4.50	4.50	2.00	2,00	
	Water Care Miscellaneous Works		L.S L.S		2.28	·	1.12	1.12	0.49	0.67	1.1
	Water Care						1.12			0.67	1.1
3-5	Water Care Miscellaneous Works				2.28	·	1.12 24.23	1.12	0.49	0.67 <u>14.74</u>	1.1 25.4

ITEN: 2.1.2, Nousing and Infrastructure of North Wahby Area

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Item	Degenietien	ot. n	Rate	Total	Fore	ign Cur	rency		nit: '00 al_Curre	
No.	Description	Q'tys Unit	(LE)	Cost	Depre- clation	Materi	Total	Local Nateri	Labour	Total
(4) 1	nfrastructure							·····		
4-1	Potable Water									
	Treatment Plant	60% x 1 Set 1		60.00	-	40.00	40.00	5.00	15,00	20.00
	Pipeline \$150mm	7,900 m	13,28	104.91	3.40	88.16	91.56	0.24	13.11	13.35
	Pipeline \$100mm	4,500 m	7,35	33.07	1.71		26.96	0.13	5,98	6.11
	Pipeline \$ 75mm	1,100 m	5.09	5.60	0.30		4.41	0.03	1.16	1.19
	Pipeline & 50mm	2,200 m	3.15	6,93	0.55	4.27	4.82	0.04	2.07	2.11
	Pipeline in Village (#50mm Pipeline)	-								
	Hamlet	16 Site	1,270	20.32	1.62	12.51	14.13	0.14	6.05	6.19
	Village	1 Site	2,290	2,29	0.18		1.59	0.01	0.69	0.70
	Town	l Site	4,790	4.79	0.38		3.33	0.03	1.43	1.46
	Miscellaneous Works	L S		12.09	0.86		6,20	0.38	5.51	5.89
	Sub-total			250,00	9.00	184.00	193.00	6.00	51.00	57.00
4-2	Sewage System	and the second second								
	(Tretment Plant & \$200m	m Plue)								
	Hamlet (160 persons)	16 Site	12.880	206.08	ים לכ	91,90	119.80	20 11	57.07	0C 20
	Village (160 persons)			15.81	1,82		9.97	28.44	57.84	86.28
	Town (560 persons)			43,16	5.07			1.79	4.05	5.84
	Miscellaneous	- L.S		14.95	1.21		26.98 9.25	5.00	11.18	16.18
	Sub-total			280.00		130.00	166.00	37.00	3.93 77.00	5.70 <u>114.00</u>
4-3	Electric Power									
4-5	60KV Trunk Line	60% x 7 Km	42 000	100 (0						
	11KV Line		43,000	180.60	-	126.40	126.40	16.26	37.94	54.20
	Sub-station 66/11 KV	25.4 Km	14,000	355.60		248.90	248.90	32.01	74.69	106.70
	Distribution 100KVA	60% x 1Site 2		120.00	-	84.00	84.00	10.80	25.20	36.00
	Village Distribution	18 Site		144.00	-	100.80	100.80	13.00	30.20	43.20
	Hamlet	16 Site		20.40	-	16.32	16.32	1.22	2.86	4.08
÷	Village		2,475	2.47	-	1.98	1.98	0.15	0.34	0.49
	Town	l Site	7,950	7.95		6.36	6.36	0.48	1.11	1.59
	Miscellaneous	L.S		28.98	-	17.24	17.24	4.08	7.66	11.74
	Sub-total			860.00	-	602.00	602.00	78.00	180.00	258.00
4-4	Telephon System									
1. 1. 1. 1.		70% x 16 Km	4,000	44.80	-	35.84	35.84	2.69	6.27	8.96
	Conection Line	7.7 Km	4,000	30.80	-	24.64	24.64	1.85	4.31	6.16
	Control Exchange	70% x 1 Set	67,000	46.90	~	37.52	37.52	2.81	6.57	9.38
· · :	Miscellaneous Works	L.S		7.50	-	6.00	6.00	0.65	0.85	1.50
	Sub-total			130.00	-	104.00	104.00	8.00	18.00	26.00
4-5										
•	(Land leveling, Road, W	ind Break etc. L.S)	50.00	-	15.00	15.00	10.00	25.00	35.00
								10.00	23.00	10.00
	Total			1,570.00	45 00	1035.00	1080 00	139.00	251.00	400 00
				1,010.00	49.00	1055.00	1000.00	139.00	351.00	490.00

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Table 1-2.3 Breakdown of Civil Works (3)

ITEM:	2.2.1,	Land R	eclamation	of	Com	Osheem	Area	
	an a			· .		2		

				e e se				:		Unit: 'OC	
Item				Rate	Total		ign Curr	ency		al Curren	icy
No.	Description	Q'tys	Unit	(LE)	Cost	equip~ ment	Materi	Total	Local <u>Materi</u>	Labour	Total
(1) Pi											
• •				÷				•			
	Cadastral Survey	170	Fed	200	34	-	3	3	-	31 4.5	31 5 4.5
	Vertical Control	90	Km	50	4.5		- 3	3		19.5	
	Pre-Construction Survey	3	Nos		22.5	-	20	20		172	172
	Construction Survey	48	Mos	4,000	192 72	-	20	. 7		65	65
	Hydrology	48	Mos	1,500	72		. 7	7	_	65	65
	Laboratory Control	48 3	Mos Mos	1,000	3	_		-		ů,	3
	Negotiation for ROW	3	nos	1,000		_		-			5
	Total				400	-	<u>40</u>	<u>40</u>	. –	360	360
(2) 1	Pump Station										
									-		
2-1 1	to.6 Pump Station						· · ·	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	
	a. Equipment	,	Set	16,200	113.40		113.40	113.40	-	· .	
	Pump \$250mm		Set	5,700	39.90		39.90	39.90	· · ·		-
	Notor 130 Kw	1.	LIS	5,700	17.80		17.80	17.80	· · · ·		~
	Auxiliary Equipment		L.S.		33.35		33.35	33.35	_	-	
	Pipes and Valves		Set		40.65		40.65	40.65		-	· _
	Control Panel & Cable Power Sub-station 650KV		Set		38.40		38,40	38.40	·		-
	Generator 200KVA		Set		60.00	_	60.00	60.00	-		_
	Pressure Tank		Set	· · · ·	54.15	_	54 . 15	54.15	· · ·	_	_
	Strainer	-	Nos	1,000	7.00	· · ·	7.00	7.00		1. 	:
	Miscellaneous	-	L.S	.,	5.35		5.35	5.35	- 18 <u>1</u> 2.	_	1. j. t <u></u>
	Transport and Installat	1. A.	L.S		80.00		32.00	32.00	8.00	40.00	48.00
	Sub-total		5.0		490.00	-	442.00	442.00	8.00	40.00	48.00
1). Intake Facilities			•			an a				
	Excavation	1.680	cu.m	1.25	2.10	0.86	0.43	1.29	0.05	0.76	0.81
	Backfill		cu.m	1.14	0.84	0.02		0.04	0.01	0.79	0.80
· ·	Concrete (Plain)			65,36	0.33	0.01		0.10	0.13	0.10	0.23
	Concrete w/S.B			179.90	7.20	0.05	1 -	3.42	1.49	2.29	3.78
	Riprap (Masonry)		sq.m		2.84	0.18		0.62	0.84	1.38	2.22
	R.C Pipe ø 700mm	6	n .	150.30	0.90	. <u> </u>	0.36	0.36	0.27	0.27	0.54
	Miscellaneous Steel		L.S		0.29	~	0.23	0.23	0.03	0.03	0.06
	Sub-total				14.50	1.12	4 94	6.06	2.82	5.62	8.44
c.	Suction Pit		•		1			~ ~ ~			<u> </u>
	Excavation		cu.m		1.05	0.43		0.65	0.02	0.38	0.40
	Backfill		cu.m	1.14	0.48	0.01		0.02	0.01	0.45	0.46
	Concrete (Plain)		cu.m		0.65	0.01		0.19	0.26	0.20	0.46
	Concrete w/S.B	-		179.90	11.69	0.08		5.56	2.41	3.72	6.13
	Screen	1	Set	4,100	4.10	~ ~ ~	3.28	3.28	0.41	0.41	0.82
	Sub-total				17.97	0.53	9.17	9.70	3.11	5.16	8.27
4	Housing			1 A. 14			1.1.1		s		1.1.1
0.	Pump Rouse	220		150.00	33.00	<u></u>	6 60	6.60	9.90	16.50	26.40
	Guard House			140.00	3.36		0.67	0.67	1.01	1.68	2,69
	Sub-total	24	ծվ.տ	.40,00	36.36		7.27	7.27	10.91	18.18	29.09
	MU-LULAL				<u></u>		1.21	1.1	10.91	10,10	27.07
e	Miscellaneous Works		L.S		21.17	3.35	11.62	14.97	5.16	1.04	<u>6.20</u>
	Total				580.00	5.00	475.00	480.00	30.00	70.00	100.00
	IULAL				200.00	5.00	473.00	400.00	50.00	10.00	100.00

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Item			Rate	Total	Forel	gn Curre	ency		Unit: '00 al Curren	
No.	Description	Q'tys Unit	(I.E)	Cost	equip- ment	Nateri	Total	Local Materi	Labour	Total
2-2	No.7 Pump Station									
	a. Equipment									
	Pump \$250mm	7 Set	16,200	113.40	-	113,40	113.40	-		~
	Motor 160 Kw	7 Set	20,300	142.10		142.10	142.10	· _	-	-
	Auxiliary Equipment	L.S		16.30	-	16.30	16.30		~	
	Pipes and Valves	L.S		41.00	~	41.00	41.00	-	<u> </u>	_
	Control Panel & Cable	l Set		29.85	_	29.85	29.85		_	-
	Power Sub-station 800K	VA 1 Set		41.15	-	41.15	41.15	-	-	-
	Generator 250KVA	1 Set		75.00	-	75.00	75.00	-		. –
	Pressure Tank	l Set		54.15	⊷	54.15	54.15	•••		-
	Strainer	7 Nos	1,000	7.00	-	7.00	7.00		_	_
	Miscellaneous	L.S		10.05		10.05	10.05			-
	Transport and Installs	tion L.S		110.00	-	44.00	44.00	11.00	55.00	66.00
	Sub-total			640.00	-	574.00	574.00	11.00	55.00	66.00
	b, Intake Facilities									
	Excavation	1,010 cu.m	1.25	1.26	0.52	0.26	0.78	0.03	0.45	0.48
	Backfill	720 cu.m	1.14	0.82	0.02	0.02	0.04	0.01	0.77	0.78
	Concrete (Plain)	5 cu.m	65.36	0.33	0.01	0.09	0.10	0.13	0.10	0.23
	Concrete w/S.B	45 cu.m	179,90	8.10	0.05	3.80	3.85	1.67	2.58	4.25
· .	Riprap (Masonry)	130 sq.m	21.86	2.84	0.18	0.44	0.62	0.84	1.38	2.22
· · ·	R.C Pipe 6 800mm	6 m	142.70	0.86	÷	0.34	0.34	0.26	0.26	0.52
	Miscellaneous Steel	L.\$		0.29	-	0.23	0.23	0.03	0.03	0.06
	Sub-total			14.50	0.78	5.18	5.96	2.97	5.57	8.54
	c. Suction Pit									
	Excavation	640 cu.m	1.25	0.80	0.33	0.16	0.49	0.02	0.29	0.31
	Backfill	420 cu.m	1.14	0.48	0.01	0.01	0.02	0.01	0.45	0.46
	Concrete (Plain)	10 cu.m	65.36	0.65	0.01	0.18	0.19	0.26	0.20	0.46
	Concrete w/S.B	65 cu.m	179.90	11.69	0.08	5.48	5,56	2.41	3.72	6.13
	Screen	l Set	4,100	4.10	-	3.28	3.28	0.41	0.41	0.82
	Sub-total			17.72	0.43	<u>9.11</u>	9.54	3.11	5.07	8.18
	d. Housing								,	
	Fump House	220 sq.m	150.00	33.00	_	6.60	6,60	9.90	16.50	26.40
-	Guard House		140.00	3.36	-	0.67	0.67	1.01	1.68	2.69
	Sub-total	- 0472		36.36	-	7.27	7.27	10.91	18.18	29.09
	e. Miscellaneous Works	L.S		11.42	1.79	1.44	3.23	2.01	6.18	8.19
	Total			720.00	3.00	597.00	600.00	30.00	90.00	120.00

2-3 No.8 Pump Station a. Equipment Pump \$\u00e9200mm 7 Set \$\u00e8,000 56.00 - 56.00 - Motor 110 Kw 7 Set \$\u00e9,750 33.25 - 33.25 - 33.25 - Auxiliary Equipment L.S 9.80 - 9.80 - 9.80 - Pipes and Valves L.S 30.20 - 30.20 - - Control Panel & Cable 1 Set 40.50 - 40.50 - 60.00 - Power Sub-station 550KVA 1 Set 60.00 - 60.00 - - - Strainer 7 Nos 1,000 7.00 - 40.70 - 40.70 - Strainer 7 Nos 1,000 7.00 - 28.00 28.00 7.00 - Sub-total J90.00 - 348.00 7.00 3 - 348.00 7.00 3 b. Intake Facilities Excavation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 <td< th=""><th>ibour Tote</th></td<>	ibour Tote
a. Equipment Pump ∲200mm 7 Set 8,000 56.00 - 56.00 56.00 - Motor 110 Kw 7 Set 4,750 33.25 - 33.25 33.25 - Auxiliary Equipment I.S 9.80 - 9.80 9.80 - Pipes and Valves L.S 30.20 - 30.20 30.20 - Control Panel 6 Cable 1 Set 40.50 - 40.50 40.50 - Power Sub-station 550KVA 1 Set 38.40 - 38.40 38.40 - Generator 200KVA 1 Set 40.70 - 40.70 40.70 - Pressure Tank 1 Set 40.70 - 40.70 40.70 - Strainer 7 Nos 1,000 7.00 - 7.00 7.00 - Miscellaneous L.S 4.15 - 4.15 4.15 - Transport and Installation 1.S 70.00 - 28.00 28.00 7.00 3 Sub-total 390.00 - 348.00 348.00 7.00 3 b. Intake Facilities Excavation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete (Plain) 5 cu.m 65.36 0.33 0.01 0.09 0.10 0.13 Concrete v/S.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sq. 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe ∮ 700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 1S 0.23 - 0.18 0.18 0.02 Sub-total 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal Excavation 42,000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Excavation 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	
a. Equipment Pump \$200mm 7 Set 8,000 56.00 - 56.00 56.00 - Motor 110 Kw 7 Set 4,750 33.25 - 33.25 33.25 - Auxiliary Equipment I.S 9.80 - 9.80 9.80 - Pipes and Valves 1.S 30.20 - 30.20 30.20 - Control Panel & Cable 1 Set 40.50 - 40.50 40.50 - Power Sub-station 550KVA 1 Set 38.40 - 38.40 38.40 - Generator 200KVA 1 Set 40.70 - 40.70 40.70 - Pressure Tank 1 Set 40.70 - 40.70 40.70 - Strainer 7 Nos 1,000 7.00 - 7.00 7.00 - Miscellaneous I.S 70.00 - 28.00 28.00 7.00 3 Sub-total 390.00 - 348.00 348.00 7.00 3 b. Intake Facilities Excevation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete (Plain) 5 cu.m 65.36 0.33 0.01 0.09 0.10 0.13 Concrete w/S.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sqn 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe \$700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 1S 0.23 - 0.18 0.18 0.02 Sub-total 1S 0.23 - 0.18 0.02 0	
Pump #200mm 7 Set 8,000 56.00 - 56.00 - Motor 110 Kw 7 Set 4,750 33.25 - 33.25 - 33.25 - Auxiliary Equipment L.S 9.80 - 9.80 - 9.80 - Pipes and Valves L.S 30.20 - 30.20 - 30.20 - Control Panel & Cable 1 Set 40.50 - 40.50 - 40.50 - Power Sub-station 550KVA 1 Set 60.00 - 60.00 - 60.00 - Generator 200KVA 1 Set 40.70 - 40.70 - 7.00 - Strainer 7 Nos 1,000 7.00 - 7.00 7.00 - Strainer 7 Nos 1,000 7.00 - 28.00 7.00 - Sub-total 390.00 - 348.00 348.00 7.00 3 Sub-total 1,150 cu.m 1.25 1.44 0.59 0.30 0.69 0.03 <	
Motor 110 Kw 7 Set 6,750 33.25 - 33.25 33.25 - Auxiliary Equipment I.S 9.80 - 9.80 9.80 - Pipes and Valves L.S 30.20 - 30.20 30.20 - Control Panel & Cable I Set 40.50 - 40.50 40.50 - Power Sub-station 550KVA I Set 38.40 - - - Generator 200KVA 1 Set 60.00 - 60.00 - - Strainer 7 Nos 1,000 7.00 - 40.70 - - Strainer 7 Nos 1,000 7.00 - 28.00 28.00 7.00 - Miscellaneous L.S 4.15 - 4.15 -	
Auxiliary Equipment L.S 9.80 - 9.80 - 9.80 - Pipes and Valves L.S 30.20 - 30.20 30.20 - - Control Fanel & Cable 1 Set 40.50 - 40.50 40.50 40.50 - Power Sub-station 550KVA 1 Set 60.00 - 60.00 60.00 - Generator 200KVA 1 Set 60.00 - 40.70 40.70 - Strainer 7 Nos 1,000 7.00 - 7.00 - Miscellaneous L.S 4.15 - 4.15 - Transport and Installation L.S 70.00 - 28.00 7.00 3 b. Intake Facilities - <td< td=""><td>. •• •</td></td<>	. •• •
Pipes and Valves L.S 30.20 - 30.20 - 30.20 - Control Pamel & Cable I Set 40.50 - 40.50 40.50 - Power Sub-station 550KVA I Set 38.40 - 38.40 - 38.40 - Generator 200KVA I Set 60.00 - 60.00 60.00 60.00 - Fressure Tank I Set 40.70 - 40.70 - 40.70 - Strainer 7 Nos 1,000 7.00 - 7.00 7.00 - Transport and Installation L.S 4.15 - 41.5 - - Sub-total 390.00 - 348.00 348.00 7.00 3 b. Intake Facilities -	·
Control Panel & Cable 1 Set 40.50 - 40.50 40.50 - Power Sub-station 550KVA 1 Set 38.40 - 38.40 38.40 - Generator 200KVA 1 Set 60.00 - 60.00 60.00 - Pressure Tank 1 Set 40.70 - 40.70 40.70 - Strainer 7 Nos 1,000 7.00 - 7.00 7.00 - Miscellaneous L.S 4.15 - 4.15 4.15 - Transport and Installation L.S 70.00 - 28.00 28.00 7.00 3 Sub-total 390.00 - 348.00 348.00 7.00 3 Sub-total 390.00 - 348.00 348.00 7.00 3 Sub-total 0.114 0.84 0.02 0.01 0.03 0.02 Concrete (Plaiv) 5 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete w/S.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe \$ 700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 1S 0.23 - 0.18 0.18 0.02 Sub-total 1.12 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal Excavation 42,000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	
Power Sub-station 550KVA 1 Set 38.40 - 38.40 38.40 - Generator 200KVA 1 Set 60.00 - 60.00 60.00 - Pressure Tank 1 Set 40.70 - 40.70 - 40.70 - Strainer 7 Nos 1,000 7.00 - 7.00 7.00 - Miscellaneous L.S 4.15 - 4.15 4.15 - Transport and Installation L.S 70.00 - 28.00 28.00 7.00 3 sub-total 390.00 - 348.00 348.00 7.00 3 b. Intake Facilities -	·
Generator 200KVA 1 Set 60.00 - 60.00 60.00 - Pressure Tank 1 Set 40.70 - 40.70 40.70 - Strainer 7 Nos 1,000 7.00 - 7.00 - Miscellaneous L.S 4.15 - 4.15 4.15 Transport and Installation L.S 70.00 - 28.00 28.00 7.00 3 sub-total 390.00 - 348.00 348.00 7.00 3 b. Intake Facilities Excavation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete (Plain) 5 cu.m 15.36 0.33 0.01 0.09 0.10 0.13 Concrete w/S.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe \$700mm 6	
Pressure Tank1 Set $40,70$ - 40.70 40.70 -Strainer7 Nos1,0007.00-7.007.00-MiscellaneousL.S 4.15 -4.15 4.15 -Transport and InstallationL.S70.00-28.0028.007.003Sub-total390.00-348.00348.007.003b. Intake FacilitiesExcavation1,150cu.m1.251.440.590.300.890.03Backfill740cu.m1.140.840.020.010.030.02Concrete (Plain)5cu.m65.360.330.010.090.100.13Concrete w/S.B40cu.m179.907.200.053.373.421.48Riptap (Masonry)140sq.m1.863.060.190.480.670.90R.C Pipe \$ 700mm6m150.300.90-0.360.27Miscellaneous Steel150.23-0.180.180.02Sub-total14.000.864.795.652.85c. Feeder Canal14.000.7631.9212.608.4021.001.26	·
Strainer 7 Nos 1,000 7.00 - 7.00 7.00 - Miscellaneous L.S 4.15 - 4.15 4.15 - - Transport and Installation L.S 70.00 - 28.00 28.00 7.00 3 Sub-total 390.00 - 348.00 348.00 7.00 3 b. Intake Facilities Excavation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete (Plain) 5 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Concrete W/S.B 40 cu.m 1.14 0.84 0.02 0.01 0.13 Concrete W/S.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sq.m 1.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe # 700mm 6 m <td></td>	
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Transport and Installation 1S 70.00 - 28.00 28.00 7.00 3 Sub-total 390.00 - 348.00 348.00 7.00 3 b. Intake Facilities Excavation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete (Plain) 5 cu.m 65.36 0.33 0.01 0.09 0.10 0.13 Concrete w/S.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe \$ 700mm 6 m 150.30 0.90 - 0.36 0.27 Miscellaneous Steel 15 0.23 - 0.18 0.18 0.02 Sub-total 14.00 0.86 4.79 5.65 2.85 2.85 2.85 c. Feeder Canal Excavation 42,000 <td></td>	
Sub-total 390.00 - 348.00 348.00 7.00 3 b. Intake Facilities Excavation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.12 1.44 0.59 0.30 0.89 0.03 Concrete (Plain) 5 cu.m 65.36 0.33 0.01 0.09 0.10 0.13 Concrete w/S.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riprap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe \$700mm 6 150.30 0.90 - 0.36 0.27 Miscellaneous Steel L.S 0.23 - 0.18 0.18 0.02 Sub-total 140.00 0.86 4.79 5.65 2.85 2.85 c. Feeder Canal 2,000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00<	
b. Intake Facilities Excavation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete (Plain) 5 cu.m 65.36 0.33 0.01 0.09 0.10 0.13 Concrete w/S.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riprap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe \$700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 1S 0.23 - 0.18 0.18 0.02 Sub-total 140.00 0.86 4.79 5.65 2.85 c. Feeder Canal Excavation 42,000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	5.00 42.0
Excavation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete (Plain) 5 cu.m 65.36 0.33 0.01 0.09 0.10 0.13 Concrete w/S.B 40 cu.m 1.79.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe # 700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 15 0.23 - 0.18 0.18 0.02 Sub-total 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal 22,000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	15.00 42.0
Excavation 1,150 cu.m 1.25 1.44 0.59 0.30 0.89 0.03 Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete (Plain) 5 cu.m 65.36 0.33 0.01 0.09 0.10 0.13 Concrete w/S.B 40 cu.m 1.79.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe # 700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 15 0.23 - 0.18 0.18 0.02 Sub-total 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal 22,000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	
Backfill 740 cu.m 1.14 0.84 0.02 0.01 0.03 0.02 Concrete (Plain) 5 cu.m 65.36 0.33 0.01 0.09 0.10 0.13 Concrete (VS.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riprap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe \$700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 1S 0.23 - 0.18 0.18 0.02 Sub-total 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal 142,000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	0.52 0.5
Concrete (Plain) 5 cu.m 65.36 0.33 0.01 0.09 0.10 0.13 Concrete w/S.B 40 cu.m 179.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe Ø 700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 1S 0.23 - 0.18 0.18 0.02 Sub-total 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal 2.000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	0.79 0.8
Concrete w/S.B 40 cum 179.90 7.20 0.05 3.37 3.42 1.48 Riptap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe \$700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 15 0.23 - 0.18 0.18 0.02 Sub-total 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal 2.000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	0.10 0.2
Riprap (Masonry) 140 sq.m 21.86 3.06 0.19 0.48 0.67 0.90 R.C Pipe \$ 700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 15 0.23 - 0.18 0.18 0.02 Sub-total 140.00 0.86 4.79 5.65 2.85 c. Feeder Canal 2000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	2.30 3.7
R.C Pipe Ø 700mm 6 m 150.30 0.90 - 0.36 0.36 0.27 Miscellaneous Steel 1S 0.23 - 0.18 0.18 0.02 Sub-total 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal 2000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	1.49 2.3
Miscellaneous Steel 1S 0.23 - 0.18 0.18 0.02 Sub-total 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal Excavation 42,000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	0.27 0.5
Sub-total 14.00 0.86 4.79 5.65 2.85 c. Feeder Canal Excavation 42,000 cu.m 1.25 52.50 21.42 10.92 32.34 1.26 1 Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	0.03 0.0
Excavation42,000 cu.m1.2552.5021.4210.9232.341.261Embankment w/comp.42,000 cu.m0.7631.9212.608.4021.001.26	5.50 8.3
Excavation42,000 cu.m1.2552.5021.4210.9232.341.261Embankment w/comp.42,000 cu.m0.7631.9212.608.4021.001.26	
Embankment w/comp. 42,000 cu.m 0.76 31.92 12.60 8.40 21.00 1.26	0 00 30 1
	8.90 20.1
Gravel Surfacine (10 cm) (000 cm = 1.22 (5.2 0.20 - 2.00 - 2.20	9.66 10.9
	0.54 3.2
Sub-total 90.94 34.41 22.21 56.62 5.22 2	9.10 34.3
d. Suction Pit	· . ·
	0.61 0.6
Backfill 420 cu.m 1.14 0.48 0.01 0.01 0.02 0.01	0.45 0.4
	0.20 0.4
	3.43 5.6
	0.85 1.3
	0.41 0.8
Sub-total <u>19.46</u> 0.89 9.15 10.04 3.47	5.95 9.4
e. Housing	5. ¹
	6.50 26.4
	1.68 2.6
	8.18 29.0
	6.27 16.8
Total 580.00 42.00 398.00 440.00 40.00 10	0.00 140.0
	1.1
	0.00 360.0
1,470.00	

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No.	and the second		(LE)	Cost	Equip-	Materi	Total	Local	Tabaum	
					ment			Materi	Labour	Total
(3) Ir	rigation Networks									
3-1	No.6 Irrigation System (L≈5,555m)								
	Pipeline 6600mm	1,100 m	126.07	138.68	4.10	126.35	130,45	0.53	7.70	8.23
	Pipeline oSOOmm	1,580 m	92.75	146.54	5.10	131,31	136.41	0.60	9.53	10.13
	Fipeline 6450mm	330 m	78.96	26.06	0.99	23.14	24,13	0.12	1.81	1.93
	Pipeline 0400mm	330 m	65.64	21.66	0.85	19.11	19.96	0.10	1.60	1.70
	Pipeline \$350mm	. 895 m	55.97	50.09	1.67	44.33	46,00	0.24	3.85	4.09
	Pipeline \$300mm	660 m	46.90	30.95	1.09	27.21	28.30	0.16	2.49	2.65
	Pipeline \$250mm Appurtenant Structure	660 m	30.15	19.90	0.55	17.52	18,07	0.06	1,77	1.83
	Sub-total	LS		43.12	1.45	38.63	40.08	0.19	2.85	3.04
	Jub Cotar			477.00	15.80	427.60	443.40	2.00	31.60	33.60
3-2	No.7 Irrigation System (164 00	010 44						
	Pipeline 6700mm Fipeline 6500mm	1,910 m · 815 m	164.22 92.75	313.66	8.19	288.99	297.18	1.01	15.47	16.48
	Pipeline 0450mm	8.15 m	78,96	75.59 64.35	2.63	67:74	70.37	0.31	4,91	5.22
	Pipeline 6400mm	180 m	65.64	11.81	2.44 0.46	57,14	59.58	0.29	4.48	4.77
	Pipeline \$350mm	840 m	55.97	47.01	1.57	$10.42 \\ 41.60$	10.88 43.17	0.06	0.87	0.93
· · ·	Pipeline \$300mm	1,725 m	46,90	80.90	2,86	71.11	73.97	0.43	6,50	6.93
,	Pipeline 5250mm	510 m	30,15	15.38	0.42	13.54	13,96	0.05	1.37	1.42
	Pipeline \$200mm	l,695 .m	19.78	33.53	0.92	29.02	29.94	0,08	3.51	3.59
	Appurtenant Structure	L.S		63.77	1.91	57.54	59.45	0.24	4.08	4.32
	Sub-total			706.00	21,40	637.10	658.50	2.70	44.80	47.50
3-3	No.8 Irrigation System (L=5,700m)								
, ¹ • .	Pipeline 0500mm	930 m	92.75	86.26	3.00	77.30	80.30	0.35	5,61	5.96
· .	Pipeline 6450mm	700 m	78.96	55.27	2.10	49.08	51.18	0.25	3.84	4.09
	Pipeline \$350mm	1,630 m	55.97	91.23	3.05	80.73	83.78	0.44	7.01	7.45
	Pipeline \$300mm Biscline \$250mm	.360 m	46.90	16.89	0.60	14.84	15.44	0.09	1.36	1.45
	Pipeline ø250mm Pipeline ø200mm	730 m 1,350 m	30.15 19.78	22.01 26.70	0.61	19.38	19.99	0.07	1.95	2.02
	Appurtenant Structure	1,350 m I.,S	19.70	29.64	0.73	23.11 26.46	23.84 27.37	0.07 0.13	2.79 2.14	2.86
	Sub-total	1.10		328.00	11.00	290.90	301.90	1,40	24.70	26.10
										~~~
3-4	Farm Road (L=98.0Km) Excavation of Ditch	55,860 cu.m	3.39	189.36	-		-	_	189,36	189.36
	Grading & Embankment	392,000 sq.m	0.14	54.88	19.60	11.76	31.36	0.00	23.52	23.52
1.5	Sub-total			244.24	19.60	11.76	31.36	0.00	212.88	212.88
3_5	Wind Break									
	Plantation of Trees									
	along Farm Road (4m)	98.0 Km	912	89.37	4.61	2.72	7.33	10.15	71.89	82.04
	Plantation of Trees					0 (0			16 22	10.00
	inside On-Farm (2m)	45.6 Km	456	20.79	1.07	0.63	1.70	2.36	16.73	19.09
	Water Supply System Sub-total	115.0 Fed	1,990	228.85 339.01	17.82 23.50	153.53 156.88	171.35 180.38	1.61	55.89 144.51	57.50 158,63
2 6		L.S		105.75	8.70	75.76	84.46	9.78	11.51	21.29
3-6	Miscellaneous	D+3								
	Total			2,200.00	100.00	1600.00	1700.00	30.00	470.00	500.00
a di		. •								
(4) Dr	ainage Networks									
4-1	Construction of Drainage	e Canal (L=15	.9Km)							
	Canalization			99.38	40.55	20.67	61.22	2.38	35.78	38.10
	Excavation	79,500 cu.m		99.38 90.63	2.38	1.59	3.97	1.59	85.07	86.66
	Embankment Pinnen (Dru)	79,500 cu.m 3,180 sq.m		34.25	3.72	2.99	6.71	4.10	23.44	27.54
	Riprap (Dry) Sub-total	J,100 SQ.(R	10.17	224.26	46.65	25.25	71.90	8.07	144.29	152.30
ю,	Structures (9places)	18 cu.m	170 00	3.24	0.02	1.52	1.54	0.67	1.03	1.70
	Concrete w/S.B	18 cu.m 27 cu.m		1.76	0.02	0.50	0.52	0.69	0.55	1.24
	Concrete (plain) Riprap (Wet)	27 cu.m 45 sq.m		0.90	0.06	0.15	0.21	0.23	0.46	0.69
	Riprap (Wec) Riprap (Dry)	90 sq.m		0.97	0.11	0.08	0.19	0.12	0.66	0.78
	Earth Works	90 cu.m		0.30	· -			-	0.30	0.30
	Sub-total			7.17	0.21	2.25	2.46	1.71	3.00	4.7
	Piezometric System									
¢.	Observation Well	10 Plcs	700.00	7.00	-	-	· _	4.90	2.10	7.00
	Water Level Indicator		300.00	0.60		0.60	0.60	-		
	Sub-total			7,60		0.60	0.60	4.90	2.10	7.00
d.	Miscellaneous			20,97	3.14	1.90	5.04	5.32	10.61	15.9
	•			260,00	50.00	30.00	80.00	20.00	160.00	180.00
	Total				20100	34,44			كتنسنه	
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•							and a second		(Unit: '(	
Item			Rate	. Total		eign Cur	rency		cal Curre	ency
No.	Description	Q'tys Uni	t (LE)	Cost	Equip- ment	Materi	Total	Local Materi	Labour	Total
(5) (	On−farm Facilities									
<i>.</i> .										· .
5-1	Pipeline in on-farm		e a filia e				4			
	(Type A, for 2,000 Fed) Pipeline ø 75mm	7,100 m	5.09	36.14	1.92	26.55	28.47	0,21	7.46	7.67
	Pipeline \$100mm	35,400 m	7.35			198.60		1.06	47.08	48.14
	Pipeline \$125mm	1,800 m	9.51		0.76			0.05	2.65	2.70
	Pipeline \$150mm	6,200 m	13.28		2.67			0.19	10.29	10.48
	Pipeline \$200mm	8,000 m	19.78		4.32			0.40	16.56	16.90
	Appurtenant Structure	L.S		55.97	3.88			1.09	12.96	14.05
	Sub-total			610.00	27.00			3.00	97.00	100.00
5-2	Pipeline in on-farm								· · ·	
	(Type B, for 750 Fed)			•	1. T.	1.1			- 1	· ·
	Pipeline 6100mm	16,600 m	7.35		6.31			0.50	22.08	22.58
	Pipeline ø150mm	2,650 m	13.28		1.14			0.08	4.40	4.48
	Pipeline \$200mm	4,000 m	19.78		2.16	· · · · · ·		0.20	8.28	8.48
	Appurtenant Structure	L.S		23.68	1.39			0.22	4.24	4.46
	Sub-total			260.00	11.00	209.00	220.00	1.00	39.00	40.00
5-3	Sprinkler (Hand move)			the second						en generationen.
	Туре А	1,000 Fed	600	600.00	· 🛶 .	570.00	570.00	-	30.00	30.00
	Type B	750 Fed	600		<u> </u>	430.00	430.00	·	20.00	20.00
	Sub-total			1,050.00	- '	1000,00	1000.00	-	50.00	50.00
5-4	Drip (for Vegetable)									
	Туре А	500 Fed	1,200	600.00	-	570.00	570.00	· -	30.00	30.00
5-5	Drip (for Fruits)									
	Type A	500 Fed	800	400.00		380.00	380.00		20.00	20.00
5-6	Miscellaneous	L.S		30.00	2.00	18.00	20.00	1.00	9.00	10.00
				÷			2.5		1.1.1	10.00
	Total			2,950.00	40.00	2660.00	2700.00	5.00	245.00	250.00
			1.0							
6) L	and Reclamation						$(1 + 1)^{2}$			î.
6~1	Deep Plowing (lst)	2,750 Fed	128.46	353.26	123.06	106.97	230.03	12.29	110.94	123.23
6-2	Deep Plowing (2nd)	2,750 Fed	64.23	176.63	61.53	53.49	115,02	6.14	55.47	61.61
6-3	Initial Soil Dressing-1						and the second			
<u> </u>	Manua Dredged from Canal	82,500 ton	4.10	338.25	76.73	84,97	161.70	9.07	167.48	176.55
			•	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		1.1	1.00		· · · :
6~4	Initial Soil Dressing-2 Gypsum	1,375 ton	31.44	43.23	1.36	1.38	2.74	36.52	3.97	40.49
6-6	Initial Leaching	2,750 Fed	52.18	143.49	·	74.47	74.47	36.88	32.14	69.02
67	Miscellaneous	L.S		45.14	7.32	18.72	26.04	9,10	10.00	19.10
						10.72	20104	5.10	10.00	19,10
	Total			1,100.00	270.00	340.00	610.00	110.00	380.00	490.00
				· ·		•.				

.

