Part B

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Appendix 6.3 Agricultural Development Plan

	· · · · · · · · · · · · · · · · · · ·				
	2000/01 (no.) 23.534	7.254 7.831	9 <i>.5</i> 75 301 <i>.59</i> 7	1.210.606	
	1999/00 (no.) 23.005	7.098 7.663	9.359 295.104	1,134,589	
	1998/99 (no.) 22.488	6.945 7.498	9.149 288.752	1,063,344 nt of Agriculture.	
rojection	1997/98 (no.) 21.982	6.795 7.336	8.943 282.536	996,574 ivision, Departme	
Population Projection	1996/97 (по.) 21.488	6.649 7.179	8.742 276.454	933,996 g Development D	
App. 6.3.5-1	1995/96 (no.) 21.005	6.506 7.024		875,348 n. 1996", Marketin	
	Annual Population Increase Rate (%) 2.3	2.2	2.3	u District 6.7 875,348 933,996 996,574 1,063,344 1) District Statistical Office, Nuwakot. 2) "Agricultural Marketing Information Bulletin, 1996", Marketing Development Division, Department of Agriculture.	
	Area Bidur Municipality	Khadga Bhanjyan VDC Gerkhu VDC	Study Area Nuwakot District	Kathmandu District Source: 1) District Statisti 2) "Agricultural M	
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Сгор	Post Harvest Losses (%)	Processing Losses (%)	Milling Recovery (%)	Seed Rate (kg/ha)
Paddy/Rice	10	1.75	62.85	55
Maize/Flour	10	1	97	20
Wheat/Flour	10	1	96	100
Millet/Flour	10	0	93	20
Vegetables	10	0	0	0

App. 6.3.5-2 Crop Losses

Source: "Agricultural Marketing Information Bulletin, 1996", Marketing Development Division, Department of Agriculture.

															•	: ;		•				;		:					-		:									! •	
		•			Self-sufficiency Rate	(12)			223.4				308.5			•	:	105.1		•	·		246.1	· ·	•	• ;	2005		•	-						· · · · · · · · · · · · · · · · · · ·	152.4			0.001	
					Foodgrain Requirement				56.92				84.80				•••••	385.63					140.00	: -	:		147 26	24.		•	•						236.84			183 03	
~			FW (12 Months Irrigation)	Estimated	Population (2000/2001)	(no.)			298		•••		444			•		2.019		. *	:		733		:		ā				·		•				1,240			Xe	ŝ
			FW (12 Mon		Foodgrain A vailability	(mt)	54.03 32.04	0071C	127.18	131,47	0.00	64.05	261.57	203.74	107.23	0	99.14	11.205	179.87	2 9 9	0	108.61	4.44	230.26	71.68	•	139.04	41.30	0	14-10 0	39.89	132.61	21.12	88.57	0	÷.		10.02		46.17	
					Production	(mt)	116.5	37.28	101.06	240.00	0.00	76.80	393.60	171.50	28.81	0	118.88	609.26	325.60	65.12 65.12	0	130.24	220.96	416.80	83.36	0	106.72	74.75	0	00 fr	47.84	182.39	28.75	103.00	0	82.40	314.15	55.36	0	55.36 281.77	77.007
		72)	:		Self-sufficiency Rate	(%)		-	168.8				232.9					79.3	•		•		168.5	•				0.707		•				-			999		·	¥ X	0.77
		App. 6.3.5-3 Irrigation Block-wise Estimated Self-sufficiency Rates (1/2)		4	Foodgrain Sel	(mc)			56.92	•	·	· · · · · · · · · · · · · · · · · · ·	84.80	: : :				385.63					1 40.00					07-14-1	• • • •								236.84			181.01	
	•	nated Self-suf	v (mization)	Estimated					298		•		444	· · ·				2.019					733) .		-	ī		• 5		 				:	• . •	1 240		:		1. 201
		ck-wise Estir	FW (9 Months (migation)		Foodgrain	÷.,	64.03 22.02	0	96.09	131.47	60 00 00	0	197.52	203.74	107.21	0	0	105.97	179.87	2 8 2	0	•	235.87	230.26	× 11.68	•		41.30	0	51.42	• •	92.72	71.12	88.57	0	•	129.69	10.09	0	0	11-041
		Irrigation Blo		.	Production	(JUL)	116.5	0	153.78	240.00	0 26.80	0	316.80	371.50	115.55	0	0	490.38	325.60	0 Y	. 0	0	390.72	416.80	836	0	0 4	74.75		08.95		134.55	128.75	03.00	0	•	21122	55.36	0	0 37 90 -	04-077
:	-	vpp. 6.3.5-3			Self-sufficiency	(%)			64.3				128.1					0.95					133.9		÷		1 66.0										58.9			0.4	
		• • • • • • • • • • • • • • • • • • •			Foodgrain S	(mt)			51.95		•	.'	77.36					352.20					127.78	•			34 461										216.21			167.80	101.05
	•		PW/O		Population	(no.)			272		•	· · ·	507	: .				1.844		:			\$				NAT .										1.132			0	
Ţ			ß		Foodgrain	(mt)	33.4	> C	33.		38.46 26.15		60.66		8 7		 	-	1 4	20.40		i i i		44.82	, .	-	1.23		:	7.94		43.40		09.64				2076 2076		184	
					Production	() III)		o c	61.51	58.75	14 93 31 56	3.26	138.52	64.18		41.91	0	186.43	•	88.88 20.01	56.65	•	221.93	82.54		27.43	14.17	0		38.69	°	52.61	0		30.05	2	103.6	10,01	16.26	90 70 0	
	. '	•••			Crops	· • • • •	Paddy	When	Sub-total	Paddy	Maize	Wheat	Sub-total	Paddy 11 in 10 day	Upland raugy	Millet	Wheat	Sub-total	Paddy	Upland Paddy Muine	Miller	Wheat	Sub-total	Paddy Finiand Baddor	Maize	Millet	Wheat Sub-	Paddy	Upland Paddy	Maize	Wheat	Sub-total	Paddy	Upland Faddy Maize	Müller	Wheat	Sub-total	Maire	Miller	Wheat	200-0021
-					Irrigation	DICK	<			ല				U					۵			•		цi				<u>ن</u> د.	:				J	2				x :			

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			FW/O	ç					FW (9 NORTH MURATION)					L VE LA ANDIALS RELEASED	1kanon v		
									Estimated.			1. T. T.			Estimated		
notestra	e Croox	Production	Foodgrain Population Foodgrain	Population		Self-sufficiency	Production	Foodgrain.	Population.	Foodgrain	Foodgrain [1] Self-sufficiency Production	- Producti	on Poodgrain		Population	Foodgrain	Self-utficiency
Block			Availability	, ·		Kate		Availability	(2000/2001)	(2000/2001) Requirement	Kate		Availability		(2000/2001) 8	Requirement	Rate
) E	(mt)	(no.)	(mc)	(%)	(mt) -	()W)	('0U).	(MU)	· · · (*5)	(strik)	(mt)		(no.)	(mt)	(th)
	Upland Paddy	12.23	12,8		_		46,20	25.45		1		¥	46,20 2:	25.45			
	Maize	62.46	53.46		-		92.40	79.46	-		· .	8	92.40 7	79.46		•	
	Willer	13.03	11.14				0	0			•		0	0			
	Sub-total	90.71	72.83	ск. -	140.00	52.0	138,60	104.91	108	153.37	68.4	13 13	38.60 10		803	153.37	68.4
-	Upland Paddy	(1 8 1	4,43				S6.80	31.29	,			۳ñ		31,29		-	
	Muize	75.61	64.72				113.60	97.69		•				97.69			
•.	Miller	16.02	13.21				•	•			•						
	Sub-total	09.83	82.42	30.	58,83	1.04.1	170.40	12X.98	337	64.37	200.4	2	170.40	28.98	337	64.37	200.4
×	Upland Paddy	60,11	6.10				79.00	43.52				F.'		43.52			
	Maize	105.15	90.01				158,00	135.87	•			ŝ	138.00 13	135.87			• .
	Millet	22.22	18.45				0	•					÷		• •		•
	Sub-total	138.83	114.62	412	78.69	145.7	237.00	179.39	451	86.14	208.3	5	237.00 17	179.39	451	86.14	208.3
L.	Paddy	178.87	61.79				514.00	26162				51.	·	283.95			
	Maize	12.63	107,53				154.20	132.60				Š.	i.	132.60			
	Millet	55-61	9				•	0	•		•			0			
	Wheat	34.95		-			257.00	214.33		:		ุก		214.33		-	
:	Sub-total	358.78	ų	1.384	264,34	94.0	925.20	630.88	1.516	289.56	217.9		925.20 63		1.516	289.56	217.9
Total	Paddy	509.33	276.57				2,360.90	15.105.1			-	2,360.90		30131			
	Upland Paddy	68.72	37.16				182.00	100.26				81	182.00 10	100.26			
	Maize		769.60				1.117,80	961.23			•	1,117.80		961.23			
	Millet	10.382	238,85				0	•		1			•	0			
•	Wheat	52.38	41.51			•	257.00	214.33			•••	- 26	972.52 81	811.04			
	Sub-total	1 817 56	1.363.69	8.742	1.069.71	81.7	3.917.70	2.577.13	9.575	1.828.82	140.9	4.633.22		3.173.84 9	9.575	1,828,82	2.571

App. 6.3.5-3 Irrigation Block-wise Estimated Self-sufficiency Rates (22)

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		FW/O				
Irrigation	Crops	Production	Production under	Increment	Production under	Increment
Block		(mt)	9 months Irrigation (mt)	(mt)	12 months Irrigation (mt)	(mt)
A	Paddy	61.51	116.5	54.99	116.5	54.99
••	Maize	0	37.28	37.28	37.28	37.28
	Wheat	Ő	0	0	37.28	37.28
	Sub-total	61.51	153.78	92.27	191.06	129.55
	Oilsceds	0	0	0	0	
district and and	Vegetables	0	229.62	229.62	459.24	459.24
	Total	61.51	383.4	321.89	650.3	588.79
	<u> </u>					
В	Paddy	58.75	240.00	181.25	240.00	181.2
	Maize	44.93	76.80	31.87	76.80	31.87
ta s	Millet	31.58	0	-31.58	0	-31.58
	Wheat	3.26	0	-3.26	76.80	73.54
	Sub-total	138.52	316.80	178.28	393.60	255.08
	Oilseeds	1.06	0	-1.06	0	-1.00
	Vegetables	0	473.04	473.04	946.08	946.08
	Total	139.58	789.84	650.26	1,339.68	1,200.10
С	Paddy	64.18	371.50	307.32	371.50	307.32
	Upland Paddy	3.07	0	-3.07	0	-3.0
	Maize	77.27	118.88	41.61	118.88	41.6
	Millet	41.91	0	-41.91	0	-41.91
	Wheat	0	0	0	118.88	118,88
	Sub-total	186.43	490.38	303.95	609.26	422,83
	Oilseeds	5.23	0	-5.23	· · · · · · · · · · · · · · · · · · ·	-5.23
	Vegetables	0	732.23	732.23	1,464.45	1,003.50
	Total	191.66	1,222.61	1,030.95	2,073.71	1,484.7.
D	Paddy	46.87	325.60	278,73	325.60	278.73
	Úpland Paddy	8.38	0	-8.38	· 0	-8.38
	Maize	110.05	65.12	-44.93	65.12	-44.93
	Millet	56.63	0	-56.63	0	-56,63
	Wheat	0	0	0	130.24	130.24
· ·	Sub-total	221.93	390.72	168.79	520.96	299.03
	Oilseeds	3.58	0	-3.58	0	-3.58
	Vegetables	0	1,337.00	1,337.00	2,139.19	2,139.19
	Total	225.51	1,727.72	1502.21	2,660.15	2,434.64
Е	Paddy	82.54	416.80	334,26	416.80	334.20
	Upland Paddy	6.43	0	-6.43	0	6.4.
	Maize	147.39	83.36	-64.03	83.36	-64.03
	Millet	27.43	0	-27.43	0	-27.43
	Wheat	14.17	0	-14.17	166.72	152.55
	Sub-total	277.96	500.16	222.2	666.88	388.92
	Oilseeds	8.25	0	-8.25	0	-8.25
	Vegetables	0	1,711.49	1,711.49	2,738.38	2,738.38
	Total	286.21	2,211.65	1,925.44	3,405.26	3,119.05