				Table	1-2,4	Breakdowdn
T TEM :	2.2.2,	Housing	and	Infrastructure	of Com	Osheem Area

				•					C	Unit: 'O	00 LE)
						Paulad					
tem	Description	Q'tys	Unit	Rate	Total	aduito	gn Curre		Local	al Curre	
No				(LE)	Cost	ment	Materi	Total	Materi	Labour	Total
11 0	re-Engineering										
1) P	Vertical Control	12	Km	50	1	-	-	-	-	1	1
	Pre-construction Survey		Mos	2,500	· · 5			-	-	5	5
	Construction Survey		Mos	2,500	60	-		-	_	60	60
	Miscellaneous		L.S		- 4				-	. 4	4
• •	Total	÷			70	_		-	-	70	70
				1 e .							
2) 10	ousing Farmers' House, Small	208	Nos	3,060	636.48	· _	101.84	101.84	318.24	216.40	534.64
	Farmers' House, Large		Nos	4,140	256.68		41.07	41.07	128.34	87.27	215.61
	Directors' House		Nos	8,100	40.50		6.48	6.48	20.25	13.77	34.02
	Technicians' House	31	Nos	5,760	178.56	-	28.57	28.57	89.28	60.71	149.99
	Labour and Other	42	Nos	5,760	241.92	-	38.71	38.71	120.96	82.25	203.21
	Mosque in Hamlet/Village	3	Nos	13,500	40.50	·	6.48	6.48	20.25	13.77	34.02
	Primary School	1	No.	45,000	45.00	· -	7.20	7.20	22.50	15.30	37.80
	Storage House		No.	6,020	6.02		0.96	0.96	3.01	2.05	5.06
	Store	1	No.	8,400	8.40	. ~	1.34	1.34	4.20	2.86	7.06
	Miscellaneous		LS		15.94		7.35	7.35	7.97	0.62	8.59
	Total				1,470.00	_	240.00	240.00	735.00	<u>495.00</u>	1230.00
3) R											
3-1	Trunk Road (L=8.3Km)									a4 - 75	
	Excavation of Ditch	7,300		3.39	24.75				-	24.75	24.7
	Grading & Embankment	66,400	•		9.30	3.32	1.99	5.31	0.00	3.99	3.99
	Gravel Paving	66,400	sq.m	2.21	146.74	6.64	67.73	74.37	64.40	7.97	72.3
	Sub-total				180.79	9.96	69.72	79.68	64.40	36.71	101.11
32	Branch Road (L=3.8Km)	÷.,						1.1			
	Excavation of Ditch	2,200	cu.m	3.39	7.46		<b></b>	· · +	-	.7.46	7.46
	Grading & Embankment	22,800	sq.m	0.14	3.19	1.14	0.68	1.82	0.00	1.37	1.37
	Gravel Paving	22,800	sq.m	1.86	42.41	2.05	19.38	21.43	18.47	2.51	20.98
	Sub-total				53.06	3.19	20.06	23.25	18.47	11.34	29.81
3-3	Wind Break										
	Plantation of Trees						0.14		1 70		12.00
	along Trank Road	16.6	Km	912	15.14	0.78	0.46	1,24	1.72	12.18	13.90
	Plantation of Trees		<b>N</b> - 1	012	2.14	0.19	0.10	0.00	0.20	2.79	3.18
	along Branch Road	-3.8		912	3.46	0.18	26.03	0.28 29.05	0.39 0.27	9.48	9.7
	Water Supply System	19.5	Fed	1,990	38.80 57.40	3.02 3.98	26.03	30.57	2.38	24.45	26.8
	Sub-Total				<u></u>	3.70	20.55	30.37	2,50	24.45	20.0.
3-4	Miscellaneous Works		L.S		8.75	0.87	5.63	6,50	1.75	0.50	2.2
	Total				300.00	18,00	122.00	140.00	87.00	73.00	160.00
11											
4) I	nfrastructure					·					
4-1	Potable Water										
	Treatment Plant			100,000	40.00		27.00	27.00	3.25	9.75	13.0
· ·	Pipeline 🔗 75mm	6,700		5.09	34.10	1.81	25.06	26.87	0.20	7.03	7.2
	Pipeline 🖌 50mm	4,600	m	3.15	14.49	1.15	8.92	10.07	0.09	4.33	4.4
	Pipeline in Village		1.						•		-
	(\$50mm Pipeline)		1.1.1						~ · · ·		
	Hamlet		Site		15.24	1.21	9.38	10.59	0.11	4.54	4.6
	Village	1		2,290	2.29	0.18	1.41	1.59	0.01	0.69	0.7
	Miscellaneous Works Sub-total		L.S		3.88	0.65 <u>5.00</u>	2.23	2.88 79.00	$0.34 \\ 4.00$	0.66 27.00	1.0 31.0
4-2	Sewage System										
	(Tretment Plant & \$200m			÷							
÷ .	Hamlet (160 persons)			12,880	154.56	20.94		89.86	21.33	43.37	64.7
	Village (160 persons)	- 1	Site	15,810	15.81	1.82		9.97	1.79	4.05	5.8
	Miscellaneous		L.S		9.63	1.24		5.17	1.88	2.58	4.4
	Sub-tota1				180.00	24.00	81.00	105.00	25.00	50.00	75.00

						1		1 A. 1		Unit: 0	
× • · -				Rate	Total	Fore	ign Curi	ency		al Curre	incy
ltem No.	Description	Q'tys	Unit	(LE)	Cost	Depre- clation		Total	Local <u>Materi</u>	Labour	Total
4-3	Electric Power										
4-5	60KV Trunk Line	40% x 7	v	43,000	120,40	19 <u>-</u>	84.28	84.28	10.84	25.28	36.12
	liky Line	15.7		14,000	219.80		153.86	153.86	19.78	46.16	65.94
		40% x1			80.00	2	56.00	56.00	7.20	16.80	24.00
	Sub-station 66/11 KV Distribution 100KVA		Site		104,00		72.80	72.80	9,36	21.84	31.20
		. 13	SILE	0,000	104,00		12.400	12.00	2130	4110	51120
	Village Distribution Hamlet	. 19	Site	1,275	15.30	-	12.24	12.24	0.92	2.14	3.06
	Village		Site	•	2.47		1.98	1.98	0.15	0.34	0.49
	Miscellaneous	,	L.S	2- 3-61-22	18.03	·	12.84	12.84	1.75	3.44	5.19
	Sub-total		5.0		560.00		394.00	394.00	50.00	116.00	166.00
	Sub-Cocar				500100		<u></u>	371.000			100100
4-4	Telephon System				and the second			1.		1.1	
4 4	Trunk Cable Line	30% x 16	Km	4,000	19.20	-	15.36	15.36	1,15	2.69	3.84
	Conection Line	5.3		4,000	21.20	· _	16.96	16.96	1,27	2.97	4.24
	Control Exchange	30% x 1		67,000	20.10		16.08	16.08	1.21	2.81	4.02
	Miscellaneous Works		L S		9.50	have	7.60	7.60	0.37	1.53	1.90
	Sub-total				70.00		56.00	56.00	4.00	10.00	14.00
	oue cocur										
45	Village Facilities								· · · ·		· .
	(Land leveling, Road,										
	Wind Break etc.)		L. S		20,00	-	6.00	6.00	4.00	10.00	14.00
		· · ·			-			•		فيرتقد والعاف	
	Total				940.00	29.00	611.00	640.00	87.00	213.00	300.00

	•	-						:	2							•							•									
					(11 DO	LOCEL			45.00	11	l.	I	1	1	48-00	40.00	7.00	300.00		02 20	291.00	1 1	ł	11	1 88.60		141.00	760.00		1,060.00	1,690,00	
		•			(קד ההה. ימושה)	Foreign	۰.		20.00	290.00 39.00	215.50	34.50	190-00	31.00	21.00	18.80	222.50	1,200.00		00 36	22.00	2,490.00 39.00	275.00	125.00	51.00	373.50	60.00 595.50	00 026 7	22.724	5,420.00	, 330.00	
						Total			65.00 200.00	290.00	215.50	34.50	190,00	31.00	00 69	58.80	229.50	1,500.00 1		00 011	364.00	490.00 2	275.00	66.00 125.00	51.00	373.50	201.00 751.60	7 00 030 7		6,480.00 5	9,020.00 7,330.00	
						Rate			200									-4			200	61							1	<u>ا</u> ع	91	
		•				Qty's Unit (IE)			L.S. L.ODO So.T			L.S	2'T.	S S - 1	1. 1. 1.						د.ا 1,820 sq.m	5 v 1 L	1,.1		- i - i							
		·				읽			-			er	rks			ce Cost on Cost			2	•	, L			ilities whe		re Cost					£:	
	-					퇴			14.0	orks	e Works	aage, and Boill	tment Wo	ilties	orks	Insuran sportati	ntingenc		e Factor	0	s rks	orks	rks r Works	ment Fac twent Uo		orks Theirran	sportati sportati			•	-industr	
						Description	(3) Animal Products	Slaughterhouse	Ground Works Building Works	Equipment Works	ELECUTIC WOLKS Cold Storage Works	Water, Drainage, Santtary and Boiler	Sewage Treatment Works	Burning Facilities	Fuclosure Works	Freight and Insurance Inlend Transportation	Physical Contingency	Sub-total	Milk Processing Factory		Ground Works Building Works	Equipment Works	Electric works Refrigerator Works	Water Treatment Facilities	Vehicles	Enclosure Works E	Freigne and insurance Inland Transportation Dhusteal Contingency		Sub-total	Total	Grand Total of Agro-industry	
		•				•	An imal		040 9	រភ្នំស្នា	9 <b>H</b> 9 1 0 1 0 0	Wats	Sev	Bur Hoh	Enc	Fre Fre	h vh	S	M11k P		Gro Bui	5 3	Ele Refe	Wat	Vet	1 B 1 B 1 B	L L L	(1) 7	01	ţ,	nd Tota.	
						Iten	(3)	3-1 3-1	•										5-16	•											Grai	
				•							•																					
					O LE)	Local			96-00	2.16	2.16	06		6.00	429.12		5.60		: 1	•	- 65.28		500.00				128.00	00.12	130.00			
	2)				(Unit: '000 LE)	Foreign			24,00	0.54	0.54	76 0	t ***	1.50	107.28		ł		414.00	320.80	942.80 149.92		1,200.00				670.50 32.00	nc./	710.00			
	$\sim$				<u> </u>	Total	÷.		120.00	2,70	2.70	00	n	7.50	134.10 536.40		5.60		414.00	320.80	942.80	04.044	1,700.00				670.50 160.00	00.2	840.00			
	vil Wo	ر ک				Rate		nit)	15	15	5		, T	150			156		103,500	80,200			-1				3 Set 223,500 0 sq.m 100					
	Breakdown of Civil Works	(Agro-Industry)	. •	·	-	Oty's Unit	(LE) Center	Cattle Shed and Office ( per one (1) unit)	8,000 sq.m	180 sq.m	180 sq.m		ar sg.	50 sq.m			36 Fed		4 Unit 103,500	4 Unit							3 Set 2 1,600 sq.m	L-S				
	reakdow	(Agro-	try.	•		প	(1) Cattle Breeding and Fattening Center	fice ( pe		H	ម		F	ß	l unit 4 unit			41044	1	Machines	í	ncy			t5	ation	Equipment Cost Building Works 40 x 40m l					
		<b> </b>	gro-indus			Description	ding and	ed and Of	Fattening Cattle Shed 2 houses x 4,000 sq.m	leising Cow Shed 1 house x 180 sq.m	treeding Shed	Parlor	l house x 80 sq.m ffice	I house x 50 sq.m	Sub-total of 1 unit Sub-total of 4 unit		ing /unit	-tuch [or	******	Bulk Cooler Tractor & Other Machines	otal	concruge			i Produc	reding St.	it Cost 5 Works 4	neous				
•	Table I-2.5	•	ITEM: 2.2.3, Agro-industry			Descr	tle Bree	attle Sh	Fattenin 2 house	Reising 1 house	Breeding Shed 1 house x 180	Milking Parlor	1 house Office	I house	Sub-t		Land Grading 9 Feddan/unit	Action Route Contract	Milker	Bulk Cooler Tractor & O	Sub-total	knysical vontingency	Total	·	(2) Agricultural Products	Tomato Grading Station	Equipment Cost Building Works	Miscellancous	Total			
	Tat		TEM: 2			臣 문 문	(1) Cat	0 [-]						•	·		1-2-1	- - -	· .			<u>1</u>			(2) Ag	2-1						
			н			M	-																									

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#### Table 1-2.6 Breakdown of Civil Works (6)

ITEM: 111. Wahby Downstream Area

			-							(Unit: '(	)00 LE)
						Fore	ign Curre	ency	Los	al Curre	ineu
Item No.	Description	Q'tys	Unit	Rate		equip-			Local		·····
NU.				(LE)	Cost	ment	Materi	Total	Materi	Labour	Total
	w			· .					· .	- 11-	
	e-Engineering Cadastral Survey	25	Fed	200	13.0		1.3	1.3		11.7	1.i -
	Vertical Control	100		50	5.0		0.5	0.5		4.5	11.7
	Pre-Construction Survey		Nos	2,500			1.0	1.0	<u>-</u>	9.0	4.5 9.0
	Construction Survey		Nos	2,500	82.5	~	8.2	8.2		74.3	74.3
	Hydrology		Mog	1,000	33.0	· _	3.3	3.3	· _	29.7	29.7
	Laboratory Control		Nos	1,000	33.0		3.3	3.3	- ^د ب	29.7	29.7
	Negotiation for ROW	. 5	Mos	1,000	5.0		0.5	0.5	-	4.5	4,5
1	Miscellaneous Works	· · · ·	L.S		8.5		0.9	0.9	-	7.6	7.6
	Total				190.0	-	19.0	19.0	· · -	171.0	171.0
2) Re	habilitation of Facilit	les				•					
2-1	Rehabilitation of Main (						-				
	Excavation/Dredging	43,000		1.69	72,67	32.25	16.34	48.59	1.29	22.79	24.08
	Embankment w/comp.	21,000		0.76	15.96	6.30	4.20	10.50	0.63	4.83	5.46
	Gravel Surfacing(18cm) Riprap (Dry)				236.47	10,70	109.14	119.84	103.79	12.84	116.63
	Withdrawal of Brick &	21,000	sų m	10.77	226.17	24.57	19.74	44.31	27.09	154.77	181.86
	Concrete	220	cu.m	16.91	3.72	•••	- 10 - <u>1</u> -1	_	. ÷ _	3.72	3.72
	Concrete w/S.B			179.90	61.17	0.40	28.67	29.07	12,64	19.46	32.10
	Concrete (plain)			65.36	15.03	0.22	4,26	4.48	5.88	4.67	10.55
	Miscellaneous		L.S		28.81	4.56	7,17	11.73	6.90	10.18	17.08
	Sub-total				660.00	79.00	189.52	268.52	158.22	233.26	391.48
			:								
2-2 1	Rehabilitation of Branch		1.1		No State State		1.1.1.1		in the Constant of the	e de la seconda	
	Excavation/Dredging	28,000		1.25	35.00	14.28	7.28	21.56	0.84	12.60	13.44
	Embankment w/comp.	14,000		0.76	10.64	4.20	2.80	7.00	0.42	3.22	3.64
	Gravel Surfacing(10cm) Riprap	31,000	• • •	1.33	148.96 333.87	8.96 36.27	66.08	75.04	61.60	12.32	73.92
	Withdrawal of Brick &	21,000	եվ ա	10.77	232-01	20.21	29.14	65.41	39,99	228.47	268.46
	Concrete	160	CU. M	16.91	2.71			1.1 1 2.1		2.71	2.71
	Concrete w/S.B			179.90	35.98	0.23	16.86	17.09	7.44	11.45	18.89
	Concrete (plain)		cu.m	65,36	9.15	0.13	2.60	2.73	3.58	2.84	6.42
	R.C. Pipe \$600am	50	m	115.60	5.78	· -	2.31	2,31	1,73	1.74	3.47
	R.C. Pipe \$400mm	50	m	67.00	3.35	<u>~</u>	1.34	1.34	1,00	1.01	2.01
	Miscellaneous		L.S		29.56	3.93	5.79	9,72	5.89	13.95	19.84
	Sub-total			· · .	615.00	68.00	134.20	202.20	122.49	290.31	412.80
2-3 1	Rehabilitation of Latera	al & Sub-	later	al (L=)	32.0Km)		1.5			· .	
	Excavation/Dredging	13,000		1,25	16.25	6.63	3.38	10.01	0.39	5.85	6.24
	Embankment w/comp.	13,000		0.76	9.88	3.90	2.60	6.50	0.39	2.99	3.38
	Gravel Surfacing(10cm)			1.33	86.45	5.20	38.35	43.55	35.75	7.15	42.90
	Riprap (Dry)	11,000	sq.m	10.77	118.47	12.87	10.34	23.21	14.19	81.07	95.26
	Withdrawal of Brick &		1						1		1.1
	Concrete			16.91	1.52	÷		-	-	1.52	1.52
	Concrete w/S.B			179.90	23.39	0.15	10.97	11.12	4.83	7.44	12,27
	Concrete (plain) R.C. Pipe #600mm		ດປະຫ ຫ	65,36	9.15	0.13	2.60	2.73	3.58	2.84	6.42
	R.C. Pipe 6400mm	150	រព ខា	115.60 67.00	17.34	-	6,94	6.94	5.20	5.20	10.40
	Niscellaneous	1.00	ե.Տ	07.00	10.05	2.12	4.02	4.02	3.01	3.02	6.03
`	Sub-total		u.u .	·	305.00	31.00	2.50 81.70	4.62	2.88 70.22	5,00 122,08	7,88
					303.00	52100	01110	112.10	10.22	122.00	192.30
2-4 F	Rehabilitation of Other										
	Excavation/Dredging			1.25	2.62	1.07	0,55	1.62	0.06	0.94	1.00
	Embankment w/comp.			0.76	1.60	0.63	0.42	1.05	0.06	0.49	0.55
	Gravel Surfacing(10cm)	12,600		1.33	16.76	1.01	7.43	8.44	6.93	1.39	8.32
	Riprap (Dry) Structure (3 Places)	2,100	sq.ក	10.77	22.62	2.46	1.97	4.43	2,71	15.48	18.19
		Cor	au -	16 01		the state of the s		1 - E	· .		·
		ະບບຄະງ			0.05			-		0.05	0.05
	Withdraval of Brick & Concrete w/S_B	1	ch ~								
	Concrete w/S.B	4	cu.m	179.90	0.72	0.00	0.34	0.34	0.15	0.23	0.38
	Concrete w/S.B Concrete (plain)	4 5	cu,m	65.36	0.33	0.01	0.09	0.10	0.13	0.10	0.23
	Concrete w/S.B Concrete (plain) Miscellaneous	4 5	cu.m cu.m L.S	65,36	0.33 5.30	0.01	0.09	0.10	0.13	0.10 0.67	0.23
	Concrete w/S.B Concrete (plain)	4 5	cu,m	65,36	0.33	0.01	0.09	0.10	0.13	0.10	

		•						Unit: 'OC	
em Description	Q'tys Un	it Rate (LE)	Total Cost	Fore equip- ment	ign Curre Materi	Total	Local Materi	al Currer Labour	Total
) Construction of Laterals		÷.,							
-1 New Hayar Canal (L=2.8Km)	-								
a. Canalization Excavation	26,000 cu	.m 1.25	32.50	13.26	6.76	20.02	0.78	11.70	12.48
Embankment w/comp.	26,000 cu	.m 0.76	19.76	7.80	5.20	13.00	0.78	5.98	6.76
Gravel Surfacing(15cm) Riprap (Dry)	14,000 sq 2,300 sq		26.04	1.26	11.90 2.16	13.16 4.85	11.34 2.97	1.54 16.95	12,88
Sub-total	1,000 aq	in corre	103.07	25.01	26.02	51.03	15.87	36.17	52.04
b. Syphon									
Excavation	1,200 cu		1,50 0,11	0.61	0.31 0.01	0.92	0.04 0.00	0.54 0.10	0.58
Embankment w/comp. Backfill	100 cú 1,100 cu			0.03	0.02	0.05	0.02	1.18	1.20
Water Care	Ŀ.	S ·	0.30	-	0.15	0.15	0.08	0.07	0.15
Road Surfaceing (18cm)	50 sq		0.11 7.20	0.01 0.05	0.05	0.06	0.05	0.00 2.29	0.05
Concrete W/S.B Concrete (plain)		.m 179.90 .m 65.36	2.09	0.03	0.59	0.62	0.82	0.65	1.47
Sub-total			12.56	0.73	4.50	5.23	2.50	4.83	7.33
c. Bridge Concrete B. (W=5m, L=7m	i) Ipl	ace	17.00		6.80	<u>6.80</u>	4.40	5.80	10.20
d. Vertical Drop (12 places		*	;		÷			. '	
Excavation	60 cu 48 cu		0.20 0106	-	0.00	0.00	0.00	0.20	0.20
Backfill Embankment	40 CU 12 CU		0.00	-	0.00	0.00	0.00	0.00	0.01
Concrete w/S.B		.m 179.90	34.54	0.22	16.19	16.41	7.14	10.99	18.13
Sub-total			34.81	0.22	16.19	16.41	7.14	11.26	18.40
e. Other Structures (5 plac Earth Works	:es) 150 сі		0,51	_	_	È	_	0.51	0.5
Concrete w/S.B		.m 179.90	13.49	0.09	6,32	6.41	2.79	4.29	7.08
Concrete (plain)	100 cu	.m 65.36	6.54	0.10	1.85	1.95	2.56	2.03	4.59
Sub-total	·		20.54	<u>0.19</u>	8.17	8.36	5.35	6.83	12.1
f. Miscellaneous Works	L.	S	22.02	9.85	7.21	17.06	1.86	3.10	4.9
Total of New Hayar (	Canal		210.00	36.00	68.89	104.89	<u>37.12</u>	67.99	105.1
3-2 New Koddoba Canal (L=3.6	Km)								
a. Canalization		1.05			5.25	17 01	o cà	6.61	7.1
Excavation Embankment w/comp.	21,000 ci 21,000 ci	i.m. 1.05 i.m. 0.76		9.66 6.30		14.91	0.63	6.51 4.83	5.4
Gravel Surfacing(15cm)	11,000 so			0.99	9.35	10.34	8.91	1.21	10.1
Riprap	2,000 so	1.m 10.77		2.34	1.88	4.22	2.58	14.74	17.3
Sub-total			80.01	19,29	20.68	<u>39.97</u>	12.75	27.29	40.0
b. Syphon (1 Place) Excavation	600 ci	.m. 1.25	0.75	0.30	0.16	0.46	0.02	0.27	0.2
Embankment w/comp.	100 ci			0.01	0.00	0.01	0.00	0.10	0.1
Backfill	500 ci			0.02		0.03	0,01	0.53	0.5 0.1
Water Care Road Surfaceing (18cm)	ե 50 so	.S 1.m 2.21	0.30	0.01	0.15	0.15	0.05	0.10 0.01	0.0
Concrete w/S,B	34 cu	1.m 179.90	6.12	0.04	2.87	2.91	1.26	1.95	3.2
Concrete (plain)	32 ci			0.03	0.59 1.87	0.62 1.87	0.82	0.65 1.41	1.4 2.8
P.C. Pipe ∲1,000mm Sub-total	· 16 1	n 292.70	4.68 <u>14.73</u>	0.41	<u>5.70</u>	<u>6.11</u>	3.60	5.02	8.6
c. Vertical Drop (10 places)						•	• _ • •		
Concrete w/S.B		u.m. 179.90		0.19	13.49	13.68	5.95	9.15 0.17	15.1
Excavation Backfill	50 ci 40 ci			0.01	0.00	0.01	0.00	0.04	0.0
Embankment	10 ci		0.01	0.00	0.00	0.00	0.00	0.01	0.0
Other Works	L	. S	2,90	0.02		1.37	0.59	0.94 10.31	1.5 16.8
Sub-total			31.91	0.22	14.84	15.06	6.54	10.51	10.0
• •									

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			e de la composición de la comp	Rate	Total	Address of the owner o	lgn Curr	ency	Loc	Unit: 'O al Curre	
tem No.	Description	Q'tys	Unit.	(LE)	Cost	equip- ment	Materi	Total	Local <u>Materi</u>	Labour	Tota
			1			a a la tal	14 L				
d.	Other Appurtenant Structu		cu.m	3.39	0.10			-	· 🛶 -	0.10	0.1
	Earth Works			179.90	2.70	0.02	1.26	1.28	0.56	0.86	1.4
	Concrete w/S.R				1.31	0.02	0.37	0.39	0.51	0.41	0.9
	Concrete (plain)	20	cu.m	65.36	0.40	0.00	0,16	0.16	0.11	0.13	0.2
. 1	Other Works		I S					1.83	1.18	1,50	2.6
	Sub-total				4.51	0.04	1.79	1.05	1.10	1,00	2.00
e.	Miscellaneous Works		r.s		8.84	2.04	2.20	4.24	<u>1.62</u>	2.98	4.6
	Total of New Koddaba	a Canal			140.00	22.00	45.21	67.21	25.69	<u>47.10</u>	72.7
3-3	Other Lateral Canal (L=	10.0Km)						÷ .		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19	
a	Canalization										
α,	Excavation	50,000	cu.m	1.05	52.50	23.00	12,50	35.50	1.50	15.50	17.0
	Embankment w/comp.	50,000		0.76	38.00	15,00	10,00	25.00	1.50	11.50	13.0
	Gravel Surfacing(15cm)	30,000		1.86	55.80	2.70	25.50	28.20	24.30	3.30	27.
			sq.m	10.77	53.85	5.85	4,70	10.55	6.45	36.85	43.
	Riprap (Dry)	3,000	sq.u	10.77	200.15	46.55	52,70	99.25	33.75	67.15	100.
	Sub-total		· .	· .	200.15	40.55	22.110	<u></u>			
ь.	Structures						0.00	0.10	0.01	0.11	0.
	Excavation		cu.m		0.31	0.13	0.06	0.19	0.01	0.11	
	Embankment w/comp.		cu.m		0.06	0.00	0.00	0.00	0.00	0.06	. 0.
	Backfill	200	cu.m	1.14	0.23	0.01	0.00	0.01	0.00	0.22	0.
	Concrete w/S.B	500	cu.m	179.90	89.95	0.58	42.16	42.74	18.59	28.62	47.
	Concrete (plain)	500	eu.m	65.36	32.68	0.48	9.27	9.75	12.79	10.14	22.
	Other Works	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	L.S		12.32	0.12	5.15	5.27	3.14	3.91	7.
	Sub-total	. •			135.55	1.32	56.64	57.96	34.53	43.06	11.
	 			•				n an an sao Tariha		·	
c.	Miscallaneous Works		r.s		14.30	2.13	4.56	6.69	2.91	4.70	<u>1.</u>
	Total of Other Late	ral Cana	1		350.00	50,00	113.90	163.90	71.19	114.91	186.
							. 1		ant. Cartan	1. T. T. T.	
	and the second	rale	. '	· · ·	700.00	108.00	228.00	336.00	134.00	230.00	364.
ota	l of Construction of Late	1010									
ota	1 of Construction of Late										
• .						•			· ·	· .	
4)	Construction of Canal Str				· · ·				· · ·		u ut D
4)	Construction of Canal Str Vent (for 13 places)	uctures		1 25	0.09		0.06	0-06	0.00	0.03	0.
4)	Construction of Canal Str Vent (for l3 places) Excevation	uctures 7{	) cu.m		0.09	-	0.06	0.06	0.00	0.03	
4)	Construction of Canal Str Vent (for l3 places) Excavation Backfill	uctures 70 40	) cu.m	1.14	0.05		0.00	0.00	0.00	0.05	0.
4)	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment	uctures 70 40 20	) cu.m ) cu.m	1.14 1.14	0.05 0.02		0.00	0.00	0.00	0.05	0.
4)	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B	uctures 70 40 20 20	) cu.m ) cu.m ) cu.m	1.14 1.14 179.90	0.05 0.02 3.60		0.00 0.00 1.71	0.00 0.00 1.71	0.00 0.00 0.74	0.05 0.02 1.15	0.
4)	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment	uctures 70 40 20 20	) cu.m ) cu.m ) cu.m ) cu.m	1.14 1.14 179.90	0.05 0.02 3.60 1.31		0.00 0.00 1.71 0.39	0.00 0.00 1.71 0.39	0.00 0.00 0.74 0.51	0.05 0.02 1.15 0.41	0 0 1
4)	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B	uctures 70 40 20 20	) cu.m ) cu.m ) cu.m	1.14 1.14 179.90	0.05 0.02 3.60 1.31 1.93	1111	0.00 0.00 1.71 0.39 0.84	0.00 0.00 1.71 0.39 0.84	0.00 0.00 0.74 0.51 0.75	0.05 0.02 1.15 0.41 0.34	0 0 1 0
4)	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain)	uctures 70 40 20 20	) cu.m ) cu.m ) cu.m ) cu.m	1.14 1.14 179.90	0.05 0.02 3.60 1.31 1.93 7.00		0.00 0.00 1.71 0.39	0.00 0.00 1.71 0.39	0.00 0.00 0.74 0.51	0.05 0.02 1.15 0.41	0. 0. 0. 1. 0. 1. 4.
4) a.	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous Sub-total	uctures 70 40 20 20 20	) cu.m ) cu.m ) cu.m ) cu.m L.S	1.14 1.14 179.90 65.36	0.05 0.02 3.60 1.31 1.93		0.00 0.00 1.71 0.39 0.84	0.00 0.00 1.71 0.39 0.84	0.00 0.00 0.74 0.51 0.75 2.00	0.05 0.02 1.15 0.41 0.34 2.00	0. 0. 1. 0. 1. 4.
4) a.	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous Sub-total Check and Other Structur	uctures 76 46 20 20 20 20 20	) cu.m ) cu.m ) cu.m ) cu.m L.S	1.14 1.14 179.90 65.36 aces)	0.05 0.02 3.60 1.31 1.93 7.00		0.00 0.00 1.71 0.39 0.84	0.00 0.00 1.71 0.39 0.84	0.00 0.00 0.74 0.51 0.75	0.05 0.02 1.15 0.41 0.34	0. 0. 1. 0. 1. <u>4</u> .
4) a.	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous Sub-total Check and Other Structur Excavation	uctures 70 20 20 20 20 20 20 20 20 20 20 20 20 20	) cu.m ) cu.m ) cu.m ) cu.m L.S 13 pl ) cu.m	1.14 1.14 179.90 65.36 aces) 1.25	0.05 0.02 3.60 1.31 1.93 7.00		0.00 0.00 1.71 0.39 0.84 <u>3.00</u>	0.00 0.00 1.71 0.39 0.84 3.00	0.00 0.00 0.74 0.51 0.75 2.00	0.05 0.02 1.15 0.41 0.34 2.00	0. 0. 1. 0. 1. 4.
4) a.	Construction of Ganal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous Sub-total Check and Other Structur Excavation Backfill	uctures 70 40 20 20 es (for 130 110	) cu.m ) cu.m ) cu.m ) cu.m L.S 13 pl ) cu.m	1.14 1.14 179.90 65.36 aces) 1.25 1.14	0.05 0.02 3.60 1.31 1.93 7.00 0.16 0.12		0.00 0.00 1.71 0.39 0.84 <u>3.00</u> 0.10 0.00	0.00 0.00 1.71 0.39 0.84 <u>3.00</u>	0.00 0.00 0.74 0.51 0.75 <u>2.00</u>	0.05 0.02 1.15 0.41 0.34 2.00	0. 0. 1. 0. 1. 4.
4) a.	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous Sub-total Check and Other Structur Excavation Backfill Embankment	uctures 70 40 20 20 20 20 20 130 130 110 30	) cu.m ) cu.m ) cu.m ) cu.m L.S 13 pl ) cu.m ) cu.m	1.14 1.14 179.90 65.36 aces) 1.25 1.14 1.14	0.05 0.02 3.60 1.31 1.93 7.00 9.16 0.12 0.03		0.00 0.00 1.71 0.39 0.84 <u>3.00</u> 0.10 0.00 0.00	0.00 0.00 1.71 0.39 0.84 <u>3.00</u> 0.10 0.00 0.00	0.00 0.00 0.74 0.51 0.75 2.00 0.00 0.00 0.00	0.05 0.02 1.15 0.41 0.34 2.00 0.06 0.12	0. 0. 1. 0. 1. 4. 0. 0. 0.
4) a.	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous Sub-total Check and Other Structur Excavation Backfill Embankment Concrete w/S.B	uctures 70 40 20 20 20 20 20 20 20 20 20 20 20 20 20	) cu.m ) cu.m ) cu.m ) cu.m L.S 13 pl ) cu.m ) cu.m ) cu.m	1.14 1.14 179.90 65.36 aces) 1.25 1.14 1.14 179.90	0.05 0.02 3.60 1.31 1.93 7.00 0.16 0.12 0.03 9.00		0.00 0.00 1,71 0.39 0.84 3.00 0.10 0.00 0.00 4.28	0.00 0.00 1.71 0.39 0.84 3.00 0.10 0.00 0.00 4.28	0.00 0.00 0.74 0.51 0.75 2.00 0.00 0.00 0.00 1.86	0.05 0.02 1.15 0.41 0.34 2.00 0.06 0.12 0.03 2.86	0. 0. 1. 0. 1. 4. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
4) a.	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous Sub-total Check and Other Structur Excavation Backfill Embankment Concrete w/S.B Concrete (plain)	uctures 70 40 20 20 20 20 20 20 20 20 20 20 20 20 20	) cu.m ) cu.m ) cu.m ) cu.m L.S 13 pl ) cu.m ) cu.m ) cu.m ) cu.m	1.14 1.14 179.90 65.36 aces) 1.25 1.14 1.14	0.05 0.02 3.60 1.31 1.93 7.00 0.16 0.12 0.03 9.00 4.58		0.00 0.00 1.71 0.39 0.84 3.00 0.10 0.00 0.00 4.28 1.37	0.00 0.00 1.71 0.39 0.84 <u>3.00</u> 0.10 0.00 0.00 4.28 1.37	0.00 0.00 0.74 0.51 0.75 2.00 0.00 0.00 0.00 0.00 0.00 1.86 1.79	0.05 0.02 1.15 0.41 0.34 2.00 0.06 0.12 0.03 2.86 1.42	0. 0. 1. 0. 1. 4. 0. 0. 0. 0. 4. 3.
4) a.	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous Sub-total Check and Other Structur Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous	uctures 70 40 20 20 20 20 20 20 20 20 20 20 20 20 20	) cu.m ) cu.m ) cu.m ) cu.m L.S 13 pl ) cu.m ) cu.m ) cu.m	1.14 1.14 179.90 65.36 aces) 1.25 1.14 1.14 179.90	0.05 0.02 3.60 1.31 1.93 7.00 0.16 0.12 0.03 9.00		0.00 0.00 1,71 0.39 0.84 3.00 0.10 0.00 0.00 4.28	0.00 0.00 1.71 0.39 0.84 3.00 0.10 0.00 0.00 4.28	0.00 0.00 0.74 0.51 0.75 2.00 0.00 0.00 0.00 1.86	0.05 0.02 1.15 0.41 0.34 2.00 0.06 0.12 0.03 2.86	0. 0. 1. 0. 1. 4. 0. 0. 0. 0. 0. 0.
4) a.	Construction of Canal Str Vent (for 13 places) Excavation Backfill Embankment Concrete w/S.B Concrete (plain) Miscellaneous Sub-total Check and Other Structur Excavation Backfill Embankment Concrete w/S.B Concrete (plain)	uctures 70 40 20 20 20 20 20 20 20 20 20 20 20 20 20	) cu.m ) cu.m ) cu.m ) cu.m L.S 13 pl ) cu.m ) cu.m ) cu.m ) cu.m	1.14 1.14 179.90 65.36 aces) 1.25 1.14 1.14 179.90	0.05 0.02 3.60 1.31 1.93 7.00 0.16 0.12 0.03 9.00 4.58 2.11		0.00 0.00 1.71 0.39 0.84 3.00 0.10 0.00 0.00 4.28 1.37 1.25	$\begin{array}{c} 0.00\\ 0.00\\ 1.71\\ 0.39\\ 0.84\\ 3.00\\ \hline 0.10\\ 0.00\\ 0.00\\ 4.28\\ 1.37\\ 1.25\\ 7.00\\ \hline \end{array}$	0.00 0.00 0.74 0.51 0.75 2.00 0.00 0.00 0.00 1.86 1.79 0.35	0.05 0.02 1.15 0.41 0.34 2.00 0.06 0.12 0.03 2.86 1.42 0.51	0 0 1 0 1 4 0 0 0 0 0 4 3 0

ITEM: IV. South Area of Lake Qarun

· · · ·										Under 10	00 15)
- N. 1997 - 1997		•								Unit: '0	
Item		<u>.</u>	:	Rate	Total		ign Curr	ency		al Curre	ncy
No.	Description	Q'tys	Unit	(LE)	Cost	Equip- ment	Materi	Total	Local	Labour	Total
					· · · · · ·	HICH C			<u>Mater1</u>		
(1) P	re-engineering										
	Cadastral Survey	360	Fed	200	72.0		7.2	7.2	-	64.8	64.8
	Vertical Control	56	Km	50	2.8	-	0.3	0.3	-	2.5	2.5
	Pre-Construction Survey		Mos	5,000	20.0		2.0	2.0		18.0	18.0
	Construction Survey		Nos	2,500	112.5	-	11.2	11.2	-	101.3	101.3
	Hydrology		Nos	1,500	67.5	-	6.7	6.7	-	60.8	60.8
•	Laboratory Control	-	Mos	1,500	67.5	_	6.7	6.7	~	60.8	60.8
	Negotiation for ROW	45	Mos	1,000	45.0	~	4.5	4.5	-	40.5	40.5
	Miscellaneous works		L.S		12.7	-	1.4	1.4		11.3	11.3
	Total				400.0	· _	40.0	40.0	-	360.0	360.0
(2) C	onstruction of Dikes				÷.						
	Qarun Dike (L=3,500m)										
. 7 - 1 .	Side Borrow Excavation	170 000	CH 11	1.69	287.30	127.50	64.60	103 10	= 10	00.10	. or or
	Embankment w/comp.	127,000		0.76	96.52	38.10		192.10 63.50	5.10 3.81	90.10	95.20
	Gravel Surfacing(18cm)	28,000		2,21	61.88	2.80		31.36	27.16	29.21 3.36	33.02 30.52
	Riprap (Random)			22,55	157.85	26.74	21.49	48.23	11.41	98.21	109.62
	Riprap (Dry)	13,000		10.77	140.01	15.21		27.43	16.77	95.81	112.58
1 - C	Riprap (Wet)	13,000		20.04	260.52	17.55		61.88	65.91	132.73	198.64
	Riprap (Masonry)			21.86	131,16	8.10		28,56	38.76	63.84	102.60
	Miscellaneous works		LS		54.76	9.00		21.85	8.15	24.76	32.91
	Sub-tota1	1.1			1,190.00		229.91	474.91	177.07	538.02	715,09
2-2	Batts Drain (L=2,500m)										113103
	Excavation	25,000	cu.m	1.69	42.25	18.75	9.50	28.25	0.75	13.25	14.00
	Side Borrow Excavation			1.69	67.60	30.00		45.20	1.20	21.20	22.40
	Embankment w/comp.	65,000		0.76	49.40	19.50		32.50	1.95	14.95	16.90
	Riprap (Dry)		sq.m	10.77	5.38	0.58		1.05	0.64	3.69	4.33
	Riprap (Wet)		sq.m	20.04	10.02	0.67		2.38	2.53	5.11	7.64
	Concrete (plain)		cu.m	65.36	6.54	0.10		1,95	2,56	2.03	4.59
	Miscellaneous works		L.S		8.81	2.40		5.41	0.47	2.93	3.40
	Sub-total				190.00	72.00		116.74	10.10	63.16	73.26
	Total	· · ·			1,380.00	317.00	274.65	591.65	187.17	601.18	788.35
(3) C	onstruction and Rehabili	tation o	f Drai	nage Ca	inals	÷ .					
3-1	Harawa Area Lateral Drain (L=3,000m)	· ·									
а.	Excavation/Dredging	, 17,000		1.69	28.73	12,75	6.46	19.21	0.51	9.01	9.52
	Embankment w/comp.	17,000		0.76	12.92	5.10		8.50	0.51	3.91	4.42
	Concrete (plain)	-	cu.m	65,36	3.27	0.05		0.98	1.28	1.01	2.29
	Riprap (Dry)		sq.m	10.77	5.38	0.58		1.05	0.65	3.68	4.3
-	R.C. Pipe 6400mm	60		67.00	4.02	0.10	1.61	1.61	1.20	1.21	2.4
	Miscellaneous Works	. 00	L.S		3.68	1.22	1 C C C C C C C C C C C C C C C C C C C	2.12	0.28	1.28	1.56
1.1	Sub-total		510		58.00	19.70		33.47	4.43	20.10	24.53
ь.	Sub-lateral Drain (L=4,0				50100		15177	<u></u>			24.5
	Excavation	8,000	CH. 10	1.25	10.00	4.08	2.08	6.16	0.24	3.60	3.84
	Embankment w/comp.		cu.m	0.76	6.08	2.40		4.00	0.24	1.84	2.08
	Concrete (plain)		cu.m	65.36	6.54	0,10		1.95	2.56	2.03	4.59
	Riprap (Dry)		sq.m	10.77	2.15	0.23		0.42	0,26	1.47	1.7
	R.C. Pipe \$300mm	100		53.90	5.39		2.15	2.15	1.62	1.62	3.24
	Miscellaneous Works		L.S	331.70	1.84	0.49		0.90	0.30	0.64	0.9
	Sub-total		~~~		32.00	7,30		15.58	5.22	11.20	16.42
	Total				90.00	27.00		49.05			
<b>.</b> .					30.00	27.00		47.03	9.65	31.30	40.95
3-2 a.	Bats Said Area Main Drain (L=2,300m)				4 						
ч.	Excavation	165,000	CH 77	1,69	278.85	123.75	62.70	186.45	4.95	87.45	92.40
	Embankment w/comp.	13,000		0.76	278.83	3.90		6.50	0.39	2,99	3.38
	Disposal	142,000		0.76	58.22	22.72		36.92	2.84		
	Concrete (plain)		ເພ.ຫ ເພ.ຫ		6.54	0.10				18.46 2.03	21.30
·								1.95	2.56		4.59
e A giran d	Riprap (Dry) Mignallanaous Harks	1,000	sq.m	10.77	10.77	1.17		2.11	1.29	2.37	8.66
196	Miscellaneous Works		r.s		20.74	8.36		13.32	0.68	6.74	7.42
÷ .	Sub-total				385.00	160.00	87.25	247.25	12.71	125.04	137.75

Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S J. Abu T a. Main Exca Emba Disp Conc Ripr Misc S b. Later Exca Emba Conc Ripr Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S b. Later Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. S S c. Sub-1 Exca Emba Conc Ripr R.C. S S S c. Sub-1 Exca Emba Conc Ripr R.C. S S S S S S S S S S S S S S S S S S	ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	21,000 cu.m 21,000 cu.m 50 cu.m 500 sq.m 60 m L.S 000m) 30,000 cu.m 100 cu.m 200 sq.m 240 m L.S 200,000 cu.m 15,000 cu.m 15,000 cu.m 100 cu.m 1,00 sq.m L.S	Rate (I.E) 1.69 0.76 65.36 10.77 67.00 1.25 0.76 65.36 10.77 53.90 1.69 0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77 67.00	Total Cost 35.49 15.96 3.27 5.38 4.02 3.88 68.00 22.80 6.54 2.15 12.94 5.07 87.00 540.00 338.00 11.40 75.85 6.54 10.77 24.44 467.00 10.14 4.56 3.27 1.61 3.35 1.07	Fore Equip- mont 15.75 6.30 0.05 0.58 1.32 24.00 15.30 9.00 0.10 0.23 1.37 26.00 210.00 150.00 4.50 29.60 0.10 1.17 9.63 195.00 4.50 1.80 0.05 0.17 0.48	Ign Curr           Materi           7.98           4.20           0.93           0.47           1.61           0.97           16.16           7.80           6.00           1.85           0.19           5.18           1.45           22.47           125.88           76.00           3.00           18.50           1.85           0.94           6.14           106.43           2.28           1.20           0.93           0.14           1.34	Total 23.73 10.50 0.98 1.05 1.61 2.29 40.16 23.10 15.00 1.95 0.42 5.18 2.82 48.47 335.88 226.00 7.50 48.10 1.95 2.11 15.77 301.43 6.78 3.00 0.98 0.31 1.34	Local <u>Materi</u> 0.63 0.63 1.28 0.65 1.20 0.27 <u>4.66</u> 0.90 0.90 2.56 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.26 0.25 0.26 0.25 0.26 0.25 0.26 0.25 0.26 0.25 0.26 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.18 0.19 1.00	a1         Curree           Labour         11.13           13.60         1.01           3.68         1.21           1.32         23.18           13.50         6.90           2.03         1.47           3.88         1.72           106.00         3.45           24.05         2.03           7.37         7.89           150.79         3.18           1.38         1.01           1.11         1.01	Total 11.76 5.46 2.29 4.33 2.41 1.59 27.84 14.40 7.80 4.59 1.73 7.76 2.25 38.53 204.12 112.00 3.90 27.75 4.59 8.66 8.67 165.57 3.36 1.56 2.29 1.30 2.01
Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S J. Abu T a. Main Exca Emba Disp Conc Ripr Misc S b. Later Exca Emba Conc Ripr Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S b. Later Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. S S c. Sub-1 Exca Emba Conc Ripr R.C. S S S c. Sub-1 Exca Emba Conc Ripr R.C. S S S S S S S S S S S S S S S S S S	avation/Dredging ankment w/comp. crete (plain) rap (Dry) , Pipe #400mm cellaneous Works Sub-total lateral Drain (L=12, avation ankment w/comp. rrete (plain) rap (Dry) . Pipe #300mm cellaneous Works Sub-total Fotal Fotal Fotal Crafaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total Lateral Drain (L= 6,	21,000 cu.m 21,000 cu.m 50 cu.m 50 sq.m 60 m 4.,S 000m) 30,000 cu.m 100 cu.m 200 sq.m 240 m 1S 200,000 cu.m 100 cu.m 1,000 sq.m 1S 6,000 cu.m 50 cu.m 50 cu.m 50 cu.m 50 sq.m 50 cu.m 50 cu.m	0.76 65.36 10.77 67.00 1.25 0.76 65.36 10.77 53.90 1.69 0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	15.96 3.27 5.38 4.02 3.88 68.00 22.80 6.54 2.15 12.94 5.07 87.00 540.00 11.40 75.85 6.54 10.77 24.44 467.00 10.14 4.56 3.27 1.61 3.35 1.07	$15.75 \\ 6.30 \\ 0.05 \\ 0.58 \\ 1.32 \\ 24.00 \\ 15.30 \\ 9.00 \\ 0.10 \\ 0.23 \\ -1.37 \\ 26.00 \\ 210.00 \\ 210.00 \\ 210.00 \\ 1.37 \\ 26.00 \\ 29.60 \\ 0.10 \\ 1.17 \\ 9.63 \\ 195.00 \\ 4.50 \\ 1.80 \\ 0.05 \\ 0.17 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ -1 \\ $	4.20 0.93 0.47 1.61 0.97 16.16 7.80 6.00 1.85 0.19 5.18 1.45 22.47 125.88 76.00 3.00 18.50 1.85 0.94 6.14 106.43 2.28 1.20 0.93 0.14	10.50 0.98 1.05 1.61 2.29 40.16 23.10 15.00 1.95 0.42 5.18 2.82 48.47 335.88 226.00 7.50 48.10 1.95 2.11 15.77 301.43 6.78 3.00 0.98 0.31 1.34	$\begin{array}{c} 0.63\\ 0.63\\ 1.28\\ 0.65\\ 1.20\\ 0.27\\ 4.66\\ \hline \end{array}$ $\begin{array}{c} 0.90\\ 0.90\\ 2.56\\ 0.26\\ 3.88\\ 0.53\\ 9.03\\ \hline \end{array}$ $\begin{array}{c} 26.40\\ \hline \end{array}$ $\begin{array}{c} 6.00\\ 0.45\\ 3.70\\ 2.56\\ 1.29\\ 0.78\\ \hline 1.29\\ 0.78\\ \hline 14.78\\ \hline \end{array}$ $\begin{array}{c} 0.18\\ 0.18\\ 1.28\\ 0.19\\ 1.00\\ \hline \end{array}$	4.83 1.01 3.68 1.21 1.32 23.18 13.50 6.90 2.03 1.47 3.88 1.47 29.50 177.72 106.00 3.45 24.05 2.03 7.37 7.89 150.79 3.18 1.38 1.01 1.11 1.11 1.01	$\begin{array}{c} 5.46\\ 2.29\\ 4.33\\ 2.41\\ 1.59\\ 27.84\\ \hline \end{array}$ $\begin{array}{c} 14.40\\ 7.80\\ 4.59\\ 1.73\\ 7.76\\ 2.25\\ 38.53\\ 204.12\\ \hline \end{array}$ $\begin{array}{c} 204.12\\ 112.00\\ 3.90\\ 27.75\\ 4.59\\ 8.66\\ 8.67\\ 165.57\\ \hline \end{array}$ $\begin{array}{c} 3.36\\ 1.56\\ 2.29\\ 1.30\\ \hline \end{array}$
Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S J. Abu T a. Main Exca Emba Disp Conc Ripr Misc S b. Later Exca Emba Conc Ripr Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S b. Later Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. S S c. Sub-1 Exca Emba Conc Ripr R.C. S S S c. Sub-1 Exca Emba Conc Ripr R.C. S S S S S S S S S S S S S S S S S S	avation/Dredging ankment w/comp. crete (plain) rap (Dry) , Pipe #400mm cellaneous Works Sub-total lateral Drain (L=12, avation ankment w/comp. rrete (plain) rap (Dry) . Pipe #300mm cellaneous Works Sub-total Fotal Fotal Fotal Crafaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total Lateral Drain (L= 6,	21,000 cu.m 21,000 cu.m 50 cu.m 50 sq.m 60 m 4.,S 000m) 30,000 cu.m 100 cu.m 200 sq.m 240 m 1S 200,000 cu.m 100 cu.m 1,000 sq.m 1S 6,000 cu.m 50 cu.m 50 cu.m 50 cu.m 50 sq.m 50 cu.m 50 cu.m	0.76 65.36 10.77 67.00 1.25 0.76 65.36 10.77 53.90 1.69 0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	15.96 3.27 5.38 4.02 3.88 68.00 22.80 6.54 2.15 12.94 5.07 87.00 540.00 11.40 75.85 6.54 10.77 24.44 467.00 10.14 4.56 3.27 1.61 3.35 1.07	$\begin{array}{c} 6.30\\ 0.05\\ 0.58\\ 0.58\\ 0.58\\ 0.58\\ 0.58\\ 0.58\\ 0.00\\ 0.10\\ 0.23\\ 0.10\\ 0.23\\ 0.10\\ 0.23\\ 0.10\\ 0.23\\ 0.10\\ 0.23\\ 0.10\\ 0.10\\ 1.17\\ 9.63\\ 195.00\\ 0.10\\ 1.17\\ 9.63\\ 195.00\\ 0.10\\ 1.17\\ 9.63\\ 195.00\\ 0.10\\ 1.17\\ 0.18\\ 0.05\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\ 0.17\\$	4.20 0.93 0.47 1.61 0.97 16.16 7.80 6.00 1.85 0.19 5.18 1.45 22.47 125.88 76.00 3.00 18.50 1.85 0.94 6.14 106.43 2.28 1.20 0.93 0.14	10.50 0.98 1.05 1.61 2.29 40.16 23.10 15.00 1.95 0.42 5.18 2.82 48.47 335.88 226.00 7.50 48.10 1.95 2.11 15.77 301.43 6.78 3.00 0.98 0.31 1.34	0.63 1.28 0.65 1.20 0.27 4.66 0.90 2.56 0.26 3.88 0.53 9.03 26.40 6.00 0.45 3.70 2.56 1.29 0.78 14.78 0.18 0.18 0.18 0.18 0.19 1.00	4.83 1.01 3.68 1.21 1.32 23.18 13.50 6.90 2.03 1.47 3.88 1.47 29.50 177.72 106.00 3.45 24.05 2.03 7.37 7.89 150.79 3.18 1.38 1.01 1.11 1.11 1.01	$\begin{array}{c} 5.46\\ 2.29\\ 4.33\\ 2.41\\ 1.59\\ 27.84\\ \hline \end{array}$ $\begin{array}{c} 14.40\\ 7.80\\ 4.59\\ 1.73\\ 7.76\\ 2.25\\ 38.53\\ 204.12\\ \hline \end{array}$ $\begin{array}{c} 204.12\\ 112.00\\ 3.90\\ 27.75\\ 4.59\\ 8.66\\ 8.67\\ 165.57\\ \hline \end{array}$ $\begin{array}{c} 3.36\\ 1.56\\ 2.29\\ 1.30\\ \hline \end{array}$
Conc Rípr R.C., Misc S c. Sub-1 Exca Emba Conc Rípr R.C. Misc T -3 Abu T a. Maín Exca Emba Disp Conc Rípr Misc S b. Later Exca Emba Conc Rípr Nísc S c. Sub-1 Exca Emba Conc Rípr Nísc S c. Sub-1 Exca Emba Conc Rípr Nísc S c. Sub-1 Exca Emba Conc Rípr Nísc S s b. Later T -4 Khor a. Maín Exca Emba Conc Rípr R.C. Nísc S S c. Sub-1 Exca Emba Conc Rípr R.C. Mísc S S c. Sub-1 Exca Emba Conc Rípr R.C. Nísc S S c. Sub-1 Exca Emba Conc Rípr R.C. Mísc S S c. Sub-1 Exca Emba Conc Rípr R.C. Mísc S S c. Sub-1 Exca Emba Conc Rípr R.C. Mísc S S c. Sub-1 Exca Emba Conc Rípr R.C. S S c. Sub-1 Exca Emba Conc Rípr R.C. S S c. Sub-1 Exca Emba Conc Rípr R.C. Mísc S S c. S S C S C S S C S S C S S C S S S C S S C S S S S S S S S S S S S S S S S S S S S	crete (plain) rap (Dry) , Pipe \$400mm cellaneous Works Sub-total lateral Drain (L=12, avation ankment w/comp. crete (plain) rap (Dry) . Pipe \$300mm cellaneous Works Sub-total Fotal Fotal Fotal Fotal Fotal Farfaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total rain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe \$400mm cellaneous Works Sub-total lateral Drain (L= 6,	50 cu.m 500 sq.m 60 m L.S 30,000 cu.m 30,000 cu.m 100 cu.m 200 sq.m 240 m L.S 200,000 cu.m 15,000 cu.m 15,000 cu.m 1,000 sq.m L.S 6,000 cu.m 50 cu.m	65.36 10.77 67.00 1.25 0.76 65.36 10.77 53.90 1.69 0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	3.27 5.38 4.02 3.88 68.00 22.80 6.54 2.15 12.94 5.07 87.00 540.00 11.40 75.85 6.54 10.77 24.44 467.00 10.14 4.56 3.27 1.61 3.35 1.07	$\begin{array}{c} 0.05\\ 0.58\\ -1.32\\ 24.00\\ -1.37\\ 26.00\\ -1.37\\ 26.00\\ -1.37\\ 26.00\\ -1.37\\ 26.00\\ -1.37\\ 26.00\\ -1.37\\ 29.60\\ 0.10\\ -1.17\\ 9.63\\ 195.00\\ -1.17\\ 9.63\\ 195.00\\ -1.80\\ 0.05\\ 0.17\\ -1.7\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1.5\\ -1$	0.93 0.47 1.61 0.97 16.16 7.80 6.00 1.85 0.19 5.18 1.45 22.47 125.88 76.00 3.00 18.50 1.85 0.94 6.14 106.43 2.28 1.20 0.93 0.14	0.98 1.05 1.61 2.29 40.16 15.00 1.95 0.42 5.18 2.82 48.47 335.88 226.00 7.50 48.10 1.95 2.11 15.77 301.43 6.78 3.00 0.98 0.31 1.34	1.28 0.65 1.20 0.27 4.66 0.90 0.90 2.56 0.26 3.88 0.53 9.03 26.40 6.00 0.45 3.70 2.56 1.29 0.78 14.78 14.78 0.18 1.28 0.19 1.00	1.01 3.68 1.21 1.32 23.18 13.50 6.90 2.03 1.47 3.88 1.72 29.50 177.72 106.00 3.45 24.05 2.03 7.37 7.89 150.79 3.18 1.38 1.01 1.11 1.01	$\begin{array}{c} 2.29\\ 4.33\\ 2.41\\ 1.59\\ 27.84\\ 14.40\\ 7.80\\ 4.59\\ 1.73\\ 7.76\\ 2.25\\ 38.53\\ 204.12\\ 112.00\\ 3.90\\ 27.75\\ 4.59\\ 8.66\\ 8.67\\ 165.57\\ 1.56\\ 2.29\\ 1.30\\ \end{array}$
Ripr R.C., Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc T -3 Abu T a. Main Exca Emba Disp Conc Ripr R.C. Misc S b. Later R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S C S S C S S S C S S S S S S S S S	rap (Dry) , Pipe \$400mm cellaneous Works Sub-total lateral Drain (L=12, avation ankment w/comp. crete (plain) rap (Dry) . Pipe \$300mm cellaneous Works Sub-total Fotal Farfaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe \$400mm cellaneous Works Sub-total lateral Drain (L= 6,	500 sq.m 60 m L.S 0000m) 30,000 cu.m 30,000 cu.m 100 cu.m 200 sq.m 240 m L.S 200,000 cu.m 15,000 cu.m 100 cu.m 1,000 sq.m L.S 6,000 cu.m 50 cu.m 150 sq.m 50 m	10.77 67.00 1.25 0.76 65.36 10.77 53.90 1.69 0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	5.38 4.02 3.88 68.00 22.80 6.54 2.15 12.94 5.07 87.00 540.00 11.40 75.85 6.54 10.77 24.44 467.00 10,14 4.56 3.27 1.61 3.35 1.07	$\begin{array}{c} 0.58\\ -1.32\\ -24.00\\ -24.00\\ -1.32\\ -24.00\\ -24.00\\ -24.00\\ -24.00\\ -24.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25.00\\ -25$	$\begin{array}{c} 0.47\\ 1.61\\ 0.97\\ 16.16\\ \hline\\ 7.80\\ 6.00\\ 1.85\\ 0.19\\ 5.18\\ 1.45\\ \underline{22.47}\\ 125.88\\ \hline\\ 76.00\\ 3.00\\ 18.50\\ 1.85\\ 0.94\\ 6.14\\ \underline{106.43}\\ 2.28\\ 1.20\\ 0.93\\ 0.14\\ \hline\end{array}$	1.05 $1.61$ $2.29$ $40.16$ $15.00$ $1.95$ $0.42$ $5.18$ $2.82$ $48.47$ $335.88$ $226.00$ $7.50$ $48.10$ $1.95$ $2.11$ $15.77$ $301.43$ $6.78$ $3.00$ $0.98$ $0.31$ $1.34$	$\begin{array}{c} 0.65\\ 1.20\\ 0.27\\ 4.66\\ \hline \end{array}$ $\begin{array}{c} 0.90\\ 0.90\\ 2.56\\ 0.26\\ 3.88\\ 0.53\\ 9.03\\ \hline \end{array}$ $\begin{array}{c} 26.40\\ \hline \end{array}$ $\begin{array}{c} 6.00\\ 0.45\\ 3.70\\ 2.56\\ 1.29\\ 0.78\\ \hline 1.29\\ 0.78\\ \hline 14.78\\ \hline \end{array}$ $\begin{array}{c} 0.18\\ 0.18\\ 1.28\\ 0.19\\ 1.00\\ \hline \end{array}$	3.68 1.21 1.32 23.18 13.50 6.90 2.03 1.47 3.88 1.72 29.50 177.72 106.00 3.45 24.05 2.03 7.37 7.89 150.79 150.79 3.18 1.38 1.01 1.11 1.01	4.33 2.41 1.59 27.84 14.40 7.80 4.59 1.73 7.76 2.25 38.53 204.12 112.00 3.90 27.75 4.59 8.66 8.67 165.57 3.36 1.56 2.29 1.30
Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S d. Main Exca Emba Conc Ripr Misc S b. Later Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S conc Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S Conc Ripr R.C. Misc S S S S S S S S S S S S S S S S S S S	cellaneous Works Sub-total lateral Drain (L=12, avation ankment w/comp. crete (plain) rap (Dry) . Pipe \$300mm cellaneous Works Sub-total Fortal Farfaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe \$400mm cellaneous Works Sub-total lateral Drain (L= 6,	L.S 000m) 30,000 cu.m 100 cu.m 200 sq.m 240 m L.S 200,000 cu.m 15,000 cu.m 100 cu.m 1,000 sq.m L.S 6,000 cu.m 50 cu.m 50 cu.m	1.25 0.76 65.36 10.77 53.90 1.69 0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	3.88 <u>68.00</u> 22.80 <u>6.54</u> 2.15 12.94 5.07 <u>87.00</u> <u>540.00</u> <u>338.00</u> 11.40 75.85 <u>6.54</u> 10.77 <u>24.44</u> <u>467.00</u> <u>10,14</u> <u>4.56</u> <u>3.27</u> <u>1.61</u> <u>3.35</u> <u>1.07</u>	$\begin{array}{r} 1.32\\ \underline{24.00}\\ 9.00\\ 0.10\\ 0.23\\ \hline \\ -1.37\\ \underline{26.00}\\ 210.00\\ \underline{210.00}\\ 1.37\\ \underline{26.00}\\ 0.10\\ 1.17\\ 9.63\\ \underline{195.00}\\ 4.50\\ 1.80\\ 0.05\\ 0.17\\ \hline \\ -\end{array}$	0.97 <u>16.16</u> 7.80 6.00 1.85 0.19 5.18 1.45 <u>22.47</u> <u>125.88</u> 76.00 3.00 18.50 0.94 6.14 <u>106.43</u> 2.28 1.20 0.93 0.14	$\begin{array}{c} 2.29\\ \underline{40.16}\\ \\ 23.10\\ 15.00\\ \underline{1.95}\\ 0.42\\ 5.18\\ 2.82\\ \underline{48.47}\\ \underline{335.88}\\ \\ 226.00\\ 7.50\\ \underline{48.10}\\ 1.95\\ 2.11\\ 15.77\\ \underline{301.43}\\ \\ 6.78\\ 3.00\\ 0.98\\ 0.31\\ \underline{1.34}\\ \end{array}$	0.27 <u>4.66</u> 0.90 0.90 2.56 0.26 3.88 0.53 <u>9.03</u> <u>26.40</u> <u>6.00</u> 0.45 3.70 2.56 1.29 0.78 <u>14.78</u> <u>0.18</u> 1.28 0.19 1.00	1.32 23.18 13.50 6.90 2.03 1.47 3.88 1.72 29.50 177.72 106.00 3.45 24.05 2.03 7.37 7.89 150.79 150.79 3.18 1.38 1.01 1.11 1.11	$   \begin{array}{r}     1.59 \\     27.84 \\     14.40 \\     7.80 \\     4.59 \\     1.73 \\     7.76 \\     2.25 \\     38.53 \\     204.12 \\     112.00 \\     3.90 \\     27.75 \\     4.59 \\     8.66 \\     8.67 \\     165.57 \\     3.36 \\     1.56 \\     2.29 \\     1.30 \\   \end{array} $
<ul> <li>S</li> <li>c. Sub-1</li> <li>Exca Emba Gonc Ripr R.C. Misc</li> <li>S</li> <li>J Abu T</li> <li>a. Main Exca Emba Disp Conc Ripr Misc</li> <li>b. Later Exca Emba Conc Ripr R.C. Misc</li> <li>c. Sub-1</li> <li>Exca Emba Conc Ripr R.C. Misc</li> <li>c. Sub-1</li> <li>Exca Emba Conc</li> <li>t. Later</li> <li>d. Khor</li> <li>a. Main</li> <li>Exca</li> <li>Emba Conc</li> <li>S</li> <li>b. Later</li> <li>Misc</li> <li>S</li> <li>t. Khor</li> <li>a. Main</li> <li>Exca</li> <li>Emba Conc</li> <li>Ripr</li> <li>R.C. Misc</li> <li>S</li> <li>b. Later</li> </ul>	Sub-total lateral Drain (L=12, avation ankment w/comp. crete (plain) rap (Dry) . Fipe \$300mm cellaneous Works Sub-total Fotal Fotal Fotal Fotal Farfaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) crete (plain) rap (Dry) . Fipe \$400mm cellaneous Works Sub-total lateral Drain (L= 6,	000m) 30,000 cu.m 100 cu.m 200 sq.m 240 m 1S 200,000 cu.m 15,000 cu.m 185,000 cu.m 100 cu.m 1,000 sq.m 1S 6,000 cu.m 50 cu.m 150 sq.m 50 m	0.76 65.36 10.77 53.90 1.69 0.76 0.41 65.36 10.77	68.00           37.50           22.80           6.54           2.15           12.94           5.07           87.00           540.00           338.00           11.40           75.85           6.54           10.77           24.44           467.00           10.14           4.56           3.27           1.61           3.35           1.07	$\begin{array}{r} \underline{24.00} \\ 15.30 \\ 9.00 \\ 0.10 \\ 0.23 \\ - \\ 1.37 \\ \underline{26.00} \\ \underline{210.00} \\ \underline{210.00} \\ 150.00 \\ 4.50 \\ \underline{29.60} \\ 0.10 \\ 1.17 \\ 9.63 \\ \underline{195.00} \\ 4.50 \\ 1.80 \\ 0.05 \\ 0.17 \\ - \end{array}$	16.16 7.80 6.00 1.85 0.19 5.18 1.45 22.47 125.88 76.00 3.00 18.50 1.85 0.94 6.14 106.43 2.28 1.20 0.93 0.14	40.16 23.10 15.00 1.95 0.42 5.18 2.82 48.47 335.88 226.00 7.50 48.10 1.95 2.11 15.77 301.43 6.78 3.00 0.98 0.31 1.34	4,66 0.90 0.90 2.56 0.26 3.88 0.53 9.03 26.40 6.00 0.45 3.70 2.56 1.29 0.78 14.78 14.78 0.18 1.28 0.19 1.00	23.18 13.50 6.90 2.03 1.47 3.88 1.72 29.50 177.72 106.00 3.45 24.05 2.03 7.37 7.89 150.79 3.18 1.38 1.01 1.11 1.01	$\begin{array}{r} \underline{27.84} \\ 14.40 \\ 7.80 \\ 4.59 \\ 1.73 \\ 7.76 \\ 2.25 \\ 38.53 \\ \underline{204.12} \\ 112.00 \\ 3.90 \\ 27.75 \\ 4.59 \\ 8.66 \\ 8.67 \\ \underline{165.57} \\ 3.36 \\ 1.56 \\ 2.29 \\ 1.30 \end{array}$
Exca Emba Conc Ripr R.C. Misc S -3 Abu T a. Main Exca Emba Disp Conc Ripr Misc S b. Later Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. Misc S S conc Ripr R.C. S S conc Ripr R.C. S S conc Ripr R.C. S S conc Ripr R.C. S S conc Ripr R.C. S S S conc Ripr R.C. S S S conc Ripr R.C. S S S C S S S S S S S S S S S S S S	avation ankment w/comp. rrete (plain) rap (Dry) . Pipe \$300mm cellaneous Works Sub-total Fotal Fotal Farfaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe \$400mm cellaneous Works Sub-total lateral Drain (L= 6,	30,000 cu.m 30,000 cu.m 100 cu.m 200 sq.m 240 m 1S 200,000 cu.m 15,000 cu.m 100 cu.m 1,000 sq.m 1S 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m	0.76 65.36 10.77 53.90 1.69 0.76 0.41 65.36 10.77	22.80 6.54 2.15 12.94 5.07 87.00 540.00 11.40 75.85 6.54 10.77 24.44 467.00 10,14 4.56 3.27 1.61 3.35 1.07	$\begin{array}{r} 9.00\\ 0.10\\ 0.23\\ -\\ 1.37\\ \underline{26.00}\\ 210.00\\ \underline{210.00}\\ 150.00\\ 4.50\\ 29.60\\ 0.10\\ 1.17\\ 9.63\\ \underline{195.00}\\ 4.50\\ 1.80\\ 0.05\\ 0.17\\ -\\ -\\ -\end{array}$	6.00 1.85 0.19 5.18 1.45 <u>22.47</u> <u>125.88</u> 76.00 3.00 18.50 1.85 0.94 6.14 <u>106.43</u> 2.28 1.20 0.93 0.14	15.00 $1.95$ $0.42$ $5.18$ $2.82$ $48.47$ $335.88$ $226.00$ $7.50$ $48.10$ $1.95$ $2.11$ $15.77$ $301.43$ $6.78$ $3.00$ $0.98$ $0.31$ $1.34$	0.90 2.56 0.26 3.88 0.53 <u>9.03</u> <u>26.40</u> 6.00 0.45 3.70 2.56 1.29 0.78 <u>14.78</u> 0.18 0.18 0.18 0.18 0.19 1.00	6.90 2.03 1.47 3.88 1.72 <u>29.50</u> <u>177.72</u> 106.00 3.45 24.05 2.03 7.37 7.89 <u>150.79</u> <u>150.79</u> 3.18 1.38 1.01 1.11 1.11	7.80 4.59 1.73 7.76 2.25 <u>38.53</u> 204.12 112.00 3.90 27.75 4.59 8.66 8.67 <u>165.57</u> 3.36 1.56 2.29 1.30
Emba Gonc Ripr R.C. Misc S -3 Abu T a. Main Exca Emba Disp Conc Ripr Misc b. Later Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S S b. Later Conc Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S S b. Later Ripr R.C. Misc S S S Conc Ripr R.C. Misc S S S S S S S S S S S S S S S S S S S	ankment w/comp. crete (plain) rap (Dry) . Pipe \$300mm cellaneous Works Sub-total Fortal Farfaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe \$400mm cellaneous Works Sub-total lateral Drain (L= 6,	30,000 cu.m 100 cu.m 200 sq.m 240 m IS 240 m IS 240 m IS 200,000 cu.m 15,000 cu.m 100 cu.m 1,000 sq.m IS 6,000 cu.m 50 cu.m 50 cu.m 50 cu.m	0.76 65.36 10.77 53.90 1.69 0.76 0.41 65.36 10.77	22.80 6.54 2.15 12.94 5.07 87.00 540.00 11.40 75.85 6.54 10.77 24.44 467.00 10,14 4.56 3.27 1.61 3.35 1.07	$\begin{array}{r} 9.00\\ 0.10\\ 0.23\\ -\\ 1.37\\ \underline{26.00}\\ 210.00\\ \underline{210.00}\\ 150.00\\ 4.50\\ 29.60\\ 0.10\\ 1.17\\ 9.63\\ \underline{195.00}\\ 4.50\\ 1.80\\ 0.05\\ 0.17\\ -\\ -\\ -\end{array}$	6.00 1.85 0.19 5.18 1.45 <u>22.47</u> <u>125.88</u> 76.00 3.00 18.50 1.85 0.94 6.14 <u>106.43</u> 2.28 1.20 0.93 0.14	15.00 $1.95$ $0.42$ $5.18$ $2.82$ $48.47$ $335.88$ $226.00$ $7.50$ $48.10$ $1.95$ $2.11$ $15.77$ $301.43$ $6.78$ $3.00$ $0.98$ $0.31$ $1.34$	0.90 2.56 0.26 3.88 0.53 <u>9.03</u> <u>26.40</u> 6.00 0.45 3.70 2.56 1.29 0.78 <u>14.78</u> 0.18 0.18 0.18 0.18 0.19 1.00	6.90 2.03 1.47 3.88 1.72 <u>29.50</u> <u>177.72</u> 106.00 3.45 24.05 2.03 7.37 7.89 <u>150.79</u> <u>150.79</u> 3.18 1.38 1.01 1.11 1.11	7.80 4.59 1.73 7.76 2.25 <u>38.53</u> 204.12 112.00 3.90 27.75 4.59 8.66 8.67 <u>165.57</u> 3.36 1.56 2.29 1.30
Ripr R.C. Misc S T -3 Abu T a. Main Exca Emba Disp Conc Ripr R.C. S b. Later R.C. Nisc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S Conc Ripr R.C. Misc S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S Conc Ripr R.C. S S C S Conc Ripr R.C. S S C S S C Conc Ripr R.C. S S C S C Conc Ripr R.C. S S C Conc Ripr R.C. S S C Conc Ripr R.C. S S C Conc Ripr R.C. S S C Conc Ripr R.C. S S C Conc Ripr R.C. S S C C Conc Ripr R.C. S S C S C S C S C S C S C S S C S S C S S C S S C S S C S S S C S S S S S S S S S S S S S S S S S S S S	rap (Dry) . Pipe \$300mm cellaneous Works Sub-total Fotal Fotal Fotal Fotal Fotal Fotal Fotal Fotal Fotal Carfaya Area Drain (L=2,800m) avation ankment w/comp. cellaneous Works Sub-total rap (Dry) . Pipe \$400mm cellaneous Works Sub-total Lateral Drain (L= 6,	200 sq.m 240 m IS 200,000 cu.m 15,000 cu.m 185,000 cu.m 1,000 sq.m IS 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m 50 m	10.77 53.90 1.69 0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	2.15 12.94 5.07 <u>87.00</u> 540.00 338.00 11.40 75.85 6.54 10.77 24.44 467.00 10.14 4.56 3.27 1.61 3.35 1.07	0.23 1.37 <u>26.00</u> <u>210.00</u> 150.00 4.50 29.60 0.10 1.17 9.63 <u>195.00</u> 4.50 1.80 0.05 0.17	0.19 5.18 1.45 22.47 125.88 76.00 3.00 18.50 1.85 0.94 6.14 106.43 2.28 1.20 0.93 0.14	0.42 5.18 2.82 <u>48.47</u> <u>335.88</u> 226.00 7.50 48.10 1.95 2.11 15.77 <u>301.43</u> 6.78 3.00 0.98 0.31 1.34	0.26 3.88 0.53 9.03 26.40 6.00 0.45 3.70 2.56 1.29 0.78 14.78 0.18 1.28 0.19 1.00	1.47 3.88 1.72 <u>29.50</u> <u>177.72</u> 106.00 3.45 24.05 2.03 7.37 7.89 <u>150.79</u> 3.18 1.38 1.38 1.38 1.01 1.11 1.01	$1.73 \\ 7.76 \\ 2.25 \\ 38.53 \\ 204.12 \\ 112.00 \\ 3.90 \\ 27.75 \\ 4.59 \\ 8.66 \\ 8.67 \\ 165.57 \\ 1.56 \\ 2.29 \\ 1.30 \\ 1.50 \\ 2.130 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 \\ 1.50 $
R.C. Misc S J Abu T a. Main Exca Emba Disp Conc Ripr Misc S b. Later Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Conc Ripr R.C. Misc S S J b. Later Ripr R.C. Misc S S S J b. Later S S S J b. Later S S S S S S S S S S S S S S S S S S S	. Pipe \$300mm cellaneous Works Sub-total Fotal Fotal Farfaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe \$400mm cellaneous Works Sub-total lateral Drain (L= 6,	240 m [.,S 200,000 cu.m 15,000 cu.m 185,000 cu.m 100 cu.m 1,000 sq.m 1S 6,000 cu.m 50 cu.m 150 sq.m 50 m	1.69 0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	12.94 5.07 <u>87.00</u> 540.00 11.40 75.85 6.54 10.77 24.44 467.00 10,14 4.56 3.27 1.61 3.35 1.07	1,37 26,00 210,00 150,00 4,50 29,60 0,10 1,17 9,63 195,00 4,50 1,80 0,05 0,17	$5.18 \\ 1.45 \\ 22.47 \\ 125.88 \\ 76.00 \\ 3.00 \\ 18.50 \\ 1.85 \\ 0.94 \\ 6.14 \\ 106.43 \\ 2.28 \\ 1.20 \\ 0.93 \\ 0.14 \\ \end{array}$	5.18 2.82 48.47 335.88 226.00 7.50 48.10 1.95 2.11 15.77 301.43 6.78 3.00 0.98 0.31 1.34	3.88 0.53 9.03 26.40 0.45 3.70 2.56 1.29 0.78 14.78 0.18 1.28 0.19 1.00	3.88 1.72 29.50 177.72 106.00 3.45 24.05 2.03 7.37 7.89 150.79 150.79 3.18 1.38 1.01 1.11 1.01	7.76 2.25 <u>38.53</u> <u>204.12</u> 112.00 3.90 27.75 4.59 8.66 8.67 <u>165.57</u> 3.36 1.56 2.29 1.30
-3 Abu T a. Main Exca Emba Disp Conc Ripr Misc b. Later Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Disp Conc Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S b. Later Ripr R.C. Misc S S S S S S S S S S S S S S S S S S S	Sub-total Fotal Farfaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	200,000 cu.m 15,000 cu.m 185,000 cu.m 100 cu.m 1,000 sq.m IS 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m	0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	87.00 540.00 338.00 11.40 75.85 6.54 10.77 24.44 467.00 10,14 4.56 3.27 1.61 3.35 1.07	26.00 210.00 4.50 29.60 0.10 1.17 9.63 195.00 4.50 1.80 0.05 0.17	22.47 125.88 76.00 3.00 18.50 1.85 0.94 6.14 106.43 2.28 1.20 0.93 0.14	<u>48.47</u> <u>335.88</u> 226.00 7.50 48.10 1.95 2.11 15.77 <u>301.43</u> 6.78 3.00 0.98 0.31 1.34	9.03 26.40 0.45 3.70 2.56 1.29 0.78 14.78 0.18 0.18 1.28 0.19 1.00	29.50 177.72 106.00 3.45 24.05 2.03 7.37 7.89 150.79 150.79 3.18 1.38 1.38 1.01 1.11 1.11	<u>38.53</u> 204.12 112.00 3.90 27.75 4.59 8.66 8.67 165.57 3.36 1.56 2.29 1.30
-3 Abu T a. Main Exca Emba Disp Conc Ripr Misc S b. Later Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. Misc S S Conc Ripr R.C. S S Conc Ripr R.C. Misc S S Conc Ripr R.C. S S S S Conc Ripr R.C. S S S S S S S S S S S S S S S S S S	Total Farfaya Area Drain (L=2,800m) avation ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe \$400mm cellaneous Works Sub-total lateral Drain (L= 6,	15,000 cu.m 185,000 cu.m 100 cu.m 1,000 sq.m IS 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m 50 m	0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	540.00 338.00 11.40 75.85 6.54 10.77 24.44 467.00 10.14 4.56 3.27 1.61 3.35 1.07	210.00 150.00 4.50 29.60 0.10 1.17 9.63 195.00 4.50 1.80 0.05 0.17	125.88 76.00 3.00 18.50 1.85 0.94 6.14 106.43 2.28 1.20 0.93 0.14	335.88 226.00 7.50 48.10 1.95 2.11 15.77 301.43 6.78 3.00 0.98 0.31 1.34	26.40 6.00 0.45 3.70 2.56 1.29 0.78 14.78 0.18 0.18 1.28 0.19 1.00	177.72 106.00 3.45 24.05 24.05 2.03 7.37 7.89 150.79 3.18 1.38 1.38 1.38 1.01 1.11 1.01	204.12 112.00 3.90 27.75 4.59 8.66 8.67 165.57 3.36 1.56 2.29 1.30
-3 Abu T a. Main Exca Emba Disp Conc Ripr Misc S b. Later Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr R.C. Misc S S b. Later	<pre>Farfaya Area Drain (L=2,800m) avation aukment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,</pre>	15,000 cu.m 185,000 cu.m 100 cu.m 1,000 sq.m IS 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m 50 m	0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	338,00 11,40 75.85 6.54 10.77 24.44 467.00 10,14 4.56 3.27 1.61 3.35 1.07	150.00 4.50 29.60 0.10 1.17 9.63 195.00 4.50 1.80 0.05 0.17	76.00 3.00 18.50 1.85 0.94 6.14 106.43 2.28 1.20 0.93 0.14	226.00 7.50 48.10 1.95 2.11 15.77 301.43 6.78 3.00 0.98 0.31 1.34	6.00 0.45 3.70 2.56 1.29 0.78 14.78 0.18 0.18 1.28 0.19 1.00	106.00 3.45 24.05 2.03 7.37 7.89 150.79 3.18 1.38 1.38 1.01 1.11 1.01	112.00 3.90 27.75 4.59 8.66 8.67 165.57 3.36 1.56 2.29 1.30
<ul> <li>a. Main Exca Emba Disp Cone Ripr Misc</li> <li>b. Later Exca Emba Conc Ripr R.C. Misc</li> <li>c. Sub-1 Exca Emba Conc Ripr R.C. Misc</li> <li>c. Sub-1 Exca Emba Conc</li> <li>d. Khor</li> <li>a. Main Exca Emba Conc</li> <li>d. Khor</li> <li>a. Main Exca</li> <li>J. S</li> <li>b. Later</li> </ul>	Drain (L=2,800m) avation aukment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	15,000 cu.m 185,000 cu.m 100 cu.m 1,000 sq.m IS 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m 50 m	0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	11.40 75.85 6.54 10.77 24.44 467.00 10,14 4.56 3.27 1.61 3.35 1.07	4.50 29.60 0.10 1.17 9.63 195.00 4.50 1.80 0.05 0.17	3.00 18.50 1.85 0.94 6.14 <u>106.43</u> 2.28 1.20 0.93 0.14	7.50 48.10 1.95 2.11 15.77 <u>301.43</u> 6.78 3.00 0.98 0.31 1.34	0.45 3.70 2.56 1.29 0.78 14.78 0.18 0.18 1.28 0.19 1.00	3.45 24.05 2.03 7.37 7.89 150.79 3.18 1.38 1.38 1.01 1.11 1.01	3.90 27.75 4.59 8.66 8.67 <u>165.57</u> 3.36 1.56 2.29 1.30
Emba Disp Conc Ripr Misc S b. Later Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Conc Ripr R.C. Misc S S b. Later	ankment w/comp. posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	15,000 cu.m 185,000 cu.m 100 cu.m 1,000 sq.m IS 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m 50 m	0.76 0.41 65.36 10.77 1.69 0.76 65.36 10.77	11.40 75.85 6.54 10.77 24.44 467.00 10,14 4.56 3.27 1.61 3.35 1.07	4.50 29.60 0.10 1.17 9.63 195.00 4.50 1.80 0.05 0.17	3.00 18.50 1.85 0.94 6.14 <u>106.43</u> 2.28 1.20 0.93 0.14	7.50 48.10 1.95 2.11 15.77 <u>301.43</u> 6.78 3.00 0.98 0.31 1.34	0.45 3.70 2.56 1.29 0.78 14.78 0.18 0.18 1.28 0.19 1.00	3.45 24.05 2.03 7.37 7.89 150.79 3.18 1.38 1.38 1.01 1.11 1.01	3.90 27.75 4.59 8.66 8.67 <u>165.57</u> 3.36 1.56 2.29 1.30
Disp Cone Ripr Misc S b. Later Exca Emba Cone Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr R.C. Misc S S t. Later	posal crete (plain) rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	185,000 cu.m 100 cu.m 1,000 sq.m 1S 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m	0.41 65.36 10.77 1.69 0.76 65.36 10.77	75.85 6.54 10.77 24.44 467.00 10.14 4.56 3.27 1.61 3.35 1.07	29.60 0.10 1.17 9.63 195.00 4.50 1.80 0.05 0.17	18.50 1.85 0.94 6.14 <u>106.43</u> 2.28 1.20 0.93 0.14	48.10 1.95 2.11 15.77 <u>301.43</u> 6.78 3.00 0.98 0.31 1.34	3.70 2.56 1.29 0.78 14.78 0.18 0.18 1.28 0.19 1.00	24.05 2.03 7.37 7.89 150.79 3.18 1.38 1.38 1.01 1.11 1.01	27.75 4.59 8.66 8.67 <u>165.57</u> 3.36 1.56 2.29 1.30
Ripr Misc S b. Later Exca Emba Conc Ripr R.C. Misc Conc Ripr R.C. Misc S Conc Ripr R.C. Misc S T 4 Khor a. Main Exca Disp Conc Ripr Misc S b. Later	rap (Dry) cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	1,000 sq.m IS 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m 50 m	10.77 1.69 0.76 65.36 10.77	10.77 24.44 467.00 10,14 4.56 3.27 1.61 3.35 1.07	1.17 9.63 195.00 4.50 1.80 0.05 0.17	0.94 6.14 <u>106.43</u> 2.28 1.20 0.93 0.14	2.11 15.77 301.43 6.78 3.00 0.98 0.31 1.34	1.29 0.78 14.78 0.18 0.18 1.28 0.19 1.00	7.37 7.89 150.79 3.18 1.38 1.01 1.11 1.01	8.66 8.67 <u>165.57</u> 3.36 1.56 2.29 1.30
Misc S b. Later Exca Emba Conc Ripr R.C. S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr B.S. S U S S D S S S S S S S S S S S S S S S	cellaneous Works Sub-total ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	IS 6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m 50 m	1.69 0.76 65.36 10.77	24.44 467.00 10.14 4.56 3.27 1.61 3.35 1.07	9.63 195.00 4.50 1.80 0.05 0.17	6.14 106.43 2.28 1.20 0.93 0.14	15.77 301.43 6.78 3.00 0.98 0.31 1.34	0.78 14.78 0.18 0.18 1.28 0.19 1.00	7.89 150.79 3.18 1.38 1.01 1.11 1.01	8.67 <u>165.57</u> 3.36 1.56 2.29 1.30
<ul> <li>b. Later Exca Emba Conc RipT R.C. Misc</li> <li>c. Sub-1 Exca Emba Conc RipT R.C. Misc</li> <li>d Khor a. Main Exca Emba Disp Conc RipT d. S</li> </ul>	ral Drain (L=1,100m) avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m 50 m	0.76 65.36 10.77	10, 14 4, 56 3, 27 1, 61 3, 35 1, 07	4.50 1.80 0.05 0.17	2.28 1.20 0.93 0.14	6.78 3.00 0.98 0.31 1.34	0.18 0.18 1.28 0.19 1.00	3.18 1.38 1.01 1.11 1.01	3.36 1.56 2.29 1.30
Exca Emba Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr B.C. S U -4 Khor a. Main Exca Emba Disp Conc Ripr S b. Later	avation/Dredging ankment w/comp. crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	6,000 cu.m 6,000 cu.m 50 cu.m 150 sq.m 50 m	0.76 65.36 10.77	4.56 3.27 1.61 3.35 1.07	1.80 0.05 0.17	1.20 0.93 0.14	3.00 0,98 0.31 1.34	0.18 1.28 0.19 1.00	1.38 1.01 1.11 1.01	1.56 2.29 1.30
Conc Ripr R.C. Misc S c. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr Misc S S b. Later	crete (plain) rap (Dry) . Pipe #400mm cellaneous Works Sub-total lateral Drain (L= 6,	50 cu.m 150 sq.m 50 m	65.36 10.77	3.27 1.61 3.35 1.07	0.05	0.93 0.14	0,98 0.31 1.34	1.28 0.19 1.00	1.01 1.11 1.01	2.29 1.30
Ripr R.C. Misc S C. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr Misc S S b. Later	rap (Dry) . Pipe 4400mm cellaneous Works Sub-total Lateral Drain (L= 6,	150 sq.m 50 m	10.77	1.61 3.35 1.07	0.17	0.14	0.31 1.34	0.19 1.00	1.11 1.01	1.30
Misc Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr Misc S b. Later	cellaneous Works Sub-total lateral Drain (L= 6,	· · · ·	67.00	1.07		1.34				2.01
c. Sub-1 Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr Misc S b. Later	Sub-total lateral Drain (L= 6,				· V.40	0.10	0.58	0.13	.0.36	0.49
Exca Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr Misc S b. Later		and the second		24.00	7.00	5.99	12.99	2.96	8.05	11.01
Emba Conc Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr Misc S b. Later	avation	,200m) 16,000 cu.m	1.25	20.00	8.16	4.16	12.32	0.48	7.20	7.68
Ripr R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr Misc S b. Later	ankment w/comp.	16,000 cu.m	0.76	12.16	4.80	3.20	8.00	0.48	3.68	4.16
R.C. Misc S T -4 Khor a. Main Exca Emba Disp Conc Ripr Misc S b. Later	rete (plain) rap (Dry)	50 cu.m 100 sq.m		3.27	0.05	0.93 0.09	0.98 0.21	1.28	1.01	2.29 0.87
S -4 Khor a. Main Exca Emba Disp Conc Ripr Misc S b. Later	. Pipe ø300mm	180 m	53.90	9.70	-	3.88	3.88	2,91	2.91	5.82
-4 Khor a. Main Exca Emba Disp Conc Ripr Misc S b. Later	cellaneous Works Sub-total	L.5		2.79 <u>49.00</u>	0.87	0.66	1.53	0.32 5.60	0.94	1.26 22.08
a. Main Exca Emba Disp Conc Ripr Misc S b. Later	fotal			540.00	216.00	125.34	341.34	23.34	175.32	198.66
a. Main Exca Emba Disp Conc Ripr Misc S b. Later	El-Hican Area									
Emba Disp Conc Ripr Nisc S b. Later	Drain (L=2,700m)	193,000 cu.m	1.69	326.17	144.75	22 24	218.09	¢ 70	102.29	108 00
Conc Ripr Misc S b. Later	ankment w/comp.	15,000 cu.m	0.76	11.40	4.50	73.34 3.00	7.50	5.79 0.45	3.45	108.08
Ripr Misc S b. Later	posal crete (plain)	178,000 cu.m 100 cu.m		72.98	28.48 0.10	17.80	46.28 1.95	3.56 2.56	23.14 2.03	26.70
S b. Later	rap (Dry)	1,000 sq.m		10.77	1.17	0.94	2.11	1.29	7.37	8.66
	cellaneous Works Sub-total	L.S		22.14 4 <u>50.00</u>	8.00 187.00	6.28 103.21	14.28	0.71 14.36	7.15 145.43	7.86 159.79
	ral Drain (L=1,000ສ)	eta terre. Na seja se terre de la		-			1.1.5		· · · · · · · · · · · · · · · · · · ·	· · · · · ·
	avation/Dredging	6,000 cu.m	1.69	10.14	4,50	2.28	6.78	0.18	3.18	3.36
Conc	ankment w/comp. crete (plain)	6,000 cu.m 50 cu.m		4.56 3.27	1.80	1.20 0.93	3.00 0.98	0.18	1.38	1.56
	tap (Dry) . Pipe ø400mm	150 sq.m 50 m	10.77	1.61 3.35	0.17	0.14	0.31	0.19 1.00	1.11	1.30
Misc	cellaneous Works	50 m L.S	V7 10V	1.07	0.48	0.10	0.58	0.13	0.36	0.49
1	Sub-total			24.00	7.00	<u>5.99</u>	<u>12.99</u>	2.96	8.05	11.01
· Exca	ateral Drain (L=2,60 avation	7,000 cu.m		8.75	3.57	1.82	5.39	0.21	3.15	3.36
	ankment w/comp. crete (plain)	7,000 cu.m 50 cu.m		5.32 3.27	2.10	1.40 0.93	3.50 0.98	0.21	1.61	1.82
Ripr	rap (Dry)	100 sq.m	10.77	1.08	0.12	0.09	0.21	0.13	0.74	0.87
	. Pipe ø300mm cellaneous Works	120 m L.S	53,90	6.47	0.16	2,59	2.59	1.94 0.17	1.94 0.38	3.88 0.55
	Sub-total			26.00	6.00	7.23	<u>13.23</u>	0.17 <u>3.94</u>	8.83	12.77
Т		al de la composition de la composition La composition de la c		500.00	200.00	116.43	316.43	21.26	162.31	183.57
al of (3	fotal	and the second second			•					12

Item	Description Q ¹	tys Unit	Rate	Total	Fore Equip-	ign_Curre	ency	Loc	Unit: 'O( al Curren	
No.	vescription q		(LE) 	Cost	ment	Materi	Total	Local <u>Materi</u>	Labour	Total
(4) Pi	ump Stations									
4-1	Abd E1-Rahman Pump Station									
	Pump House	20 sq.m	150	3.00	-	0.60	0.60	0.90	1.50	2,40
	Pump and Engine									
	Mixed Flow Volute Pump		1							
	with Engine 6200mm, 9 Ps	2 set	7,250	14 50	-	14.50	14,50	· -	-	-
	Auxiliary Equipment	LS		1.85		1.85	1.85	-	-	-
	Pipes and Valves	L.S		4.15	-	4.15	4.15	-		-
	Transpor and Installation	L.S		4.50		2.10	2.10	0.72	1.68	2.40
	Sub-total			28.00		23.20	23.20	1.62	3.18	4.80
	Suction, Excavation	50 eu.m		0.06	-	0.04	0.04	0.00	0.02	0.02
	choankment	10 cu.m	1.14	0.01		0.00	0.00	0.00	0.01	0.01
	" Concrete w/S.B	20 cu.m		3.60	-	1.71	1.71	0.74	1.15	1.89
	Discharge, Concrete w/S.B		179.90	1.62	-	0.77	0.77	0.33	0.52	0.85
	•	24 m	115.60	2,77	+	1.11	1.11	0.83	0.83	1.66
	Appurtenant Earth Works	10 cu.m	3.39	0.03	. ~	<u> </u>		-	0.03	0.03
	Niscellaneoue Works	L.S		0.91	-	0.41	0.41	0.21	0.29	0.50
1 - F	Sub-total			9.00	-	4.04	4.04	2.11	2.85	4.96
	Total			27 00		07 04		2 22	6.00	0.70
	IOLAC			37.00		27.24	27.24	3.73	6.03	9.76
		$\{x,y_i\}_{i=1}^{n-1}$								
4-2	Abu Haraw Pump Station									
	Pump House	24 sq.m	150	3.60	-	0.72	0.72	1.08	1.80	2.88
	Pump and Engine									
	Mixed Flow Volute Pump		0 250	27 75		07 75	22.25			
	with Engine \$250mm, 18 Ps	3 set	9,250	27.75	-	27.75	27.75	-	-	-
	Auxiliary Equipment	1.5		2.00		2.00	2.00	-	-	-
	Pipes and Valves	L.S		9.35	-	9.35	9.35			-
	Transpor and Installation	L.S		6.90	· -	3.15	3.15	1.13	2.62	3.75
	Sub-total			49.60	-	42.97	42.97	2.21	4.42	6.6
	Suction, Excavation	50 cu.m	1.25	0,06	· · .	0.04	0.04	0.00	0.02	0.02
	" Embankment	10 cu.m		0.01	· _	0.00	0.00	0.00	0.01	0.0
	" Concrete w/S.B	20 cu.m		3.60	· _	1.71	1.71	0.74	1.15	1.89
	Discharge, Concrete w/S.B		179.90	1.62	••••	0.77	0,77	0.33	0.52	0.85
	R.C Pipe 6600mm	24 m	115.60	2.77	_	1.11	1.11	0.83	0.92	1.66
	Appurtenant Earth Works	10 cu.m		0.03					0.03	0.03
	Miscellaneoue Works	L.S	3.37	0.31	· _	0.14	0.14	0.07	0.10	0.1
	Sub-total			8.40	-	3.77	3.77	1.97	2,66	4.6
				<u> </u>			<u></u>			
	Total			58.00	-	46.74	46.74	4.18	7.08	11.26
· ·					•					
4-3	Bats Said Pump Station	<b>.</b>	150				A		<b>_</b> · · -	<b>.</b> .
	Pump House	32 sq.m	150	4,80	-	0.96	0.96	1.44	2.40	3.80
	Pump and Engine									
	Mixed Flow Volute Pump &		0 000			47 00				
	with Engine \$250mm, 18 Ps	4 set	9,250	37.00	-	37.00	37.00	-	-	~
· .	Auxiliary Equipment	L.S		4.00		4.00	4.00	-	-	-
	Pipes and Valves	L.S		12.45	-	12.45	12.45		-	
÷ 1	Transpor and Installation	L.S		9.55		4.40	4.40	1.55	3.60	5.15
	Sub-total			67.80	· -	58.81	58.81	2.99	6.00	8.99
	Suction, Excavation	100 cu.m	1.25	0.13		0.08	0.08	0.00	0.05	0.0
	" Embankment	20 cu.m		0.02		0.00	0.00	0.00	0.02	0.02
	" Concrete w/S.B	32 cu.m		5.76	-	2.74	2.74	1.19	1.83	3.02
	Discharge, Concrete w/S.B	13 cu.m		2.34	_	1.11	1.11	0.48	0.75	1.2
	R.C Pipe \$700mm		150.30	3.61	_	1.44	1.44	1.08	1.09	2.17
	Withdrawal & Reconstruction			5.01	-	1.44		1.00	1.07	2.11
	Asphalt Pavement	24 sq.m	16.91	0.41	-	0.06	0.06	0.13	0.22	0.35
	Riprap (Wet)	19 sq.m		0.38	_	0.09	0.09	0.10	0.19	0.29
	Riprap (Dry)	16 sq.m		0.17	·	0.03	0.03	0.02	0.12	0.14
	Riprap (Masonry)		21.86	0.09	_	0.03	0.03	0.02	0.04	0.07
	Excavation	4 sq.m 46 cu.m		0.05		0.02	0.02	0.00		
					-	0.04	0.04	0.00	0.02	0.02
										\$1.514
	Backfill Miccollancoup Harks	34 cu.m	1.14	0.04						
·	Miscellaneoue Works	34 cu.m L.S	1.14	0.19	-	0.08	0.08	0.05	0.06	0.11
			1.14							0.11 7.51

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tem		•		Rate	Total		algn Curi	ency	Loc	Unit: 'O al Curre	
No. D	escription	Q'tys	Unit	(LE)	Cost	Equip- ment	Materi	Total	Local <u>Materi</u>	Labour	Tota
4-4 Abu Tar	faya Pump Station	•							1 - A		
Pump H		24	sd'w	150	3.60	-	0.72	0.72	1.08	1.80	2.8
	nd Engine Flow Volute Pump &	L									a st
	ngine ø250mm, 18 1		set	9,250	27.75	÷	27.75	27.75		_	· · · · -
	ary Equipment		LS		2.00	· · · _	2.00	2.00	-	. <b></b>	_
	and Valves		L.S		9.35	·	9.35	9.35	-	·	-
	or and Installatio	on	L.S		6.90	. –	4.15	4.15	1.13	1.62	2.7
Sub	-total				49.60	-	43.97	43.97	2.21	3.42	5.6
Suction	n, Excavation	50	cu.m	1.25	0.06	_	0.04	0.04	0.00	0.02	0.0
300010	Embankment		cu.m		0.00	· _	0.00	0.00	0.00	0.02	0.0
11	Concrete w/S.B			179.90	3.60	-	1.71	1,71	0.74	1.15	1.1
Discha	rge, Concrete w/S.			179.90	1.62	-	0.77	0.77	0.33	0.52	0.1
И	R.C Pipe 6600		10 10	115.60	2.77		1 11	1.11	0.83	0.83	. 1.
Withdr	awal & Reconstruct					· ·					
Asphal	t Pavement	32	sq.m	16.91	0.54	-	0.08	0.08	0.17	0.29	0.
Riprap	(Wet)	20	sq.m	20.04	0.40	-	0.10	0.10	0.10	0.20	0.
Riprap			sq.m		0.26		0.05	0.05	0.03	0.18	0.
Riprap	(Masenry)		sg.m		0.26	<b>~</b> .	0.06	0.06	0.07	0.13	0.
Excava			ເພ.m	1.25	0.06	~	0.04	0.04	0.00	0.02	0.
Backfi		34	cu.m	1.14	0.04		0.00	0.00	0.00	0.04	0.
	laneoue Works		L.S		0.28	-	0.12	0.12	0.06	0.10	0.
Sub	-total	:			<u>9.90</u>	-	4.08	4.08	2.33	3.49	<u>5</u> .
Tota	1				59.50	-	48.05	48.05	4.54	6.91	<u>11.</u>
-5 Khor El-	-Hitan Pump Static							2 L	and the second sec		
Pump H			sq.m	150	3.00	~	0.60	0.60	0.90	1.50	2.
	nd Engine	20	34.0		31.90		0.00	0.00		1.50	
	Flow Volute Pump 8	5				•	1. A. S. A.				
	igine \$250mm, 18 H		set	9,250	18,50		18.50	18.50	· · <del></del>	·	1.1
	ary Equipment		L.S		1.85		1.85	1.85	· · · · - ·	· · ·	
	and Valves		LS		6.25	, ·	6.25	6.25	·	,	
Transp	or and Installatio	วก	L.S		5.00	-	2.30	2.30	0.81	1.89	2.
Sub	-total				34.60	-	29.50	29.50	<u>1.71</u>	3.39	5
Suction	n, Excavation	50	cu.m	1.25	0.06		0.04	0.04	0.00	0.02	0.
11	Embankment		cu.m		0.00		0.00	0.00	0.00	0.01	ŏ.
n	Concrete w/S.B			179.90	3.60		1.71	1.71	0.74	1.15	1.
Discha	ge, Concrete w/S.			179.90	1,62	_	0.77	0.77	0.33	0.52	ā.
	R.C Pipe \$600		m,	115.60	2.77		1.11	1.11	0.83	0,83	1.
Withdra	wal & Reconstruct							4 - A - A - A			•
Asphal	t Pavement	32	sq.m	16.91	0.54	-	0.08	0.08	0.17	0.29	0.
Riprap	(Wet)	20	sq.m	20.04	0.40		0.10	0.10	0.10	0.20	. 0.
Riprap	(Dry)	24	sq.m	10.77	0.26	. –	0.05	0.05	0.03	0.18	0.
	(Masonry)		sq.m	21.86	0,26	-	0.06	0.06	0.07	0.13	0.
Excava			cu.m	1.25	0.06		0.04	0.04	0.00	0.02	0.
Backfi.		34	cu.m	1.14	0.04	-	0.00	0.00	0.00	0.04	0.
	laneoue Works		r.s		0.28	–	0.11	0.11	0.07	0.10	0.
Sub	-total				9.90		4.07	4.07	2.34	3.49	5
Tota	1				44.50	-	33,57	33.57	4.05	6.88	10.
•										1.1.1.1.1.1.	11 J.
al Of (4) 1	oump Station				280.00	-	220.10	220.10	22 57	37 22	50
** (-/ )	sup otherion				200.00	-	220.10	240.10	22.57	37.33	<u>59.</u>
	,										

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Table 1-2.8

Breakdown of Civil Works (8)

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#### ITEM: V. Model Farm

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			.*						(Uni	t: LE)
:		-			Fore	eign Curi	cencv	Loc	al Curre	ncy
Item No.	Description	Q'tys Un	it Rate (LE)	Total Cost	Equip-	Materi	Total	Local	Labour	Total
		·			ment			<u>Materi</u>		
(1) P	re-engineering	1 a	and the second				:			
•	Cadastral Survey	60 Fe		6,000	-	600	600	-	5,400	5,400
	Vertical Control	10 K	տ 50	500		100	100	- '	400	400
	Pre-Construction Survey	2 Mo	1 A A A A A A A A A A A A A A A A A A A	5,000	-	500	500	-	4,500	4,500
	Construction Survey	12 Mo		24,000	-	2,400	2,400		21,600	21,600
	llydro1ogy	12.Mo		18,000	-	1,800	1,800	-	16,200	16,200
	Laboratory Control	12 Mo		18,000		1,800	1,800	-	16,200	16,200
	Negotiation for ROW	2 Mo		-	-	200	200	_	1,800	1,800
	Miscellaneous works	L.	S .	6,500	**	2,600	2,600	-	3,900	3,900
	Total			80,000	-	10,000	10,600		70,000	70,000
(2) I	rrigation Facilities	11								
2-1	Pump Station									
а.	Pump facilities				•					
	Pump House 4x5m	20 sq	.m 150	3,000	-	· —	-	1,000	2,000	3,000
	Pump and Power Facilit			1. <u>211</u> - 11 -		1.1.1.1.1				
	ø150mm, 66kw, 90m	4 se		250,000		238,000		-	12,000	12,000
	Fressure Tank	L.		40,000	. –	40,000	40,000	-		-
	Strainer	4 50	t 1,000	4,000		4,000	4,000	-		
	Sub-total			297,000	· -	282,000	282,000	1,000	14,000	15,000
þ.	Intake Structures (Vent 1						~~	-		_ · ·
	Excavation	50 cu		63		39	39	2	22	24
	Backfill	20 cu		23	· _	1	. 1	1	21	22
	Embankment	30 cu		34	-	1	1	1	32	33
•	Concrete w/S.B		.m 179.90	900	-	428	428	186	286	472
	Concrete (Plain)	1 cu		65	-	19	-	26	20	46
	Riprap (Wet)	27 sq		541	-	128		137	276	413
	Riprap (Dry)	6 sq	.m 10.77	65	-	13		8	44	52
	Sub-total			1,691	· –	629	629	361	701	1,062
c.	Suction Facilities									
	Excavation	20 cu	.m 1.25	25	-	15	15	1	9	10
	Backfill	10 cu	.m 1.14	11	·	0	0	0	11	11
	Embankment	10 cu	.m 1.14		~	0	0	0	11	11
	Concrete w/S.B	. 5 cu	.m 179.90	900	-	428	428	186	286	472
	Concrete (Plain)	lcu	.m 65.36	65	-	19	19	26	20	46
	Sub-total			1,012	-	462	462	213	337	550
d.	Miscellaneous Works	l.,	<b>S</b> .	14,297	-	12,909	12,909	426	<u>962</u>	1,388
	Total			314,000	-	296,000	296,000	2,000	16,000	18,000
2-2	Distribution Pipeline									
	Nain Line \$300mm	1,620 u	46.90	75,978	2,690	66,776	69,466	405	6,107	6,512
	Branch Line \$200mm	1,370 E		27,099	740	23,454		69	2,836	2,905
	Field Line \$200mm	1,250 @		24,725	675	21,400		63	2,587	2,650
	Field Line \$150mm	840 n		11,155	361	9,375		25	1,394	1,419
	Field Line \$100mm	5,420 m		39,837	2,060			162	7,209	7,371
	Appurtenant Facilities	L,		53,638	1,958			217	6,040	6,257
	Miscellaneous Works	L,	5	27,568	516			59	2,827	2,886
	Total			260,000	9,000	221,000	230,000	1,000	29,000	30,000
2-3	On-farm Facilities									
	Sprinkler System	76 se	t 1,700	129,200	· _	129,200	129,200	· _		-
	Drip System for Vegital			91,200	÷	91,200		-	_	-
	Appurtenant Facilities	L,		33,100	-	26,480		3,310	3,310	6,620
	Miscellaneous Works	L.	\$	12,500	-	10,120		690	1,690	2,380
	Total			266,000		257,000	257,000	4,000	5,000	9,000
2-4	Road (Except Trunk Road)	1.12								
	Excavation of Ditch	4,740 cu	.m 3.39	16,069	-	-		-	16,069	16,069
	Grading & Embankment	33,200 sq		4,648	1,660	. 996	2,656		1,992	1,992
•	Gravel Paving (10cm)	33,200 sq		44,156	2,656	19,588		18,260	3,652	21,912
	Wind Break W=4.0m	8.3 Kn		7,570	391	230		860	6,089	6,949
	Wind Break W=2.0m	4.2 Kt		1,915	. 99			217	1,541	1,758
	Irrigation for Wind B.	9.9 Fe		19,701	1,535			139	4,811	4,950
	Miscellaneous Work	5.5 IC		5,941	659	1,912		1,524	1,846	3,370
· ·				100,000	7,000	•		21,000	36,000	57,000
	Total			1001000	.,000	50,000	45,000	21,000	30,000	21,000

				:					(Un l	t: LE)
				1	Fore	ign Curi	rency	Loc	al Curre	incy
Item No.	Description	Q'tys Unit	Rate (LE)	Total Cost	Equip- ment	Materi	Total	Local Materi	Labour	Total
				1. A. 1. A.		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		· · · · ·	e ja se ta	
2-5	Land Reclamation		007 50	r. 000	18,075	15,707	33,782	1,803	16,290	18.093
	Deep Plowing	250 Fed	207.50	51,875		7.725	14,700	825	15,225	16,050
	Initial Soil Dessing-1	7,500 ton	4.10	30,750	6,975	250	497	6,640	723	7,363
3	Initial Soil Dressing-2	250 ton	31,44	7,860	247		6.770	3,352	2,923	6,275
	Initial Leaching	250 Fed	52.18	13,045		6,770				
	Miscellaneous Works	L.S		6,470	703	2,548	3,251	1,380	1,839	3,219
	Total			110,000	26,000	33,000	59,000	14,000	37,000	51,000
				1. The second					14 - C	
Total	of (2) Irrigation Facili	ties		1,050,000	42,000	843,000	885,000	42,000	123,000	165,000
3) Re	serch, Laboratory and Trai	ning Facili	ties							· · ·
3-1	Building Works						·			
	Office Building	200 Տգ.ա	200	40,000	<u>ب</u> ــ	8,000		12,000	20,000	32,000
	Training Building	100 sq.m	200	20,000		4,000		6,000	10,000	16,000
	Recerch Building	100 sq.m	200	20,000	· · · ·	4,000	4,000	6,000	10,000	16,000
	Laboratory Building	50 sg.m	200	10,000	-	2,000		3,000	5,000	
	Warehouse	200 sg.m	100	20,000	-	4,000	4,000		10,000	16,000
	Garage	120 sq.m	100	12,000	-	2,400	2,400	3,600	6,000	9,600
	Dormitory	120 sg.m	200	24,000	-	4,800	4,800	7,200	12,000	19,200
	Staff Quarter 50sq.m x			50,000	-	10,000	10,000	15,000	25,000	40,000
	Appurtenant Facilities	5 .50 04.4								
	(Electricity, Water Su	oply,		1.14					• •	
	sewage and Others)	L.S	<u>, 1</u>	35,000		7,000	7,000	10,500	17,500	28,000
· .	Miscellaneous	L.S		11,000	<del>.</del>	800	800	4,700	5,500	10,200
	Total			242,000	-	47,000	47,000	74,000	121,000	195,000
		an the second second								
		• • • • •						-	· .	
3-2	Reserch & Laboratory Ins	L.S		200,000	-	200,000	200,000	· · -	· . –	
3-3	Training & Education Ins	trumente	1	$(-1)^{-1} = (-1)^{-1}$		· · ·				
<u> </u>	TISTUTUR & FOUCACION THE	L.S		10,000	·	10,000	10,000	· . – .	-	· -
Total	of (3) Facilities			452,000	-	257,000	257,000	74,000	121,000	195,000

Table I-2.9	Unit Cot of Manpowers and Materials
	ŢŗŗŗŢġġĸġſĸĊĸĊſĊĸĸĸġĸĸĸġĸĸĸġĸĸŶĸĊĊĊŢĊĊĊĊĊĊŢġġġĊĸĸĊŎŎġġġĨġĸġĸţŎĿĸĊŎĊĸĊŎĸĸĸġĸġĸġŎĸĸĸĊĊŎŎŎĊŎŎĸĸĸġĸĸĸġĸĸĸġĸ

· ·		Unit	Unit Cost
1.	Common Labor	/day	5.0 LE
2.	Skilled Labor	11	8.0
3.	Operator for Heavy Equipment	11	10.0
4.	Operator for Truck or Vehicle	11	8.0
5.	Carpenter	11	10.0
6.	Masonry	11	15.0
7.	Surveyor	**	10.0
8.	Steel Bender	f1	12.0
9.	Portland Cement	ton	80.0
10.	Steel Bar (round)	· 81	500.0
- 11.	Steel Bar (deformed)	31	800.0
12.	Crashed Gravel	cu.m	6.0
13.	Coarse Aggregate (Washed Gravel)	10	8.0
14.	Fine Aggregate (Sand)	11	5.0
15.	Timber	El	250.0
16.	Gasoline	litter	0.15
17.	Diesel 0il	18	0.03
18.	Grease	kg	1.15
19.	Brick (Clay, 25 x 12 x 6 cm)	pcs 1000	60.0
20,	Electric Charge	Kw.h	0.0245

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#### Cost of Construction Equipment I-3.

			<b>.</b>		(Unit: 'O	00LE)
Description	Q	ty's	Unit <u>Price</u>	Total	Foreign	Local
a. Construction Equipment		· .				
Bulldozer w/ripper 32ton	1	No.	200	200	190	10
Bulldozer w/ripper 21ton	1	No.	125	125	119	6
Back hoe 0.35cu.m	6	Nos	44	264	251	13
Tractor Shovel 1.0cu.m	1	No.	75	75	72	3
Track Crane 5ton	1	No.	35	35	33	2
Water Lorry 5.5cu.m	2	Nos	22	44	42	2
Dump Track 8ton	10	Nos	23	230	220	10
Track óton	1	No.	14	14	13	1
Concrete Mixer 0.5 cu.m	1	No.	10	10	9	1
Miscellaneous Equipment		L,S		53	51	2
Sub-total				1,050	1,000	<u>50</u>
b. Vehicles			•			
Jeep & Wagon	5	Nos	13	65	62	- 3
Micro Bus	1	No.	-13	13	12	1
Motor Cycle	10	Nos	`2	20	19	1
Workshop Equipment	1	Set		22	17	5
Sub-total				120	110	10
Total				1,170	1,110	60

Table 1-3.1Cost of Construction Equipment (1)<br/>(Land Reclamation of North Wahby Area)

Table 1-3.2Cost of Construction Equipment (2)(Land Reclamation of Com Osheem Area)

			linit		(Unit: '0	00LE)		
	Description		Q	ty's	Unit Price	Total	Foreign	Loca1
a.	Construction Equ	Jipment						
	Bulldozer	21ton	-1	No.	115	115	110	5
	Back hoe	0.3Scu.m	4	Nos	44	176	167	9
	Tractor Shovel	1.Ocu.m	1	No.	75	75	72	9 3 2 3 2 2 3 5 2 1
	Track Crane	Ston	. 1	No.	35	35	33	2
	Grader	3.7m	1	No.	55	55	52	3
	Road Roller		1	No.	37	. 37	35	2
	Tire Roller		1	No.	36	36	34	2
	Water Lorry	5.5cu.m	3	Nos	22	66	63	3
	Dump Track	8ton	5	Nos	23	115	110	5
	Track	6ton	2	Nos	14	28	26	2
	Concrete Mixer	0.5 cu.m	1	No.	10	10	9	
	Miscellaneous I	Equipment		L.S		52	49	3
	Sub-total					800	<u>760</u>	<u>40</u>
,	** * * *							
D.	Vehicles		e	M	1.2		()	2
	Jeep & Wagon			Nos	13	65	62	3
	Micro Bus			No.	13	13	12	1
	Motor Cycle			Nos	2	20	19	1 5
	Workshop Equip		1	Set		22	17	
	Sub-total	Ĺ				<u>120</u>	110	<u>10</u>
	Total					920	870	<u>50</u>

				۰.		· ·	(Unit: '000LE)	
	Description		Q	ty's	Unit Price	Tota1	Foreign	Loca1
a.	Construction Equ	ipment			· ·	· · · ·	· . ····	
u,	Drag Line	0.6cu.m	2	Nos	90	180	172	8
	Back hoe	1.0cu.m	1	No.	120	120	114	6
	Back hoe	0.35cu.m	3.	Nos	44	132	126	6
	Bulldozer	21ton	1	No.	115	115	109	6
	Grader	3.7m	2	Nos	55	110	106	4
	Compaction Roll	er 1.0ton	1	No.	8	8	7	- 1
	Track	6ton	1	No.	14	- 14	13	1
	Concrete Mixer	0.5cu.m	1	No.	10	10	9	1
	Miscellaneous E	quipment		L.S		24	17	7
	Sub-total					713	673	40
ь.	Vehicles					.*		
	Jeep & Wagon		2	Nos	13	26	26	·
	Motor Cycle		3	Nos	2	6	· · 6	•
	Sub-total		•		1. A.	<u>32</u>	32	
	Total	• • •		•		745	705	40

## Table I-3.3Cost of Construction Equipment (3)<br/>(Wahby Downstream Area)

Table I-3.4Cost of Construction Equipment (4)(South Area of Lake Qarun)

	· · · ·	· .			(Unit: '0	00LE)
Description		Qty's	Unit Price	Total	Foreign	Local
a. Construction Equi	pment	· ·				
Drag Line	0.6cu.m	12 Nos	-90	1,080	1,026	54
Back hoe	0.35cu.m	2 Nos	44	88	84	4
Bulldozer	21ton	3 Nos	-115	345	328	17
Grader	3.7m	1 No.	55	. 55	53	2
Track	6ton	2 Nos	14	28	27	1
Concrete Mixer	0.5cu.m	2 Nos	10	20	19	1
Miscellaneous Eq	uipment	L.S	1.1	32	21	11
Sub-total	-			1,648	1,558	90
		1.11			· · · ·	
b. Vehicles						
Jeep & Wagon		2 Nos	13	26	26	-
Motor Cycle		3 Nos	2	6	6	· - '
Sub-total	•			32	32	
Total	· · ·			1,680	<u>1,590</u>	<u>90</u>

## Table I-3.5Cost of Equipment (5)(Model Farm)

			•		(Unit: '000LE)		
	Description	Qty's	Unit <u>Price</u>	Total	Foreign	Local	
Ξ.	Construction Equipment						
	Bulldozer w/ripper 32ton	1 No.	200	200	190	10	
	Bulldozer 15ton	3 Nos	75	225	216		
	Back hoe 0.35cu.m	3 Nos	44	132	126	6	
	Back hoe 0.10cu.m	2 Nos	26	52	50	2	
	Grader 2.5m	l No.	44	44	42	2	
	Front End Loader 1.0cu.m	1 No.	34	34	33	1	
	Compaction Roller 1.0ton	1 No.	. 8	8	7	1	
	Concrete Mixer 0.5 cu.m	1 No.	10	10	9	1	
	Miscellaneous Equipment	L.S	10	22	20	2	
	Sub-total	~		727	<u>693</u>	34	
ь.	Vehicles						
	Jeep & Wagon	5 Nos	13	65	62	3	
	Micro Bus	2 Nos	13	26	24	2	
	Motor Cycle	5 Nos	· 2	10	9	1	
	Sub-total	5 1.00	, –	101	<u>95</u>	6	
с.	Agricultural Equipment		-				
~ •	Tractor 60ps	4 Nos	19.1	76.4	72.6	3.8	
	Rotavator 230cm	4 Nos		14.4			
	Mold Board Plow 14"x2	2 Nos	1.8	3.6			
	Disk Harrow 15"x24	2 Nos	2.4	4.8		0.2	
	Tooth Harrow 310cm	2 Nos	1.2	2.4			
	Sprayer 60011t.	1 No.	4.1	4.1			
	Thresher 3hr/Fed	1 No.	1.0	1.0			
	Manure Spreader	1 No.	3.7	3.7			
	Forage Harvestor	2 Nos	4.6	9.2			
	Farm Wagon	2 Nos	6.0	12.0			
	Broad Caster	1 No.	0.9	0.9			
	Truck 2ton	2 No.	5.8	11.6			
	Miscellaneous	2 NO.	5.0	5.9			
	Sub-total	1.0					
	300-10131			150.0	140.0	10.0	
d.	Office Equipment			_			
	Theodolite	1 No.	3.7	3.7			
	Level	2 Nos	1.4	2.8			
	Copy Machine	l No.	2.8	2.8	- • -		
	Electric Calculator	10 Nos	0.1	1.0			
	Miscellaneous	- L.S		1.7			
	Sub-total			12.0	12.0	-	
	Total			990.0	940.0	50.0	

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			(	(Unit: '000LE)			
Description		Qty's	Unit Price	Total	Foreign	Local	
a. Agricultural Deve	lopment	L.S		400.0	200,0	200.0	
b. Agricultural Equi	pment						
	60ps	12 Nos	19.1	229.2	217.7	11.5	
Rotavator	230cm	6 Nos	3.6	21.6	20.5	1.1	
Mold Board Plow	14"x2	8 Nos	1.8	14.4	13.7	0.7	
Disk Harrow	15 ¹¹ x24	8 Nos	2.4	19.2	18.3	0.9	
Tooth Harrow	310cm	8 Nos	1.2	9.6	9.1	0.5	
Sprayer	6001it.	7 Nos	4.1	28.7	27.3	1.4	
Thresher	3hr/Fed	7 Nos	1.0	.7.0	6.6	0.4	
Ridger	3 rows	7 Nos	0.7	4.9	6.7	0.2	
Cultivator	3 rows	1 No.	· 1.1	1.1	1.0	0.1	
Miscellaneous		L.S		14.3	9.1	3.2	
Sub-total				350.0	330.0	20.0	
Total	,			750.0	530.0	220.0	

## Table 1-4.1Cost of Agricultural Development (1)(Land Reclamation of North Wahby Area)

Table I-4.2Cost of Agricultural Development (2)(Land Reclamation of Com Osheem Area)

				(Unit: '000LE)			
Description		Qty's	Unit Price	Total	Foreign	Local	
a. Agricultural Deve	lopment	L.S		200.0	100.0	100.0	
<ul> <li>b. Agricultural Equiport Tractor</li> <li>Rotavator</li> <li>Mold Board Plow</li> <li>Disk Harrow</li> <li>Tooth Harrow</li> <li>Sprayer</li> <li>Thresher</li> <li>Ridger</li> <li>Cultivator</li> <li>Manure Spreader</li> <li>Forage Harvestor</li> <li>Farm Wagon</li> <li>Broad Caster</li> <li>Miscellaneous</li> <li>Sub~total</li> </ul>	60ps 230cm 14"x2 15"x24 310cm 60011t. 3hr/Fed 3 rows 3 rows	10 Nos 6 Nos 6 Nos 6 Nos 3 Nos 3 Nos 4 Nos 1 No. 3 Nos 6 Nos 6 Nos 3 Nos L.S	19.1 3.6 1.8 2.4 1.2 4.1 1.0 0.7 1.1 3.7 4.6 6.0 0.9	191.0 21.6 10.8 14.4 7.2 12.3 3.0 2.8 1.1 11.1 11.1 27.6 36.0 2.7 8.4 350.0	181.5         20.5         10.3         13.7         6.9         11.7         2.9         2.7         1.0         10.5         26.2         34.2         2.6         5.3         330.0	9.5 1.1 0.5 0.7 0.3 0.6 0.1 0.1 0.1 0.6 1.4 1.8 0.1 3.1 20.0	
Total				550.0	430.0	120.0	

<mark>) === (3)</mark>	(Unit: '000 LE) <b>Proteign</b> Local 8 32 8 32 1 4 1 64 5 25 35 145	3.7 3.7 1.4 1.4 2.8 2.8 2.9 2.9 4.2 4.2 15.0 15.0 15.0 145	(4) 11: 1000 LE 11: 1000 LE	8 3 32 32 32 32 32 32 32 32 32 32 32 32 3	7.4 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8
Cost of Project Facilities (3) (Wahby Downstream Area)	Qty's         Unit Rate         Total           CO sq.m         200         40           SS0 sq.m         100         25           S0 sq.m         200         80           S0 sq.m         200         80           So sq.m         200         80           So sq.m         200         80           So sq.m         200         80           So sq.m         200         80	No. 3.7 No. 3.7 No. 2.8 L.S L.S L.S L.S	Cost of Project Faci (South Area of Lake (Suth Area of Lake (South Area of Lake (LE)	sq.н 200 40 Sq.н 100 25 sq.н 200 80 C.S 200 80 L.S 100 30 L.S 100 100	Nos 3.7 Nos 1.4 Nos 1.4 2.8 Nos 2.8 2.8 Nos 0.1 0.5 L.S 2.9 L.S 2.9 L.S 200
Table I-5.3	Description Qry a. Building Works Office Building 200 Garage 250 Work, Shop Staff Quarter 50x8 400 Appurtement Facilities Sub-rotal	<ul> <li>b. Office Equipment</li> <li>Theodolite</li> <li>Level</li> <li>Level</li> <li>Level</li> <li>Copy Machine</li> <li>Loopy Machine</li> <li>Loopy Machine</li> <li>Soil &amp; Hydreulic</li> <li>Soil &amp; Hydreulic</li> <li>Survey Equipment</li> <li>Miscellancous</li> <li>Sub-cotal</li> <li>Total</li> </ul>	-5.4 <u>9</u> t		b. UTIICE Equipment Theodolite 22 Level 22 Copy Machine 1 Electric Calculator 5 Soil & Hydraulic 5 Sul & Hydraulic 5 Survey Equipment 1 Miscellaneous 1 Miscellaneous 1 Total 7 Total
	LECB1 LOCB1 128 128 24 40 50 270	1111110	t) LE) Local	16 80 22 150	
<u>Facilities (1)</u> on of North Wanby Area)	(Unit: '000 L Foreign 10 32 13 32 15 10 55 50 50	60 00 1000 0000 0000 0000 0000	m Ares '000	4 0 8 8 0 4	3.7 3.7 2.6 2.0 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6
	Total 160 355 30550 330	350 2000 2000 2000 2000 2000 2000 2000 2	To of	100 100 100 100 100	3.7 2.8 1.0 2.9 2.9 2.9 2.9 2.9
Cost of Project (Land Reclamatio	Unit Rate (LE) 200 150 150 200	юн20 7.9.8.1 9.1	Cost of Project Fa (Land Reclamation Y's Unit Rate	(LE) 200 100	00 1 2 2 4 3 0 7 8 4 0
	<u>Сту's</u> 800 sq.н 350 sq.н 250 sq.н 1.S	N NOS NOS NOS NOS NOS NOS NOS NOS	<u>Q</u> t	100 sq.m 500 sq.m 400 sq.m fes L.S	1 No. 2 Nos. 1 No. 10 Nos. 1. S. 1. S.
Table I-5.1	Description 0 a. Building Works Office Building 800 Work Shop 350 Dormitory 200 Staff Quarter 50x5 250 Appurtenant Facilities Sub-total	b. Office Equipment Theodolite Level Level Copy Machine Electric Calculator Soil & Hydraulic Survey Equipment Miscellaneous Sub-rotal Total	Table I-5.2 Description	<ul> <li>a. Building Works</li> <li>Sub-office Building 100 sq.m</li> <li>Staff Quarter 50x10 500 sq.m</li> <li>Garage</li> <li>Appurtement Facilities L.S</li> <li>Sub-total</li> </ul>	<ul> <li>b. Office Equipment Theodolite</li> <li>level</li> <li>level</li> <li>level</li> <li>copy Machine</li> <li>Copy Machine</li> <li>Electric Calculator</li> <li>Soli &amp; Hydraulic</li> <li>Survey Equipment</li> <li>Miscellaneous</li> <li>Sub-total</li> <li>Total</li> </ul>

I-5. Cost of Project Facilities

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#### 1-6. Cost of Consulting Services

Table 1-6.1 Cost of Engineering for Detail Design

Description		Unit Pri	ce (LE)	Cost ( '000 LE)		
	Qty's	Foreign	local	Total	Foreign	Local
Consultant Remuneration (F)	75 H/H	12,000	-	900	900	-
Consultant Remuneration (L)	. 115 H/H	6,000	-	690	690	
International Trips	20 Trips	3,500	-	70	70	-
Communication, Transportation & etc.	12 Mos	-	8,000	96	-	96
Per Diem Allowance	53 H/H	-	2,400	127.2	-	127.2
Other Items	12 Mos		3,000	36	-	36
Miscellaneous Expenditure	15			80.8	40.0	40.8
Total				2,000	1,700	300

Cost of Consulting Services (1) (Implementation of North Wabby and Com Osheem Area) Table I-6.2

		Unit Prie	ce (LE)	Cost ( '000 LE)			
Description	Qty's	Foreign	Local	Total	Foreign	Local	
Consultant Remuneration (F)	93 M/H	12,000	-	1,115	1,116	-	
Consultant Remuneration (L)	108 H/M	6,000		648	648	~	
Inter National Trips	13 Trips	3,500	-	45.5	45.5	-	
Communication, Transportation & etc.	69 Mos	-	1,000	69	-	69	
Per Diem Allowance	93 M/M	-	2,400	223.2	-	223.2	
Other Items	69 Mos		1,500	103.5	-	103.5	
Miscellaneous Expenditure	L.S			104.8	90.5	14.3	
Total		4 M	*	2,310	1,900	410	
	North Wahby Area (60%)			1,390	1,140	410 250	
	Com C	sheemAre	a (40%)	920	760	160	

#### Cost of Consulting Services (2) (Implementation of Wahby Downstream Area) Table 1-6.3

	Unit Price (LE)			Cost ( '000 LE)		
Description	Qty's	Foreign	Local	Total	Foreign	Local
Consultant Remuneration (F)	58 M/M	12,000	-	696	696	~
Consultant Remuneration (L)	63 M/M	6,000	-	378	378	-
International Trips	12 Trips	3,500	· –	42	42	-
Communication, Transportation & etc.	45 Hos	-	1,000	45	-	45
Per Diem Allowance	58 H/H	-	2,400	139.2	-	139.2
Other Items	45 Mos		1,200	54	-	54
Miscellaneous Expenditure	L.S	-		65.8	54	11.8
Total				1,420	1,170	250

#### Total

Cost of Consulting Services (3) (Implementation of South Area of Lake Qarun) Table 1-6.4

		Unit Price (LE)			Cost ( '000 LE)		
Description	Qty's	Foreign	Local	Total	Foreign	Local	
Consultant Remuneration (F)	46 M/H	12,000	~	528	528	~	
Consultant Remuneration (L)	55 H/H	6,000	-	330	330	-	
International Trips	10 Trips	3,500	-	35	35	-	
Communication, Transportation & etc.	48 Mos	-	1,000	48	-	48	
Per Diem Allowance	44 M/N	-	2,400	105.6	-	105.6	
Other Items	48 Hos		1,300	62.4	-	62.4	
Niscellaneous Expenditure	L.S			61	47	14	
Total	· .			1,170	940	230	

#### Cost of Consulting Services (4) (Model Farm) Table 1-6.5

	Unit Price (LE)			Cost ( '000 LE)		
Description	Qty's	Foreign	Local	Total	Foreign	Local
Consultant Remuneration (F)	28 M/N	12,000	-	336	336	-
Consultant Remuneration (L)	23 H/M	6,000	-	138	138	-
International Trips	6 Trips	3,500	-	21	21	-
Communication, Transportation & etc.	21 Mos	-	1,000	21	-	21
Per Diem Allowance	20 H/H	-	2,400	48	-	48
Other Items	21 Mos		600	12.6	-	12.6
Hiscellaneous Expenditure	L.5			23.4	15	8.4
Total				600	<u>510</u>	90