App. 6.3.5-4 Crop-wise Incremental Production (1/3)

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		FW/O	••••••••	<u></u> P		
rrigation	Crops	Production	Production under	Increment	Production under	Increment
Block	! 	(mt)	9 months Irrigation (mt)	(mt)	12 months Irrigation (mt)	(mt)
F	Paddy	0	74.75	74.75	74.75	74.75
	Upland Paddy	4.33		-4.33	0	-4.33
· · ·	Maize	38.69	59.80	21.11	59.80	21.11
	Millet	9.59	0	-9.59	0	-9.59
	Wheat	0	0	0	47.84	47.84
	Sub-total	52.61	134.55	81.94	182.39	129.78
	Oilseeds	5.81	0	-5.81	0	-5.81
	Vegetables	0	491.11	491.11	785.77	785.77
	Total	58.42	625.66	567.24	968,16	909.74
G	Paddy				******	
U			128.75	128.75	128.75	128.75
e più E	Upland Paddy Maize	11.7	0	-11.7	0	-11.7
	Maize Millet	57.95 33.95	103.00	45.05	103.00	45.05
	and the second		0	-33.95	0	-33.95
1990 - 19 ⁴	Wheat	0	0	0	82.40	82.40
	Sub-total	103.6	231.75	128.15	314.15	210.55
	Oilseeds	8.4	0	-8.4	0	-8.4
	Vegetables	0	845.89	845.89	1,353.42	1,353.42
	Total	112.00	1,077.64	965.64	1,667.57	1,555.57
H	Paddy	16.61	173	156.39	173	156.39
	Maize	53.98	55.36	1.38	55.36	1.38
	Millet	16.26	0	-16.26	0	-16.26
	Wheat	0	0	0	55.36	55.36
	Sub-total	86.85	228.36	141.51	283.72	196.87
	Oilseeds	2.13	0	-2.13	0	-2.13
	Vegetables	0	340.98	340.98	681.97	681.97
	Total	88.98	569.34	480.36	965.69	876.71
1	Upland Paddy	15.22	46.20	30.98	46.20	30.98
	Maize	62.46	92.40	29.94	92.4	29.94
	Millet	13.03	0	-13.03	0	-13.03
	Sub-total	90.71	138.60	47.89	138,60	47.89
	Oilseeds	6.71	0	-6.71	0	-6.71
	Vegetables	0	948,54	948.54	1,707.38	1,053.36
	Total	97.42	1,087.14	989.72	1,845.98	1,161.84
J	Upland Paddy	8.2	56.80	48.6	56.80	48.6
-	Maize	75.61	113.60	37.99	113.60	37.99
	Millet	16.02	0	-16.02	0	-16.02
	Sub-total	99,83	170.40	70.57	170.40	-10.02 70.57
	Oilseeds	11	0	-11	170,40	-11
	Vegetables	0	1,166.18	1,166.18	2,099.12	2,099.12
	· · · · · · · · · · · · · · · · · · ·	v		1,100.10	2,079.12	2,099.12

App. 6.3.5-4 Crop-wise Incremental Production (2/3)

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		FW/O	an ailine har 'n ar a d'an River a' and Garail, fain air Russennike faine ar an an air an an an an an an an an	F	¥	
Irrigation Block	Crops	Production (mt)	Production under 9 months Irrigation (mt)	Increment (mt)	Production under 12 months Irrigation (mt)	Increment (mt)
К	Upland Paddy	11.39	79.00	67.61	79.00	67.61
	Maize	105.16	158.00	52.84	158.00	52.84
	Millet	22.28	0	-22.28	0	-22.28
	Sub-total	138.83	237.00	98.17	237.00	98.17
	Oilseeds	15.29	0	-15.29	0	-15.29
	Vegetables	0	1,621.97	1,621.97	2,919.54	2,919.54
	Total	154.12	1,858.97	1,704.85	3,156.54	3,002.42
L	Paddy	178.87	514	335.13	514	335.13
: 	Maize	125.63	154.2	28.57	154.2	28.57
	Millet	19.33	0	-19.33	Ó	-19.33
• •	Wheat	34.95	257	222.05	257	222.05
1	Sub-total	358.78	925.20	566.42	925.20	566.42
	Oilseeds	10.18	0	-10.18	0	-10.18
· :	Vegetables	0	2,954.86	2,954.86	2,954.86	2,954.86
	Total	368.96	3,880.06	3,511.10	3,880.06	3,511.10
Total	Paddy	509.33	2,360.90	1,851.57	2,360.90	1,851.57
	Upland Paddy	68.72	182.00	113.28	182,00	113,28
	Maize	899.12	1,117.80	218.68	1,117.80	218.68
х -	Millet	288.01	0	-288.01	0	-288.01
11. 1	Wheat	52.38	257.00	204.62	972.52	920.14
:	Sub-total	1,817.56	3,917.70	2,100.14	4,633.22	2,815.66
	Oilseeds	77.64	0	-77,64	0	-77.64
	Vegetables	0	12,852.91	12,852.91	20,249.40	20,249.40
	Total	1,895.20	16,770.61	14,875.41	24,882.62	22,987.42
	Total	1,895.20	16,770.61	14,875,41	24,882.62	_22

App. 6.3.5-4 Crop-wise Incremental Production (3/3)

Irrigation Block	Crops	FW (9 Months Irrigation) Estimated Marketable Volume (mt)	FW (12 Months Irrigation) Estimated Marketable Volume (mt)
A	Paddy	64	64
•	Maize	4	17
	Wheat	0	23
	Sub-total	68	104
	Vegetables	199	429
	Total	267	533
В	Paddy	160	160
· .	Maize	27	47
	Wheat	0	55
	Sub-total	187	262
4	Vegetables	428	901
	Total	615	1,163
С	Paddy	.0	$= \begin{bmatrix} 20 & 1 \end{bmatrix} = \begin{bmatrix} 20 & 1 \end{bmatrix}$
	Maize	0	0
· . ·	Wheat	0	10
	Sub-total	0	30
	Vegetables	321	1,259
	Total	321	1,289
D	Daddy	173	
D	Paddy	173	198
	Maize Wheel	0	16
	Wheat Sub total	0	94
	Sub-total	173	308
	Vegetables Total	1,262	2,064
	i Utal	1,435	2,372
Е	Paddy	278	282
	Maize	0	32
	Wheat	0	128
	Sub-total	278	442
	Vegétables	1,633	2,660
	Total	1,911	3,102
F&G	Paddy	0	0
	Maize	18	73
	Wheat	0	72
	Sub-total	18	145
	Vegetables	1,211	2,013
	Total	1,229	2,158

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App. 6.3.5-5 Surplus Foodgrain Available for Marketing (1/2)

	App. 6.3.5-5	Surplus Foodgrain Available	
		FW (9 Months Irrigation)	FW (12 Months Irrigation)
Irrigation	Crops	Estimated Marketable Volume	Estimated Marketable Volume
Block		(mt)	(mt)
Н	Paddy	0	6
	Maize	0	0
	Wheat	0	2
	Sub-total	\mathbf{O}	8
	Vegetables	138	584
	Total	138	592
т. Т	Upland Paddy	0	0
er P H e g		0	0
	Maize		
• • •	Sub-total	0	0
	Vegetables	742	1,501
	Total	742	1,501
J	Upland Paddy	0	e de la construcción de la O rmania de la construcción de la
	Maize	75	75
	Sub-total	75	
	Vegetables	1,132	2,065
	Total	1,207	2,140
· · ·			
K	Upland Paddy	0	0
	Maize	108	108
	Sub-total	108	108
	Vegetables	1,576	2,874
	Total	1,684	2,982
L	Paddy	250	254
	Maize	53	54
	Wheat	183	184
	Sub-total	486	492
÷	Vegetables	2,800	2,800
	Total	3,286	3,292
· · ·			
Total	Paddy	925	984
	Upland Paddy	0	Ó Ó
	Maize	285	422
	Wheat	183	568
	Sub-total	1,393	1,974
	Vegetables	11,442	19,150
		12,835	21,124
	Total	12,033	£1,124

App. 6.3.5-5 Surplus Foodgrain Available for Marketing (2/2)

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Note: Calculation was made based on the per capita minimum calorie

requirement (191kg of cereals and 102kg of vegetables including potato).

App. 6.3.5-6 Irrigation Block-wise Seeds Requirements (1/2)