I-7. Disbursement Schedule

Table I-7.1 Summary of Disbursement Schedule

•						:	•									
	00LE)		200 20	200 30 450	300	180	500	1,430	(000LE)		2,100 710	1,300 470	1,540 6,120	590	880	
	(Unit: '000LE) 4(1987) 1 F.C L.C		900 30	500 10 1,140	390	850	1,000	3,380	(Unit: '( 9(1992) <u>F.C</u>		3,300 90	2,200 130		280	370	
	(( Total		800 50	700 40 1,590	690	1,030	1,500	4,810	Total .		5,400	3,500	5,470	870	1,250	
	с. 1	240					550	290	т. С		3,200	2,100 1,440		1,390	1,500	
	3(1986) F.C	1,360					2,100	3,460	8(1991) F.C		4,700	3,300		760	750	
arn	Total	1,600					2,650	4,250	S Total		7,900 3,000	5,400	5,120 23,230 1	2,150	2,250	
ocnedute	L.C	60		: 			50	110	L, C		3,000	2,200 1,350		1,510	1,770	
	2(1985) 11 F.C	340					100	077	7 (1990) F.C		5,000	3,600		1,020	016	
nrsoursemenc	2 Total	400					150	550	Total		8,000 3,550	5,800	22,770	2,530	2,680	
	r.c								L.C.		1,500	1,200 730	4,860	066	1,320	
o dianato	1 (1984) Total F.C		:						6(1989) F.C		2,000 970	1,600 470	5.040	640	600	
ימווי	1 Total								Total		3,500 2,400	2,800 1,200	6,900	1,630	1,920	
<b>H</b> • / I .	C L	300	11,100 7,600	7,700 4,200 3,800 34,400	5,500	6,400	1,100	47,700	с. Т.С		1,100 260	700 180	2,240	720	750	
	Total F.C	1,700	16,900 2,700	12,300 1,600 10,400 43,900	3,900	5,000	3,200	57,700 4	5(1988) F.C		1,300 240	1,100 160	2,800	810	1,520	
-	Total	2,000	28,000 10,300	20,000 5,800 14,200 78,300	9,400	11,400	4,300	105,400	Total		2,400	1,800	5,040	1,530	2,270	
	Description	I. Engineering for Detail Design	<pre>II. Land Reclamation Area 2.1 North Wahby Area 2.1.1 Land Reclamation 2.1.2 Housing and Infrastructure</pre>	<ul> <li>2.2 Com Osheem Area</li> <li>2.2.1 Land Reclamation Area</li> <li>2.2.2 Housing and Infrastructure</li> <li>2.2.3 Agro-industry</li> <li>Sub-total</li> </ul>	III. Wahby downstream Area	IV. South Area of Lake Qarun	V. Model Farm	Total	Description	I. Engineering for Detail Design	II. Land Reclamation Area 2.1 North Wahby Area 2.1.1 Land Reclamation 2.1.2 Housing and Infrastructure	2.2 Com Osheem Area 2.2.1 Land Reclamation Area 2.2.2 Housing and Infrastructure	2.2.3 Agro-Industry Sub-total	III. Wahby downstream Area	IV. South Area of Lake Qarun	V. Model Farm

Total

8,840 5,130 3,710 13,450 6,280 7,170 27,980 14,630 13;350 27,630 14,080 13,550 17,890 10,300 7,590

Table 1-7.2         Disbursement Schedule (land Reclamation Area)           Table 1-7.2         Disbursement Schedule (land Reclamation Area)           Mathematication Area         Mathematication Area           Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area           Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area           Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area           Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area           Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area           Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area           Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area         Mathematication Area           Mathematication Area         Mathematication Area         Mathematication Area <thmathmatication area<="" th="">         Mathematication A</thmathmatication>		(1661)8	200 120 28 200 28 200 28 200 28 200 28 200 20 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 200 2	(2,580) (820) (2,140)(1,710) (2,580) (820) (2,140)(1,710) (1,710) (1,710)	- 330 200 - 2 330 240 20		3,350 1,450 3,100 2,250	1,350 1		- 10	180 940 280 50 110 40 110 40	20 70 30	310 1,060 310 50 2	30 100 30 10	10 340 1,160 340 60 280 10 110 1,390 460 30 430	<u>450</u> 2.550 800 90	<u>0 5,150 5,750 6,200 3,390 2,810</u>		0 - 60 40 - 40 0 550 140 180 140 40 220 100 210 166 50 0 220 90 20 10 20	800 80 860 790 70 100 80 40 (1,800) (570) (1,450)(1,140)	130 60 170		2,140 890 1,870 1,360	210 60 180 140	950 1.	3,300 2,100 3,500 2,200 1.		100 500 150 20 130 60 <del>9</del> 0 60	(230) - (570) (240) 10 40 10	610 250 80 1	60 30 10	260 670 260 90 190
Table I-7.2 Disbuttsement Schedule (Land Rev Land Rev L	•	amation Area)	100 - 100 1,120 850 270 660 480 180 1,400 1.280 230 1,400 1.280 120	380 150 230 (3,690)(2,760) (930) 350 300 50	360 - 360 450 370 80	4,850 3,430 1,426 4 450 320 130	5,300 3,750 1,550 4.	2,700 1,250 1,450 3 8,000 5,000 3,000 7		20 - 20	1,120 180 940 630 430 200 (1.770) (6101(1160)	100 30 70	1,870 640 1,230 1,3	170 60 110 2 2/0 700 120	1,510 220 1,290	3,550 920 2,630	11.550 5.920 5.630 10.		100 - 100 735 590 140 630 480 150 20 - 20	870 800 70 250 100 150 (2,600)(1,970) (630) (2,	200	250 - 250 296 240 50	3,370 2,410 960	380 240 140 3750 2450 1100 3	2,050 950 1,100	5,800 3,600 2,200	<u> </u>	600 100 500 280 190 90	(890) (290) (600) 50 20 30	940 310 630 8	90 30 60	1,030 340 690
Table I-7.2         Disburrsemen           Table I-7.2         Disburrsemen         Disburrsemen </td <td>0.000</td> <td>Schedule (Land (1988)</td> <td>30 80 100 160 60 660 480 430</td> <td>50 80 380 150 (240) (220) (1,890)(1,270) - 150 660 40 40 50 150</td> <td>eu 160 - 45 180 40 15 230 190</td> <td>1,000 630 2,300 1,460 100 70 200 140</td> <td>1,100 700 2,500 1,600</td> <td>400 1,000 400 <u>1,100 3,500 2,000 1</u>,</td> <td></td> <td>28</td> <td>200 40 50 60 230 40 110 50 630 430 (167) (138) (1,360) 670)</td> <td>23 42 100 30</td> <td>190 180 1,460 700</td> <td>10 130 70 190 1 560 770 5</td> <td>70 810 200</td> <td><u>260 2,400 970 L,</u></td> <td><u>1.360 5.500 2.970 2.</u></td> <td></td> <td>50 100 - 190 150 50 630 480</td> <td>300 270 30 50 250 100 (220) (150) (1,470)(1,000)</td> <td></td> <td>90 30 140 - 10 160 130</td> <td>400 1,770 1,130</td> <td>50 230 170 450 2 000 1 300 7</td> <td>250 800 300</td> <td>700 2,800 1,600 1.</td> <td>ç</td> <td>30 240 190 30 280 190</td> <td>(85) (660) (320) 25 50 20</td> <td>110 710 340 3</td> <td>10 70 30</td> <td>120 780 370</td>	0.000	Schedule (Land (1988)	30 80 100 160 60 660 480 430	50 80 380 150 (240) (220) (1,890)(1,270) - 150 660 40 40 50 150	eu 160 - 45 180 40 15 230 190	1,000 630 2,300 1,460 100 70 200 140	1,100 700 2,500 1,600	400 1,000 400 <u>1,100 3,500 2,000 1</u> ,		28	200 40 50 60 230 40 110 50 630 430 (167) (138) (1,360) 670)	23 42 100 30	190 180 1,460 700	10 130 70 190 1 560 770 5	70 810 200	<u>260 2,400 970 L,</u>	<u>1.360 5.500 2.970 2.</u>		50 100 - 190 150 50 630 480	300 270 30 50 250 100 (220) (150) (1,470)(1,000)		90 30 140 - 10 160 130	400 1,770 1,130	50 230 170 450 2 000 1 300 7	250 800 300	700 2,800 1,600 1.	ç	30 240 190 30 280 190	(85) (660) (320) 25 50 20	110 710 340 3	10 70 30	120 780 370
		· / UlSDUrSemen (1987) / Toc.	20 10 2.	(20) (10) (10) 470 450 20 130 20 110	5 5 5 1 5 5 1 5 5 5 5 7 5 7 5 7 5 7 5 7	-1	0. 550 150 1,	0 50 50 2 <u>600</u> 20 2 <u>1</u>		ی ۲	(5) (2)	15 7 8	0 10 10	0 10 - 20 10 -	10 10	30 20	<u>630</u> <u>220</u> <u>2</u> ,		20 10 10	(20) (10) (10)	350 20	20 - 10 20 10	400 II0 I	- 40 400 150 1	100 50	500 200 1.	ۍ ۱	•	(5) - (5) 15 10 5	10 10	1	10 20
	Table I-7		ahby A	Bacion	1,120	021-1 029-1	12,600	4,300 16,900	e off			F	1,900	500 200 5,900 2,100 3	4,400 600	2.700	19 600	Osheew Area	400 40 360 1,830 1,470 360 2,100 1,600 500 210 30 180	2,910 2,660 250 830 340 490 (8,280)(6,140)(2,140)	ca 90 - 920 870 550 430	210 60 800 - 920 760	8,260	1,230 840 13.000 9.100 3	7,000 3,200	12,300		1,470 240 1,230 300 140 1,230 940 640 300	14,700/11,740/11,740/ 520 80 240	1,100 - 1,	300 100	1,200

2.2.3 Agro-Industry (1) Civil Horks 4. Cattle Breedi

center b. Agricultural Products	1,700 1,200	1,200	500										340	240	100	680	780	200	680		480
Tomato Grading Station c. Animal Produces	840	710	130										840	110	130						
Slaughter House Milk Processing Factory	1,500 1,200	1 200	300										300	240	60	600	480	120	600		480
Sub-total of (1)													1,000	840	160	1,990	1,690	2005	1,990	-	690
(luclude Physical Contingency) 9,020 7,330	9,020	7,330 1	1,690										2,480	2,030	450	3,270	2,650	620	3,270	~	2,650
(2) Price Escalation	5,180	5,180 3,070 2,110	011,1										1,130	690	077	1,850 1	1,100	750	2,200		1,280
Total	14,200 11	14,200 10,400 3,800	. 800	ł	ı	ı	1	ı	ı	ı	1	1	3,610	2,720	890	5.120 3	3,750 1	1,370	5.470	5	3,930
Total of Com Osheem Area	40,000 24,300 15,700	4,300 15	, 700	240	510	230	2,140	1,260	880	000.4	2,070 1	1,930 I	11,220 6	6.780 4	4,440 1	12,330 7	7.420 4	4,910	9.570		6,260
Total of Land Reclamation Area	78.300 43,900 34.400	3,900 34		1,590 1	1,140	450	2,040	2,800 2	2,240	9,900	5,040 4	4,860 2	22,770 12,700 10,070	<u>, 700 10</u>		23,230 12	12.570 10	10.660 1	15.770	5	9.650

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(127) (Unit: '000LE) 9(1992) F.C L.C 590 827 9 53 220 20 240 350 63 6 (227) 158 3 28 28 320 94 360 520 (Undr: '0001E) 880 કે ધ ન ફેં 9(1992) 170 38 22 (115) 101 3 190 8 280 5 115 250 230 20 120 370 140 50 (193) Total 101 26 (342) Total 28 97 390 9 430 077 870 215 2 145 145 550 99 610 079 1.250 (\$65) 1545 (\$65) 7.0 126 24 (446) 1,500 ş 35 580 S 630 760 1.390 60 236 3 110 52 620 60 680 \$20 \$(1991) 7.C 8(1991) Total F.C (179) 78 88 (248) 1 60 60 470 2 540 220 760 1 20 750 591 3 232 480 530 220 Disbursement Schedule (South Area of Lake Qarun) (585) Disbursement Schedule (Wahby Downstream Area) 204 112 (649) Total 22.52 .170 250 242 242 9 1.050 2.150 60 318 2,250 120 980 20 1,100 1,210 1,040. 100 286 110 1.510 188 24 (528) 1,770 ... 1 88 5 770 740 с 1 ខ្ល 700 80 236 100 ĝ 120 820 8 006 870 7 (1990) F.C 125 90 (220) 7(1990) F.C 1.020 117 85 (288) 270 370 690 80 20 760 260 18 3 282 220 60 680 230 Total 45 435 240 240 (730) 305 112 (816) 2,530 Total 120 90 450 .390 071 1.530 1,000 319 100 99 1,580 1,100 120 344 077 140 (432) (16E) 220 3 570 420 065 r.c 1,320 2 355 68 61 80 188 80 55 55 680 2 750 570 (151) (117 22 194) 6(1589) Total F.C 6(1989) Total F.C 600 450 13 I 1 21 27 299 3 200 140 970 226 120 40 460 140 (275) 305 28 (626) 1,070 360. 970 1,630 213 100 560 100 **95** 279 .100 110 ,210 710 (135) (061) 720 L.C 30 30150 57.6 430 50 470 250 62 5.5 077 07 480 270 750 1.C 128 33.33 (72) (35) 29 670 071 810 1.25 26 610 99 33 40 1,140 1,250 5(1988) Total F.C ' 7 946 110 270 5(1986) Total F.C 4 8 (262) (190) 1,040 1,140 1,530 140 20 390 160 102 0 0 0 0 0 0 0 0 1,580 1,730 2,270 245 145 115 24 126 130 150 540 છ (12) ¢ 38 220 56 002 20 80 300 12 36 2 1 56 120 8 8 с Г 0.7 30 3 3 æ 310 340 4 (1987) 1 5.C 280 -24 8 S 390 4 (1987) 1 F.C 644 7 570 99 730 120 33 Table I-7.3 Table I-7.4 (10) Tota2 (20) Total 2 200 8 \$ \$ 510 50 560 ŝ 690 20 680 20 ។ អ៊ 052 70 860 1,030 170 19 171 418 1.027 228 364 10 13 (675)(1.575) 390 627 220 60 (925)(1,835) 1.0 2.650 2,900 2,600 5,500 0-1 1 250 250 145 230 230 230 230 3,000 6.400 250 360 300 3,300 3,100 1,170 2,700 3,000 3,900 1.590 50 55 3,560 5,000 Total F.C 300 906 Total F.C 40 3,900 1.100 100105 940 340 23 (2.250) 1,017 280 (2,760) 250 245 290 290 290 290 290 5,900 400 190 5,350 550 3,500 9,400 250 1,680 1,680 200 1,170 6,560 7,200 4,200 11,400 640 Construction of Laterals. Construction of Canal Structures Sub-toral of (1) ( Ч, Acquisition and Compensation Land Acquisition and Compensation Construction Equipment Construction 6 Rebabilitation Drainage Canals Pump Statious Pre-Engineering Rehabilitation of Facilities Project Facilities Engineering and Administration Consulting Services Froject Facilities Engineering and Administration Consulting Services 6 Sub-total of (1) to (8) to (7) to (8) Land Acquisition and Comp Construction Equipment Agricultural Development <u>٩</u> Agricultural Development a. Pre-Engineering b. Construction of Dike Sub-total of (1) Sub-total of (1) Sub-total of (1) Sub-total of (1) Physical Contingency Physical Contingency Description Description Price Escalation (9) Price Escalation Works CIVIL HOTKS Total Total Civil 1 a. Pre-b. Rehu j ų. 3-5 Э 663686 6 Э 663666 9 6

2,680

1,920

1,520

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Table I-7.5 Disbursement Schedule (Model Farm)

					~					÷.†					
~	T.C		65 5	155	$\sim$				100	40	360	40	400	100	500
0001 E	4(1987) 1 F.C		343	207	(550)			·	ι	200	750	80	830	T70	1,000
11-2+2 1	vunit: vuulb) 4(1987) Total F.C		408	362	(170)				100	240	011,1	120	L,230	270	, 500 1
			100	40	(200)		10	50	100	40	400	40	055	110	550 1
· .	3(1986) 1 F.C		1 005	50	(550)		1	940		240	,730	170	1,900	200	, 100
	3( Total		600	06	$\sim$	· ·	10	066	100	280	2,130 1	210	2,340 1	310	2,650 2,100
•	L.C		10		(10)				10	10	8	10	40	10	20
	2(1985) 1 F.C		10		(01)	•			ł	70	80	TO	<u> 80</u>	10	100
	2( Total	:	50		(20)				10	80	110	20	130	20	150
		÷					_			-	- 1	_	1	·	1
	L.C		70 - 165	195	(430)		10	50	210	06	290	06	880	220	1,100
· ·	Total F.C		10 70 843 165	257 195		ί Ο τ τ <b>6</b> τ	- 10	940 50	- 210	510 90		260 90		380 220	3,200 1,100
			Ē	452 257		(71,4,4)	·		210 -	:	3,350 2,560 790	· .	3,700 2,820 880		4,300 3,200 1,100
	Total F.C		10 843 I	452 257	) (011 1)	(011 ( 1 )	ł	076	210 -	210	3,350 2,560	260	3,700 2,820	380	300 3,200
	Total F.C		80 10 1,008 843 1	452 257	(1,540) (1,110)	<b>T</b>	10	076	210 -	600 510	3,350 2,560	350 260	3,700 2,820	380	300 3,200
	<u>Total</u> <u>Total</u> <u>F.C</u>		80 10 1,008 843 1	452 257	(1,540) (1,110)	<b>T</b>	10	076	210 -	600 510	3,350 2,560	350 260	3,700 2,820	600 380	300 3,200
	<u>Total</u> <u>Total</u> <u>F.C</u>		80 10 1,008 843 1	452 257	otal of (1) (1,540) (	<b>T</b>	10	630 940	210 -	600 510	3,350 2,560	350 260	3,700 2,820	600 380	4,300 3,200
	Total F.C		80 10 1,008 843 1	452 257	otal of (1) (1,540) (	<b>T</b>	10	630 940	210 -	600 510	350 2,560	350 260	700 2,820	600 380	300 3,200
	<u>Total</u> <u>Total</u> <u>F.C</u>		10 843 I	& Training 452 257	otal of (1) (1,540) (	(2) Land Acquisition and	Compensation 10	076		210	3,350 2,560	260	3,700 2,820	380	4,300 3,200

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	<ol> <li>Com Osheem Area</li> <li>Com</li></ol>	a. Annual Electric Charge 7,741,660 Kwh x 0.0245 LE/Kwh = 189,670	<pre>b. Salary and Wages Mechanical Eng. 1 Person x 0300 x 12 = 3,600 Electric Eng. 0.4 Persons x 0300 x 12 = 1,440 Operator 3x3 9 Persons x 0200 x 12 = 21,600 Labor 3x3 9 Persons x 0100 x 12 = 10,800 Watchwan 3x2 6 Persons x 0100 x 12 = 7,200 44,640</pre>	<pre>c. Maincenance Cost     1,260,000 LE x (1-0.17) x 5.5% =     57,520</pre>	Note: 1,260,000 LE consists of equipment cost of pump facilities. A rate of 0,17 and 5.5 are rates of an inter- national freight charge and annual repair cost, respectively. Sub-total 291,830	2-2. Maintenance Cost of Pipeline	Main Pipeline L = 19.75 Km 1,511,000 × 0.003 = 4,530 On-farm Line L ≈ 53.20 Km 580,000 × 0.003 = 1,740 Sub-cotal 6,270	2-3. Maintenance Cost of Drainage Canal	L¤15,9 Km 260,000 x 0.003 = 280	2-4. Maintenance Cost of Road	Trunk road (Gravel Paving) L= 8.30 Km 8,800 146,740 x 1/5 x 30% = 8.30 Km 8,800 Branch road (Gravel Paving) L= 3.8 Km 2,540 42,410 x 1/5 x 30% = 2,540 Farm road (Grading and compaction) L= 98.0 Km 8,230 54,880 x 1/2 x 30% = 8ub-rotal 19.570	2-5. Total Com Osheem Area	174 GUN
Table I-8.1. <u>Estimate of 0 &amp; M Cost</u> (Land Reclamation Area)	l. North Wahby Area 1-1. O & M Cost of Pump Stations (5 Places)	a. Annual Electric Charge 10,954,380 Kwh x 0.0245 LE/Kwh =	<pre>b. Salary and Wages Mechanical Eng. 1 Person x @300 x 12 = 3,600 Electric Eng. 0.6 Persons x @300 x 12 = 2,160 Operator 3x5 15 Persons x @200 x 12 = 36,000 Labor 3x5 15 Persons x @100 x 12 = 18,000 Watchman 5x2 10 Persons x @100 x 12 = 12,000 71,760</pre>	<pre>c. Maintenance Cost     1.740,000 LE x (1-0.17) x 5.5% =     79,430</pre>	Note: 1,740,000 LE consists of equipment cost of pump facilities. A rate of 0.17 and 5.5 are rates of an inter- national freight charge and annual repair cost, respectively. Sub-total <u>419,570</u>	1-2. Maintemance Cost of Fipeline	Main Fipeline L = 31.37 Km 1,524,000 × 0.003 = 4,570 On-farm Line L =111.10 Km 1,220,000 × 0.003 = 3,660 Sub-rotal 8,230	1-3. Maintenance Cost of Drainage Canal	L=18.1 Km 300,000 x 0.003 = <u>900</u>	1-4. Maintenance Cost of Road	Trunk road (Gravel Paving) L ^w 16.0 Km 282,880 × 1/5 × 302 = 16,970 Branch road (Gravel Paving) L ^w 1.7 Km 22,540 × 1/5 × 302 = 1.7 Km Farm road (Grading and compaction) L = 106.3 Km 9,930 59,530 × 1/2 × 302 * 202 * 202 * 106.3 Km 8,930	1-5. Total of North Wahby Area	

I-8. Estimate of 0 & M Cost

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I,390 3,600 3,600 3,600 (Unit: LE) I person x @300 x 12 =
I persons x @150 x 12 =
3 persons x @100 x 12 = Table I-8.2. Estimate of 0 & M Cost. (Wahby Downstream Area) 2. Canal Dredging L = 16.5 km
16.5 km x 3^{*}cu.m/m x 0.028^{*} =
cf. * MOI, Fayoum data, 1984 Civil Engineer Labors Labors Sub-total Salary and Wages . .

10,390

3. Total Cost of Wahby Down Stream Area

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		•
Table I-8.3 <u>Estimete of 0 &amp; M Cost</u> (South Area of Lake Qarun)		
I. Bats Said area	2. Abu Tarfaya and Khor el Hitan Area	- - - - - -
1-1. Pumping Station (1 stations) (Unit:LE)	2-1. Fumping Scatton (2 stations) (Unit:LE)	
a. Annual Fuel Consumption 0.22 kg/ps/hr / 0.85 kg/lfr x 5,894 (hr/3 units) x 18 (ps x 3 units) = 72,459 11t	a. Annual Fuel Consumption 0.22 kg/ps/nr / 0.85 kg/lit x 4,132 hr/2 units x 18 ps 2 units = 19,250 lit	
b. Fuel Cost 27,459 lit x 1.05 x 0.03 LE/lit x 1.2 = 1.038	0.22 kg/ps/nr / 0.85 kg/lit x 2,064 hr/l unit x 18 ps 1 unit = 9,616 lit 19,250 + 9,616 = 28,866 lit	
including 5% of preparation works and 20% of other kinds of oils such as grease, machine oil, etc.	b. Fuel Cost 28,866 lit x 1.05 x 0.03 LE/Lit x 1.2 = 1.091	
ges 1 Eng. 1 person x 0300 x 12	including 5% of preparation works and 20% of other kinds of oils such as grease, machine oil, etc.	
	person x 0300 x 12 x 0.34 = persons x 0200 x 12 x 0.34 = nersons x 0100 x 12 x 0.34 =	4
Note: 0.32=5,894 hrs / 18,290 hrs	nan 2 x 2 4 persons x @100 x 12 ≠ roral	00
d. Maintenance Cost 41,000 LE x (1 - 0.17) x 5.5%=	. = (4,132 + 2,064) / 18,290 hrs	ł
LE consists of pump and engine costs r equipments. A rate of 0.17 and 5.5	d. Maintenance Cost (29,750 + 20,350) LE x (l - 0.17) x 5.5%= 2.287	7
rates of an international freight charge and annual repair cost, respectively.	Note: (29,750 + 20,350) LE consists of pump and engine costs with auxiliary equipments. A rate of 0,17	•
e. Total (b + c + d) $\frac{9.150}{100}$	and 5.5 are rates of an international freight charge and annual repair cost, respectively.	
1-2. Drain Dredging <u>t</u> = 22.1 km _× 22.11 km x 3 cu.m/m x 0.028 = 24 ××××××××××××××××××××××××××××××××××××	e. Total (b + c + d) <u>12,258</u>	ωł
å	2-2. Drain Dredging L a (10.1 + 6.3) = 16.4 km 16.4 km x 3 cu.m/m x 0.028 = 15.4 km cf. MOL, Fayoum data, 1984	ωl
· · ·	2-3. Total of Abu Tarfaya and Khor el Hítan Area	ام

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	(Unit: LE)	24.370	·. ·. ·	13,920	13,420	51,710		780	2,650	071+00					•		
Table I-8.4 Estimate of 0 & M Cost (Model Farm)	1. 0 & M. Cost of Pump Station	a. Annual Electric Charge 994,620 Kwh x 0.0245 LE/Kwh =	Persons x 6300 x 12 Persons x 6300 x 12 Persons x 6200 x 12 Persons x 6100 x 12 Persons x 0100 x 12	2 Persons x 0100 x 12 =	c. Maintenance Cost 294,000 LE x (L-0.17) x 5.5% =	Note: 294,000 LE consists of equipment cost of pump facilities. A rate of 0.17 and 5.5 are rates of an inter- national freight charge and annual repair cost, respectively. Sub-fotei	e Cost of	L = 10.5 Km 260,000 × 0.003 = 3. Maintenance Cost of Road	Gravel Paving L= 8.30 Km 44.156 x 1/5 x 30% =	4. LOCAL OF ROGEL FARM							· · ·
(Cont'd) Table I-8.3	3. Abu el Rahman and Abu Harawa Area	Fumping Station (2 stations) Annual Fuel Consumption	0.22 kg/ps/hr / 0.85 kg/lit x 2,068 hr/unit x 9 ps/unit x l unit = 4,817 lit 0.22 kg/ps/hr / 0.85 kg/lit x 4,132 hr/2 units x 18 ps x 2 units = 19,250 lit 4,817 + 19.250 = 24.067 lit		including 5% of preparation works and 20% of other kinds of oils such as prease, machine oil, etc.	) x 12 x 0.34 1 x 12 x 0.34 3 x 12 x 0.34 1 x 12 =	8 + 4,132) / 18,290 hrs = 0.34	d. Maintenance Cost (16,350 + 29,750) LE x (1 - 0.17) x 5.5%= 2,104	Note: (16,350 + 29,750) LE consist of pump and engine costs with auxiliary equipments. A rate of 0.17 and 5.5 are rates of an international freight charge and annual repair cost, respectively.	Total $(b + c + d)$	3-2. Road (Dike)	Gravel 3.5 km x 8 m x 2.2 LE/sq.m/5 years x 30 % = 3,696	Reparing works will be done one time per five years. A road surface of 30% will be supplemented or repaired.	Drain Dredging $_{\star}$ L = 7.0 km [*] 7.0 km x 3 cu.m/m x 0.028 = cf. MOT, Fayoum date, 1984	3-4. Total of Abu el Rahmen and Abu Harawa Area	Total of South Area of Lake Qarun	

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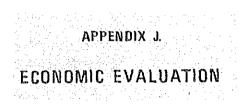
### 1-9. Project Cost for Improvement of Existing Canals (land Reclamation Area)

and the second		Coanc	с кесташат;	ion Area)					
	· .							1	0001 00
								(Unit: '	0001.E)
Item		Rate	Total	Fore	ign Curre	ency	Loc	al Curre	ncy
No. Description	Q'tys Unit	(LE)	Cost	Equip- ment	Nateri	Total	Local Materi	Labour	Total
· · · · · · · · · · · · · · · · · · ·				<b>-</b>					
(1) Civil Works			•	· .					
				-	1.				
1. Pre-engineering				· .					
Cadastral Survey	42 Fed	200	8.40	·	0.84	0.84	-	7.50	7.56
Vertical Control	17.5Km	50	0.87		0.08	0.08		0.79	0.79
Pre-Construction Survey	l Mo.	2,500	2.50	-	0.25	0.25	-	2.25	2.25
Construction Survey	6 Mos	2,500	15.00	_	1.50	1.50		13.50	13.50
Laboratory Control	6 Mos	1,000	6.00	-	0.60	0.60		5.40	5.40
Negotiation for ROW	1 Mo.	1,000	1.00	_	0.10	0.10	-	0.90	0.90
Miscellancous works	L.S		6.23	-	1.63	1.63	_	4.60	4,60
Sub-total			40.00	~	5.00	5.00	. –	35.00	35.00
2. Improvement of Drainage C	analo (2 Drad	Tate	l Laughh	- 17 7 4-					
						. 20.10	1.0/	10.55	10.07
Excavation	34,600 cu.m		58.47	25.95	13.15	39.10	1.04	18.33	19.37
Embankment	34,600 cu.m		39.44	1.04	0.69	1.73	0.69	37.02	37.71
Riprap (Wet)	3.460 sq.m		69.34	4.67	11.80	16.47	17.54	35.33	52.87
Riprap (Dry)	3,460 sq.m	10.77	37.26	4.05	3.25	7.30	4.46	25.50	29.96
Sub-total			204.51	35.71	28.89	64.60	23.73	116.18	139.91
3. Improvement of Structures	(20 -1	;. ·	· · · ·						
		170.00	2 (0	0.00	1 (0	1 71	A 76	1	1 00
Concrete w/S.B	20 cu.m		3.60	0.02	1.69	1,71	0.75	1.14	1.89
Concrete (plain)	40 cu.m	, -,	2.61	0.04	0.74	0.78	1.02	0.81	1.83
Riprap (Wet)	200 sq.m		4.01	0.27	0.68	0.95	1.01	2.05	3.06
Riprap (Dry)	200 sq.m	10.77	2.15	0.23	0.19	0.42	0.26	1.47	1.73
Earth Works	200 cu.m	3.39	0.68	-	. –		-	0.68	0.68
Sub-total			13.05	0.56	3.30	3.86	3.04	6.15	<u>9.19</u>
					- 1				
4. Miscellaneous Works			22,44	3.73	2.81	6.54	<u>3.23</u>	12.67	15.90
				+					
Total of Civil Works			200 00	10 00	10 00	00 00	20.00	170 00	200 00
TOCAL OF GIVIE WORKS	· ·		280.00	40.00	40.00	80.00	30.00	170.00	200,00
(2) Land Acquisition and Compe	ensation								
	÷.,								
1. Land Acquisition	15 Fed	4,000	60.00			~			60,00
2. Compensation	10 Fed	400	4.00			~			4.00
Tota1	÷		64.00			-			64.00
	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1								
(3) Engineering and Administra	ation L.S		36.00						36.00
	and the second second								
and the second									
Total of (1) to (3)	•		380.00			80.00			300.00
(4) Physical Contingency	L.S		40.00			10.00			30,00
- · · · ·	· .								
Total of Project Cos	st		420.00			90.00		· .	330,00
and the second									

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 (Land Reclamation Area)

Note; This estimated cost is applied for only the economic evaluation of the land reclamation in the North Wahby and Com Osheem Arca.



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APPENDIX J-1	Commodity P	rice
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Table J1-1	Exchange Rate for US\$
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		Yen/US\$
1983	May	233.78
B	June	239,20
13	July	239.47
11	Aug ,	243.32
11	Sept.	241.84
11	Oct.	231.98
1F	Nov.	234.28
U .	Dec.	233.36
1984	Jan.	232.94
11	Feb.	232.70
11	Mar .	224.43
н 1	Apr.	224.06
11	May	232.33
11	Jun.	232.33
11	Aug.	241.40
n	Sept.	244.35
	Source: Tokyo Bank	

Table J1-2 Exchange Rate for Egyptian Pound

		Selling	Buying	Average	<u>}</u>	
1984	Jul. 19	82.6	81.80	82.2	(L.E/100	US\$}
	и 26-	82.7	81.90	82.3		
	:	•	:	:		
	11 31	82.7	81.90	82.3		
	Aug - 1	82,90	82.10	82.5		
	:		:	* 7		
	7	82,90	82.10	82.5		
	8	82,70	81.90	82.3		
	•	•	:	:		
	15	82.70	81.90	82.3		
		:	:	:		
	21	82.70	81.90	82.3		
	с. С. т. т. т.	Paulting Co				

Source: Egyptian Gazette

Table	e J1-3	Index	Numbers	of Who	lesale	Prices
	1977	1978	1979	1980	1981	1982
All ltems*	186.6	214.1	234.6	285,2	308.9	337.7
	100	114.7	125.7	152.8	165.5	180.9
		+14.7	+9.6	+21.6	+8.3	+9.3

Source: Statistical Yearbook, 1983. Central Agency for Public Mobilization and Statistics.

	Table .	J1-4	Index	Numbers	of Con	sumer P	rices
		1977	1978	1979	1980	<u>1981</u>	1982
A11	Items *			226.0 109.9			
				+9.9			
	Note :	1965/66	= 100				

Source: Statistical Yearbook, 1983.

Central Agency for Public Mobilization and Statistics.

-J2-

#### Table J1-5

## Main Accounting Ratio by Category in Egypt - Conversion Factor -

I tems Social Accounting Prices Standard Conversion Factor (SCF) 0.965 Rural average consumption 1.070 Rural (Formal Sector) Unskilled Labor 0.220 Marginal Productivity of Capital at Border Prices (Efficiency Prices) 10.0 Tradable Goods Cement 2.185 Electric Machinery 0.965 Electrical Distribution Machinery 0.830 Electrical Motors 0.849 Iron and Steel Products 0.937 Iron and Steel 0.928 Machinery (metal work) 0.965 Machinery Spare parts 0.965 Plastics 0.810 Rubber Products 0.788 Trucks and Lorries 0.910Agricultural Inputs and Outputs Agricultural Machinery 1.159ri Spares 1.021 п Implements 0.992 Fertilizer 1.663 Pesticides 1.976 Seeds 1.149 Maize 1.313 4.259 Onions Rice 2.043 1.591 Wheat

-J3-

Items	cial Accounting Pr	ices
Petroleum Products		
Crude Oil	1.010	
Diesel	6.751	
Fuel Oil	15,299	· .
Kerosene	5.883	
Urban Consumer Goods (Tradable)		
Beef (rationed)	1.978	
Becf (non-rationed)	1.007	
Fruit	0.658	
Maize	1.798	2
Milk and Products	0.968	
Vegetables	0.919	÷
Rural Consumer Goods		
Meat (non-rationed)	1.163	
Non Traded Goods		
Animal Fodder	1.085	
Electricity	3.321	
Milk Products	1.266	
Port and Harboer Charges	1.315	
Road Transport (goods)	1.365	

Source: Shadow Prices for Trade Strategy and

Investment Planning in Egypt

John M. Page, Jr.,

World Bank Staff Working Papers, No.521.

-.J4 -

(Unit: L.E 1,000) Average 3,726,975 1,368 1,590,682 1,525,141 5,317,657 6,641,430 0.800 1 1981 2,262,982 6,187,497 2,175,256 1,182 8,450,479 10,624,553 0.795 3,402,000 2,152,178 1,030 5,534,178 6,687,106 1,153,958 1980 0.827 3,974,026 1,287,813 1,119 2,686,213 961,844 4,934,751 1979 0.805 2,632,191 679,754 2,142 3,311,945 4,319,308 1,009,505 1978 0.766 1 3. Import Duties and Taxes 4. Export Duties and Taxes 1. Import (c.i.f., total) 2. Export (f.o.b., total) S S ī 4 5. Export Subsidy ı 7 ŝ ŧ (1 + 2)**C**1 8. SCF (6 ÷ C 6. 7.

Table J1-6 Calculation of Standard Conversion Factor

-J5-

Table J1-7

# Prices of Commodities at Present

	Farmgate Pr	ice	<u>Retail</u>	Price
<u>Crops</u>	<u>Unit</u>	<u>L.E.</u>	<u>Unit</u>	<u>L.E.</u>
Wheat	Ardab(150kg)	25	Ardab	25
Rice(hulled)	· · ·		Ton	150
Rice(unhulled)	Ton	105	-	
-Barely	Ardab(120kg)	15	Ardab	15
Broad Beans	Ardab(150kg)	36	Ardab	36
Berseem	Ardab(157kg)	48	Ardab	20
Maize	Ardab(140kg)		Ardab	20 to 25
Cotton with seed	Kentar(157.5		-	-
Sunflower	Ton	160 to 400	Ton	400
Sesame	Ardab(120kg)		Ardab	80 to 100
Sorghum	Kg	1.2	Kg	1.2
Tomatoes (Nili)	Ton	50	Ton	100
Tomatoes (summer)	Ton	200	Ton	300
" (winter)	Ton	50 to 130	11	75 to 200
Cabbage	Ton	50	Ton	100
Squash (summer)	Ton	50	Ton	80
(winter)	Ton	120	Ton	250
Potato (summer)	Ton	100	Ton	150
(nili)	Ton	150	Ton	250
Soybeans	Ton	250	Ton	300
Onion	Ton	50 to 65	Ton	70
Watermelon	Ton	100 to 250	Ton	200 to 400
Strawberry	Ton	600	Ton	1,000
Groundnuts	Ardab(75kg)	35 to 45	Ardab	40 to 50
Melon	Ton	100 to 200	Ton	200 to 350
Cucumber(summer)	Ton	100	Ton	150
(nili)	Ton	150	Ton	200
Okra	Ton	200 to 250	Ton	300
Orange	Ton	250 to 270	Ton	350
Lemon	1,000 pieces	4	1,000 p	cs. 10 to 20
Mongo (mini.)	Ton	500	Ton	750
(maxi.)	Ton 1	,250		7,000
Sugacane	Ton	48	Ton	60
Guave	Ton	150 to 250	Ton	200
Dates	Ton	200 to 250	Ton	500
Olives	Ton	400 to 500	Ton	700
· · · · · · · · · · · · · · · · · · ·				

-J6-

	Farmgate F	rice	<u>Retail</u>	Price
	<u>Unit</u>	<u>L.E</u> .	<u>Unit</u>	L.E.
Animal				
Buffalo(pregnant)	Head	1,000	Head	1,000
(not ")	Head	800	Head	800
Baladi (pregnant)	Head	800	Head	800
(not ")	Head	600	Head	600
Donkey	Head	70	Head	80
Goats	Head	5	Head	7
Ducks	Head	4.5 to 6	llead	5 to 6
Lamb (sheep)	Head Male	100,Female 120	flead	150
Milk	Kg	25 to 30 pi	as Kg	40 pias
Meat	Kg <u>1 year</u>	2.2 2 years	Kg <u>3 years</u>	4
Buffalo	300 to 400	500 to 600	700 to 8	300
Baladi Caw	300 to 360	400 to 450	500	
Milk Cattle	000 00 000	1,000 to 1,400	000	
<u>Straw</u>				
Wheat	Ton	100	Ton	110
Barley	Ton	100	Ton	110
Beans	Ton	60	Ton	90
Maize	Ton	15 to 30	Ton	35
Sunflower	Ton	10 to 35	Ton	40
Rice	Ton	20 to 25	Ton	35
Seasame	Ton	10 to 20	Ton	25
Groundnuts	Ton	20 to 30	Ton	25 to 35
	· .			
Young Trees			· .	
Orange	One tree	0.650	One tree	e 0.750
Lemon (seeds)		0.250		0.500
(trees)	One tree	0.650	One tree	
Mongo (seeds)		1.500		2.000
(trees)	One tree	1.000	One tree	e 1.000
Grape (seeds)		0.150		0.150
(trees)	One tree	0.200	One tree	
Sugacane	· ·	0.500		1.000
Guava (seeds)		0.250		0.250
(trees)	One tree	0.700	One tre	
Dates		6.000		6.000
		3.000		3.000
Olives (trees)	One tree	0.800	One tre	e 1.250

-J7-

		Farmgate P	nice	Dotail	Dation	·
			······		Price	
		Unit	L.E.	<u>Unit</u>	<u>I.E.</u>	
	Fertilizers				· · · · · · · · · · · · · · · · · · ·	
	Urea (46%) Super phosphate	50 kg 50 kg	6.5 2.0	50 kg 50 kg	6.5 2.0	
	(19.5%) Potassium sulfate					
	(19.5%)	50 kg	4.0	50 kg	4.0	
	Potassium sulfate (SO4)	50 kg	5.5	50 kg	5.5	
	Chemicals	·				
	Robigan 2%			Liter	52.0	
	Tamaron			Liter	11.79	
	Koprozan			Pauder	3.23	
	Lanit			Kg	25.86	
	Dinethweet			Liter	3.49	1. ·
			·. ·	Kg	22.77	* . •
	Seeds					
	Wheat	Ardab(150 kg) 25		Ardab	25	÷.,
	Rice (unhulled)	Ardab 18		Ardab	25 18	
	Broad beans	Ardab $(150 \text{ kg})36$		Ardab	36	
	Berseem	Ardab (157 kg)60		Ardab	50 60 to 150	
	Maize	Ardab (140 kg)20		Ardab	20	
	Cotton	Ardab (120 kg)9.		Ardab	9.6	
	Sunflower	Ton 400		Ton	400	
	Sudan grass	Kentar 1.2		Kentar	1.2	
	Tomatoes		to 40	Kg	20 to 40	
	Soybeans	Ton 250		Ton	250	
	Potatoes	Ton 480		Ton	480	
·	Onions	Ardab(102kg) 306		Ardab	306	
	Watermelon	Kg 4.5	· .	Kg	4.5	
	Squash	Kenter 4		Kenter	4	÷
	Cabbage	Kenter 3.8		Kenter	3.8	
	Sorghum	Kg 0.5		Kg	0.8	
	Groundnuts	75 kg 💿 60		75 kg	60	
					· · ·	

-J8-

Tale 11-6         Pice of cross and innut wnerrial.           Tale 11-6         Pice of cross and innut wnerrial.           Tale 11-6         Pice of cross and innut wnerrial.           Mole 1         Pice of cross and innut wnerrial.           Out Pice 011:         Pice 011: <th colspa<="" th=""><th></th><th></th><th></th><th></th><th>· ·</th><th></th><th></th><th></th><th></th><th></th></th>	<th></th> <th></th> <th></th> <th></th> <th>· ·</th> <th></th> <th></th> <th></th> <th></th> <th></th>					· ·					
Kind         1979         1979         1979         1980         1981         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983         1983 <t< th=""><th></th><th>Tab 1</th><th></th><th></th><th>s and Input Mat</th><th>erials</th><th></th><th></th><th></th><th></th></t<>		Tab 1			s and Input Mat	erials					
Kind         1975         1900         1901         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902         1902 <t< th=""><th></th><th>-</th><th>1 a.</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>		-	1 a.								
Models         Batelli         Models         Satelli         Models	Kind		1979	1980		1981				· · · · ·	
iiiiere)         Ton         70-40         70-40         70-40         89.22         Ton         118.8         Ton         118.8         Ton         118.8         Ton         126.80         <		Whole. Unit	sale Re Price Unit	Price Unit Price Uni		sale Ret Price Unit		sale Ret Price Unit			
Ton         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40         70.40	(Fertilizers)	· .*	·			•					
phosphare         "         20.16         "         27.30         "         50.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.30         "         30.	Urea	Ton	70.40 Ton	70.40 Ton		118.8 Ton	118.8 Ton	118.8 Ton		6.80	
isitum suppate       ''       36.00''       36.00''       36.00''       36.00''       36.00''       42.00''       42.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00''       57.00'''       57.00'''       57.00'''       57.00'''       57.00'''       57.00'''       57.00'''       57.00'''       57.00'''       57.00'''       57.00'''       57.00'''       57.00'''       57.00''''       57.00''''       57.00'''''       57.00'''''''''''''''''''''''''''''''''''	Super phosphate	÷		(-)	27.30	30,30 "	30.30 "	30.30 "	30.30 "	0.50	
i       Ardab       14.70       Ardab       15.59       Killa       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1 </td <td>Pottasium sulphate</td> <td>÷</td> <td>36.00 "</td> <td></td> <td></td> <td>57.00 "</td> <td>57.00 "</td> <td>57.00 "</td> <td>. 57.00 "</td> <td>2.00</td>	Pottasium sulphate	÷	36.00 "			57.00 "	57.00 "	57.00 "	. 57.00 "	2.00	
(1)       Ardab       14.70       Ardab       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       14.40       1	(Seeds)										
Killa       T.455       Killa       T.450       Ardab       55.00       Ardab       42.00       Ardab       42.00       Ardab       42.00       Ardab       45.00       T.455       T.       5.495       T.       T.495       T.       T.405       T.411       T.405       T.405 <td>Wheat</td> <td>Ardab</td> <td></td> <td>Ardab 11.452</td> <td>Ardab</td> <td>14.70</td> <td>Ardab</td> <td></td> <td>Ardab 16.00</td> <td></td>	Wheat	Ardab		Ardab 11.452	Ardab	14.70	Ardab		Ardab 16.00		
Ardab       25.10       Ardab       25.00       Ardab       42.00       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       "       <	Rice	Killa	7,455		Killa	12.64	Killa	15.39	Kîlla 19.30		
<pre>aire " 22.00 " 22.00 " 50.403 " " 5.670 " 12.870 " 2.870 " 2.870 " 2.870 " 2.870 " 2.870 " 2.870 " 14.11a 0.265 Killa 0.265 Killa 0.265 Ardab 52.38 Ardab 52.38 Ardab 7 ardab 7 nuts Killa 15.89 Killa 19.05 Killa 19.05 Killa 3 ardab 7 ardab 7 uts Killa 15.89 Killa 19.05 Killa 19.05 " 11.6 " 11.6 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 11.5 " 1</pre>	Bean	Ardab			Ardab	55.00	Ardab	42.00			
"       2.870       "       2.870       "       5.670       "         Ler       killa       0.265       Killa       0.265       "       5.670       "         m (sugar grass)Ardab       45.00       Ardab       45.00       Ardab       45.00       Ardab       50.38       Ardab       7         muts       killa       10.265       Ardab       50.00       Ardab       50.38       Ardab       7         nuts       killa       19.05       Killa       19.05       Killa       5       8       13       3         e according to       e       according to       19.05       Ardab       57.00       1       1         e of purity       i       11.50       "       11.50       "       11.50       "       1         i       50.00       "       55.00       "       11.50       "       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       5       1       1       1       1       1       1       1       1       1       1       1       1       1 <td>Nili maize</td> <td>=</td> <td>22.00</td> <td></td> <td>-</td> <td>50.403</td> <td>τ</td> <td></td> <td>Ξ</td> <td></td>	Nili maize	=	22.00		-	50.403	τ		Ξ		
killa       0.265       killa       0.265       killa       Killa       Killa         ugar grass)Ardab       45.00       Ardab 45.00       Ardab 45.00       Ardab 55.03       Ardab 59.58       Ardab         ts       Killa       15.89       Killa       15.89       Killa       59.58       Ardab         ts       Killa       15.89       Killa       19.05       Killa       59.58       Ardab         ts       Killa       19.05       Killa       19.05       Killa       Killa       Killa         ts       travia       19.05       Killa       19.05       Killa       Killa       Killa         ts       travia       19.05       Ardab       57.00       Ardab       77.00       Ardab         t       9.50       "       11.50       "       11.50       "       "         t       50.0       "       75.00       "       75.00       "       "       "         source       MOA Fayoun       "       11.50       "       11.50       "       "       "       "       "	Cotton	=	2.870		11	3.495	τ	5.670			
m (sugar grass)Ardab       45.00       Ardab       15.00       Ardab       52.38       Ardab       59.38       Ardab         I nuts       Killa       15.89       Killa 15.89       Killa       19.05       Killa       Killa         ie according to cee of purity       Ardab       25.00       Ardab       55.00       Ardab       57.00       Ardab         ie)       9.50       ''       11.50       ''       11.50       ''       ''         attab       50.00       ''       11.50       ''       11.50       ''       ''         attab       50.00       ''       11.50       ''       11.50       ''       ''       ''         attab       50.00       ''       11.50       ''       ''       ''       ''       ''         attab       50.00       ''       11.50       ''       ''       ''       ''       ''       ''         attab       50.00       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''       ''	Sunflower	Killa							Killa		
l nuts (killa IS.89 killa IS.89 killa 19.05 killa Killa Killa (killa e according to te according to te of purity Ardab 20.00 Ardab 25.00 Ardab 55.00 Ardab 57.00 Ardab 77.00 " 11.50 " 11.50 " 11.50 " 11.50 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 " 15.00 "	Sarghum (sugar grass	5)Ardab	45.00	Ardab 45.00	Ardab	52.38	Ardab	59.38			
e according to ee of purity ley Ardab 20.00 Ardab 25.00 Ardab 57.00 Ardab " 9.50 " 11.50 " 11.50 " 11.50 " " 11.50 " 11.50 " Source : MOA, Fayoum Source : MOA, Fayoum	Ground nuts	Killa		Killa 15.89	Killa		Killa				
<pre>iey Ardab 20.00 Ardab 25.00 Ardab 55.00 Ardab 57.00 Ardab " 9.50 " 11.50 " 11.50 " 11.50 " " 50.0 " 55.00 " 75.00 " 75.00 "</pre>	Price according to degree of purity	0								·	
" 9.50 " 11.50 " 11.50 " 11.50 " 11.50 " 1.50 " 1.50 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500 " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500"" " 1.500""" " 1.500""" " 1.500""" " 1.500""" " 1.500""" " 1.500"""" " 1.500""" " 1.500"""" " 1.500""" " 1.500"""" " 1.500"""" " 1.500"""" " 1.500"""" " 1.500""""" " 1.500"""" " 1.500""""" " 1.500""""" " 1.500"""""""""""""""""""""""""""""""""""	Barley .	Ardab	20.00		Ardab		Ardab	37.00			
" 50.0 " 65.00 " 75.00 " 75.00 " 75.00 " Source : MOA, Fayoum	Wheat	E	9.50		Ξ	11.50	÷	11.50			
Source : WOA, Fayoum	Ses ame	Ξ	50.0		. =	75.00	•	75.00			
		Source	s : MOA, Fa	iyoum							

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		-1. -			:	
API	PEND	IX	J-2,	Import	and	Export

	Salance of Tr and Foreign C		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
		(Unit:	L.E. 1,000)
Year	Exports	Imports	Balance
 1952	150172	227698	- 77526
1977	668478	1884278	-1215800
1978	679754	2632180	-1952426
1979	1287813	2686212	-1398399
1980	2132178	3401999	-1269821
1981	2262982	6187486	-3924504
1982*	2184122	6354517	-4170395
Source:	Statistical	Yearbook	

# Table J2-2 Exports of Some Principal Commodities

				(U	nit: L.E	. 1,000)
Commodities	1977	1978	1979	1980	1981	1982*
Petroleum Oil Crude	119124	140671	396490	1233280	1230530	1211240
Raw Cotton	182268	131523	267277	296372	319964	286021
Cotton Yarn	68614	89613	130098	135871	108603	86625
Cotton Fabrics	24539	27161	41012	26723	23524	15802
Sugar Cane Refined	10249	7228	8894	3014	10422	6172
Oranges	21350	20741	14410	27239	32980	36835
Rice	23378	19882	22072	24648	29825	8129
Potatoes	16404	5784	18812	22744	17928	28762

Source: Statistical Yearbook, 1983

Table J2-3

Imports of Some Principal Commodities

	·			(U	nit: L.E	. 1,000)
Commodities	1977	1978	1979	1980	1981	1982*
Wheat	128604	169001	174340	308890	531202	492235
Wheat Flour	49368	74799	68419	71720	250819	192187
Maize	30010	37974	31346	71739	219864	210101
Meat Chilled or Frozen	22904	34610	49495	118739	208619	120559
Dairy Products	26144	49019	49171	78106	150852	117233
Sugar Refined	16768	40628	34862	84742	164419	98302
Motor Vehicles for transport of goods	55122	111385	102611	117768	221959	168696
Automobiles	53466	73347	83688	83542	133107	177976
Parts for motor Vehicles & tractors	39621	83506	84488	44580	161140	165271
Bars & Rods Buildin Iron	^g 18631	29920	99933	180394	152231	172192
Excavating Lendling Loring and excraction machinery	ng35922	61458	67544	78103	95109	132673
Organic & Inorganic Chemicals	64069	69839	52629	86091	130138	122307
Cement	25693	44452	99001	103096	164910	250129

Source: Statistical Yearbook, 1983

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		1981			1982	
Crop	<u>Value</u> 1,000LF	Q'ty	LE/ton	<u>Value</u> 1,000LE	<u>Q'ty</u>	LE/ton
Fresh Tomatoes	1,136	3,294	345	2,977	8,576	347
Mangoes	223	206	1,083	491	438	1,121
Oranges	32,980	113,719	290	36,835	101,257	364
Watermelon	2,864	10,915	262	2,725	7,148	381
Groundnuts	3,379	4,507	750	2,700	4,642	582
Tomato paste	-	-		-	-	
Fruits juices	6,680	7,122	938	3,948	3,955	998
Raw cotton	319,964	3,551	1/K 90LI	/K286,021	4,003M/K	71LE/¥
Source:		Bulletin c. 1982,		eign Trade 33		

Table J2-4 Export of Commodities Concerned the Project

Table J2-5

Imports of Commodities Concerned the Project

				-		
	· .	1981			1982	
Items	Value	<u>Q'ty</u>	LE/ton	Value	Q'ty LE	/ton
· ·	1,000LE	Ton		1,000LE	Ton	
Wheat	531,202	3,092,41	0 172	492,235	2,919,703	169
Maize	219,864	1,289,41	5 171	210,101	1,296,640	162
Cement	164,915	4,215,98	1 39	250,129	5,772,684	43
Fertilizers	72,392	682,66	8 106	15,988	196,445	81
Meat chilled or frozen	208,619	200,40	0 1,041	157,023	137,888	1,139
Dairy Produce bird's eggs, natural honey	150,852	118,44	2 1,274	117,233	86,724	1,352

Source:

Monthly Bulletin of Foreign Trade -Jan./Dec. 1982, Aug. 1983 Table J2-6 Fresh Tomato Exported from Egypt

		1.				· . ·			
	LE/kg		0.36	0.40	0.34	0.34	0.35	0.33	0.39
1981	Q'ty Ton	•	1,036	ъ.	391	1,284	154	233	23
	Value. 1,000LE		373	.0	131	440	54	76	Сл
	LE/kg		0.34	I	0.34	0.34	I	<b>۱</b>	I
1980	<u>Q'ty</u> Ton	•	577		688	677	Ĩ	н 11	. * 1 *
	Value 1,000LE		197	1 - 	235	230	ł	I	1
	LE/kg		0.33		0.27	0.25	0.28	0.25	I
1979	●.		463	1	1,150	1,711	32	79	
	<u>Value</u> 1,000LE		151	ł	315	423	0	20	l
	Country	(Arab Country)	Saudi Arabia	Algeria	Lebanon	Kuwait	Bahrain	U.A.E.	Oman

		Actual Price	199	95
	Unit	at Present	Financial	Economic
Seeds				
Wheat	kg	0.17	0.2	0.22
Tomato(winter)	нT	20 to 40	30	34
Groundnuts	n	0.8	0.8	0.9
Watermelon	11	4.5	4.5	5.2
Barley	11	0.13	0.13	0.15
Beans	11	0.24	0.24	0.28
Onions	ГН —	3.0	3.0	3.5
Cotton with see	ed''	0.08	0.08	0.09
Millet(sorghum)	11	0.50	0.5	0.57
Sesame	11	0.67 to 0.83	0.75	0.86
Sunflower	14	0.4	0.4	0.46
Maize	. 11	0.14	0.14	0.16
Berseem	11	0.38 to 0.96	0.67	0.77
Unskilled labor	r per da	ay 4.0	4.0	2.0

Note: 1. Economic price of berseem and sorghum is the equivalent value to production cost in the project.

2. Domestic price of tomato is estimated using actual price at present.

Export price of tomato is estimated by the price structure which F.O.B. Egypt in 1982 in 347 L.E. per ton.

3. According to the Monthly Bulletin of Foreign Trade, 1983 F.O.B. price of raw cotton is 71 L.E./kentar 1982.

This is the same as the farm gate price in Table J1-7.

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# APPENDIX J-3. Estimation of Financial and Economic Farm Gate Price

Table J3-1 Farmgate Prices by Commodity

	Thiga ce T	Trees by common	* ***	Jnit: LE)
	-	Actual Price	1995	Š
Commodity	Unit	at Present	<u>Financial</u>	Economic
Crops				
Wheat	ton	167	200	216
Tomato (Winter)	11	50 to 130	Domestic 100	
			Export 159	
Groundnuts	11	467 to 600	600	595
Watermelon	н	100 to 250	175	140
Olives	tt	400 to 500	500	400
Orange	11	250 to 270	309	300
Mango	11	500 to 1,250	880	700
Guava	H.	150 to 250	200	160
Fertilizer				
Unce $(A \Gamma \theta)$	<b>t</b> on	170	276	200
Urea (45%)	ton	130	276	288
TSP (19.5%)	U .	40	105	110
Potash (60%)	.,	110	177	190
Animal Fodder				
Wheat Straw	ton	100	100	109
Berseem (Green)	11		15	15
Maize Straw	11	30	30	33
Sorghum(Green)	EF.		8	8
Barley Straw	**	100	100	109
Beans Straw	11	60	60	65
			00	
Animal Products	•			
Milk (Baladi,Fr	iesian)k	g 25 to 30	25	24
Milk (Baffalo)	่ 1		40	39
Meet		2.2	2.2	4.4
Crops				•
Barley	ton	125	125	100
Beans	1011	240	240	192
Onion	:, <b>11</b>	65	65	52
Maize	11	161	202	217
and the second	÷ +	476	476	476
Cotton with see	u I	178	178	193
Millet(Sorghum)			833	666
Sesame	po 11 - S	833 400	400	320
Sunflower	· · ·	400	41/17	520

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Table J3-2	Financial and Economic Price Structure for	
	1097 Constinut Device	A
	- 1983 Constant Price -	

Cost Item	<u>Fi</u>	nanci	al	Economic
1. F.O.B., U.S.A. (us\$/ton) 1/		149		149
2. Ocean Freight (us\$/ton)	+	40	÷	+ 40
3. C.I.F., Alexandria (us\$/ton)	•	189		189
(L.E./ton)		155		155
4. Management fee, profit, imports	2/ +	10	1 i	+ 14 5/
5. Port fees, fiscal stamps 3/	 -	- 5		+ 7 5/
6. Port handling, storage, sundries	4/+	30		+ 40 5/
7. Transport Alexandria to Cairo	4	10		+ 14 6/
8. Transport Fayoum to Cairo		5		7 -
9. Collection, storage, commission		5		7
10. Farm gate price per ton	 	200		216

Note: 1/ Primary Commodity Price Forecasts.

Office Memorandum,

World Bank, Jul. 13, 1984.

Wheat is Canadian No.1, Western Bed Spring in store Thunder Bay.

2/, 3/, 4/ are based on Fayoum Agricultural Development Project, Fesibility Study, Oct. 1982.

5/ Conversion factors of port and harbor charges is 1.315 based on Shadow Prices for Trade Strategy and Investment Planning in Egypt, World Bank, 1982.

6/ Conversion factor of road transport (goods) is 1.365 based on World Bank Report.

Table J3-3 Financial and Economic Price Structure for Urea (N-45)

- 1983 Constant Price -

and the second	·		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1
	19	90	199	95 💡
Cost Item	Fin.	Econ.	Fin.	Econ.
1. Export Price, F.O.B. Europe				
(US\$/ton) 1/	250	250	260	260
2. Ocean Freight (US\$/ton)	+35	+35	+36	+36
3. Import Price, C.I.F.			· .	
Alexandria (US\$/ton)	285	285	296	296
(LE/ton)	234	234	243	243
4. Port Handling, Storage and				A. A.
Processing	+15	+20	+15	+20
5. Ex-godown Price	249	254	258	263
6. Transport Cost from Port			1 < 1 < 1 < 0 < 1	
to Tamiah Storage	+16	+22	+16	+22
				1. S.

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		1	990	199	5
	<u>Cost Item</u>	Fin.	Econ.	Fin.	Econ.
7	Transport Cost from Storage	· .			
а. Д	to Farm	+2	+3	+2	+ 3
8.	Farm Gate Price per ton	267	279	276	288
. *	Note: 1. Fin.: Financial Econ.: Economic	. · ·			
	2. Transportation cost:		to Alexa		ton truck OLE/5 ton
	3. Conversion Factor: 1	road tran			
	4. 1/ Primary Commodity Office Memorandum,				ık

Table J3-4Financial and Economic Price Structure for TSP (46%)- 1983Constant Price -

	1990, 1995			
Cost Item	Financial			
	:			
1. Export Price, F.O.B. US. Gulf				
(US\$/ton) 1/	-170	170		
2. Ocean Freight (US\$/ton)	+40	+40		
3. Import Price, C.I.F. Alexandria				
(USE\$/ton)	210	210		
4. Port Handling, Storage and				
Processing	+15	+20		
5. Ex-godown Price	225	230		
6. Transport Cost from Port to				
Tamialh Storage	+20	+27		
7. Transport Cost from Storage Farm	+2	+3		
8. Farm Gate Price per ton	247	260		
9. Convert to content 19.5%	105	110		

Note: <u>1/</u>: Primary Commodity Price Forecasts, July 13, 1984, World Bank.

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Table J3-5

## Financial and Economic Price Structure for Muriate of Potash (60%) - 1983 Constant Price -

1990, 1995 Cost Item Financial Economic 1. Export Price, F.O.B., Vancouver (US\$/ton) 100 100 2. Ocean Freight (US\$/ton) +40+403. Import Price, C.I.F., Alexandria (US\$/ton) 140 140 4. Port handling, Storage and Processing +15 +20 5. Ex-godown price 155 160 6. Transport Cost from Port to Tamiah Storage +20 +277. Transport Cost from Storage to Farm +2 +3 8. Farm gate Price per ton 177 190

## Table J3-6 Price Structure for Oranges

	1995			
Cost Item	Financial	Economic		
1. F.O.B. Alexandria				
(L.E./ton)	364	364		
2. Port Handling, Storage, Port Fees	-15	20		
3. Transport Fayoum to Alexandria	20	27		
4. Packing, Collection, Grading	20	17		
5. Farmgate Price for delivered Orange	309	300		

Note: 1. F.O.B. Prices of Oranges 1982 ..... 364 L.E./ton

> Source: Monthly Bulletin of Foreign Trade Jan./Dec. 1982, Aug. 1983.

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Table J3-7	Price	Structure	for	Tomatoes

		1982			
	Cost Item	Financial	Economic		
1.	F.O.B., Cairo Airport				
	(L.E./ton)	347	347		
2.	Profit: Nile Company (5%)	25	20		
3.	Overheads, Management fees	22	17		
4.	Handling cost, airport	16	21		
5.	Transport	25	34		
6.	Packing, Packing materials	23	18		
7.	Collection, grading center	10	8		
8.	Price of selected tomatoes, Fayoum	227	229		
9.	Wastage, losses, not acceptable 30	8 68	69		
10.	Farm gate price for delivered				
	tomatoes (export)	159	160		

- Note: 1. Based on Fayoum Agricultural Development Project Feasibility Study, Oct. 1982, Agrar-Und Hydrotechnik GMBH.
  - 2. F.O.B. is based on the monthly bulletin of foreign trade, Jan./Dec. 1982, Aug. 1983.
  - 3. Operating cost per ton in the grading center of agricultural cooperation is estimated at about five L.E. In this table, 10 L.E. is used.

Table_J3-8	Price	Structure	for Maize	

	1995			
Cost Item	Financial	Economic		
1. CIF, Alexandria (LE/ton) 1/	162	162		
2. Port charge, handling, profit of				
importer	+40	+53		
3. Transport cost Alexandria to				
Cairo 3/	+10	+14		
4. Transport cost Fayoum to Cairo	-5	- 7		
5. Collection, storage, commission				
Fayoum	-5	<del>~</del> 5		
6. Farm gate price	202	217		

Note: 1/ is an imported price in 1982.

2/ : Conversion factor of port and harbor charges is 1.315.

3/ : Conversion factor of road transport is 1.365.

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٨	, PPEND I X	J-4.	Estimati	on of Ec	conomic E	8enefit			
		Tabl	e J4-1 in North	Schedul Wahby &	e of Ben Com Osh	efit Gro eem Area	wing s		
		North Wa	ihby Area			Com Os	heem Are	a	
	roject <u>ear</u>	1	Settler II	111	<u>Cattle</u> 1	<u>B.C.</u> 11	<u>I</u> .	Settler 11	[
6	(1989)	0.F.	<u> </u>		0.F.		0.F.	~	
7	(1990)	L.	0.F.		ι.	0.F.	L.,	0.F.	
8	(1991)	lst.S.	Լ.	0.F.	<u>lst.S.</u>	L.	lst.S.	L.	0.
9	(1992)	2nd.S.	lst.S.	L.	2nd.S.	lst.S.	2nd.S.	<u>lst.S.</u>	1
1	0(1993)	<u>3rd.S.</u>	2nd.S.	lst.S.	<u>3rd.S.</u>	<u>2nd.S.</u>	<u>3rd.S.</u>	<u>2nd.S.</u>	$\frac{1}{2}$
1	1(1994)	-do-	3rd.S.	2nd.S.	-do-	3rd.S.	- do -	3rd.S.	<u>2r</u>
1	2(1995)	- do -	-do-	<u>3rd.S.</u>	Full	- do -	- do -	-do-	31
ļ	3(1996)	- do -	-do-	-do-	- do -	<u>Full</u>	- do -	-do-	-
1	4(1997)	-do-	-do-	-do-	-do-	- 50 -	- do -	- do -	-
1	5(1998)	-do-	-do-	-do-	-do-	-do-	- do -	- do -	
1	6(1999)	- do -	-do-	-do-	- do -	-do-	-do-	- do -	
1	7(2000)	Full	- do -	-do-	- do -	-do-	<u>Fuli</u>	-do-	
1	8(2001)	- do -	Full	- do -	-do-	-do-	- do -	<u>Full</u>	
1	9(2002)	-do-	-do-	Full	- do -	-do-	- do -	- do -	

Table J4-1	Schedule	of	Benefit	: Growing
in North	Wahby &	Com	Osheem	Areas

	Table J	4-2	Area of	Crop			
						(Unit	Fed)
Project North Wahby	Crop	<u>1991</u>	<u>1992</u>	<u>1993</u>	1995	1997	2001
	Berseem Tomato wheat Groundnuts Watermelon Sorghum Olive	945 	1,733 473  1,733 126	2,521 158 788 315 568 1,890 294	3,152 526 841 1,050 1,892 1,050 420	2,416 526 526 1,050 1,303 1,050 420	2,100 526 526 1,050 1,050 1,050 420
	Orange Mango Guava <u>Total</u>	1,890	125 83 81 4,354	303 202 101 7,140	465 310 155 9,861	465 310 155 8,221	465 310 155 7,652
<u>Com Osheem</u> a. <u>Scttler</u>	Berseem	300	675	1,188	1,443	1,114	
	Tomato Wheat Groundnuts Watermelon		150	50 313 100 140	251 251 500 702	251 251 500 591	251 251 500 500
	Sorghum Olive Orange Mango	300	825 40 30 20	1,300 110 83 55	500 200 150 100	500 200 150 100	500 200 150 100
	Guava Total	600	10	27 3,366	50 <u>4,147</u>	50 <u>3,707</u>	50 3,502
Cattle Breed b. Center	ing				· · · . ·	· ·	• .•
	Berseem Sorghym	500 500		1,000 1,000	1,000 1,000		
	Total			2,000			
c. <u>Subtotal</u>				5,366			en en en
<u>Grand Total</u>		3,490					
Cropping Int	ensity	48	-113	174	222	193	183

Note:

Cropping intensity is calculated as one season of orchard. The acreage projected by 1997 include intercrops as berseem and watermelon. Table J4-3

Production of Crop

					(1	Unit: 1,	000 ton)
Crop	Area	8yrs _(1991)_	9yrs (1992)	10yrs _(1993)_		17yrs (2000)	18yrs -(2001)-
Berseem	N.W. C.O.	4.9 4.2	10,5 10,8	14.8 16.4	$23.5 \\ 28.4$	26.3 32.5	26.3 32.5
Tomato	N.W. C.O.	•• <b>-</b>	 	$1.7 \\ 0.6$	6.6 2.9	7.9 3.7	7.9
Wheat	N.W. C.O		0.5 0.2	1.0 0.4	0.9	0.9 0.4	$0.9 \\ 0.4$
Groundnuts	N.W. C.O.		~ ~	0.1 0.04	0.6 0.3	0.8 0.4	$0.8 \\ 0.4$
Watermelon	N.W C.O			3.1 1.0	12.8 5.7	10.5 4.8	10.5
Sorghym	N.W. C.O	4.3 3.6	15.1 12.6	22.0 23.0	$17.9 \\ 25.6$	18.9 27.0	$18.9 \\ 27.0$
Fruits	N.W. C.O.			0.2 0.06	1.7 0.5	7.4 3.2	7.5 3.6

Note: N.W. is North Wahby Area.

C.O. is Com Osheem Area including Cattle fattening center.

	Table J4-4	Product	ion of L	i vestock	<u>.</u>		
Area	Products	8yrs (1991)	9yrs (1992)		12yrs (1995)	•	18yrs (2001)
North	Fattening Ca	ttle					
Wahby	No. (head)	160	650	960	760	800	800
	Beef (ton)	45	179	265	210	222	222
	Milking Cow						•
	No. (head)	351	1,404	2,080			
	Milk (ton)	324	1,291	1,913	1,525	1,599	1,599
Com	(Settlers)	_					
Osheem	Fattening Ca				700	200	700
	No. (head)	50	250	460	380	380	380
	Beef (ton)	14	. 70	128	108	111	111
	Milking Cow						
· *	No. (head)	110	546	1,008	1,250	845	845
	Milk (ton)	100	503	927	748	797	797
	· · ·						
Com	(Cattle Bree		nter)				
Osheem	Fattening Ca	it tle					
	No. (head)	150	480	880	,		1,200
	Beef (ton)	54	170	311	412	424	424
t an A	Milking Cow						
	No. (head)		1,206	2,200	2,924	3,015	3,015
	Milk (ton)		4,269	7,789	10,354	10,674	10,674
	Mara	Numbon	of lives	tock inc	ludes ca	lf	

Note: Number of livestock includes calf.

Net Production Value per Feddan - North Wahby & Com Osheem Areas -Table J4-5

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Financial

Economic

	A CANADA AND AND AND A CANADA		Not			Net
Crop	Gross Income LE	Production Cost LE	Production Value LE	Gross Income LE	Production Cost LE	Production Value LE
Wheat	585	179	406(69)%	540	229	115
Tomato (EXPO) (DOME)	2,400 1,200	5 36	1,864(78) 664(55)	2, 385 1, 500	759	1,626 741
Groundnuts	476	164	312 (66)	480	253	227
Watermelon	1,400	192	1,208(86)	1,750	261	1,489
Olive	2,800	777	2,023(72)	3,500	934	2,566
Orange	2,400	728	1,672(70)	2,472	836	1,636
Mango	4,200	1,553	2,647(63)	5,280	1,367	3,913
Guava	1,120	715	405(56)	1,400	842	558

EXPO and DOME of tomato are for export and for domestic.

Note:

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				Total	EE E	585	2,400	1,200	476	1,400	2,800	2,400	4,200	1,120						<u>Total</u> LE	540	2, 385	1,500	480	1,750	3,500	2,472	$\sim$	1,400
- ,		9 G	Gross	Income	LE	t ?	ľ	4.4	-	1	1	L F	1 1	ł				0	Gross	In come LE	1	3	1	1	1	ł	1	2	1
	:	Green Forage		Price	LE	1	1	8 t	i I	1 t	1	t i	1	1				Green Forage		Price	1	1	ŀ	1	1	1 1	1	1	1
rroject		G		Yield	ton	.a 1	1	1	I I	1	1	I I	1	1	,	roject		ч С		Yield ton	1	. 1	L 8	1 1	ł	1	1	1	] 1
(Economic)			Gross	Income	Ц	. 961	1	1	1	1	1	1 1	1	1		dan with F	cial)		Gross	<u>Income</u> LE	180	1	L I	I	1	1	i I	1	2
		Straw		Price	ĽΕ	109	1	I I	t I	1	I I	t T	1	1 1		per Fed	(Finan	Straw	•	Price LE	100	1	J ł	1	1	1	1	ł	1
				Yield	ton	1.8	1	· 1	1	E P	   	1 1	1	1		Gross Income per Feddan with Project				Yield	1.8	ł	r I	3 1	E T	ş t	1	1	1
	·	Products	Gross	Income	ш Т	389	2,400	1,200	476	•	•	2,400	4,200	1,120		04-7		Products	Gross	Income	360	2,385	1,500	480	1,750	3,500	2,472	5,280	1,400
		20	-	Price	ц	216	160	80	595	140	400	300	700	160		Table J4		οr		Price LE	200	159	100 .	600	175	500	309	880	200
		Grain		Yield	ton	1.8	15	15	0.8	10	7	80	Q	4	ŗ		÷.,	Grain		Yield ton	1.8	5 T	15	0.8	10	7	S	9	r~
				Crop		Wheat	Tomato		Groundnuts	Watermelon	Olive	Orange	Mango	Guava						Crop	Wheat	Tomato	11	Groundnuts	Watermelon	Olive	Orange	Mango	Guava

Table J4-6Gross Income per Feddan with Project(Economic)

-J27-

Production Cost per Feddan with Project

Table J4-8

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	Valve 55	11	11	33	22	22		55	3.3	22	22	55	11	
Phosnhate		8.	gu. Ba	÷	18 1 1	<b>:</b>	4 <b>2</b>	90 90 1 <del>90</del>	11	E	<u>6-</u>	*	- 	
Чd	01ty kg 500 5	100	100	300	200	200	100	300	300	200	200	500	100	
	Valve LE g 29	29	43	46	14	14	29	86	86	288	58	29-	29	
Urea	Price V. LE 14.4/50kg		5	5	÷	<b>I</b> .	=		=	Ŧ	-	=	2	
	0'ty kg 100	100	150	160	50	50	100	300	300	1,000	200	100	100	
	Valve LE 12	12	15	<b>о</b>	14	ъ	15	12	7	9	10	12	15	
Seed	Price LE 0.67x1.149=0.77		0.17x1.149=0.2	50x1.149=34	0.8x1.149=0.9	4.5x1.149=5.2	0.5x1.149=0.6				·	0.77	0.77	
	0'ty kg 15	15	75	0.25	15	1	25					15	25	
	Crops rs Berseem(L)	Berseem(S)	Wheat	Tomato	Groundnuts	Watermelon	Sorghum	Olive	Orange	Mango	Guava	e Berseem	Fattening Sorghum	
	Farmers							•				Cattle	Fatter	Center

Seeds cost of fruits are annual cost which initial planting costs are divided by life years of fruits tree.

Note:

-J28-

(Continue)		- A - A - A	oduction	Production Cost per Feddan with Project (Economic)	Feddan v omic)	vith Proj	ect			
		Potassium			Labor		Farm	Protection	uo	Total
Crops	0'ty kg	0'ty Price kg LE	<u>Value</u> LE	0'ty days	<u>Price</u> LE	<u>Value</u> LE	<u>Machine</u> LE	Q.ty Price LE LE	Value LE	<u>Cost</u> LE
Farmers Berseem(L)	: <b>b</b> ]	1 1	1	64	2	128	46	8x1.976	16	286
Berseem(S)	2 1	3	1	28.	0	56	46		ł	154
Wheat	ł	ŧ	8 2	27	0	5 7	56		F T	179
Tomato	100	9.5/50	19	Man 70 Boy 86	∧ 1	140	77		\$3	5.36
Groundnuts					°.2	16	22		3 F	164
Watermelon				45	. 01	06	21		40	192
Sorghum				44	~1	88	22		t İ	165
Olive				155	. (3	310	26	IS7xI.976	310	777
Orange				131	5	262	50	ŧ	310	728
Mango	100	9.5/50	19	137	C)	274	39	458xl.976	905	1.553
Guava				140	7	280	35	157x1.976	310	715
Cattle Berseem				64	<b>CI</b>	128	70		16	310
Fattening Sorghum				44	5	88	52		ł	195

.

-J29-

Center

eddan with Project ial)	Urea Phosphate Price Value Value	0kg 28 500 5.3/50kg	" 28 100 "	" 41 100 "	" 44 300 " 32	" 14 200 " 21	" 14 200 " 21	11 28 100 tt	" 83 300 " 32	" 83 300 ¹¹ 32	** 276 200 ** 21	•• 56 200 •• 21	11 28 500 11 55	" 28 100 " II	
Production Cost per Feddan with Project (Financial)	Value 0.tv D	100 kg	10 100	13 150	8 160	12 . 50	S S	13 100	16 300	10 300	7 1,000	13 200	10 100	13 100	
Table J4-9	O'ty Price		15 0.67	75: 0.17	0.25 30	15 0.8	1 4.5	25 0 5			· · ·		15 0.67	25 0.5	
	Crops	Farmers Berseem(L)	Berseem(S)	wheat	Tomato	Groundnuts	Watermelon	Sorghum	Olive	Orange	Mango	Guava	Cattle Berseem	Battening Sorghum	Center

(continue)			Proc	Juction Co	sst per Fedd (Financial	Feddan w ncial)	Production Cost per Feddan with Project (Financial)	14		
		Potassium			Labor		Farm	Protection		
Crops	Q ty kg	Price LE	<u>Value</u> LE	<u>0'ty</u> days	Price LE	<u>Value</u> LE	Machine LE	Q'ty Price LE LE	Value LE	· 1
Farmers Berseem(L)	4 - 1 1	1	1	64	4	256	46		ŝ	
Berseem(S)	   	3 2	1 1	28	4	112	46		ł ł	
Wheat	i i	• • •	1	57	4	108	56		# 1	
Tomato	100	8.9/50kg	18	Man 70 Pov 26	. 4 <b>1</b> 2	2580 2580	77		42	
Groundnuts	ł	1	3 8	buy ou 46	ন ন	184	22		t I	
Watermelon	. E I	L B	8	45	4	180	21		20	
Sorghum	1 1	ı I	! !	44	4	176	22		1	250
Olive	1	ţ	9 E	155	4	620	26		157	934
Orange	r L	 1	I I	131	4	524	50		157	836
Mango	100	8.9/50kg	18	137	4	548	39		458	1.367
Guava	B S	) 1	1 1	140	ব	560	35		157	842
Cattle Berseem				64	4	256	70		s	42
Fattening Sorghym				77	4	176	52		1	280

Initial Planting Cost of Fruits per Feddan	
Table J4-10	

		(Economic )		
Cost Item	Olive	Orange	Mango	Guava
Ploughing	121)E×1.159(C.F)=141E	-		н. На
Leveling	6LEX1.159(C.F)=7LE	2	Ξ.	
Irrigation Canal	10LEx0.5(C.F)=5LE	-	ŧ	2
Digging Hole	150LEx0.5(C.F)=75LE	<b>t</b>	R0x0 5=40	2
Seedling	1201.Ex1.149(C.F)=138	97x1.149=111	80x1.149=92	105×1.149=120
Planting Labor	16LEx0.5(C.F)=8	5	E	
I rrigation	39 LE x0.5 (C.F)=20		£	Ξ
Manure	45LEx0.5(C.F)=23	2	24x.0.5=12	ĩ
Fertilizer Chemical	12LEx1.663(C.F)=20	- <b>-</b>	2 2 2	44 97
Fertilizer Labor	4LEx0.5=2	•±		H
Total Cost	312	285	220	294
Life Years	25	40	40	30
Annual Cost	12		ý	10
Source : Farm	Farm Management Survey, Aug. 1984.	4. C.F is conversion	on factor.	

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	Table 14-11 Initial Planting Cost of	st of Fruits per Feddan	. Feddan	
	) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )		I outrail	
Cost Item	Olive	Orange	<u>Man go</u>	Guava
Ploughing	3LE/horx4hor=12LE (Machine)	=	1	11 - F
Leveling	5LE/horx2hor=6LE (Machine)	Ξ	÷	
Irrigation Canal	10LE (Labor)	=	1	=
Digging Hole	150holex1LE=150LE (Labor)	2 2	80x1=80	u e
Seedling	Olive 0.8LE/treex150tree=120LE 0.	0.65LEx150=97LE	1.0LE×80=80LE	0.7LEx150=105
Planting Labor	4manx4.0LE=16LE (Labor)	=	11	ĩ
Irrigation	one time ner two week 26time/yearx1.51.E=391.F (1.ahor)	÷	-	÷
Farmyard Manure	l50hole x0.5LE/hole=45 (lahor)	a.	$80 \times 0$ , $3 = 24$	an 81
Fertilizer Chemícal	1 2 LE	1	z	
Fertilizer Labor	4 LE		1	Ξ
Total Cost	402	391	283	-399
Machine	- 18	18	18	18
Ferti li zer	12	12	12	12
Labor	372	361	253	369

Note: Actual farmgate prices are used.