										•		,	(a comment
		Cropped Area	ē.	Seeds Roquinement	Cropped Area	Sec.	Seeas Kequirement	Cropped Area		Sec.	ULCORD	Increment	Translation of
Imgation Block	Croph	(ha)	(Kg)	(kg)	(ha)	(K2)	(42)	(Ha)	(kg)	• •		(\$\$)	(Kg)
V	Paddy	25.63	5	1.666	23.30	55	1,282	0.02	8		ц ц	-384	-384
	Maize	0	0	0	25.9	ຊ	186	6.32	2			186	2
	Wheat	o	0	Ó	0	10 10	0	2576	8		14	¢	252
	Vegetables	0		0	13.98	152-1	17,489	8.13	1571		- 22	17,489	34.978
1 1 1 1	Sub-total	25.63		1,666	46,60		18,957	06.69			78	17,291	0.35.712
B	Paddy	24,45	3	1921	45.00	S	2.640	8 8.00	55 55			690'1	1,049
	Maize	21,60	26	562	02761	ន	384	19.20	2		4	-178	-178
	Millet	16.80	8	336	0		0	0		•		-3.%	-336
	Wheat	2,40	22	887	0	8	0	19,20	8		2	882	1.632
	Oilveeds	2.40	ห	\$	Ö		0	· · 0 · · ·				8	1
	Vegetables	0		0	28,80	ភ្ម	36.029	- 21.60	1231		58	620'98	72,058
	Sub-total	67.68		282	8.8		130.61	00 771	:		02	36,228	74,177
U	Paddy	26,74	\$	1,738	74,30	55 .	4,087	74.30	\$			2,349	23.65
•	Upland Paddy	61/1		0	0	. 55		0	8	•		0	0
:	Maize	37.15	2	38	20,22	ង	594	20.72	8	· · · ·		-372	177
	Miller	877	ន	44 844	0		0	0	•	:		977-	4
	Wheat	0	8	0	ò	8	. 0	11.62	8	:	1	¢	2.972
•	Oil-eeds	1.39	ន	25	0		0		•			-238	238
	Vegetables	0		ò	44.58	ฎ	55.770	89.16	5		539	55,770	965-111-539
	Sub-total	95.66		3,388	148,60	-	60,451	222.90			32	57,063	115,804
۵ ۱	Paddy	19.53	59	1269	65.12	2	28576	65.12	33	30.0	2	2.113	2,31.3
	Upland Paddy	4.07		ø	0	22	0	0	. 35	•		0	o
	Maize -	52.91	23	1,376	16.28	8	326	16.23	50		\$	-1.050	-1,050
•	Miller	20.12	2	602	0	 	Ó	0	· . 40-	•		-602	-605 -
•	~ Wheat	0	8	0	0	8	···· • • • · · ·	32.56	8	전	ę	0	3256
· · ·	Oilseeds	8.14	8	[6]	0		· · · · · · · · · · · · · · · · · · ·	•	· · ·	•		-163	-163
And a second second second	Vegetables	•		0	81.40	1221	101,871	130.24	1231	162.5	020	101 331	162,930
	Sub-total	114.77		3.410	162.80		105,739	244.20		1 70.0	204	102.329	166,6%4
ы	Paddy	34.39	\$3	2,235	83.36	2	- 4,585	83.36	8	4	55	2.350	2,150
- *. -	Upland Paddy	3.12		0	•	55	0	0	55	0		0	0
	Maize	70.86	2	1,842	20.84	ก	417	20.34	8	41,		-1,425	1. 1. 1. 1.
	Miller	14.59	ន	262	0		0	ō		•	•	262-	167-
	Wheat	10.42	120	1.250	0	8	0	41.68	. 10	4.16		-1,250	2,918
2	Oilseeds	18.75	ล	375	0		0	0		•		-375	375
the second s	Vegetables	• • • •		0	104.20	ន	130,354	166.72	នា	208.1	67	130,354	208.567
	Sub-total	152,13		5,994	20%,40		135,356	312.60				129,362	211,743
الل ر	Paddy	: 0	\$	Ó	14.95	3	822	14.95	\$:	- -	822	ũ
	Upland Paddy	2.10	8	126	0	\$	•	: 0	55	•		-126	-126
•	Maize	18.60	ង	484	14.95	ន	2 8	. 14.95	8	X	•	-185	-185
	Miller	5.10	2	5	0	:	0	0				-102	-102
	Wheat	•	ទី	•	0	<u>8</u>	Ö	% ;11	8		8	•	1,196
	Oilseeds	13.20	8	264	•	•	0	0.				-104	Ņ
	Vegetables	0	1.	0	26.62	121	37,405	47,84	121	59.8		37,405	59,848
	Sub-twol	(Joint)		ATA	10.80	:	ALS BE	02.08		103		77 660	00117

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			PW/O	_ !		¥4.	W (9 Month	 Imigation) 		3	(12 Monthy 1	mgation)	9 Months	12 Months	
•	-	Cropped Area	Chit Chit	Seeds Requirement	firement	Crepped Area	Chit	Seeds Requirement			Unit	Seeds Requirement	Increment	Increment	
Impation Block	Crops	(P4)	(KZ)	(č3)		(ha)	- (kg)	(kg)		(ha)	(kg)	(kg)	(kg)	(ke)	
U	Paddy	•	č	0		25.75	S	1,416		25.25	55	1,416	1,416	1.416	
. *	Upland Paddy	5.68	8	341		ġ	22	0		0	55	0	120	Ĩ	
	Matze	21.86	ក	12		25.75	ក្ត	515		25.75	ន	515.	ê,	502-	
	Millet	18.06	8	9	•	•		o	•	0	÷	0	-36	192	
•	Wheat	D. 44 44	8	o [0	8	0	•	20:60	8	2,060	•	2,060	
	Vincetos	60.61	3	282		0.00		- ;		0		0	-382	R .	
	Vegradie			SV a -			3	174.40		04-72	<u>ត</u>	103,082	2	107.082	
	100000	40%		100°		MT-01		96.00		06.40		\$10,701	64,530	105,265	
	Puddu	694	52	450		14.60	¥		:		: ;			5	
:	torne -	26.00	37			3	3 8			0.1	8 :	î î	1.65,1	1.45.5	
	Mauch	0X.04	9	6		490°C	2		:	2.84	R	112	398	861,	
	WHILE	60.0	3	51	1	0		P		•		•	-173	-173	
	Wheat		2	•		0 0	8	•••		13.84	8	787	0	1,384	
	Oilverds	4.84	ន	\$		0		•		0		0	65-	-01	
•	Vegetables	0	:	•		20.76	ភ្ល	25.971		41.52	1251	51.942	25.971	S1 942	
	Sub-total	66.JS		205.1		69.20	-	28,151		103,80		55,506	26.756	11.9	
	Upland Paddy	1.39	8	544		11.55	, 25	635		11.55	55	635	192	192	
	Mauze	30.03	36	181		23.10	8	(9 1	:	23.10	ន	462	-319	-319	·) ·
	Miller	. 693 .	8	139		o	 	0		0		0	661-	621-	
	Otherds	15.25	ន	205		0		0		0		0	-305	505-	
	Vegetables	o		•		57.75	1251	242.27		103.95	ก	1,40041	72.245	130.041	
	Sut-total	59.60		1,668		92.40		73,742		138.60		REFIEL	71,674	129,470	
,	Upland Paddy	3.98	8	239		14.20	. 55	181		14.20	55 55	181	542	542	
•	Maize	36.35	8	. 945		9-82	ន	568		38.40	8	568	-377	110	
	Millet	8-51	ន	5		0		0	•	0		0	-121-	-171	
	Oiliceds	24,99	ĥ	8		•	•	· · · · ·		0	•	•	202	-200	
	Vegetables	0		•		38	1521	85,821		08721	121	159878	88,821	159,878	
	Sub-total -	X 1.		1,855	_	09/011		90,170		170.40		161227	88,315	159,372	
: ×	Upland Paddy	52 22	8	132		57.61	8	1.086		19.75	\$	1,086	754	754	
	Maize	50.56	ង់	1,315		05.65	ន	. 262	2	39.50	ន	200	Ŋ,	53	
	Millet	11.85	ର :	162		•		0		•		0	•237.	-237	
	Circuit	01.44	8	. 60		0		• •		0	•	0	-695	569-	
	Vegelation	0		0		98,75	ឆ្ម	123,536	:	77.75	1251	222.365	09571521	- 222.365	:
	Sub-total	102.70	:	626.2		154.00		125,412		217.00		224,241	122,833	221.662	
	rauuv Milia		83	000°		087201	8	5,654		102,80	8	5,654	810	018	
	Miller		8,8		. .		3	E ·		36.35 ^	2		78	84	
-	When	04 Y	2	1.0er		24.75	5				4		9. I	607- 1	
	Oilverds	1142	1 8	LYP	_		3				3		145.5	14.14	
	Veretables	0		¢	•	120 00	120	116 066					204	Sol 1	
	Sub-total	194.04		10,167	7	385.50	i	200-277			i :	200,022	000/077		
Total	Paddy	212.22		197.61		£77.18		150 21			.	14 041	951,117	101127	
	Uplund Paddy	33,76	8	1.481		45.50		1001		45.5		208 0	1.01	1001	
	Maize	432.27	3	01211	õ	279.45		5.589		220.45		0%5 5	158.5	4 45	
•	Miller	153.19	ទួ	3,065		0		0		0		0	1005	- 1 000	
	Wheat	38.52		4,672		22		5.425		243.13	7	24313	LOX.	19 401	
:	Oilveeds	176.44	8	3,530		• •	.*	0	:	0		0	0621-	3.570	
۰.	Vegetables			0	•	782.52	•	072 011		12101		1 647 193			
								7101A	-	10.101			116.975	141121	

5		Connect		line a	0	DAP		Total	Cmoned		PW (4)	SEI 4100	DAP DAP	Total			Lirea	Neuronal and	IVC DVI		Total	9 Months	12 Month	
Block	Crops	Area	Ner.	Consumption		1 · .	1	ş	nY	Ĕ	Consumption	Unir Unir	Солчитрноп	Consumption	A Arca	Unt	ů.		UNC	ş	Consumption	Increment	Increments (14)	
ľ		(ML)									(24) V			(H) V (M)		1					6,000	1.724	124	
	Maixe		20	0	ξo	20				38	798 1	8 8	110	8.1						012	817	8.1	2.76	
	Wheat	0	0	0	0	0				0	ø	c	0	· 0 · · ·							2.7%	0	2.796	
	Vegetables	0	0	0	0	0	~	0	16.11	ĝ	1.7%	11 11	1.74K	4.544	:		÷		: .		9,0%7	4.44	\$ OK	
5	Sub-total	25.63	•	4,613	٠	4.101		×.714	1	•	9.320		\$,010	14.030					·		21.669	5.616	12.955	
["	Pauldy	24 aX	1×0	4,406	\$	1012		x_723	4K,00	8	009'6	8	4,400	14.400		· .					14,400	6.077	6.077	
	Maize	21,60	8	4.320	100	2.15		040		8	3,840	8	1.920	5.760							5.760	-720	-720	
μ.	Millet	16.40	150	2,520	0	0		20		0	ċ	•	ò	ວ່							0	22	-2.520	
1	Wheat	41	8	4×0	8	040		8	0	0	ò	c	¢	0	19,20						5,750	-720	2040	
	Otheredie	3.40	0	o	0	0		0		0	0	0	0	•						÷	о ¹	c	0	•
-	Vegetablen	0	•	٥	¢	o		0	04,45	80	5.760	친	3,600	09.16	57,60						18.720	9.,60	1X,720 .	
v.	Sub-total	67,68	•	11.726	•	6.3:7		Out 1	ĺ	•	19.200		10,720	29.520	144.00						44,540	11.477	26,597	
ſ	Pauluty	26.74	041	£1×'7	991	¥2		150'5	0	007	14,260	8	7.430	20	74.30						27.2%	12.199	13,199	•
2	Uptund Paddy	1.49	8	ž	:	ð		š		0	0	0	0	•	ō			h			¢	X67	6	
*	Maize	37.15	ş	7.430	8	1.11		.14\$	212	8	16	8	2.972	816'X	52						916'n	2.229	222	
	Millet	215	150	3.344	Ö	0		1		0	0	0.	•	•	0			-	1	- ;	0	144	1	•
	Wheat	·. 0	0	0	0	0		0		0	0	0	o	0	12.62				÷.;		X.916	Q .	. × 916	
	Oilseeds	6x 11	0	0	0	¢				ò	0	ō	0		0		• .		۰.	1	0	C	C	
1	Vegetables	0	0	0		0		. 0	· 44_5N	201	916'N	22	5.773	14,489	K9.16			. /			24, 977	14.4%	24.973	
×.	Sub-total	95.66	•	15,885	•			к7к	1	•	29.720		15,975	45,695	222.90			÷	i.	. 1	69.099	21 ×17	45,221	1
Ē	Paddy	19.53	110	31215	160	:		940		ĝ	13,024	100	515.6	19.536	65.1		ĺ	ł			925 61	12,806	12,896	
2	Upland Paddy	4.07	80	X14	ó			4		0	0	0	o'	o ,	0			÷			o	A 14	- 114	
,	Maize	10.22	ŝ	10.5×2	8			X73		ĝ	85F.V	8	1.62%	4, XX4	16.2						422.4	555.01-	-10.949	
	Miller	30.13	20	4.5.IX	•		:	*1:	0	0	0	0	0	o '	•		:	÷	. '		0	*	NIN"	
~	Wheat	•	•	•	8	ţ.		0		•	0	0	ວ່	<u>،</u>	Y I			•			0.764	¢,	9.768	
	Otherde		•	о с :	р (о «		0		: ⊳¥		o ž		24,25	0.051	- 8 - 8			;		, 1967 CV	0 V		
Ŷ	Vegetatolies				\$					3		j.		223.05		Ì.		t.	:		76 \$15		42.671	
ſ	Dette:	01 21		1001	1			3	97. EX	s.	16.672	8	97.1 ×	25.008	х Х	L					25,008	13.316	91011	
• •	Inland Pacto	-	Ę	4.4	Ċ	Ċ		1		o	0	C	Ċ	0	0						a	424-	20	
	Anise .	70.06	8	14.177	8	7.0%		251		ŝ	4,168	001	2.0%4	6250	20.44			1			6.252	15.006	-15.006	
	Millet-	65.41	150	- 6x17	ò	•		6x		0	0	0	¢	0	Ö	:	÷				0	() X	2.189	
	Whene	10.42	8	1.044	8	1.04		2		0	ð	0	0	0	41.64				• .		12,504	-3.126	X21.0	
0	Oilseeds	14.75	0	0	ò	0				0	0	¢	•	•	•						0	0	0	
-	Vegetables	0	0	0	0	с .		0		8	20,840	<u>8</u>	0.13.025	33, 665	166.7		÷	•			54 184	33,465	54,1%4	
У ;	Sub-total	152.13	•	25.259		13,630		249			41.6ND	•	23,445	65.125	91216						97 94N	26.236	59,059	
5	Paddy	0	0	Ö	0	0		0	14.95	30	2.990	8	\$65"1	4,4%5	14.95	500				1.495	4.4%5	4.4NS	4,4355	
2	Upber Drady	5.10	8	420	•	¢		ខ្ល		•	0	0	0	¢	0						0	2	64 1	
•	Mail:	18.60	8	1,720	8	091.1		2	÷	8 N	0661	8	\$67'1	4,455	4				:		4.4NS	-1.095	6	
-	Miller	5.10	<u>8</u>	165	0	•••	F. '	\$ \$		• •	0. 1	ė,	s e	о (•						0	-165	9.	
~ 1	Wheat	0	•	o (8	• •	:		; • •	ວ່	- -	- - -	, 	- <	9	B.					1			
ند می	University	3) 	• • • •	ə İq	э с		.		- E		> Ĕ	2 22	0.10		1					0		0.2	
	Sub-total	λ W	•	4 904	. .				08.65	2	09671	<u>]</u>	6.728	13.688	02.02	}			;	10.166	20 X	11.023	17	
ľ	Paddy	•	0	0	0	0		0		8	5,150	8	2.575	7,725	25.72					2.575	YiL C	Я. С	1 724	;
د.	Upland Paddy	5.64	8	961,1	•	0	1,1	2		O	0	. 0	: 0	· · · 0 · · ·	с					0	0	-1,136	9C1"I-	
	Maize	3.5	200	5.572	8	2.7K6		N. 75K	24.75	02 02	5,150	001	2.575	2115	7. 72					2.575	227.7	633	(i) (i)	
	Millet	18,06	150	2,709	ò	0	ਸ ਹ	2,709	Ö	o	0	•	• •	0	0					0	0	-2.709	-2.709	
^	Wheat	0	0	0	š	•		•	۰.	0	ð	ò	•	0	20.60	ខ្ល		4.120		2,060	6.1×0	0	6.1×0	
Ĵ	Oilseeds	19.00	¢	•	•	¢		o		0	0	¢	0	0	0					0	0	•	0	
-	Vegetables	•	o	0	•	•			- 21-20	8	000001	125	6.43K	16.732	04.4X			1	มี	10, 000	26.7%0	16, 734	26,7%0	
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Cos No. Use Norw No		Cropped		Urea .		DAP	Total	Copped		Urea		DAP	Total	Cropped		التع		DAP	<u>च</u> िठ]	4 Months	-12 Month
Math Math <th< th=""><th>•</th><th>νu.</th><th>, Link</th><th>Consumption</th><th>Uru</th><th>12</th><th>Consumption</th><th>Area</th><th>Cret</th><th>Consemption</th><th>Chat</th><th>Consumption</th><th>Consumption</th><th>Arca</th><th>M M M</th><th>Consumption -</th><th>Unit Chief</th><th>Consumption</th><th>Consumption</th><th>Increment</th><th>ouerel.</th></th<>	•	νu.	, Link	Consumption	Uru	12	Consumption	Area	Cret	Consemption	Chat	Consumption	Consumption	Arca	M M M	Consumption -	Unit Chief	Consumption	Consumption	Increment	ouerel.
Math Each Table T		(Pa)	(ML/M)	(c) ((refie)		(11)	(P)	(kg/ba)	(7 3)	(a) (a)	(162)	(25)	(ua)	(NUTA)	(A)	(av.3v)	(24)	(JA)	(3) 	
Mater 255 100 </td <td>Partely</td> <td>6.92</td> <td>9ž</td> <td>1.246</td> <td>8</td> <td></td> <td>2.355</td> <td>24,60</td> <td>8</td> <td>0.5.0</td> <td>8</td> <td>3,460</td> <td>046-01</td> <td>00.4</td> <td>3</td> <td>0.4.0</td> <td>3</td> <td></td> <td></td> <td>170.4</td> <td></td>	Partely	6.92	9ž	1.246	8		2.355	24,60	8	0.5.0	8	3,460	046-01	00.4	3	0.4.0	3			170.4	
Mitter nist 10 <	Mailter	56°52	8	\$ 190	8		7.7%5	13,74	Ŗ	2.76%	8	1.244	4,152	4X.C.1	8	101	8	4×4	201.4		0
Were 0	Miller	1.65	0.1	1.294	0		¥64.1	0	•	ò	0	Ð	c	0	0	0	•	0	c	102. T	X61
Openands 0<	Wheat	¢	0	•	¢			ö	o	Ó	ė	0	õ	13.84	2	2.764	8 Ž	- 44 - L	4.152	0	4,152
Womenes 0 </td <td>Oilseeds</td> <td>4.74</td> <td>0</td> <td>ç</td> <td>Ó</td> <td></td> <td>0</td> <td>ò</td> <td>0</td> <td>•</td> <td>•</td> <td>•</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>•</td> <td>¢.</td> <td>0</td>	Oilseeds	4.74	0	ç	Ó		0	ò	0	•	•	•	0	0	0	0	0	0	•	¢.	0
Submat 655 T714 7 770 11.01 700 700 700 700 700 700 700 700 700 700 700 700 700 700 700	Veretables	0	0	•	0		: 0	20.76	200	4,152	ž	2.595 00	6.747	41.52	8	400 X	1	<u>818</u>	11.494	6.747	13.494
Name Name <th< td=""><td>Substotal</td><td>46.36</td><td>•</td><td>7.734</td><td>•</td><td></td><td>31,476</td><td>69,20</td><td>•</td><td>042,61</td><td>-</td><td>7.439</td><td>21.279</td><td>OXTEDI</td><td>: :•</td><td>20,760</td><td></td><td>11,418</td><td>32.178</td><td>9,843</td><td>20.742</td></th<>	Substotal	46.36	•	7.734	•		31,476	69,20	•	042,61	-	7.439	21.279	OXTEDI	: :•	20,760		11,418	32.178	9,843	20.742
Main Main <th< td=""><td>1 Intend Peddy</td><td>7 F</td><td>86</td><td>1.478</td><td>6</td><td>0</td><td>1.478</td><td>11.55</td><td>8</td><td>2310</td><td>8</td><td>1.155</td><td>3,465</td><td>11.55</td><td>8</td><td>2310</td><td>8</td><td>1.155</td><td>3,465</td><td>1.947</td><td>1.447</td></th<>	1 Intend Peddy	7 F	86	1.478	6	0	1.478	11.55	8	2310	8	1.155	3,465	11.55	8	2310	8	1.155	3,465	1.947	1.447
Milit (%) </td <td>Varian Varian</td> <td></td> <td>Ę</td> <td>λΩ,</td> <td>8</td> <td>, u</td> <td>200</td> <td>0110</td> <td>002</td> <td>4.620</td> <td>8</td> <td>2.310</td> <td>0.930</td> <td>23.10</td> <td>200</td> <td>4.620</td> <td>8</td> <td>011</td> <td>0:6'9</td> <td>54012-</td> <td>5.0.5</td>	Varian Varian		Ę	λΩ,	8	, u	200	0110	002	4.620	8	2.310	0.930	23.10	200	4.620	8	011	0:6'9	54012-	5.0.5
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Main Main <th< td=""><td>Chalman Statistic</td><td>101</td><td>ş</td><td>105</td><td></td><td>-</td><td>200</td><td>00.71</td><td>Ę</td><td>O KAO</td><td>691</td><td>1 420</td><td>042.4</td><td>14.20</td><td>000</td><td>- 04X-C</td><td>001</td><td>1.420</td><td>4.260</td><td>3.464</td><td>5.464</td></th<>	Chalman Statistic	101	ş	105		-	200	00.71	Ę	O KAO	691	1 420	042.4	14.20	000	- 04X-C	001	1.420	4.260	3.464	5.464
Miler X.S. X.S. <thx.s.< th=""> X.S. X.S. <th< td=""><td>Uplate Faulty</td><td>96 96</td><td></td><td></td><td>5 5</td><td>3446</td><td></td><td></td><td>Ş</td><td></td><td>2</td><td>07714</td><td>005 %</td><td>07.76</td><td>9</td><td>5 680</td><td>8</td><td>U-X-D</td><td>025.8</td><td>200.0</td><td>SNE.C.</td></th<></thx.s.<>	Uplate Faulty	96 96			5 5	3446			Ş		2	07714	005 %	07.76	9	5 680	8	U-X-D	025.8	200.0	SNE.C.
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NASE 7.704 3.852 11.556 64.25 12.850 6.425 19.275 243.13 48.626 24.313 176.44 0	Millet	153.19		128-11		¢	ŝ	0		\$		0	Ö	0		-0			С	196-11-	1811
176.44 0 <td>Wheat</td> <td>ALC: N.</td> <td></td> <td>7,704</td> <td></td> <td>3,852</td> <td>11.556</td> <td>17 3</td> <td></td> <td>12, 450</td> <td></td> <td>1.426</td> <td>19,275</td> <td>243.13</td> <td>·</td> <td>48,626</td> <td>:</td> <td>24,313</td> <td>00024</td> <td>2.719</td> <td>61.3K</td>	Wheat	ALC: N.		7,704		3,852	11.556	17 3		12, 450		1.426	19,275	243.13	·	48,626	:	24,313	00024	2.719	61.3K
x 0 0 0 7x2.52 156.504 97.418 254.52 1.22.44 2.46.564 154.106 10.46.00 16.006 11.034 245.043 1643.90 324.736 512.736 2.2735.10 245.664 154.105	Otherda	176,44		. O .		0	0	0		0		0	•	0	:	ò	•	0	o	Ð	0
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	Total	1046.00	:	162,009	•	K1,034	243,043	1643.90		324,780		1X1.956	-512.736 -	2,273,10		454.620		258,132	712.752	269,693	469,700
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frngation Block	Crops	Сторреб Атса	Unit	Agro-chemical Req.	- Cropped Area	Unit	Agro-chemical Req.	Cropped	Unk	Agro-chemical Req.	Increment	Increment	
		(m)	Ē	(Im)	(Ina)	(m))	(m))	(ha)	(III)	(m)	(Jm)	(m)	
<	Paddy	25.63	350	8.971	23.30	350	8,155	23.30	. 350	8,155		-816	1
	Maize	0	ò	0	9.32	350	3,262	5776	350	3.262	3.262	3,262	
	Wheat	0	0	0	0	350	0	32.6	ŝ	3.262	0	3262	
	Vegetables	•	0	0	86.61	1567	21,907	27.8	567	43.813	21,907	43,813	
	Sub-total	25.63	٢	8.971	46.60		33,324	86.69		58,492	24.353	49.521	÷
ß	Paddy	24,48	350	8.568	48.00	350	16,800	48.00	350	16.800	8.232	4,232	
	Maize	21.00	0	0	19.20	.30	6.720	19.20	150	6.720	6.720	6.720	
	Maller	16.80	•	ò	0	o	0	o	0	0	D.	; 0	
	Wheat	0 4 .5	0	ō	0	0	0	19.20	350	6.720	0	6.720	
	Oilsceds	2.40	0	0	0	•	0	0	0	0	•	O	
-	Vegetables	0	0	Ö	28.80	1567	45.130	57.60	1567	90,259	45,130	90.259	
	Sub-total	67.68		8,568	96.00		68,650	144.00		1 20,499	60.082	111,931	
U	Paddy .	26.74	350	632'6	74.30	350	26,005	74.30	- 350	26.005	16.646	16.646	
-	Upland Paddy	67"1	350	522	0	0	- 0 - ·	0	0.	0	-522	-522	
	Maize	37.15	0	Ð	29.72	350	10.402	26.72	350	10,402	10.402	10,402	
	Miller	22.22	0	0	ò	0	0	0	0	0	0	0	
	Wheat	0	0	o	0	0	0	29.72	350	10.402	0	10,402	
	Otherda	68,11	0	0	0	0	0	0	0	0	0	0	
	Vegetables	ò	ò	0	44.58	1567	69,857	89.16	1567	139.714	69,857	139.714	
	Sub-total	99.56	•	9,881	148.60	•	106.264	222.90	•	186.523	96.383	176.642	
Â	Paddy	55.91	350	6.8.16	65.12	350	22,792	65.12	350	22,792	15,956	15.956	
:	Upland Paddy	4.07	350	1,425	•	ò	0	•	ç	• • •	-1,425	-1.425	
	Maixe	52.91	0	0	16.25	350	5,698	16.23	320	5.698	5.698	5.698	
	Miller.	20.12	0	0	•	•	0	0	0	0	0	•	
	Wheat	•	0	0	ò	0	0	32.56	350	80.11	0	8610	
	Oilsceds	8.14	0	0	0	ò	0	0	o	0	¢	0	
	Vegetables	0	0	0	81.40	1567	127.554	130.24	1567	204,086	127,554	204,086	
	Sub-total	114.77	•	8.261	162.80		156,044	244.20	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	243.972	147.783	235.711	
ы	Paddy	61.14	350	12,037	83.36	350	29,176	83.36	350	29,176	17,139	621.73	
•	Upland Paddy	212	8	1.092	0	0	0	0	0	0	-1,092	-1,092	
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	Cilverte.	18.75) C	òċ	, > C	òc			è c	ue C	¢		
	Veretables	0	0	• •	104.20	1567	163.281	166.72	1567	261.250	163.281	261,250	
	Sub-total	152.13	•	13,129	208.40		160,751	312.60	•	312,308	186.622	299.179	
٤.,	Paddy	Ō	0	0	14.95	350	5,233	14.95	350.	5,233	5,233	5,2,73	
•	Upland Paddy	2.10	350	735	•	0	0	: • •	0	0	-735	235	
-	Maize	18.60	0	0	14.95	350	5.233	14.95	150	5,233	5.233	5.233	
	Maller	5.10	0	0	0	· · · 0	0	0	0	0	0	0	
	Wheat	0	0	0	• •	, 0 0	0	8711	350	4,186	0	4,186	
	Otherda	13.20	0	Ô	• •	0	0	0	•	0	o,	. 0	
	Verschables	0	ò	0	20.00	1 5 67	46.853	17 9.4	1447	74 965	55 25	74 0.65	
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App. 6.3.