-J33-

	(Econom	[[]]]
	Baladi Cow	Friesian
Gross Income		
Meat	350kgx4.4LE= <u>1,540LE</u>	500kgx4.4LE= <u>2,200LE</u>
· ·		
Production Co		
Stock Calf	1headx400LE=400LE	lheadx450LE=450LE
Fodder	3,025kgx0.016LE=48LE	5,300kgx0.016=85LE
Concentrate	425kgx0.04LEx1.085=18L	321E 740kgx0.04LEx1.085=321E
Wheat Straw	540kgx0.109LE=59LE	540kgx0.109LE=59LE
Labor	11LE	14LE
Insurance	4 LE	5LE
Other	60 LE	90LE
	( 201 P	
<u>Total</u>	<u>628LE</u>	<u>735 LE</u>
Pro. Cost exc	luding	
fodder produc		650LE
· · · · · · · · · · · · · · · · · · ·		<u> </u>
Net Production	n Value 960LE	1,550LE
······		

Table J4-12Net Production Value for Meat with Project<br/>(Economic)

Table J4-13Net Production Value for Meat with Project<br/>(Financial)

	Ba	ladi Cow		Friesian
Gross Income Meat	350kgx2.2L	B=770LE		500kgx2.2LE= <u>1,100LE</u>
Production Cos	t	а. ¹ 4 — а. а.		
Stock Calf				1headx450LE=450LE
Fodder	3,025kgx0.(		1 - 1 - 1	5,300kgx0.016=85LE
Concentrate	425kgx0.041			740kgx0.04LE=30LE
Wheat Straw	540kgx0.1L	E=54 LE		540kgx0.1LE=54LE
Labor		22 LE		22LE
Insurance		4 LE		4 L E
Other		29 LE		34 LE
Total		574LE		<u>679LE</u>
Pro. Cost excl	uding			
fodder produce	d	526LE		594LE
Net Production	Value	244LE	·	506LE

	Table J4-14 Net Production	Net Production Value for Milk with Project	
		(Economic)	
Gross Income	Baladi Cow	Raffalo	Friesian
Milk	800kgx0.24LE=192LE	I,400kgx0.39LE=546LE	4,200kgx0.24LE=1,008LE
Calf(female)	0.3headx325LEx1.007=98LE	0.3headx400LEx1.007=121LE	0.45headx425LEx1.007=184LE
Calf(male)	0.3headx400LEx1.007=121LE	0.3headx350LEx1.007=106LE	0.45headx425LEx1.007=184LE
Cull	0.14headx700LEx1.007=99LE	0.14headx550LEx1.007=78LE	0.14headx950LEx1.007=154LE
Total	210LE	851LE	1,510LE
Production Cost			
Green Maize	4.6tx13LE=60LE	5.4tx13LE=70LE	6.3tx13LE=82LE
Sorghum*	1.1tx8LE=8.8LE	1. $0 \pm x $ BLE = 8LE	1.4tx8LE=11.2LE
Wheat Straw*	1.5tx109LE=163.5LE	1.4tx109LE=152.6LE	$2.0t \times 109LE = 218LE$
Berseem*	8.5tx15LE=1,257LE	8. ltx15LE=121.5LE	11.4tx15LE=171LE
Concentrate	1.ltx40LEx1.085=48LE	0.9tx40LEx1.085=39LE	2.3tx40LEx1.085=100LE
Insurance	14 LE	2 0 L E	30 LE
Labor	5 S L B	SSLE	55 LE
Replacement*	45 LE	60LE	210LE
Others (5%)	26LE	26LE	44LE
Total	548LE	552 LF	921LE
Pro. cost excluding and replacement cost	ng fodder produced ost203LE	210LE	<u>311LE</u>
Net Production Value	1ue <u>307LE</u>	<u>641LE</u>	<u>1,199LE</u>
Martin Martin	Notes Months of * and and form total	cost becomed of intermediate nroduce	

Note: Marks of * are excluded from total cost because of intermediate produce.

1391	Friesian		4,200kgx0.25LE=1,050LE	0.43headx425LE=183LE	0.45headx425LE=183LE	0.14headx950LE=133LE	<u>1,549LE</u>		6.3tx13LE=82LE	1.4tx8LE=11.2LE	2.0tx100LE=200LE	11.4tx1SLE=171LE	2.3tx40LE=92LE	14LE	110LE	210LE	45LE	<u>935LE</u>	343LE	1,206LE	
(Financial)	Baffalo		1,400kgx0.4LE=560LE	0.3headx400LE=120LE	0.3headx350LE=105LE	0.14headx550LE=77LE	862 LE		5.4tx13LE=70LE	1.0tx8LE=8LE	1.4tx100LE=140LE	8.ltxl5LE=121.5LE	0.9tx40LE=36LE	14LE	110LE	45 LE	27LE	572LE	257LE	605LE	
	Baladi Cow		800kgx0;25LE=200LE	0.3headx325LE=98LE	0.3headx400LE=120LE	0.14headx700=98LE	516LE	·	4.6tx13LB=60LE	1.1tx8LE=8.8LE	1.5tx100LE=150LE	8.5txlSLE=127.5LE	1.ltx40LE=44LE	14LE	110LE	45LE	28LE	587LE	Pro. Cost excluding fodder produced and replacement cost 256LE		
•		Gross Income	Mi 1k	Calf (female)	Calf (male)	Cull	Total	Production Cost	Green Maize	Sorghum	Wheat Straw	Berseem	Concentrate	Insurance	Labor	Replacement	Others (5%)	Total	Pro. Cost excluding f and replacement cost	Net Production Value	

Table J4-15 Net Production Value for Milk with Project

-J36-

	Table J4-16	Farm Machinery Cost	per Feddan		
		(Economic)			
				(Unit: LE/feddan)	ddan)
Cr	Crops	Fixed Cost	Fuel Cost	Wage	Total
Farmers	Berseem	15	27	6	46
	Tomato	61	14	~	22
	Wheat	32.	20	4	56
	Groundnuts	13	7	5	22
	Watermelon	12	М	~1	21
	Sorghum	13	7	0	22
	Olive	17	4	$\sim$	26
	Orange	21 .	<b>L</b>	2	50
	Man go	30	7	<b>C1</b>	39
	Guava	26	1	<b>C1</b>	55
Cattle	Berseem	57	27	Q	70
Fattening Center	g Sorghum	54	14	*7	52
			·		

Table J4-16 Farm Machinery Cost per Feddan

-J37-

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												· . ·		
		Wage	9	~1	4	ы		0	0	2		$\sim$	9	4
cl														
raim Machinery Cost per Feddan	11)	Fuel Cost	4	0	10	ۇمىم		<b></b>	-		1	. <b>.</b> 1	4	<b>1</b>
Inery Lost	111411 C.T.S													•
		Fixed Cost	11	5.	29		10	ll	14	18	26	22	33	29
		bs	Berseem	Tomato	Wheat	Groundnuts	Watermelon	Sorghum	Olive	Orange	Mango	Guava	Berseem	Sorghum
	-	Crops	Farmers B	Ļ	M	5	M	ŵ	0	Ō	W	Ō	Cattle Be	Center So

Table J4-17 Farm Machinery Cost per Feddan

(LE) Total

с  Note: Fixed cost consists of annual depreciation and repair cost.

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	-											
	1000 LE)	20 (2003)										
	(Unit: 100	19 (2002)										
	ıр)	18 (2001)		6,318	1,585	4,753		2,159	1,746	413	5,146	
		17 (2000)		6,274	1,565	4,709		2,159	1,746	413	5,122	
· · · · · · · · · · · · · · · · · · ·		16 ( <u>1999)</u>		6,127	1,524	4,603		2,159	1,764	395	4,998	
		15 (1 <u>998)</u>		5,741	1,450	4,291		2,159	1,787	572	4,663	
North Wahby Area		14 ( <u>1997</u> )		5,342	1,333	4,009	·	2,161	1,839	322	4,531	
rth Wah		13 ( <u>1996)</u>		4,751	1,231	3,520		2,129	1,864	265	3,785	
н. Г		12 ( <u>1995</u> )		4,005	1,055	2,948		2,056	1,844	212	3,160	
N.P.V.		11 (1994)		2,581	767	l,814		2,557	2,001	556	2,370	
4-18	• .	10 (1993)	•	1,240	522	718		2,578	2,057	521.	1,239	
Table J4-18	· .	9 ( <u>1992</u> )		220	223	ן ניז		1,743	l,376	367	<u> 564</u>	
				F	75	- 75	·	436	604	- 168	-245	
		7 8 (1990) (1991)										
		• •	A. Crop Husbandry	G. I.	Р.С.	N.P.V.	. Animal Husbandry	G.I.	P.C.	N.P.V.	C. Total N.P.V.	
-			A				â				Ö	

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ai 000[ ·+;e]])	19 20 19 20 (2002) (2003)	- - - -		• .								:			
11	18 (2001) (01		2,960	837	2,123		1,078	656	422	2,545		6,409	1,908	4,501	7,046
· ·	17 (2000) (		2,929	821	2,108		1,078	656	422	2,530		6,409	1,908	4,501	7,031
	16 (1999)		2,841	800	2,041		1,078	660	418	2,459		6,409	1,908	4,501	6,960
	15 (1998)		2,619	761	1,858		1,078	665	413	2,271		6,409	1,908	4,501	6,772
Area	14 ( <u>1997</u> )		2,358	725	1,633		1,079.	702	377	2,010		6,409	1,908	4,501	6,511
in Com Osheem Area	13 (1996)		2,125	668	1,457		1,050	702	348	1,805		6,409	1,908	4,501	6,306
in Com	12 (1995)		1,753	537	1,216		1,014	695	319	1,535		6,211	1,883	4,328	5,863
N. P. V.	11 ( <u>1994</u> )		1,082	371	711	· .	1,376	865	211	1,222		4,687 5,902	l,436 l,758	4,144	5,366
-19	10 ( <u>1993</u> )		427	221	206		1,243	878	365	271		4,687	1	3,251	3,822
Table J4-19	9 ( <u>1992</u> )		70	81	- 11		673	502	171	160		2,564	617	1,647	1,807
F	7 8 (1 <u>990</u> ) ( <u>1991</u> )		1 . 1	24	-24		136	142	- 2	- 30	Center]	803	343	460	430
	(0661) 2	lry				lry	• •		·	1 8 1					v
		[Settler] A. Crop Husbandry	Г С	P.C.	N.P.V.	B. Animal Husbandry	C. I.	P.C.	N.P.V.	C. Sub-Total N.P.V.	[Cattle Fattening A. Animal Husbandry	G.I.	ç.	N.P.V.	Total N.P.V
			· · ·			· · ·	J40-	· · ·							1.

(Unit: 1,000 L.E) 18 19 20 (2001) (2002) (2003) 5,122 5,146 5,863 6,306 6,511 6,772 6,960 7,031 7,046 <u>9,023 10,091 10,842 11,435 11,958 12,153 12,192</u>  $\frac{17}{(2000)}$  ( 
 13
 14
 15
 16

 (1996)
 (1997)
 (1998)
 (1999)
 (
 3,785 4,331 4,663 4,998 After the year 2000 the benefits obtained from casuarina trees would be added at 355,000LF. Summarized N.P.V. 12 (1995) ( 3,160 2,370 7,736 11 (1994)5,366 Table J4-20 5,061 10 (1993) 1,239 3,822 2,171 364 7 8 9 (1990) (1991) (1992) 430 1,807 -243 187 Total N.P.V. Note: North Wahby Com Osheem -J41Table J4-21 Crop Area and Production with Project

- Wahby Downstream Area -

6;137 0'ty: ton 6,256 560 15,600 490 513 9,709 96 9,384 2,462 1,466 271 108,441 1994 5,711. 24,769 7825,648 513 338 513 3,910 1,163 509 1,300 20 4,091 221 fed Area 8,746 2,265 5,768 350 440 84 247 6,404 505 14,140 5,361 1,414 ton 104,697 Q'ty 1993 5,453 25,236 5,359 309 fed 472 1,120 490 1,250 50 472 3,741 192 561 3,767 Arca 349 202 69 1,863 444 140 7,074 2,332 93,428 4,090 4,886 1,249 12,430 ton Q'ty 1992 3,063 4,612 253 3,410 20 388 212 4,866 158 388 1,013 1,130 fed 444 19,957 Area 2,893 1,103 5,926 4,599 398 70 300 60 187 1,035 1,702 10,816 91,175 Q'ty ton 1991 4,357 Area 3,285 976 10 360 2,837 149 234 104 360 428 19,006 4,819 1,087 Tomato (summer) Tomato (winter) Berseem (Short) Berscem (Long) Sunflower Total Sesame Millet Barley Onions Cotton Wheat Maize Beans

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· ·			e e	C		ŀ		
	AT 12			14				94 
÷	fed	fed ton	fed	fed U.ty		fedton		fed ton
Wheat Stream	3,285	3,285 6,669	3,410	3,410 7,161	3,767	3,767 8,028 3,910 8,602	3,910	8,602
Maize Stream	2,837	8,681	8,681 3,063		10,017 3,741		12,845 4,091 14,519	14,319
Millet Stream	4,357	13,332	4,612	15,071	5,359		18,392 5,711	19,989
Total	10,479	28,682	11,085	32,249	12,867	39,263	13,712	42,910

Table J4-22Production of By-Products with Project<br/>(Wahby Downstream Area)

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Forage Production and Number of Livestock (Wahby Downstream Area) Table J4-23

Without ProjectWithout ProjectWithout 1992With the Project 19951994Winter Berseem (L)90,597(ton)91,17595,428104,697108,441Berseem (S)1,692(")1,7021,8632,2652,462Summer Summer6,570(")6,6697,1618,0288,602Wheat Straw6,570(")6,6697,1618,0288,602Maize Straw6,570(")8,68110,01712,34314,319Millet Straw15,071(")8,53110,01712,34314,319Mult1,400(head)1,4101,5801,9505,100Adult1,400(head)1,4101,5801,9505,100Heifer420(")456470580650Bultfalo1,4101,5801,9502,100Heifer1,670(")1,6901,9002,3202,530Bult5,580(head)5,6206,5307,7208,420Heifer1,670(")1,6901,9002,3202,530Bull Calf1,670(")1,6901,9002,3202,530Remining46,696(ton)47,90044,10023,20019,500Berseem to be sold700(1,000LE)71966234823								
<pre>n (L) 90,597(ton) 91,175 95,428 104,697 10 n (S) 1,692(") 1,702 1,863 2,265 Straw 6,570(") 6,669 7,161 8,028 5traw 8,511(") 8,681 10,017 12,843 1 Straw 8,511(") 13,332 15,071 18,592 1 1,400(head) 1,410 1,580 1,930 580 420(") 450 470 580 6,330 7,720 5,620 6,330 7,720 1,670(") 1,690 1,900 2,320 1 alf 1,670(") 1,690 1,900 2,320 1 af 46,696(ton) 47,900 44,100 23,200 1 at to be sold 700(1,000LE) 719 662 348</pre>			Without Project	1991	With the 1 1992	Project 1995	1994	
<pre>n (L) 90,597(ton) 91,175 95,428 104,697 10 n (S) 1,692(") 1,702 1,863 2,265 Straw 6,570(") 6,669 7,161 8,028 Straw 8,511(") 8,681 10,017 12,843 1 Straw 15,071(") 13,532 15,071 18,592 1 Straw 15,071(") 13,532 15,071 18,592 1 alf 420(") 450 470 580 580 alf 420(") 450 6,330 7,720 1,670(") 1,690 1,900 2,320 1,670(") 1,690 1,900 2,320 1 af 1,670(") 1,690 1,900 2,320 1 at to be sold 700(1,000LE) 719 662 348</pre>		Winter		   .				
<pre>n (S) 1,692(") 1,702 1,863 2,265 Straw 6,570(") 6,669 7,161 8,028 Straw 8,511(") 8,681 10,017 12,843 Straw 15,071(") 13,332 15,071 18,592 1 Straw 15,071(") 15,332 15,071 18,592 1 alf 420(") 450 470 580 580 alf 420(") 450 470 580 7,720 alf 1,670(") 1,690 1,900 2,320 alf 1,670(") 1,690 44,100 23,200 1 at to be sold 700(1,000LE) 719 662 348</pre>		Berseem (L)	90,597(ton)	91,175	95,428	104,697	108,441	
<pre>Straw 6.570(") 6.669 7.161 8.028 Straw 8.511(") 8,681 10,017 12,843 Straw 13,071(") 13,332 15,071 18,592 1,400(head) 1,410 1,580 1,930 alf 420(") 450 470 580 alf 420(") 450 0,7720 2,320 alf 1,670(") 1,690 1,900 2,320 alf 1,670(") 1,690 44,100 23,200 ag 46,696(ton) 47,900 44,100 23,200 ag to be sold 700(1,000LE) 719 662 348</pre>		Berseem (S)	1,692( ¹¹ )	1,702	1,863	2,265	2,462	
Straw6,570(")6,6697,1618,028Straw8,511(")8,68110,01712,8431Straw8,5071(")13,33215,07118,5921Straw1,400(head)1,4101,5801,9301,930alf420(")450470580alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,670(")1,6901,9002,320alf1,6601,90034,1002,320		Summer		· .				
Straw       8,511(")       8,681       10,017       12,843       1         Straw       13,071(")       13,332       15,071       18,592       1         Straw       13,071(")       13,332       15,071       18,592       1         Straw       13,071(")       13,532       15,071       18,592       1         Straw       13,071(")       13,532       15,071       18,592       1         1,400(head)       1,410       1,580       1,930       580         alf       420(")       430       470       580         alf       420(")       450       7720       580         alf       1,670(")       1,690       1,900       2,320         alf       1,670(")       1,690       1,900       2,320         at be sold       700(1,000LE)       719       662       348		Wheat Straw	6,570( ¹¹ )	6,669	7,161	8,028	8,602	
2       13,071(")       13,332       15,071       18,592       1         2       1,400(head)       1,410       1,580       1,930         alf       420(")       430       470       580         alf       420(")       430       470       580         alf       1,670(")       450       6,330       7,720         alf       1,670(")       1,690       1,900       2,320         ato be sold       700(1,000LE)       719       662       348		Maize Straw	8,511(")	8,681	10,017	12,843	14,319	
2       1,400(head)       1,410       1,580       1,930         alf       420(")       450       470       580         alf       420(")       450       470       580         alf       1,670(")       1,690       1,900       2,320         alf       1,670(")       1,690       1,900       2,320         alf       1,670(")       1,690       2,320       2,320         ato be sold       700(1,000LE)       719       662       3,48		Millet Straw	13,071( ")	13,332	15,071	18,592	19,989	
1,400(head)       1,410       1,580       1,930         420(")       450       470       580         420(")       450       470       580         580       470       580       580         1,670(")       1,690       1,900       2,320         1,670(")       1,690       1,900       2,320         1       46,696(ton)       47,900       44,100       23,200         n       700(1,000LE)       719       662       53,200       1		Buffalo						
alf       420(")       430       470       580         alf       420(")       450       470       580         5,580(head)       5,620       6,330       7,720         1,670(")       1,690       1,900       2,320         1,670(")       1,690       1,900       2,320         nto be sold       700(1,000LE)       719       662       348		Adult	1,400(head)	1,410	1,580	1,930	2,100	
alf     420(")     450     470     580       5,580(head)     5,620     6,330     7,720       1,670(")     1,690     1,900     2,320       alf     1,670(")     1,690     2,320       alf     1,690     1,900     2,320       at to be sold     700(1,000LE)     719     662     348		Heifer	- 420(-11-).	430	470	580.	630	
5,580(head)       5,620       6,330       7,720         1,670(")       1,690       1,900       2,320         1,670(")       1,690       1,900       2,320         1       46,696(ton)       47,900       44,100       23,200         1       to be sold       700(1,000LE)       719       662       348		Bull Calf	420( " )	430	470	580	650	
5,580(head) 5,620 6,330 7,720 1,670(") 1,690 1,900 2,320 1,670(") 1,690 1,900 2,320 46,696(ton) 47,900 44,100 23,200 1 be sold 700(1,000LE) 719 662 348		Baladi						
1,670(") 1,690 1,900 2,320 1,670(") 1,690 1,900 2,320 46,696(ton) 47,900 44,100 23,200 1 be sold 700(1,000LE) 719 662 348	•	Adult	5,580(head)	5,620	6,330	7,720	8,420	
],670(") 1,690 1,900 2,320 46,696(ton) 47,900 44,100 23,200 1 be sold 700(1,000LE) 719 662 348		Heifer	1,670( ")	1,690	1,900	2,320	2,530	
46,696(ton) 47,900 44,100 23,200 19, be sold 700(1,000LE) 719 662 348		Bull Calf	J,670( ")	1,690	1,900	2,320	2,530	
46,696(ton)       47,900       44,100       23,200       19,         be sold       700(1,000LE)       719       662       348	÷.	· · · · · · · · · · · · · · · · · · ·						
be sold 700(1,000LE) 719 662 348		Remining	46,696(ton)	47,900	44,100	23,200	19,500	
		Berseem to be sold	700(1,000L)	1.1	662	348	233	

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Table J4-24 Crop Budget per Feddan with Project (Wahby Downstream Area)

•

(Unit: LE)

	·											
	Net Pro. Value	156	234	39	06	162	482	-49	84	25	140	125
Financial	Production Cost	307	286	249	204	293	718	442	223	273	200	205
	Gross income	463	520	288	294	455	1,200	393	307	298	340	330
	Net Pro. Value	286	383	103	118	95	396	131	155	198	138	125
Economic	Production Cost	204	203	171	140	269	564	309	178	188	135	141
	Gross income	490	586	274	258.	364	960	440	333	386	273	266
		Berseem	Wheat	Barely	Beans	Onions	Tomato	Cotton	Maize	Millet	Sesame	Sunflower

					0	(Unit: LE)
		Economic			Financíal	:
	Gross income	Production Cost	Net Pro. Value	Gross income	<pre>Production Cost</pre>	Net Pro. Value
Berseem(L)	490	204	.286	463	307	129
Wheat	520	181	339	480	270	210
Barely	274	171	103	288	249	39
Beans	258	140	118	294	204	06
Onions	564	269	95	455	293	162
Tomato	760	511	249	950	680	270
Cotton	162	265	126	391	412	-21
Maize	294	157	137	272	202	20.2
Millet	350	167	183	273	252	21
Sesame	273	135	138	340	200	140
Sunflower	266	141	125	330	205	125

Crop Budget per Feddan without Project (Wahby Downstream Area) Table J4-25

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J4-27 Gross Income per Feddan without Project (Economic) (Wahby Downstream Area)

	Total (LE)	490	520	274	258	364	760	391	294	350	273	266
e	Gross income (LE)	282	ł	ł	Ľ	<b>ا</b>	ŧ		ţ	٤.		
en Forag	Price (LE)	15		· 1		ł		ľ	1	2	I	ŧ
Gre	YieldPriceir(t)(LE)(	18.8	I	:		ł	ł	i	3	1	r	1
	Gross Income (LE)				85	ì	١	10	66	66	· /	01
Straw	Price (LE)	I	109	109	65	3	ï	8	33	33	8	10
	Yield (t)	ı	2.0	1.5	1:3	1 -	I	1.3	3.0	3.0	0.84	1.0
oducts	uross income (LE)	208	302	110	173	364	760	381	195	251	266	256
lin or Products	Price (LE)	770	216	100	192	52	80	476	217	193	666	320
Grai	$\frac{\text{Yield}}{(t)}$	0.27	1.4	1.1	6.0	7.0	9.5	0.8	0.9	1.3	0.4	0.8
	Crop	Berseem	Wheat	Barely	Beans	Onions	Tomato	Cotton	Maize	Millet	Sesame	Sunflower

Tabje J4-28Production Cost per Feddan without and with Project<br/>(Economic)

								• .				(Un.)	(Unit: L.E.)	С 
·	Berseem(L	em(L)	Bers	Berseem(S)	Wheat	at	Barley	ley	Beans	us	Oni	Onions	Tom	Tomato
Item	0/M	3	0/M	3	0/M	X	0/M	3	0/M	3	0/M	3	M/0	>
Seed	12	12	12	12	17	17	11	11	21	21	85	85	40	40
Fertilizer														
Nitrogen	29	29	29	29	29	45	37	37	53	29	58	58	46	46
Phosphate	44	44	11	11	11	11	11	11	11	11	11	11	22	22
Potassium	1	1	1	I	l	I	1	ł	I	ı	ì	ı	I	16
Manure	ı	I	ı	I	21	21	21	21	I	ł	21	21	lS	30
Protection	ł	F	i	ı	F	I	1	1.	I	ı	T	1	158	138
Labor	108	108	60	60	92	100	80	80	68	68	83	83	239	258
Machine	11	11	11	11	11	11	11	11	11	ĨĨ	11	11	11	11
Total Cost	204	204	123	123	181	203	171	171	140	140	269	269	511	564
Note: Water	managen	ient la	bor wit	Water management labor with the Project shall reduce because of	oject :	shall	reduc	e bec	ause	of su	supply of enough	of er	Jough	

nated management labor with the respect shall reduce because of supply of enough irrigation water, on the other hand harvesting labor with the Project shall increase. On berseem, barley, beans, onion and sesame, both labor cost are assumed at the same value.

	Cot	Cotton	Maize	02	Millet	e t	Sesame	me	Sunflower	OWET	
Item	<u>w/o</u>	3	0/M	3	M/O	13	0/м	131	- 0/M	13	
Seed	2	0	12	12	14	14	10	м	М	ю	
Fertilizer Nitrogen	43	4 K	43	43	43	43	29.	29	29	- 55	
Phos phate	22	22	11	11	1	11	] ] ]	11	r⊶i r=i	11	
Potassium	I	1	1	T	E.	I	I	ł	· i	ł	
Mannure	15	30	1	21	.t	21	Ц С	15	21	21	
Protection	22.	45	i	ı	i L	1	Ľ	t	1	. I	
Labor	150	158	80	80 -	66	66	66	66	66	66	
Machine	11	11	11	ŢŢ	11	11	11	11	11	11	
Total Cost	265	309	157	178	167	188	135	135	141	141	

(Continued: Table J4-28)

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			(Wanby Downstream - Crop Husbandı	Crop Husbandry	lry -					
	Grain	Green	Forage & V	ξVegetable	ц Ф		Straw	,aw		
	Crop Area fed.	/ield ton/fed		Unit Price LE/ton	Gross Income 1.000LE	Yield   ton/fed	Total Prod. ton	Unit ( Price LE/ton	Gross Income 1.000LE	Total Gross Income 1.000LE
Winter Crop)	(10,965)		(108,743)	-	(1,944)		6)		(196)	
Berseem (Long)	4,819	18.8	90,597	(Anima	(Animal Husbandry)	idry)	1	٢	ł	J
Berseem (Short)	360	4.7	1,692	)	2		I	V	ı	ş
Wheat	5,285	1.4	4,599	216	933	2.0	6,570 (	(Animal I	Husbandry)	y) 955
Barley	976	1.1	1,074	100	107	1.5	1,464	109	160	267
Beans	428	0.9	385	192	74	1.5	556	65	36	110
Tomato	1,087	9.5	10,326	80	826	I	I	I	I	826
Onions	10	7.0	70	52	4	1	ł	I	I	<b>₽</b> .
(Summer Crop)	(8,041)		(9,740)		(1,965)		(26,079)	<u> </u>	(2)	
Cotton	360	0.8	283	476	137	1.3	468	S	4	141
Maize	2,857	6.0	2,553	212	ភភ4 22	3.0	8,511	(Animal	I Husbandry)	ldry) 554
Millet	4,357	1.3	5,664	193	1,093	3.0	15,071	11 )	-	)1,093
Sesame	149	0.4	60	666	40		125	8		41
Sunflower	254	0.8	187	320	60	1.0	254	10	сł	62
Tomato	104	9.5	988	. 80	62	J	I	1	ł	- 79
Total	19,006		118,483	·~-	5,907		35,526		205	4,110

8,041 fed.

Summer season 55% x 14,620 fed :

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$\begin{array}{c c c c c c c c c c c c c c c c c c c $		i.	Table J4-30	Gros	Gross income with Project	/ith Proj	ect			
$\begin{array}{c cccc} 1991 & 1992 & 1992 & 994 & 994 & 994 & 984 & 984 & 984 & 984 & 984 & 984 & 984 & 984 & 984 & 984 & 984 & 984 & 984 & 984 & 984 & 985 & 986 & 37 & 94 & 94 & 94 & 95 & 37 & 95 & 94 & 94 & 95 & 37 & 97 & 42 & 94 & 94 & 95 & 37 & 97 & 42 & 94 & 94 & 95 & 37 & 97 & 42 & 94 & 94 & 95 & 37 & 97 & 42 & 94 & 94 & 95 & 37 & 97 & 42 & 94 & 94 & 1,165 & 34 & 1,165 & 34 & 1,248 & 34 & 1,642 & 1,1145 & 34 & 1,165 & 34 & 1,165 & 34 & 1,165 & 34 & 1,642 & 1,145 & 34 & 1,688 & 34 & 1,165 & 34 & 1,642 & 1,145 & 34 & 1,688 & 34 & 1,165 & 34 & 1,642 & 1,145 & 34 & 1,688 & 34 & 1,165 & 34 & 1,642 & 1,145 & 34 & 1,688 & 34 & 1,642 & 1,145 & 34 & 1,668 & 37 & 97 & 35 & 36 & 227 & 40 & 1 & 43 & 1 & 1,688 & 34 & 1,642 & 1,145 & 34 & 1,668 & 37 & 97 & 35 & 37 & 36 & 5,075 & 211 & 6,648 & 235 & 7,102 & 2,345 & 4,366 & 5,286 & 6,883 & 5,075 & 2,286 & 6,883 & 7,102 & 2,345 & 5,075 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 & 5,286 &$		• •		1	Crop Hush	andry -				
Crop     Product     Crop     Product     Crop     Product     Crop     Product       - 1,000 LE -     -     A.H     -     A.H     -     A.H       A.H     -     A.H     -     A.H     -     A.H       A.H     -     A.H     -     A.H     -     A.H       93     A.H     -     A.H     -     A.H       10     160     125     166     142     185     139       110     160     125     166     142     185     139       77     56     86     37     97     42     94       865     -     995     -     1,131     -     1,248       4     -     92     -     2,4     -     5,4       145     A.H     1,163     A.H     1,642     1       1,145     A.H     1,163     A.H     1,642     1       4.0     1     43     1     59     59       60     2     5     79     5     87       1,00     -     29     -     1,163     1       60     2     5     79     5     87       100     - <td></td> <td>51</td> <td></td> <td>1992</td> <td></td> <td>1995</td> <td></td> <td>1994</td> <td></td> <td></td>		51		1992		1995		1994		
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		Crop	Product	Crop	Product	Crop	Product	Crop	by- Product	
-       A.H       -       A.H       -       A.H         -       A.H       -       A.H       -       A.H         -       A.H       1,055       A.H       1,246       A.H       1,352         160       125       166       142       185       139         56       86       37       97       42       94         -       995       -       1,1131       -       1,248         -       995       -       1,1131       -       1,248         -       995       -       1,1131       -       1,248         -       995       -       1,1131       -       1,248         -       9       -       24       -       34         4       166       5       209       6       227         A.H       1,658       A.H       1,658       A.H       1,642         1       43       1       55       5       279       5         2       4.H       1,658       A.H       1,642       1       2         1       43       1       51       5       5       2       2 <td></td> <td></td> <td></td> <td>- 1,</td> <td></td> <td>·</td> <td></td> <td></td> <td></td> <td></td>				- 1,		·				
<ul> <li>A.H</li> <li>A.H</li> <li>A.H</li> <li>A.H</li> <li>I.055</li> <li>A.H</li> <li>I.246</li> <li>A.H</li> <li>I.5245</li> <li>A.H</li> <li>I.545</li> <li>36</li> <li>86</li> <li>37</li> <li>97</li> <li>42</li> <li>94</li> <li>94</li> <li>95</li> <li>1,131</li> <li>42</li> <li>94</li> <li>97</li> <li>42</li> <li>94</li> <li>97</li> <li>42</li> <li>94</li> <li>95</li> <li>1,131</li> <li>42</li> <li>95</li> <li>1,131</li> <li>1,248</li> <li>4</li> <li>166</li> <li>5</li> <li>209</li> <li>6,883</li> <li>7,345</li> <li>7,345</li> <li>5,075</li> <li>211</li> <li>6,648</li> <li>235</li> <li>7,102</li> <li>7,345</li> </ul>		A.11	1	Α.Η	i	А.Н	ł	H. A		
A.H1,055A.H1,246A.H1,352160125166142185139368637974294-995-1,131-1,248-995-24-34-995-24-34416652096227A.H1,655A.H1,165A.H1,642A.H1,555A.H1,688A.H1,642A.H1,555A.H1,688A.H1,642A.H1,555A.H1,688A.H1,642A.H1,555A.H1,688A.H1,642 $1$ 43151159265379387 $203$ 5,0752116,6482357,102 $4,366$ 5,286 $6,883$ $6,883$ 7,102		A H	i	А.Н	r	А.Н	ł	А.Н	1	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		566	A.H.	1,055	Α.Η	1,246	A.H.	1,352	A. A.	
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		110	160	125	166	142	185	139	190	
865 - 995 - 1,131 - 1,248 - 34 - $145$ 4 $166$ 5 $24$ - $34$ - $34$ - $34$ - $145$ A.H $166$ 5 $209$ 6 $227$ A.H $1,020$ A $1,145$ A.H $1,555$ A.H $1,1638$ A.H $1,642$ A $40$ 1 $43$ 1 $51$ 1 $51$ 1 $59$ 6 $100$ - $299$ - $818$ - $1,200$ $4,165$ 203 $5,075$ 211 $6,648$ 235 $7,102$ 2 $2$		77	36	86	37	56	4	94	で す	
- 9 - 24 - 34 4 166 5 209 6 227 A.H 887 A.H 1,163 A.H 1,020 A.H 1,365 A.H 1,688 A.H 1,642 1 43 1 51 1 59 2 65 3 79 3 87 - 299 - 818 - 1,200 4,366 5,883 235 7,102 4,366 5,883 7,102	Tomato (Winter)	865	ı	365	3	1,131	1	1,248	ı	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		4	ı	6	F	24	<b>)</b>	34		
A.H       887       A.H       1,165       A.H       1,020         A.H       1,565       A.H       1,688       A.H       1,642         1       43       1       51       1       59         2       65       3       79       5       87         -       299       -       818       -       1,200         2.03       5,075       211       6,648       235       7,102         4,366       5,286       6,883       6,883       7,102		143	4	166	S	209	9	227	ý.	
A.H       1,365       A.H       1,688       A.H       1,642         1       43       1       51       1       59         2       65       3       79       5       87         -       299       -       818       -       1,200         2.03       5,075       211       6,648       235       7,102         4,366       5,286       6,883       6,883       7,345		628	Α.Η	887	A.H	1,163	А.Н	1,020	А.Н	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1,145	А.Н	1,365	Н. А.	1,688	A.H.	1,642	А.Н	
$\begin{array}{rrrrr} 2 & 65 & 5 & 79 & 5 & 87 \\ - & 299 & - & 818 & - & 1,200 \\ \hline 203 & 5,075 & 211 & 6,648 & 235 & 7,102 & 24 \\ \hline 4,366 & 5,286 & 6,883 & 7,545 \end{array}$		40	<b></b> 4	43	r→	51	t-red	50	<b>r1</b>	
- 299 - 818 - 1,200 203 5,075 211 6,648 235 7,102 24 4,366 5,883 7,102 7,345		60	с <b>ч</b>	65	2	79	89	87	E.	
203         5,075         211         6,648         235         7,102         24           4,366         5,286         6,883         7,345         7,545         7,545		100	F	299	. <b>1</b>	818	1 1	1,200		
5,286 6,883		4,165	203	5,075	211	6,648	235	7,102	243	
	÷		1,366	ΓΟ	,286	0	883		545	

Note: A.H. means destination to animal husbandry.

Crop	<u>Crop Area</u> fed.	Unit Cost LE/fed	Production Cost 1,000LE
(Winter Crop)			
Wheat	3,285	181	595
Barley	976	171	167
Beans	428	140	60
Tomato	1,087	511	555
Onions	10.	269	3
(Summer Crop)			
Cotton	360	265	95
Maize	2,837	157	445
Millet	4,357	167	728
Sesame	149	135	20
Sunflower	234	141	33
Tomato	104	511	53
Total			2,754

## Table J4-31Production Cost in Crop Husbandry without Project<br/>(Wahby Downstream Area)

## Table J4-32 Production Cost of Berseem

(Without the Project)

Crop	Crop Area	Unit Cost	Production Cost
	fed.	LE/fed.	1,000LE
Berseem (L)	4,819	204	983
Berseem (S)	360	123	44
Total	5,179	· · ·	1,027

-J53-

Table J4-33 Production Cost with Project

(Unit: 1,000 L.E)

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Т	1661	1992	52.	1993	93	1994	94	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 (L) $-$ 985 $-$ 995 $-$ 1,102 $-$ 1,1 1 (S) $-$ 44 $-$ 48 $-$ 58 $-$ 1,10 167 $-$ 674 $-$ 754 $-$ 793 167 $-$ 175 $-$ 192 $-$ 199 167 $-$ 173 $-$ 192 $-$ 70 (Winter) 567 $-$ 619 $-$ 696 $-$ 70 (Winter) 567 $-$ 619 $-$ 696 $-$ 70 (Winter) 567 $-$ 619 $-$ 696 $-$ 734 460 $-$ 538 $-$ 665 $-$ 728 460 $-$ 538 $-$ 140 $-$ 159 100 $-$ 118 $-$ 146 $-$ 159 460 $-$ 538 $-$ 665 $-$ 728 749 $-$ 21 $-$ 26 $-$ 30 20 $-$ 21 $-$ 26 $-$ 30 (summer) 58 $-$ 117 $-$ 313 $-$ 441 (summer) 58 $-$ 117 $-$ 313 $-$ 441 (summer) 2,827 $1,027$ $5,219$ $1,041$ $5,924$ $1,160$ $4,294$ $1,21$	· · ·	<u>C.H</u>	A H	CH	H.A	C.H	A.H	C.H	A.H	
1 (S)- $44$ - $48$ - $58$ - $610$ - $674$ - $754$ - $793$ $167$ - $175$ - $192$ - $793$ $167$ - $175$ - $192$ - $793$ $60$ - $619$ - $626$ - $770$ $67$ - $619$ - $696$ - $754$ $567$ - $619$ - $696$ - $754$ $567$ - $6118$ - $144$ - $199$ $760$ - $118$ - $146$ - $159$ $749$ - $855$ - $1,007$ - $1,074$ $749$ - $21$ - $26$ - $26$ - $738$ - $117$ - $216$ - $441$ $6r$ $5,219$ $1,041$ $5,924$ $1,160$ $4,294$ $1,21$	1 (S)-44-48-58- $610$ - $674$ - $754$ - $793$ $167$ - $175$ - $192$ - $793$ $60$ - $619$ - $674$ - $792$ - $60$ - $619$ - $622$ - $688$ - $700$ $60$ - $619$ - $696$ - $770$ $567$ - $619$ - $6966$ - $734$ $57$ - $6118$ - $144$ - $199$ $749$ - $855$ - $1,007$ - $1,074$ $749$ - $855$ - $1,007$ - $1,074$ $6r$ $53$ - $211$ - $266$ - $300$ $6r$ $558$ - $1,007$ - $1,074$ $749$ - $855$ - $456$ - $47$ $6r$ $55$ - $1,007$ - $1,074$ $58$ - $117$ - $5124$ $1,160$ $4,294$ $2.827$ $1,027$ $5,219$ $1,041$ $5,924$ $1,160$ $4,294$		3	983	ı	566	ł	1,102	ľ	1,152	
			Т	44	I	48	I	58	I	63	
		Wheat	610	ł	674	I	754	ι'	793	ı	
	(Winter) $567$ - $62$ - $62$ - $68$ - $734$ 567 - $619$ - $619$ - $734567$ - $118$ - $14$ - $19100$ - $118$ - $146$ - $159460$ - $558$ - $146$ - $159749$ - $855$ - $1,007$ - $1,07420$ - $21$ - $226$ - $728fer 33 - 43 - 432.827$ $1,027$ $5,219$ $1,041$ $5,924$ $1,160$ $4,294$	Sarley	167	t	175	<b>i</b>	192	ą	199	F .	
(Winter) $567$ - $619$ - $696$ - $734$ $5$ - $6$ - $14$ - $19$ $100$ - $118$ - $146$ - $159$ $460$ - $538$ - $665$ - $728$ $749$ - $855$ - $1,007$ - $1,074$ $720$ - $21$ - $26$ - $30$ $er$ $53$ - $21$ - $26$ - $47$ $er$ $53$ - $117$ - $512$ $ 441$ $er$ $58$ - $117$ - $313$ - $441$ $er$ $58$ - $117$ - $313$ - $47$ $er$ $58$ - $117$ - $313$ - $441$ $er$ $527$ $1,027$ $5,219$ $1,041$ $5,924$ $1,160$ $4,294$	(Winter) $567$ - $619$ - $696$ - $734$ 5 - $6$ - $14$ - $19100$ - $118$ - $146$ - $159460$ - $538$ - $665$ - $728749$ - $855$ - $1,007$ - $1,07420$ - $21$ - $21$ - $26$ - $728er$ $55$ - $1,007$ - $1,074er$ $55$ - $21$ - $26$ - $47(summer) 58 - 117 - 313 - 4412,827$ $1,027$ $5,219$ $1,041$ $5,924$ $1,160$ $4,294$	seans	60	н	62	ł	68		70	1	
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		567	3	619	1	696	5	734	ŀ	
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	100 - 118 - 146 - 159 $460 - 538 - 665 - 728$ $749 - 855 - 1,007 - 1,074$ $20 - 21 - 26 - 30$ $er 33 - 117 - 26 - 43$ $(summer) 58 - 117 - 313 - 441$ $2,827 - 1,027 - 1,041 - 3,924 - 1,160 - 4,294$	)níons	ĸ	ŧ	έ	I	14		19	ł	
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	otton	100	I	118	<b>1</b>	146	١	I 59	1	
749 - 855 - 1,007 - 1,074 20 - $21$ - 26 - 1,074 35 - $36$ - $45$ - $47$ 1074 1074 2,827 1,027 3,219 1,041 5,924 1,160 4,294	749 - 855 - 1,007 - 1,074 20 - $21$ - 26 - 1,074 35 - $36$ - $45$ - $47$ 1074 1074 2,827 1.027 3,219 1.041 5.924 1.160 4.294	laize	460	I	538	1	665	١	728	1	
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	11 Llet	749	1	855	I	1,007	<b>)</b> 	1,074	t ·	
35       - $56$ - $45$ - $47$ anmer) $58$ - $117$ - $313$ - $441$ $2,827$ $1,027$ $5,219$ $1,041$ $5,924$ $1,160$ $4,294$	$\overline{35}$ $\overline{56}$ $\overline{45}$ $\overline{47}$ anmer) $\overline{58}$ $\overline{117}$ $\overline{313}$ $\overline{441}$ $2,827$ $1,027$ $\overline{3,219}$ $1,041$ $\overline{3,924}$ $1,160$ $4,294$	esame	20	Ŧ	21	t	26	Ŧ	30	I	
nmer) 58 - 117 - 313 - 441 2,827 1,027 5,219 1,041 5,924 1,160 4,294	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	unflower	35	ŗ	36	ł	4.5	<b>1</b>	47		
2,827 1,027 5,219 1,041 5,924 1,160 4,294	2,827 1,027 5,219 1,041 5,924 1,160 4,294	omato (summer)	58	ı	117	I	313	1	441	F	
		otal	2,827	1,027	5,219	1,041	3,924	1,160	4.294	1,215	

A.H. : Animal husbandry

Note: C.H. : Crop husbandry

Net Production Value in Animal Husbandry without and with Project -Wahby Downstream Area-Table J4-34

Total		4,616		4,664	5,231	6,591	6,965
idi Bull calf	- 096	1,670 1,603		1,690 1,622	1,900 1,824	2,320 2,227	2,530 2,429
Baladi Baladi B	307	5,580 1,713		5,620 1,725	6,330 1,943	7,720 2,370	8,420 2,585
alo Bull calf	- 096	420		430 413	470 451	580 557	630 605
Buffalo B Adult c	641	1,400 897		1,410 904	1,580 1,013	1,930 1,257	2,100 1,346
Unít.	L.E. L.E.	head 1,000L.E.	·	head 1,000L.E.	head 1,000L.E.	head 1,000L.E.	head 1,000L.E.
	N.P.V./head excluding fodder cost Produced Milk Meat	Without the Project Number of Cattle N.P.V./head excluding fodder cost Produced	With the Project	1991 Number of Cattle N.P.V./head excluding fodder cost Produced	1992 Number of Cattle N.P.V./head excluding fodder cost Produced	- <u>1993</u> Number of Cattle N.P.V./head excluding fodder cost Produced	1994 Number of Cattle N.P.V./head excluding fodder cost Produced

Note: excluding Cost of Fodder Produced

-J55-

Net Production Value in Wahby Downstream Area Table J4-35

		-			
	Without		With P	With Project	•
	Project	0661	1661	1992	1993
Crop Husbandry)	·	•			
a. Gross income	4,110	4,366	5,286	6,883	7,345
Production Cost	2,754	2,827	3,219	3,924	4,294
	1,356	1,539	2,067	2,959	3,051
(Animal Husbandry)	-	·		• •	
N.P.V. excluding Berseem Cost	4,616	4,664	5,231	6, 391	6,,965
Gross income of berseem sold	200	714	647	341	286
Production Cost of Berseem	(-)1,027	(-)1,027	(-)1,041	(-)1,160	(-)1,215
d. N.P.V.	4,289	4,351	4,837	5,572	6,036
(Total N.P.V.)	5,645	5,890	6,904	8,531	9,087
Incremental N.P.V.		245	1,259	2,886	3,442

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Berseem is estimated in animal husbandry. Berseem sold means remains after feeding. . М

Production cost of grains such as wheat, maize and millet are included in crop husbandry.