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Cons Construction						Т		T NUMBER &	I SALKARL)				Thermony	formerer	
mode mode <th< th=""><th>Imgation</th><th>Crops</th><th></th><th>Cropped</th><th>Unit</th><th>Agro-chemical Poor</th><th>Cropped</th><th>Cnic</th><th> Agro-chemical Red</th><th>Cropped</th><th>Unit .</th><th>Agro-chemical Rec.</th><th>102021201</th><th>וואנובנוואנאו</th><th></th></th<>	Imgation	Crops		Cropped	Unit	Agro-chemical Poor	Cropped	Cnic	Agro-chemical Red	Cropped	Unit .	Agro-chemical Rec.	102021201	וואנובנוואנאו	
Reg 0<	200X			(ha)	(m))	(m))	(Fra)	(m)	(iu)	(au)	(III)	Ê	(jm)	(m)	
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Nime 150 0 <td></td> <td>upland rawy</td> <td></td> <td>2010</td> <td>5</td> <td>• • • • • • • •</td> <td>2 X X</td> <td>. 05</td> <td>0013</td> <td>25.75</td> <td>150</td> <td>003</td> <td>9,013</td> <td>5.013</td> <td></td>		upland rawy		2010	5	• • • • • • • •	2 X X	. 05	0013	25.75	150	003	9,013	5.013	
Mint 0		WINKS		20.13	> <	> <		ç c	c	Ċ	Ċ	Ċ	c	c	
Norme 10 0 <td>:</td> <td></td> <td></td> <td></td> <td>> <</td> <td>> c</td> <td>) C</td> <td>s ic</td> <td>> c</td> <td>30.60</td> <td>150</td> <td>7210</td> <td>,</td> <td>7.210</td> <td></td>	:				> <	> c) C	s ic	> c	30.60	150	7210	,	7.210	
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Xintum Xint <	•	Cineers	. ,	20161		> c	215	1567	80.701	82 AD	1567	124 121	80.701	129.121	
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Pade OS NO ZA22 NA NO ZA34 NO ZA44 ZA44 <thza4< th=""> <thza44< th=""> <thza44< th=""></thza44<></thza44<></thza4<>		Sub-fotal		10.69	•	1.933	100		77196	N+C1			601°04	100-201	,
Maie 2359 0 134 309 444 134 300 644 4344 Mise 8.6 0 0 0 0 0 0 500 544 4344 Mese 0	x	Paddy		6.92	9	2,422	34.60	150	12,110	.4.60	00	011:21	9,065	9,068	
Mile 8.6 0 <td></td> <td>Maize</td> <td></td> <td>25.95</td> <td>ò.</td> <td>0</td> <td>13.84</td> <td>99 -</td> <td></td> <td>13.84</td> <td>350</td> <td>4.844</td> <td>4.844</td> <td>4,844</td> <td>•</td>		Maize		25.95	ò.	0	13.84	99 -		13.84	350	4.844	4.844	4,844	•
Whene 0 <td></td> <td>Millet</td> <td></td> <td>8.65</td> <td>ò</td> <td>•</td> <td>ò</td> <td>ö</td> <td>C</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>:</td>		Millet		8.65	ò	•	ò	ö	C	0	0	0	0	0	:
Okrestion 444 0 <th0< th=""> 0 0 <th0< td=""><td></td><td>Wheat</td><td></td><td>0</td><td>ó</td><td>0</td><td>0</td><td>0</td><td>0</td><td>13.84</td><td>350</td><td>4.8.44</td><td>ō</td><td>4,2,44</td><td></td></th0<></th0<>		Wheat		0	ó	0	0	0	0	13.84	350	4.8.44	ō	4,2,44	
Warmeler 0<		Oilseeds		4.84	0	0	•	0	0	0	¢	0	0	0	
Subrenti 4(h 2421 9620 6435 10330 4,600 4,000 4		Vegetables	1. 1. 1.	•	0	0	20.76	1567	32,531	41.52	1567	65,062	152,52	65.062	
Upmark factor 1.19 330 2.81 11.55 300 4.043 1.66 Mater 6.001 0		Sub-total		46.76		2,422	69.20	•	49.485	103.80	•	86,860	47,063	84.438	
Native XXX XXX XXX XXX XXX XXX XXXX XXXX XXXXX XXXXX XXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	-	Intend Paridy		7.10	350	2.587	11.55	350	4.043	11.55	350	4,043	1,456	1.456	
Miller 6.95 0	•	Maize		1001	c	0	23.10	150	8.085	23.10	350	8.085	8.085	8,085	
Clinecki 1.2.3 0 <th0< th=""> 0 0 <th< td=""><td></td><td>Milia</td><td></td><td>¥97</td><td>, c</td><td>c</td><td>Ċ</td><td>io N</td><td>c</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td></td></th<></th0<>		Milia		¥97	, c	c	Ċ	io N	c	0	0	0	0	0	
Version 0 </td <td></td> <td>Oliverde</td> <td></td> <td>2 3 Y</td> <td>÷</td> <td></td> <td></td> <td>• c</td> <td>, c</td> <td>• •</td> <td></td> <td>. 0</td> <td>0</td> <td>0</td> <td></td>		Oliverde		2 3 Y	÷			• c	, c	• •		. 0	0	0	
Stelevisiti 9.0 2.37 92.40 1.370 135011 13501 135011 13501 135011 13501 135011 135011 135011 135011 135011 135011 135011 135011 135011 135011 135011 135011 135011 135011 13	•	Versetable			¢	•	26.63	2551	00 404	103 95	1567	162,890	00.494	162.890	
Ubliand Padey 3.86 1.30 4.70 1.4.20 3.00 4.70 1.4.20 3.00 4.70 1.4.20 3.00 4.70 1.4.20 3.00 4.70 1.4.20 3.00 1.4.20 3.00 1.4.20 3.00 1.4.20 3.00 1.4.20 3.00 1.4.20 3.00 1.4.20 3.00 9.00 2.8.40 9.00		Sub-evel	•	> 05 05	, .	7 587	04 40		102 622	118,600		175.018	100.035	172,431	
Main 36,3 0 25,40 35,0 9,40 35,40 9,90 9,40	-	Inland Duddu		1.08	\$	101 1	14.20	140	4 970	14.20	350	4.970	3.577	3.577	-
Mile %25 0 <td></td> <td>Maine</td> <td></td> <td>2 × ×</td> <td>ç c</td> <td>c c</td> <td>78,40</td> <td>150</td> <td>0.940</td> <td>28.40</td> <td>350</td> <td>070</td> <td>076.6</td> <td>0766</td> <td></td>		Maine		2 × ×	ç c	c c	78,40	150	0.940	28.40	350	070	076.6	0766	
Chickets 24.9 0 11.1257 12.37.120 12.37.13 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 12.37.14 <td></td> <td>Netter N</td> <td></td> <td>25 X</td> <td>• •</td> <td></td> <td>0</td> <td>c</td> <td>0</td> <td>0</td> <td>¢</td> <td>0</td> <td>0</td> <td>0</td> <td>•</td>		Netter N		25 X	• •		0	c	0	0	¢	0	0	0	•
Vegenales 0 0 0 71.00 1567 111.257 127.80 1567 200.265 111.257 Subrenal 73.84 - 1.303 113.80 - 26.167 170.40 551 124.774 124.774 Subrenal 73.84 0 0 0 0 0 0 13.835 13.800 13.835 <td< td=""><td></td><td>Oilverds</td><td></td><td>24.99</td><td>0</td><td>• •</td><td>0</td><td>0</td><td>0</td><td>0</td><td>Q</td><td>0</td><td>0</td><td>0</td><td></td></td<>		Oilverds		24.99	0	• •	0	0	0	0	Q	0	0	0	
Sub-coal 7) Xi 1.303 113.60 1.26,167 170.40 215,173 124,774 124,775 154,744 12		Veretables		0	Ó	•	21.00	1567	111.257	127.80	1567	200,263	111,257	200.263	: . :
Ubjiand Placty 5.51 350 1.975 350 1.975 350 6.911 4.977 Mater 80.56 0		Sub-total		23 84		1.393	113.60	•	126,167	170.40		215,173	124,774	213,780	
Maire 50.56 0 0 13,825 13,843	×	Upland Paddy		5.53	350	936	19.75	350	\$169	19.75	350	516,8	4,977	4,977	
Milet 11,85 0		Maize		50.56	0	0	39.50	150	13,825	39.50	350	13.825	228,61	13,825	• • • •
Oliseeds 34.76 0 <t< td=""><td></td><td>Müllet.</td><td></td><td>11,85</td><td>ò</td><td>0</td><td>0</td><td>0</td><td>ò</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>· . :</td></t<>		Müllet.		11,85	ò	0	0	0	ò	0	0	0	0	0	· . :
Vegenables 0 0 0 0 87.55 156.7 154.741 177.75 156.7 278.534 154.741 Nuberoal 102.70 1.936 138.00 - 193.65 139.00 237.00 239.272 173.433 Nuberoal 102.70 0 0 0 0 239.00 130.73 134.93 173.433 Nuberoal 102.70 0 <td>•</td> <td>Oilseeds</td> <td></td> <td>34.76</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>.0</td> <td>0</td> <td>•</td> <td>o</td> <td></td>	•	Oilseeds		34.76	0	0	0	0	0	0	.0	0	•	o	
Sub-local 102.70 1936 158.00 175.479 237.00 239.272 173.543 Paddy 74.53 350 26.086 102.80 359		- Vegetables	:		0	0	98.75	1567	154,741	177.75	1567	278.534	154,741	278,534	
Paddy 74.51 350 26.086 102.80 35.980 15.980 9.894 Maire 60.40 0 <td></td> <td>Sub-total</td> <td></td> <td>102.70</td> <td>•</td> <td>1,936</td> <td>158.00</td> <td>•</td> <td>175,479</td> <td>237.00</td> <td>•</td> <td>299,272</td> <td>173.543</td> <td>297,336</td> <td></td>		Sub-total		102.70	•	1,936	158.00	•	175,479	237.00	•	299,272	173.543	297,336	
Maire 60.40 0 35.5 350 13.493 33.5 350 13.493 13.7178 13.7178 13.7178 13.7178 13.7178 13.7178 13.7178 13.7178 13.7178 13.7178 13.7178 13.7178		Paddy		74.53	350	26.086	102.80	350	086.25	102.80	350	35,980	9,894	9.894	
Millet 10.28 0	-	Maize		60.40	0	0	38.55	350	13.493	38.55	350	13.491	13,493	13,493	•
Wheat 25.70 0 0 64.25 350 22.488 64.25 350 22.488 22.748 22.488 22.748 23.779 27.48 27.718 15.576 4.248 22.748 27.18 15.576 4.248 27.719 27.745 72.745 72.745 72.956 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809 97.809<		Matter		10.28	Ó.	•	0	0	0	0	o	0	•	0	
Oliverdia 23.13 0 <		Wheat		25.70	0	•	64.25	350	22,488	64.25	350	22,488	22,488	22,488	
Vegetables 0 0 0 0 179:90 1567 281.903 281.778 281.903 281.778 281.903 281.778 281.903 281.778 281.903 281.778 281.903 281.778 281.778 281.778 281.778 281.778 281.778 281.778 281.778 281.903 7809 97.	•	· Oilseeds ···		23.13	0	0	•	0	0	0	. 0	0	0	0	
Sub-total 194.0d 26.086 385.50 353.864 327.778 Paddy 212.22 74.279 472.18 165.264 472.18 155.264 90.985 Upland Paddy 33.36 60 11.678 45.50 15.926 4.248 Maize 43.2.77 26 0 15.926 4.248 97.809 Maize 43.2.77 26 0 279.45 97.809 97.809 Miler 153.19 20 0 0 0 0 0 Wheat 38.52 0 64.25 15.926 27.488 22.488 Oliverds 176.44 20 0 0 0 0 0 Vegetables 0 0 170.44 20 170.44 20 19.1860 1.216.20 Total 170.00 170.00 170.00 170.00 170.00 170.00		Vegetables		0	0	0	179.90	1567	281,903	06-64.1	1567	281,903	281,903	281,903	
Padoy 212.22 74.279 472.18 165.264 472.18 165.264 90.985 Upland Padoy 33.36 60 11.678 4.540 15.926 4.248 Maize 4.31.19 26 0 15.926 4.248 97.809 97.809 97.809 Miler 153.19 20 0 279.45 97.809 97.809 97.809 Miler 153.19 20 0 0 0 0 0 0 Wheat 38.52 0 </td <td></td> <td>Sub-total</td> <td></td> <td>194.04</td> <td>•</td> <td>26.086</td> <td>385.50</td> <td></td> <td>353,864</td> <td>385.50</td> <td>· · · · · · · · · · ·</td> <td></td> <td>327.778</td> <td>327.778</td> <td></td>		Sub-total		194.04	•	26.086	385.50		353,864	385.50	· · · · · · · · · · ·		327.778	327.778	
cddy 33.36 60 11,878 45.50 15,926 4.248 43.227 26 0 279,45 97,809 97,809 97,809 43.227 26 0 279,45 97,809 279,45 97,809 97,809 15,31.9 20 0 0 0 0 0 0 38,52 0 0 0 0 0 0 0 0 176,44 20 0 0 12,262,09 12,21,84 1,91,1860 1,226,309 176,44 20 0 1,22,420 1,226,209 1,221,246 1,91,1860 1,226,309 0 0 1,224,209 1,224,209 1,224,209 1,212,0209	Total	Paddy		212.22		74,279	472.18		165,264	472.18		165,264	90.985	90,985	:
432.27 26 0 279.45 97.809 97.809 97.809 151.19 20 0 0 0 0 0 151.19 20 0 0 0 0 0 151.19 20 0 0 0 0 0 151.19 20 0 0 0 0 0 176.44 20 0 78.52 1.22.483 1.91.1860 1.22.6.30 176.44 20 0 78.52 1.22.6.209 1.22.1.84 1.91.1860 1.22.6.209 0 0 777.662 1.27.12.64 1.91.1860 1.22.6.209 1.22.6.209	•	Upland Paddy		33.36	8.	11.678	62.55		15.926	- 45.5		15.926	4.248	4,248	•
153,19 20 0 0 0 0 0 135,19 20 0 0 0 0 0 135,22 0 0 64.25 22.485 22.485 22.485 176,44 20 0 0 0 0 0 176,44 20 0 172,245 1.232,84 1.911,860 1.226,209 0 0 172,2420 1.232,84 1.911,860 1.226,209 1.226,209 0 0 782,52 1.232,84 1.931,860 1.226,209 1.226,209		Maize		432.27	38	Ó	279.45		97.809	279.45		97,809	608.26	603 26	
35.22 0 0 2.2.485 2.45.1.5 85.000 176.44 20 0 0 0 0 0 0 176.44 20 0 0 0 0 0 0 0 176.44 20 0 782.52 1,226.209 1,231.84 1,31.860 1,226.209 1,220.200 1,226.209 1,212.84 1,212.05.00 1,226.209 1,226		Miller		151,19	8	0	0	:	0	0	• •	0	0	0 3	:
1/0.44 20 0 782.22 1,220.20 1,221.84 1,91.840 1,220.09 0 0 0 1,220.09 1,200.09 1,200		Wheat		18.52	é	0	5	•	22.455	243.13	•	80.09	22 4 22	0,0,0	
		Circle			<u>,</u>					1 227 61				049 110 1	•
		Vegetables		00.274			20701		207 077 I	01 666 6		1,711,000	014 111 1	1.221.000	