-J56-

												ļ					, 630
:	-									Fed.)	Total	Arable Land	1,750	2,405	1,455	5,610	510 = 4
	Fed.)	Total	Arable Land	1,520	2,570	1,455	5,345		·	(Unit:	nt Class B	Arable Land	170	1;020	4 85	1,675	- + New land 265=3,935
	ject (Unit:	5 4 0	Arable Land	170	1,020	485	1,675				Improvement	Gross d Land	50 200	50 1,200	970 570	,670 1,970	C 3
	Land at Present or Without Project South Area of Lake Qarun - (	0 51	Gross Land	200	1,200	570	1,970		oject Oarin -		SS A	New Old Land Land	230 1,350	35 1,350	ъ.	265 3,6	Gross land = Direct gross land 4,520 Arable land=Old Land 5,670+New land New arable land=310 x 0.85 =265
	ent or Withour of Lake Qarun	L A C	Arable Land	1,350	1,350	670	5,670	·	Arable Land with Project South Area of Lake Damin		ement Class	Arable Land	1,580	1,385	026	3,935	Gross land = Direct gr Arable land=Old Land 3 New arable land=310 x (
	and at Pres South Area		Land	1,590	1,590	1,140	4,320		Arable Land South Area		Improvement	Gross Land	1,860	1,630	1,140	4,630	Gross land Arable land New arable
	<u>Arable Lan</u> - Sou	- - - -	Submerged Area	330	100	50	480		J4-37 Ara - Sou	2 2 3		Submerged Area	60	60	50	170	lass A C A N
	e J4-36	Project	Area	2,120	2,890	ե fon1,970	6,770		Table		Project	Gross Area	2,120	2,890	ዩ Conl,970	6,770	Improvement CI
	Table		Sub Area	l. Abu Hawara	2. Bato Said	<ol> <li>Abu Tarfaya &amp; Khore el-Hifonl,970</li> </ol>	Total					Sub Area	l. Abu Hawara	2. Bato Said	3. Abu Tarfaya ƙ Khore el-Hifonl,970	Total	Note: Impr

-J57-

Table J4-38Crop Area without ProjectSouth Area of Lake Qarun

(Unit: Fed.)

Indirect affected (170)170 80 73 20 42 ച 5† 10 affected (1, 350)276 16 163 (\$0\$) (60%) 123 222 425 1,350 Abu Harawa Direct 30 Ń 1 Total 1,520. (1, 520)518142 250 183 518 932 61 す う 499 ł affected Indirect (485)181 686 63 83 10 23 23 <u>د،</u> 205 ŝ 29 с С Abu Tarfaya affected (026) (26%) (66%) 363 166 166 1,572 Direct 66 410 101 59 2 5 ł Total (1, 455)2,058 1,104 544 249 249 615 152 88 88 954 66 47 പ്പ Indirect affected (1,020)536 1,408 241 ri M с С 149 108 284 C Bat Said affected Direct 209 318 6L 196 145 375 1,863 41 (85%) (1, 350)(53%) 1,245 345 559 72 138 2,015 659 1,256 (2, 370)Total 251 3,271 Arable land Sunflower In winter In summer Crop Berseem Wheat Barley Tomato Cotton Millet Maize Total Beans Onion

-J58-

Table J4-39 Crop Area with

Crop Area with Project Bats Said Sub-Area in South Area of Lake Qarun (Unit: fed.)

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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				1991				1992				1993		
Image         Land         <		Cla New	ss A			Cla New	ss A 01d	·		Cla New	ss A 01d			
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	Crop	Land	Land		Total	Land	Land		Total	Land	Land		Total	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	rseem(L)	12	520	390	922	13	520	390	923	14	498	376	\$\$\$	
7 $524$ $246$ $577$ 7 $531$ $250$ $588$ 8 $537$ $255$ - $82$ $61$ $143$ - $84$ $62$ $146$ 2 $85$ $63$ 2 $42$ $32$ $76$ 2 $43$ $55$ $78$ $1$ $45$ $55$ $53$ 3 $155$ $118$ $276$ 4 $170$ $395$ 5 $252$ $191$ 8 $409$ $510$ $727$ 9 $445$ $537$ $791$ $10$ $483$ $564$ 4 $170$ $128$ $502$ 4 $183$ $159$ 1 $442$ $2.053$ $1,540$ $5,617$ $49$ $2,153$ $1,612$ $5_1$ b Land $(2,370)$ 1 $46^{6}$ $146^{6}$ $146^{6}$ $146^{6}$ $2.053$ $1,540$ $5,617$ $49$ $2,153$ $1,612$ $5_1$ 1 $166^{6}$ $156^{6}$ $146^{6}$ $165^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $166^{6}$ $1$	Berseem(S)	4	200	163	367	4	220	170	394	ъл	252	191	448	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Wheat	1	324	246	577	2	331	250	588	S	537	255	600	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Beans	I	82	61	143	I	84	62	146	61	85	63	150	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	rley	0	42	32	76	63	43	53	78	щ	43	52	77	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Cotton	4	200	163	367	ស	220	170	395	ιΩ	252	191	448	
e a 409 310 727 9 445 337 791 10 483 364 40 1,932 1,483 3,455 44 2,033 1,540 5,617 49 2,133 1,612 5, e Land (2,370) 146% 156%	Maize	Ю	155	118	276	4	170	128	502	4	183	159	526	
$40 \ 1,932 \ 1,483 \ 3,455 \ 44 \ 2,033 \ 1,540 \ 5,617 \ 49 \ 2,133 \ 1,612 \ 5,$ Fund (2,370) $\frac{146\%}{146\%}$	Millet	8	409	310	727	6	445	337	191	10	483	364	857	
146%	tal	40			3,455	44	2,033		3,617	49	2,133	1,612	5,794	
	able Land ()	2,370) 			-1 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2				153%				160%	
			10+0.	Clace A	meene t	ho dire	rt 255'	Close A means the direct affected area	σ					

Note: Class A means the direct affected area. Class B means the indirect affected area.

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-J59-

Table J4-40Crop Area with ProjectAbu-Tarfaya in South Area of Lake Qarun

(Unit: Fed.)

153% 2,225 ...56 1 2 1 2 1 2 1 Total Class b cO ដ  $\overline{\mathbf{C}}$ ò Class A 1,504 Land 01d 151% 2,191 621[.] Total Class B ю С  $\overset{\infty}{4}$ 40 S.L Class A 1,462 ല്ല പ്ര Land PIO 146% [ota] 2,124 10 Class B 83 က က Class A 1,418 in M Land old Arable Land (1,455) Cropping intensity Berseem (L) Berseem (S) Sunflower Crop Tomato Millet Cotton Wheat Beans Maize Ohion Total.

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. *														,
			Total	614	576	570	102	49	376	276	222	2,720		179%
(Unit: Fed.)	1995		Class B	4	57	37	10	'n	53	27	70	268		
(Unit		<u>ss A</u> Old	Land	362	292	293	81	39	292	214	561	2,134		
		Class A New Old	Land	42	47	40	त्व त्व	ហ	47	35	16	$\frac{318}{2}$		ł
		* * *	Total 1	532	346	321	75	51	346	253	664	2,586		157%
	1994		Class B	34	54	31	8	'ব	34	24	65	234		
		<u>ss A</u> 01d	Land	259	269	253	65	32	269	197	515	1,859	-	
		Class A New 01d	Land	39	53 73	37	I	15	43	32	84	293		
			Total	218	315	239	56	40	315	252	607	2,022		153%
	1993		Class B	24	31	25	Q	<b>.</b> 71	31	22	59	201		
		Class A w Old	Land	158	244	180	50	24	244	180	470	1,550		
		Clas		36	40	34	I	t C	40	30	78	271	520)	ıty
			. *	(T)	(S)								and (1,:	intens
			Crop	Berseem (L)	Berseem (S)	Wheat	Beans	Barley	Cotton	Maize	Millet	Total	Arable Land (1,520)	Cropping intensity

<u>Crop Area with Project</u> <u>Abu Harawa in South Ar</u>ea of Lake Qarun

Table J4-41

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Table J4-42 Crop Production South Area of Lake Qarun

(Unit: ton)

Crop	B: Without Project	bars Sald Wi 1991	d With Project 1992	ct 1993	Mithout Project	<u>ADU Larraya</u> ut With ct 1992	uth Project 992 1993	1994	Abu Witňout Project	Abu Harawa ut With ct 1993	rawa With Project 993 1994	1995
Berseem (L)	16,974	17,822	18,205	17,732	5,544	6,217	6,920	7,558	2,374	3,845	6,400	8,913
Berseem (S)	1,627	1,784	1,944	2,238	1,171	1,192	1,210	1,218	1,161	1,418	I,664	1,861
Wheat	727	852	905	926.	349	405	437	490	217	512	470	.576
Beans	83	102	121	149	33	42	50	58	25	41	67	97
Barley	94	108	120	123	•	I	•	. 3	29	51	71	76
Tomato	. <b>F</b>	1	ł	ı	693	840	666	1,053	1	1 	1	ı
Onion	ал ^а    -  -  -	<b>1</b>	ł		135	167	192	232	ł		ł	I
Cotton	311	345	394	447	224	225	252	252	225	279	357	371
Maize	351	447	506	584	861	927	1,014	ì,036	256	549	717	480
Millet	1,120	1,260	1,421	1,541	258	260	272	277	813	968	1,170	1,291
Sunflower		. 1	<b>I</b> -	I	23	53	6.5	65	3	1	<b>I</b>	l
Total	21,287	22,720	23,615	23,770	9,321	10,328	11,409	12,239	5,100	7,263	10,596	15,665

	Table J4-43	J4-43	Forage Pr - Sou	oduction th Area o	Forage Production and Number of Livestock - South Area of Lake Qarun -	er of Liv	estock	
	·	•			:	•		· ·
			Without		ĒŴ	With Project	ct :	
Item		Unit	Project	1991	1992	1993	1994	1995
Winter Crop								
Berseem (L)		ton	22,518	25,740	26,796	28,497	51,690 5130	54,203 51,203
Summer Crop		i	) ) ) )	) + + <b>(</b> +	r t	D . D . t	04 <b>1</b> .0	/ 10 * 0
Wheat Straw		Ξ	1.615	1.917	2.131	2.404	2.666	7 781
Maize Straw			2,464	2,799	3,597	4,052	4,195	4,285
Millet Straw		ī	3,520	4,258	4,644	5,485	5,839	6,067
Burraro Adult		head	570	440	500	580	620	640
Heifer		1	110	150	150	170	180	190
Bull Calf		E	110	130	150	170	180	190
<u>Baladì</u>								
Adult		3.5	1,500	1,770	2,040	2,340	2,500	2,590
Heifer		-	450	530	610	700	750	770
Bull Calf		=	450	530	610	700	750	770
Berseem to be sold	PI	ton	10,582	11,071	9,503	8,543	10,290	12,065
Sales		LE 1,000	159	161	143	128	154	181
			·					

Note: Figures are totalized by three sub-project.

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## Table J.4-44

# Production Cost at Full Stage

(Unit: L.E/fed.)

	Newl		ss A Oldl	·	Clas	s B
	W/O	W/		and W	<u>W/O</u>	11/
Berseem (L)	-	224	224	236	236	236
Berseem (S)	-	142	142	147	147	147
Wheat	-	172	172	203	203	203
Barley	-	161	161	171	171	171
Beans		129	129	140	140	140
Onions	-	269	269	269	269	269
Tomato	-	496	496	546	546	546
Cotton	-	264	264	288	288	283
Maize	~	154 -	154	178	178	178
Millet	-	164	164	188	188	188
Sesame		135	135	135	135	135
Sunflower		141	141	141	141	141
	÷					

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## Table J.4-45

Production Cost

(Unit: L.E./fed)

n an	0	<u>l yr</u>	<u>2 yr</u>	3 yr
Dld Land				
Berseem (L)	224	228	232	236
Berseem (S)	142	143	145	147
Wheat	172	182	192	203
Barley	161	164	167	171
Beans	129	1 3 3	137	140
Onions	269	269	269	269
Tomato	496	513	530	546
Cotton	264	272	280	288
Maize	154	162	170	178
Millet	164	172	180	188
Sesame	135	135	135	135
Sunflower	141	141	141	141
New Land				
Berseem (L)	_	176	204	224
Berseem (S)	-	112	136	142
Wheat	-	138	141	172
Barley	-	129	150	161
Beans	-	-	-	129
Cotton	-	229	242	264
Maize	-	145	151	154
Millet	~	152	160	164

.

r I I	10131	1,236	1,459	1,677	1,925	2,058
on Cost		450 432	530	610 586	700 672	750 720
Production Cost Baladi Bull	- 102 - 102	1,500 461	1,770 543	2,040 626	2,340	2,500
seem	calf - 960	110 106	130	150 144	170 163	180 173
		370 237	440 282	500 321	580 372	620 397
Net Production Value excluding in Animal Husbandry South Area of Lake Qarun Bufi	L.E. L.E.	head 1,000L.E.	head 1,000L.E.	head 1,000L.E.	head 1,000L.E.	head 1,000L.E.
Table J.4-46 Net Production Valu in Animal Husbandry South Area of Lake	N.P.V./head excluding fodder cost Produced Milk Meat	Without the Project Number of Cattle N.P.V./head excluding fodder cost Produced With the Project	Number of Cattle N.P.V./head excluding fodder cost Produced	Number of Cattle N.P.V./head excluding fodder cost Produced	Number of Cattle N.P.V./head excluding fodder cost Produced	1994 Number of Cattle N.P.V./head excluding fodder cost Produced

2,126

739.

2,590 795

190

640 410

head 1,000L.E.

Number of Cattle N.P.V./head excluding fodder cost Produced

1995

-J66-

Table J.4-47 Net Production Value with Project

(Unit: 1,000 L.E.)

•

	Bats Said	<u>Abu Tarfaya</u>	<u>Abu Harawa</u>	Total
1991				
<u>G.1.</u>	747	510	382	1,639
P.C.	421	296	210	927
N.P.V.	326	214	172	712
1992				
<u>G.I.</u>	832	553	382	1,767
<u>P.C.</u>	458	334	210	1,002
<u>N.P.V.</u>	374	219	172	765
	· .		2 · · · · · ·	
1993				
<u>G.I.</u>	915	613	489	2,017
<u>P.C.</u>	504	346	283	1,133
<u>N.P.V.</u>	411	267	206	884
1994				
<u>G.I.</u>	915	640	617	2,172
<u>P.C.</u>	504	365	335	1,204
<u>N.P.V.</u>	411	275	282	968
1995				
<u>G.I.</u>	915	640	703	2,258
P.C.	504	365	385	1,254
N.P.V.	411	275	318	1,004

Note:	G.I. :	Gross Income
	P.C. :	Production Cost
	N.P.V. :	Net Production Value

Table J4-48 Net Production Value South Area of Lake Qarun

• • • • • (Unit: 1,000 L.E.)

	-						
	Without		ŢΜ	With Project	1)		
Item	Project	1661	1992	1993	1994	1995	
(Crop Husbandry)							
a. Gross Income	1,534	1,639	1,767	2,017	2,172	2,258	÷
b. Production Cost	944	927	1,002	1,133	1,204	1,254	
c. N.P.V.	590	712	765	884	968	1,004	
(Animal Husbandry)						:	
a. N.P.V. excluding fodder cost produced	1,236	1,459	1,677	1,925	2,058	2,126	1. A.
b. Berseem Gross Income sold	159	166	143	128	154	181	
c. Production Cost of Berseem	(-) 396	(-)420	(-)421	(-)488	(-)530	(-) 564	: •
d. N.P.V.	656	1,205	1,399	1,565	1,682	1,734	. •
(Total N.P.V.)	1,589	1,917	2,164	2,449	2,650	2,738	÷
Incremental N.P.V.		328	575	860	1,061	1,149	•

APPENDIX J-5. Evaluation of the Project Cost

Table J5-1 Economic Project Cost for North Wahby Area

0 L.E)		<u>r.C.</u>	660	560	448	100	50	498
1,00	1988	F.C.	190	ı	I	i	ł	490
(Unit:		Total	1,150 490 660	I	t	I	i	988
		L.C.	100 130	1 2 S	100	цо,	5	102
	1987	F.C.	100	I	I	s	ł	100
. '		Total	230	I	I	I	I	202
		L.C.	5,520	4,315	- 3,450	1,207	605	4,055
	Total	F.C.	11,970	ļ	1	3	i	11,970
		Total	17,490 11,970 5,520	1	ſ	1	I	16,025
		Item	Financial Project Cost excluding Price Escalation	L.C. excluding unskilled labor cost	Liconomic L.C. (B x 0.8)	Unskilled labor cost	Economic unskilled labor $cost(0 \times 0.5)$	Economic Project Cost (F.C. of A + L.C. of C & E)
			, A	в.	с.	D.		<u>0</u> -

ļ	L.C.	860	685	548	175	38	636	
1992	<u>P.C.</u>	2,270	t t	ł	ŀ	t	2,270	
	Total	5,130	i	1	I	I	2,906	
	L.C.	1,440	1,125	006	315	158	1,058	
1991	<u>н.с.</u>	4,870 3,430	\$	I	ł	i	3,430	
•	Total	4,870	I	I	I	I	4,488	
	г.с. г.с.	1,530	1,179	943	351	176	1,119	
1990	F.C.	3,900 1	I	I	I	I	3,900	
	<u> </u>	5,430 3	t	I	I	I	5,019	
	L.C.	006	639	511	261	131	642	
4	F.C.	1,780 900	I	1	i	I	1,780	
	Total	2,680	J	ı	;	I	2,422	
		Α.	в.	с.	D.	ш	Ľ.	

Note: F.C.; Foreign Currency L.C.; Local Currency

-J69-

	(Unit: 1,000 L.E)	1988	Total F.C. L.C.	840 420 420	- 348	- 278	- 72	1	734 420 314		1992	Total F.C. L.C.	2,040 1,490 550		325	143	12	1,886 1,490 596
			<u>r.c.</u>	130	125	100	ທ່	7	102			T.C.	940	696	557	244	122	679
CI CI		1987	U U U	50	1	ł	. 1	a National National	20		1991	F.C.	2,340	I	I	•	· 1	2,340
Com Osheem Area			Total	180	ı	· F	1	1	152			Total	3,280	ł	1	۱		5,019
Com Osl		-	L.C.	3,830	2,885	2,308	945	472	2,780			<u>r.c.</u>	1,090	822	658	268	134	792
Cost for		Total	<u>г.с.</u>	8,410	1	t	ı	1	8,410	 -	1990	C C C	2,700	1	J	1		2,700
Project Cost			Total	12,240	1	1		1	11,190			Total	3,790	1	ł	· 1	ţ	5,492
Table 15-2 Liconomic			Item	. Financial Project Cost excluding Price Escalation	. L.C. excluding unskilled labor cost	. Economic L.C. (B x 0.8)	. Unskilled labor cost	. Economic unskilled labor $cost(D \ge 0.5)$	Economic Project Cost (F.C. of A + L.C. of C & E)		1989	Total F.C. L.C.	A. 2,110 1,410 700	8 487	C 390	D. – – 213	E 107	F. <u>1,907</u> <u>1,410</u> <u>497</u>
				Α.	20	сi	ŋ	<u></u>	ت			•						

Note: F.C.; Foreign Currency L.C.; Local Currency

-J70-

		an a					
Areas	(Unit: 1,000 L.E)	<u>1989</u> Total F.C. L.C.	2,680 1,780 900 2,110 1,410 700 4,790 3,190 1,600	2,422 1,780 642 1,907 1,410 497 4,529 5,190 1,159	Note: F.C.; Foreign Currency	L.C.; Local Currency	
Vahby and Com Osheem Areas		1988 Total F.C. L.C.	,150 490 660 840 420 420 ,990 <u>910 1,080</u>	988 490 498 734 420 514 722 910 812	1992 otal F.C. L.C.	3,130     2,270     860       2,040     1,490     550       5,170     5,760     1,410	2,906 2,270 636 1,886 1,490 396 4,792 3,760 1,032
Project Cost for North Wahby		1987 otal F.C. L.C. T	230 100 130 1 80 50 130 1 110 150 260 1	202 100 102 152 50 102 554 150 204 1	. 1991 Total F.C. L.C. T	870 3,430 1,440 5 280 2,540 940 2 150 5,770 2,580 5	,488 5,450 1,058 2 ,019 2,540 679 1 ,507 5,770 1,737 4
.15-3 Economic		Total F.C. L.C. To	11,970 5,520 2 8,410 3,830 1 20,380 9,350 4	11,970 4,055 8,410 2,780 20,380 6,835	<u>10tal F.C. L.C.</u>	5,430 5,900 1,530 4, 5,790 2,700 1,090 5, 9,220 6,600 2,620 8,	5,019 5,900 1,119 4, 5,492 2,700 792 5, 8,511 6,600 1,911 7,
Table		Item	Financial North Wahby 17,490 Com Osheem 12,240 Total 29,730	Economic North Wahby 16,025 Com Osheem 11,190 Total 27,215	<u>Item</u> Financial	- Wahby theem	Economic North Wahby 5, Com Osheem 5, Total 8,

-J71-

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Economic Project Cost for Model Farm in Com Osheem Area

Table J5-4

1987 1,272 872 с ш Total ] I L.C. 390 308 1986 Total F.C. 1,362.972 ł ł С Г 40 ы С 1985. Total P.C. 90 130 830 670 536 г. Г. 2,764 1,934 о ц Total Total excluding price escalation L.C. excluding unskilled C. Economics L.C. (B x 0.8) A. Financial Project Cost labor cost

L.C. 400

(Unit: L.E. 1,000)

262

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246

t

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327

299 37 1,171 872 r 82 287 47 1,259 972 ι ł 30 ഗ  $\sim$ 06 ı 120 616 160 80 ł 2,550 1,934 Economic unskilled labor F. Economic Project Cost (F.C. of A+L.C. of C&E) D. Unskilled labor cost cost (D x 0.5) . ш

Foreign Currency Local Currency н.с.; Note:

-J72-

. Д

Economic Cost of Re-Use Water Pump Station - North Wahby & Com Osheedm Areas-

Table J.5-5

(Unit: 1,000 L.E)

L.C.	391	291	E.C.	1 1	I
1985 L.C.	1,571	7 200, I	1987 L.C.	2,852 2,282	2,282
Total	1,762 1,571	1,488	Total	2,852	2,282
F.C.	782	782	F.C.	- -	391
Total L.C.	8,687	6,950	1986 L.C.	4,464 3,571	3,571
Total	9,469	7,732	Total	4 87 17 17 17 17	3,962
Item	Financial Cost	L.C. X U.8 Economic Cost	Item	Financial Cost L.C. x 0.8	Economic Cost
	A	ບໍ່ຂ		. У. В.	

• :

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Foreign Currenćy Local Currency

н.С.: L.С.: L

Note:

-J73-

Table	1 5-6	
lauic	0.0-0	

O & M Cost for North Wahby Area

		(Uni	t: L.E. 1,000)
	Item	Financial	Economic
ι,	Pump station		
	a. Electric Charge	268,380	891,290
	b. Salary and Wages	71,760	56,760
	c. Repair Cost	79,430	76,650
	Sub-total	419,570	1,024,700
2.	Pipeline		
	a. Repair Cost	8,230	7,712
3.	Drainage Canal	900	843
4.	Road		
	a. Repair Cost	27,250	27,250
	Total of O & M Cost	455,950	1,060,505

 Table J.5-7
 O & M Cost for Com Osheem Area

			Un (Un	it: L.E. 1,000)	) :
	Item		Financial	Economic	
1.	Pump Station	to a second s			
	a. Electric Charge	· .	189,670	629,894	
	b. Salary and Wages		44,640	35,640	
	c. Repair Cost		57,520	55,507	÷
	Sub-total		291,830	721,041	
2.	Pipeline				
•••	a. Repair Cost		6,270	5,875	
3.	Drainage Canal		780	730	
4.	Road				
	a. Repair Cost	· · ·	19,570	19,570	
	Total of O & M Cost		318,450	747,216	

# Table J.5-8

## Economic O & M Cost for Re-Use Water Project - North Wahby and Com Osheem Areas -

(Unit: L.E.)

Item	Financial	Economic
1. Electric Charge	240,956	800,215
2. Maintenance of Elec./Mecha.	36,073	34,810
3. Salary & Wages	6,432	6,432
4. Maintenance Canals ξ electrical lines	120,052	96,040
5. Maintenance of pressure pipeline	3,756	3,519
Total	407,269	941,016

Table J.5-9

Economic O & M Cost for Model Farm_______-- North Wahby and Com Osheem Areas -

(Unit: L.E.)

Item	Financial	Economic
1. Electric Charge	24,370	80,933
2. Salary & Wages	13,920	10,920
3. Maintenance Cost of Pump facilities	13,420	12,950
4. Maintenance of Pipe Line	780	730
5. Road	2,650	2,650
Total	55,140	108,183

Table J.5-10	Replacement Cost of Pump Facilities
	- North Wahby & Com Osheem Areas -

1. At 13.5 years after operation:

15% of Pump Cost only with contingency of 10%

15% of 880,150 L.E x 1.1 = 145,225 L.E

 $= .145 \times 10^{3} L.E$ 

2. At 26 years after operation:

80% of Pump Cost only with contingency of 10%

80% of 880,150 L.E x l.l = 774,532 L.E = 775 x 10³L.E

3. At 38.5 years after operation

As same as the above 1 = 145,225 L.E =  $145 \times 10^{3}$ L.E

Table J.5-11Replacement Cost of On Farm Facilities- North Wahby & Com Osheem Areas -

### (Unit: 1,000 L.E)

								1				
					Nort	h Wahby	Com Osheem					
	$\dot{\mathbf{p}}_1$	roje	ctiYe	ear	Drip	Sprinkler	Drip	Sprinkler				
	Yrs	Yrs	Yrs	Yrs				· ·				
Α.	13	23	33	45	630	378	236	248				
	14	24	34	44	840	504	436	458				
	15	25	35	45	630	378	328	344				
Β.	18	. 28	38	48	630	·* _	236					
	19	-29	39	49	840	-	436	<u> </u>				
	20	30	40	50	630	-	328	. –				

Table J.5-12Replacement Cost for Re-Use Water Project- North Wahby and Com Osheem Areas -

13.5 years after operation	111,400 L.E.
26 - do -	594,300 L.E.
38.5 - do -	111,400 L.E.

#### J.5-13 Economic Project Cost for Existing Drainage Canal Improvement Project

(Unit: L.E. 1,000) Item Total F.C. L.C. Financial Project Cost excluding Λ. 420 90 330 Price Escalation Β, L.C. excluding unskilled labor 251 cost С. Economic L.C.  $(B \times 0.8)$ 201 ~ -D. Unskilled Labor Cost 79 _ Ε. Economic unskilled labor cost 40  $(D \times 0.5)$ F. Economic Project Cost 332 90 241 (F,C, of A + L,C, of C&E)

Note:	F.C.;	Foreign Currency
	L.C.;	Local Currency

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Economic Project Cost for Wahby Downstream Area Table J5-14

(Unit: 1,000 L.E)

	445	401	321	44	22	343			 			art.		,			•
1988 F.C.	265	ł	Ļ.		Ч.	265		•							~ 1		•
Total	710	t.	, I	t.	i. I	608		~	1	261	221	177	40	20	197		
· 7	200	7	.00	53	5			1992	F.C.	224	ан	* <b>1</b>	Ľ	1 ·	224		
1987 F.C. L.C.	60 20	- 197	128 1		T	60 160			Total	485	• •	1	-I,	ľ.	421	• •	
	260	I	ł	· 1	. <b>1</b>	220				619	501	400	18	59	459		
Total	3¢	·	·	1.		15		1			ហ៊.	4	Т Т		1		
1.C	2,860	2,390	,912	470	236	2,148		1661	U L L	9 620	•				620		
		 `		1	ı	5			Total	1,239			•		1,079		
	2,588					2,588			L C	765	619	495	146	73	568		
Total	5,448	 :	,	,	•	4,736		1990	F.C. 1	859	ĩ	1	: 1	1	859	ncy y	
:		ix			5)		· .		. [.] .	1.1				1		Currel rrenc	
	ы С	cost	· · ·		Cost(D x 0.5)				Total	1,624			· .		1,427	Foreign Currency Local Currency	• •
	ccludi	laboı				<u> </u>	. :		I.C	570	451	361	611	60	421	For Loci	
	ost excluding	illed labor	0.8)	ن.	Labor	C St 6 E		1989	F.C.	560	- <b>1</b>	1	T	_ 1	560	с. С.С. Ц. Л.	
	C 4	unsk			lled	Economic Project Cost F.C. of A + L.C. of C			Total	130	1	I	ı	1	981	Note:	
	ial Project Escalation	excluding unsk	С. П	Labo	Unski	Proje + L.C	· ·		E E	r-î			a ar		•	NO	
			Economic L.C. (B x	Unskilled Labor Cos	Economic Unskilled	omic of A				A	m.	U	Q	ш	ц		
	Financ Price	Ľ.C.	Econ	Unsk	Econ	Econ (F.C.			• .			ۍ د د	· · ·			ta e e	
	· .			•.	ш	ц											

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				(Unit; 1,000 L.E)						
		Total	1985							
Item	Total	<u>L.C</u> .	<u>F.C</u> .	Total	<u>L.C</u> .	<u>F.C</u> .				
A. Financial Cost	8,198	7,521	677	1,525	1,187	338				
B. L.C. x 0.8	-	6,017	-	-	950	-				
C. Economic Cost	6,694	6,017	677	1,288	950	338				
		1986			1987					
Item	Total	L.C.	<u>F.C</u> .	Total	L.C.	<u>F.C</u> .				
A. Financial Cost	4,204	3,865	339	2,469	2,469	-				
B, L.C. x 0.8	-	3,092	-	-	1,975	-				
C. Economic Cost	3,431	3,092	339	1,975	1,975	-				
Note: F.C.; L.C.;	Foreign Local (					•				

Table	J.5-15	Economic Cost for Re-Use Water Project
	4 . <u>.</u> .	(Wahby Downstream Area)

Table J.5-16	Economic O & M Cost
	(Wahby Downstream Area)

•

		(1	Unit:	L.E.)
	Item	Financial	Eco	nomic
1.	Salary and Wages			
	Civil Engineer	3,600	,	3,600
	Labors (A)	1,800	1	1,800
	Labors (B)	3,600		1,800
	Sub-total	9,000		7,200
2.	Canal Dredging	1,390		1,112
3.	Total Cost	10,390		8,312

		O & M Cost of Re-Use Water Projec (Wahby Downstream Area)									
			(Unit: L.E)								
	Item	Financial	Economic								
1.	Electric Charge	196,956	654,090								
2.	Maintenance of Elec./Mec	ha. 31,227	30,134								
3.	Salary & Wage	5,568	5,568								
4.	Maintenance canals & electrical lines	103,948	83,158								
5.	Maintenance of pressure pipeline	3,252	3,047								
	Total	340,951	775,997								

# Table J.5-18Replacement Cost of Re-Use Water Project<br/>(Wahby Downstream Area)

13.5 years	after operation	96,500 L.E.
26	- do -	514,500 L.E.
38.5	- do -	96,500 L.E.

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	L.E)		427	356	285	12	36	521	·		L.C.	360	305	244	55	28	272		
·	1,000 L.E)	1988 F.C.	368	ł	1	ł	ł	368		1992	<del>Р</del> .С.	379	ì	ł	t	. I	379		
	(Unit:	Total	785	• •	ı	ł	ł	689			Total	739	1	١	١	١	651		
		L.C.	94	88 88	70	9	ю	73			Г.С.	680	561	449	119	59	8		
	•	1987 F.C.	36	I	ı	ł	ı	86		1991		756 68	- 2	- 41	- 11	1	508		
·		Total	180	1	I	I	ł	159		5			۱	١	ı	۱	64 756		
	(un		, 211	15	72	496	248	20			Total	1,436					1,264		
	ct Cost Lake Qarun)		м	- 2,715	- 2,172	4		9 2,420			L.C.	006	763	610	137	68	678	,	
	ofe	Total F.C.	3,279					3,279	- 19	1990	F.C.	971	I	1	I	ı	126	ur en cy	•
	Economic Pr (South Area	Total	6,490		1	1	ı	5,699			Total	1,871	I	ł	1	f	1,649	Foreign Currency	}
				st.			0.5)	·			L.C.	750	642	514	108	54	568	F.C.: Fo	
	J.5-19		guibu	bor co			st(D x 0.5)			1989	F.C.	719	ł	- 1	I	ł	719		
	Table .		excl	L.C. excluding unskilled labor cost	0.8)	÷	3	Economic Project Cost (F.C. of A + L.C. of C & E)			Total	1,469	4	1	ł	Ĩ	1,287	Note	
		Item	Financial Project Cost Price Escalation	ing unsk	Economic L.C. (B x 0.8)	Unskilled labor cost	Economic unskilled labor	oject Co + L.C. o				ν.	8	с.	D.	ш	с.		
			Financial Projec Price Escalation	excludi	omic L.(	illed li	omic uns	omic Pro . of A 4											
				г.с.	Econd	Unsk	Econd	Econ( (F.C.											
			A.	в.		D.	щ	بىر											

L.C.: Local Currency

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Table .J. 5-20

Economic O & M Cost - South Area of Lake Qarun - · .

40,820	16,178	13,636	11,006	r 111411C1&1
38,830	15,501	12,955	10,374	1 0 0 10 10
· · · · ·				Total O & M Cost
	588	1,378	1,856	Drain Dredging
:	3,696	<b>1</b>	lit.	2. Repair Cost of Dike Road
	11,217	11,577	8,518	d. Sub-total
	2,104 x C.F.0.965 = 2,030	2,287 x C.F.0.965 = 2,207	1,872 x C.F.O.965 = 1,806	Repair Cost
•	4,800	4,800	2,400	Watch man
	612	612	576	Labors
	1,632	1,632	1,536	Operators
	(8,268) 1,224	(0,200) 1,224	1,152	Mechanical Eng.
· .	= 919	= 1,102	= 1,048	Salarat F Baran
	910 × C.F.1.010	1,091 x C.F.1.010	1,038 x C.F.1.010	Fuel Cost
Total	Abu Harawa	AUU LALTAYA	DTUD CIDA	Pumping Station
		۰	Rote Coil	
:: L.E)	(Unit:			

# Replacement Cost - South Arca of Lake Qarun -Table J.5-21

,

## (Unit: L.E.)

. .

		12.5 year $\frac{1}{}$	<u>25 year^{2/}</u>	<u>37.5 year 1/</u>
Bat Said	(45,100)	6,765	38,335	6,765
Abu Tarfaya	(55,110)	8,267	46,843	8,267
Abu Harawa	(50,710)	7,607	43,103	7,607
	· · · ·			

15% of Pump cost only including contingency of 10% Note: 1/ 80% 2/ - do -

Note:

¢

Replacement Cost by year

Project year	Bad Said	Abu Tarfaya	Abu Harawa
18	6,765	-	
19	-	8,267	-
20		-	7,607
30	38,335		-
31	-	46,843	
32	-	-	43,103
43	6,765	-	-
44	. , <del>.</del>	8,267	-
45	. <del>.</del>	-	7,607

## APPENDIX J-6. Calculation of EIRR

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						MILLION L.	. )
YEAR	чP\$	ROJECT COST-	1010	INCREMENT-	PROJECT	PRESENT WE VALUE (3)*DISCOUN	
	· · · · ·		(1)	(2)	= (2) - (1)	(12 %)	(13 %)
1 1985	1.610	0.0	1.610	0.0	-1,610	-1.438	-1.425
2 1986	5.220	0.0	5.220	0.0	-5.220	-4.161	-4,088
3 1987	3.810	0.0	3.810	0.0	-3.810	-2.712	-2.641
4 1900 5 1080	1.720	0,110	1.830	0.0	-1.830	-1.163	-1.122
6 1990	8.510	0.110	8.620	0.0	-4.440	-4 367	-2.410
7 1991	7.510	1.600	9.110	0.190	-8.920	-4.035	-3.792
8 1992	4.790	2.940	7.730	2.170	-5.560	-2.246	-2.091
9 1993	0.0	2.870	2.870	5.060	2.190	0.790	0.729
10 1994	0.0	2.870	2,870	7.740	4.870	1.568	1.435
12 1996	0.0	2.870	2.870	10.090	7.220	1.853	1.665
13 1997	0.0	3,920	3.920	10.840	6.920	1.586	1.413
14 1998	0.0	4.140	4.140	11.440	7.300	1.494	1.319
15 1999	0.0	3.830	3.830	11.960	8.130	1.485	1.300
16 2000	0.0	. 2.870	2.870	12.150	9,280	1.514	1.313
18 2002	0.030	5.510 6.230	5.040 4 430	12,190	7 766	1 609	0.860
19 2003	0.0	5.110	5.110	12.190	7.080	0.822	0.694
20 2004	0.0	4.550	4.550	12.190	7.640	0.792	0.663
21 2005	0.0	2.870	2.870	12.190	9.320	0.863	0.716
22 2005	0.0	5.020	5.020	12.190	9.370	0.758	0.023
20 2007	00	3.920	J.920 4 150	12,190	5 - 2 - 0 	0.530	0.491
25 2009	0.0	3,830	3.830	12.190	8.360	0.492	0.394
26 2010	0.0	2.870	2.870	12.190	9.320	0.489	0.388
27 2011	0.0	3.870	2.870	12.190	9.320	0.437	0.344
28 2012	0.0	4.430	4.430	12.190	7.760	0.325	0.200
24 2013	0.0	5.700	5.700	12.190	0.490 7 640	0.243	0.195
31 2015	6.0	2 870	2.870	. 12.190	9.320	D 278	0.211
32 2016	0.0	2.870	2.870	12.190	9.320	0.248	0.187
33 2017	0.0	3.920	5.920	12.190	8.270	0.196	0.14
34 2018	Ú.O	- 920	4.920	12,190	1.270	0.104 0.158	0.114 6.116
35 2019	0.0	3.830 5.976	3.630 2.876	12.790	9.320	0.358 0.358	0.110
-37 2021	0.0	2.870	2.870	12.190	9.320	0.141	0.101
38 2022	0.0	4.430	4.430	52,190	7.760	0,105	0.075
39 2023	0.0	5,110	5.110	12.190	7.080	.0.085	0.060
40 2024	0.0	4.550	4.550	12.190	r+04U 6-320	0.082	0.030
41 2025	0.0	2.870 2.600	2.010 2.010	12 190	9.210	0.679	0.054
42 2020	0.0	5.920	3.920	12.190	8.270	0.063	0.043
44, 2028	0.0	4.920	4.920	12.190	7.270	0.050	0.034
45 2029	0.0	3.830	3.830	12.190	8.360	0.051	0.034
46 2030	0 0	2,870	2.870	12.190	9.320	0.001	0.034
47 2031	0.0	3.020	3.020	12,190	7.760	0.034	0.022
48 2032	0.0	4.400 5.110	5,110	12.190	7.080	0.027	0.018
50 2034	0.0	4.550	4.550	12.190	7.640	0.026	0.017
101AL	37.830	163.460	201.290	495.120	293.830	0.407	-2.088
	$\begin{array}{c} CAPITAL \\ \hline 1.610 \\ 5.220 \\ 3.810 \\ 1.720 \\ 4.300 \\ 8.510 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.$		12 + 0	.41 / (	5.210 8.270 7.270 8.360 9.320 9.170 7.760 7.080 7.640 293.830	2,09) = 1	2.16

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# Table J.6-1 Project Economic Cost and Return -North Wahby and Com Osheem Areas-

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