App. 6.3.5-9 Monthly Average Retail Prices of Cereal Crops in Kathmandu (1995/96)

		A ALCONOM	N. Sand Town	Total Total	Tull And	Auc/Can	Son Oas		Now/Der	Der/Inn	Ind/Each	Eeh/Mar	"Mar/Anr	Averace
Crops	District	Apriv/ide	unrikew	י זמראומר	Sny /nr	Augoch	いたの	101100	171101			1 COI 11141	VAC INTER	3
Rice (Pokhareli)	Nuwakot	19.50	19.50	19.50	19.50	1	22.00	22.00			· · · · ·	•	•	20.33
	Kathmandu	23.00	23.00	23.00	23.75.	24.63	24.25	2425	24.00	23.38	23.00	23.38	24.00	23.64
Rice (Mansuli)	Nuwakot	15.75	16.50	1731	16.50	16.00	16.00		18:00	15.50	16.00	16.00	18.00	16.51
	Kathmandu	16.00	16.00	16.00	1525	15.75	15.38	15.50	15:50	15.50	15.80	16.13	17.50	15.86
	Parsa	13.81	14.20	1463	14.50-	14.50	14.50	•		•	13.50	15.00	15.50	11,83
	Raxaul (India)	13.60	13.60	14.40	14.40	14.40	14.40	14.40	14.40	15.20	14,40	14,40	15.20	14,40
Rice (Mota)	Nuwakot	11.50	11.50	11.50	11.50	12.75	13.25	13.50	13,50	12.50	13.00	13.50	13.50	12.63
	Kathmandu	19.00	19.00	00.01	12.50	-13.83-	14.25	14.00	12.75	12.63	12.70	12.38	13.00	14.59
	Parsa	12.00	12.45	13.25	13:38	13.50	12.25	11.50	12.50	12.50	11.50	12.50	12.50	12.49
	Raxaul (India)	12.00	12.80	12.80	(2.80	12.80	12.80	12.80	12.80	12.00	12.80	12.80	12.00	12.60
Maize	Nuwakot	n.n.	n.a.	0.4.A.	- 11.4 -	n.a.	n.a.	n.a.	n.a.	ъ.п.	n.a.	п.а.	n.a.	n.a.
	Kathmandu	ษน	19.	ita.	9.69	9.69	9.75	9.75	9.75	9.75	- 11.60 -	12.50	11.33	10.42
	Parsa	6.76	7.05	7.14	. 3.38	7.25	2.00	8.50	8.25	8.25	8.50	8.25	8.25	7.71
	Raxaul (India)	7.20	7.20	200	8.8	8 .00	8.00	8.00	8.00	12.80	8.00	8.00	16.00	8.93
Wheat	Nuwakot	8.00	8.00	8.00	8.00	•		•	•					8.00
	Kathmandu	10.00	•		9.88	9.88	10.13	10.00	9.94	9.88	10.25	10.88	8:13	10.18
	Parsa	1 <i>1</i> .9	7.10	7.31	7.50	7.50	7.50	8.50	8.25	8.25	8.50	828	83 23	7.80
	Raxaul (India)	7.20		•	•	7.52	7.52	7.52	8.00	9.20	7.52	8.00	9.60	9.80

Note: Shaded area indicates the corresponding harvesting periods of cereal crops in the study area.

Source: "Agricultural Marketing Information Bulletin, 1996" Marketing Development Division, Department of Agriculture.

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		App.	App. 6.3.5-10 Monthly Average Wholesale Prices of Vegetables in Kalimati Wholesale Harvest (1995/96) (1/2)	Ionthly Av	erage Who	lesale Pri	ces of Veg	ctables in	Kalimati	Wholesa	le Harvest	(1995/96)	(2/C) (2/C)				
			Development	Ecological	Apr/May	May/Jun	Jun/Jul	Jul/Aug	Aug/Sep	Sep/Oct	OctNov	Nov/Dec	Dec/Jan	Jan/Feb	Feb/Mar	Mar/Apr	Average
Vegetables	bistrict	Zone	Region	Belt	(Rvks)	-(RvKg)	(Rvkg)	(Rvkg)	(Rv/kg)	(Rvkg)	(Rvkg)	(Rvkc)	(Rvke)	(Rvkg)	(Ruke)	(Rvkg)	(Rvkg)
Cabbage	Nuwakot	Bagmati	Central	HIH		4.50	14.00	8.59	9.00		6.75	3:6	~ 6 03	5.50	8 :8	£7	7.12
	Kathmandu	Bagmati	Central	IIIH ·	15.6	5.13	11.44	8.85	7.50	7.63	7.23	7.53	6.05	5.50	¢%	4.26	7.65
	Bhaktapur & Laliton		Central	ШH	? }	5.27	11.19	9.48	9.50	7,04	6.67	7.78	62	5,47	46 2	8 .4	6.99
	Dhading		Central	Hill	5.95	4.94	9.92	6.33	8.93	•	5.75		5:50	•	4.56	84	6.56
	Makawanpur	Narayani	Central	Hill	\$. \$	5.34	11.59	10.17	8.84	7.27	6.60	154	6.15	5.47	~ 6 2.9	3.73	6.93
	Sarlahi	Janakpur	Central	Terrai	5.50			•	8.50	8.50	. 4	•	2.00		•	1. 3•	7.38
	Bara & Parsa	Narayani	Central	Tera	ક્ષ્ટ	•	15.33	8.09	•	•	7.64 10234	7.53	6.15	5.48	8 8	Ş	7.17
	Chitwan	Narayani	Central	Terrai	525		14.40	8.08	8.85	•	6.83	\$68	-6.07	5.43	4.60	4.14	7.29
	Other Districts				<u>}</u> 920€	5.31	12.11	9.89	8.81	7.14	7.67	7.50	623	5.53	4,66	4.21	7.35
	Highest		•		. IS.60	5.34	15.33	11.8	9.50	8.50	7.67	\$36	7.00	5.53 .	8 .4	Ŗ .	8.74
	Lowest	· · · · · · · · · · · · · · · · · · ·	•.	· · ·	530	4.50	9.92	7.83	7.50	7.04	5.75	7.45	5.50	5.43	456	3.J.	6.23
	Average		•		े 7 .67	5.31	12.42	9.23	8.76	7.52	6.89	7.76	6.15	5.49	2.67	4 23	7.18
Red	Nuwakot	Bagmati	Central Central	- CUH	. 623	7.54	9.78	11.14	12.28	13.06	1220	2 (2 (1 (2000 - 2000 2000 - 2000 2000 - 2000	•			9.07
Potato	Kathmandu	Bagmati	Central	IIIH	ِ کې	•	9.50		•	¢	,Y ,		\$3		8.4	•	6.25
	Bhakapur & Lalith	tp. Bagmati	Central	ШH	664	•	9.82	1.40	•	•	13.80	10.30		8.	SS8	- 4	9.49
	Dhading	Bagmati	Central	HII		7.45	9.50	1	•		0851						10.25
	Каνтс	Bagmati	Central	ШH	\$ \$	7.56	9.87	11.35	12.42	13.29	12.81	05.01	9.58	8.51	652	%;9	9.64
	Makawanpur	Narayani	Central	IIIH	617	7.07	01.0	11.40	12.61	13.60	11,40	÷ T	ŝ,		•		10.19
	Dhanusha	Janakpur	Contral	Terai		7 30		- 	•	кланк - -		į.			e e		7.20
	Bara & Parsa	Narayani	Central	Terai	6.12		10.00	94.11	•	4	13.00			8.37	6.86	6 97	8.8
· ·	Sunsari	Koshi	Eastern	Terai	1	•	10.15	•	•		a P	i.			10 4 20 20 20	•	10.15
	Other Districts		-		6,65	•	9.73	11.35	- 12:32	13,04	12.85	10.49	\$63	0 .00	6.56	83	9.87
	Highest				. 66.64	7.54	10.15	11.40	12.61	13.60	308.CI	66*012	6.63	8.6	636	6.99	68.6
-	Lowest			÷	6.12.	7.07	9.10	11.14	12.28	13.04	11.40	10:30	8	8.37	\$50°	° 6.96 · ·	8.73
	Average	the second s			6.44	7.38	9.72	11.34	12.41	13.25	12.84	10,36	28 8 2	8.72	5.99	6.97	9.44
White	Nuwakot	Bagmati	Central	Hill	\$.50	6.09	8.63	9.28	10.59	10.41	6.90	1		•	ş		7,86
Potato	Kathmandu	Bagmati	Central	IEH	SS.	•	•	a.	•	6.80					•	•	6.08
	Bhaktapur & Lahtpu	itpi Bagmati	Central	HII	\$ <u>\$</u>	5.72	9.25	9.10	•	•	1			•	•	à.	7.41
	Dhading	Bagmati	Central	НН	14.1 1 1 1 1 1				•	•	234 51 • • •	. K 	,	2 00		•	2.00
	Kavre	Bagmati	Central Central	Hill	يې کې	6.18	8.58	9.23	10.37	10.72	11.96	\$32	733	7.50	85	. 33	8.24
• • •	Makawanpur	Narayani	Central	IIIH	\$.30	6.68	8.55	9.10	10.53	10.23	- (- (3 14 13	i L	i i	5.5	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	8.01
	Bara & Parsa	Narayani	Central	Terai	- S.3S	9.65	8.45	9.74	•	•				6.30	5.89	\$ <u>5</u>	7.45
•	Chitwan*	Narayani	Central	Terai		. •	13.98			•		•	10 ² 11	۰ ۱ <u>.</u>	•••	r	13.98
	Other Districts		• .		S.S	6.42	8.71	9.28	10.49	10.72	<i>п.</i> л	8.80	122	2.00	625	6.78	8.26
· · · · · ·	Highest				5.60 8	9.65	13.98	9.74	10.59	10.72	3611	8.92	733	7.50	ŝ	6.78	9.09
· · ·	Lowest			•	3 3	5.72	8.45	9.10	10.37	6.80	8%	8.90	Ĕ,	6.30	S.S.	673	7.28
	Average				8.S	6.79	9.45	9.29	10.50	9.78	1021	8.91	7.8	6.95	S.81	6.75	8.10

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App. 6.3.5-10 Monthly Average Wholesale Prices of Vegetables in Kalimati Wholesale Harvest (1995/96) (22)

							•									
Vegetables District	Zone	Region	Belt	(Rvkg)	(Rvkg)	(R.Vk2)	(Rvkg)	(Rs/kg)	(Rv/kg)	(RVke)	(Rs/kg)	(Rvkg)	(Rv/kg)	(Rvkg)	(Rv/kg)	(Rvkc)
Red Radish Nuwakot	Bagmati	Central	IIH	5.57	3.75	9.78	7.50	5.50	5.17	3.17		•		•		5.78
Kathmandu	Bagmati	Central	IITH	10.13		9.50	7.70	7.50	7.43	5.8	5.02	5.09	•	4.57	6.40	6.24
Bhaktapur & Lalitpi	Bagmati	Central	InH	8.93	9.13	382	750	7 50	2.00	5.79	S:07	4.50	,	5.20	7.10	7.05
Dhading	Bagmati	Central	Hin	• •	•	9.50	÷.	•	•			•	•	•	•	9.50
Качтс	Bagmati	Central	HiH	•	•	6.83		•	•				•	5.00	•	7.4
Makawanpur	Narayani	Central	Hill	•	3.50	\$10 ·	6:33	5.50	5.42	333		•	•	•	•	5.61
Bara & Parsa	Narayani	Central	Terrai	٠	•	10,00		4	1			,	,	•	٠	10.00
Sunsari	Koshi	Eastern	Terai			10:15		•	•	See Section 1				•	,	10.15
Other Districts				•	•	\$.73		• •	. I			`•	2 1. 1.	•	۰	9.73
Highest				10:13	51.9	10,15	7.70	7.50	7,43	5.90	5.07	5.09		5.20	7.10	7.31
Lowest				5.57	3.50	06	્સ્ટ	5.50	5.17	3.37	- 5.02	4.50	•	4.57	6.40	5 39
Average				8.21	5.46	9.72	7.38	6.50	6.26	4.55	5.05	4.80		4.92	6.75	6.33
White Radish Nuwakot	Bagmati	Central	1UH	6.50	4.16	4.61		•	1	3:35	3.06	2.82	2.86	2.50	•	3.73
Kathmandu	Bagmati	Central	Hill	•	7.50	•		· · ·	•	, ,	1	•	2.25	•	•	4.88
Bhaktapur & Lalitpi	Bagmati	Central	Hill	•	•			•	•	े		۰	4.00	6.50	,	5.25
Kavre	Bagmati	Central	нл	• •	•			· · ·	- - - - -	12.9			•	•	•	6.45
Makawanpur	Narayani	Central	Hill	•	3.25	767		•		327_	¥.	•	2.71	2.36	•	3.32
Other Districts				6.50	•	-		•				3.8 8	•	•	•	4.75
Highest	1			6.50	7.50	4.92			1	, 12.9	3.41	3.00	4.00	6.50	,	60.9
Lowest	-		•	6.50	3.25	4.61	•	i	•	327	3.05	2.82	2.25	2.36	·	3.52
Average				6.50	4.97	4.77				·6,51	3.24	2.91	2.96	3.79	•	4.46
French Bean Nuwakot	Bagmati	Central	Hill	13.57	16.14		-	I8.86	- 15.13	18.21		•				16.38
Kathmandu	Bagmati	Central	Hill	•	•			•	٠	18.21	19.00	۲	•	•	•	18.61
Bhaktapur & Lalitpi	Bagmati	Central	HiH.	•	8. 11			18.92		18.23	18.00	•	•	•	·	16.54
Dhading	Eagmati	Central	IIIH	13.43	14.14			1921	15.22	16.98	18.76	•	•	•	٢	16.29
Kavre	Bagmati	Central	IIH	• • • • •	9.50		•		14.50	14.50	•	•	•	,	1	12.83
Makawanpur	Bagmati	Central	Hill	0.11	•		•	23.24	20.00	15.19	18.25		•	•	,	17.54
Sarlahi	Janakpur	Central	Terai	•	1	16.92	4 4 4		i i	•	•	,	ŀ	•	•	16.92
Dhanusha	Janakpur	Central	1 L	•	1.35%) 1. 1.	15.50			•	•		•		١	•	15.50
Rautahat	Narayani	Central	Terai	•				1) 1	ł	14.50	•	•		ſ	•	14.50
Bara & Parsa	Narayani	Central	Terai	13.75	4			•3	•	17.32	18.85	٠	•	•	•	16.64
Chitwan*	Narayani	Central	Terai	- 12.00	4		4 4	18.8	۰.	19,10	00.61	•	•	•	ı	17.03
Sunsari	Koshi	Eastern	Teni	•		•	Ŷ		•	20.50	•	•	•	•	•	20.50
Jhapa	Mechi	Eastern	Terui	13.50				20 A		20.50	•	•	•	٠	•	17.00
Gorkha & Tanahu	Gandaki	Western	ΗH		17.70			20.33	14.77	18.58	18.75	•	•	4	•	18.03
Highest	• • • •	: • •		13.75	17.70	16.92		15.24	20.00	20.50	. 19.00	•	4	•	•	18.73
Lowest					9.50	. 15:50	•	15.8	14.50	14.50	18.00	•		١	,	14,43
Average	· · · · · · · ·			12 88	13.70	16.21		3026	15 00	17.65	18.66			,		16.40

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Source: "Agricultural Marketing Information Bulletin, 1996" Marketing Development Division. Department of Agriculture.

Part B

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Appendix 7.5 Project Cost

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 401.686	240,745	91.6%	642,431	%6T	13,203	6.6%	46.037	403.456	298,215	100.0%	701.671	Ground Total
	2,990	85.7%	2,990	14.3%	500			1.770	1,720	100.0%	3,490	Total (B)
·	1,220	100.0%	1.220				-	0	1.220	100.0%	1,220	4. Multipurpose Community Hall
•	1.020	100.0%	1.020					1 020	00	100.0%	1,020	 Equipment for Water Management Equipment for Training
	0	%0.0	0	500 100.0%	200	•		0	200	100.0%	88 8 8	B. Cost for Program 1. Training Program
401.686	237.755	91.6%	639,441	1.8%	12,703	6.6%	46.037	401,686	296,495	100.0%	698.181	Total (A)
36.517	21,614	%916	S8,131	8.4%	S,340			36.517	26,954	100.0%	63,471	VII. Price Contingency (10.0%)
365,169	216,141	91.6%	S81.310	1.2%	7,363	7.3%	46,037	365,169	269,541	100.0%	634,710	
5.912	2.203	89.8%	8,115	10.2%	5	•		5.912	3,123	100.0%	9.035	Engineering Services Phisical Contingency
23.649	018.8	%0°0	057 62	100.0%	500			73 640	28 28 28	100.0%	805 X	IV. Administration
0	0	0.0%	0	100.0%	2.259	:		0	2,259	100.0%	2,259	III. Land Acquisition (0.5% of I)
335,608	205,128	92.2%	540,736	0.0%	0	7.8%	46,037	335,608	251,165	100.0%	586,773	Construction Cost Total (I+II)
40,000	95,000	100.0%	135,000					000.01	95,000	100.0% 100.0%	135,000	11-4 Transport & Packing Sub-total (II)
	20.000	100.0%	20,000		•			0	20,000	100.0%	20,000	
	35,000 40,000	100.0%	35,000	•	• •		· · · · · · · · · · · · · · · · · · ·	00	35,000	100.0%	35,000	II-1 Common Temporary Cost II-2 Size Administration
					••					-	· · ·	
295,608	110,128	89.8%	405,736	0.0%	0	10.2%	46,037	295,608	156,165	100.0%	451,773	I-S Equipment Owing Cost Sub-total (1)
0 748.77	20	%0'0	77 847	0.0%	•	100.0%	2,695	0 240	2.695	100.0%	2,695	
22,985	5,816	82.5%	28.801	0.0%	•	17.5%	6,099	22,985	11,916	100.0%	34,901	
11,073	0	22.9%	11.073	0.0%	0	77.1%	37,243	11.073	37.243	100.0%	48.316	
43,454	14,341	100.0%	51.795		•		· . ·	43,454	14341	100.0%	10221	
4.250	10.316	100.0%	14.566					666.61	0/20/	100.0%	CIC.021	1-2 Main Canal Facilities
170.030	76 376	2000	215 326			•	-	600000	007.0	0.0.001	900.V	
6:059	3 280	100 00	0110	 				6 050	000 0	200	025.0	р
					•	• • • •						A. Construction Cost
(000N.Rs)	(000N.Rs) ((%)	(000'N.Rs)	(%)	(000'N.Rs)	(%)	(000'N.Rs)	(000'N.Rs)	(000'N.Rs)	(%)	10131 (000'N.Rs)	
E/C		Other Fund	Total	nad		atribution 100%	Farmers' Contribution	C D	ct Cost	Projec		Description

contribution

1. Project Cost		·					•	•			•		· · · · · ·	2			
Description	Total			Total Total		1998 1. 1998	2 2	6661	8	2000	ເ ເ	2001	ు ల	2002	55	Total	8
A. Construction Cost		Remarks 1)	Indirect C	Construction					Ŀ		1				1		
Direct Cost	Direct.cost	<u>ं स्व</u>	Cost		15								:				
1 Intake Works	9,339		2.974	្ដ	12927 2	2,585 2(•		80%	0	80	•	0% 0	0		2.927	300%
2 Main Canal Facilities	256,315	16,837	81.624	Ъ́			0% 28:			70,955	20%	0	020 20	0	0% 35	354,775	88
3 Proposed Control Tank	14,566		4.639	20.				:			80%	o	020 0	0		0.161	2001
4 Branch Canal Facilities	57,795		18.405	79.							40%	0	80	0		9 907	100%
5 Om-farm I evel Pacilities	215 22		75 206	Ś		1					80%	c	٤			× 8.7	Š
	100 22			Ş							200	> <	s z	> <			202
7 Storne Contraction Cost	202 0		. 330 .	۶۳ ۲						3 720	200	è	22	> <			22
	C2017		3	5							<i>w</i> .~~1	>	2.0	> :		2	°
		11011	2000								:						
Tediana Cost	011400	NN' CC1 140'17	200100							•		•					
	25 000		Damades 1)											ý t 1			
				a. 1.) for Emiliament and Indiana Ocei and into Direct Ocei with milio of the Construction Ocei items	anifund for	10 June 1970		Since Dim	- 100 m	with mein	من ولا و						
											5 5 5			9		:	
	000.07				:	:					;	-					
Sub-total (1)	135 000		•		•				ť.	-	•	: • :					
Sub-total (I+II)	S86.773			586.773		2.585	36	369,228	21	214,960		0	: ·	¢	58	586.773	
					Ľ						:						
III. Land Acquisition	•			ц Ч	•		9500	•	026	0	0%0	0	80	•		2.259	100%
IV. Administration					8		÷		°.	8	- 9601-	0	8	0		8	8001
				36. 			-		ŝ	3,614	201 201	, 0 ,	200	•	Š	36.142	18 8
VI. Phisical Contingency				6					ł	2.711	30%	0	28	0		9.035	100%
VII. Price Contingency	634,710			63.471		12,694 20		50.777 - 8		0	% %	0	8° 80	0		63.471	100%
Sub-total (III-VII)				111		282	Ś	0.048		6.375		0		0	11	1 407	
: : : :	. :							ł								1	
I otal (Construction Cost)				698,181		38.570	Ť	438,276	52	221.335		0		0	ŝ	698,181	
R. Program				્ત	3,490 1,0	1,047 30	30%	1.396	40%	1.047	30%	ò	နိုင်	0	Š	3.490	100%
· · · · · · · · · · · · · · · · · · ·				•		:											
Project Cost Total			i. A	701,671	671 39.617	517	435	439,672	22	222.382		0.0		0	70	701.671	
	: /			and the second				-	•			-	:				
2. Operation & Maintenance Cost																	
				Total		1998 11-1	2	- [999 	٤	- 2000 2000	2	2001	1.1	2002		2003	
A Canaral Managament					(sylon) (sy	ŝ		(mon ks)		(ourks)		(0001KN)	8) 8	(000 KS)	% %	(000'R4)	8
(0.5% of Construction Cost)	1		•		 - 	•		0		2347	2	2.934	~	2 974		2026	
B. Equipment & DOI O & M Cost	· · ·			:									,				
(0.5 Million Rs/year)			•		* 1	500	-	2005		200		8		200		ŝ	
C, Monitoring Cost						8		50		8		50		8		20	
O.S. M.T.Mol					. 1	N. N		222		1001	ſ		•		· · ·		• •

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Annual Fund

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Direct Summary

	Description	Total	Local Currency Fo	orein Currency
	Description	(000'N.Rs)	(000'N.Rs)	(000'N.Rs)
. Direc	t Construction Cost			
1. Intake	Works			
11-1	Main Structure	3,845	1,189	2,657
11-2	Pipe Laying D=1000	1,607	452	1,155
11-3	Fish Firm Diversion	774	546	228
11-4	Temporary Works	3,113	1,093	2,020
	Sub-total	9,339	3,280	6,059
2 Main	Canal Facilities			
I2-1	Pipe Laying	142,022	26,748	115,274
12-1	Water Bridge	57,507	24,309	33,198
12-2 12-3	Aqueduct-1	22,350	9,975	12,374
12-3	Aqueduct-2	8,061	3,891	4,170
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•	26,375	11,453	14,923
12-5	Temporary Works Sub-total	256,315	76,376	179,939
0 D		430,313	10,010	1173757
- -	sed Control Tank	9,738	9,138	600
I3-1	Main Structure	4,828	1,177	3,65(
13-2	Drainage Facilitiy		10,316	4,250
	Sub-total	14,566	10,510	4,230
	h Canal Facilities	11 240	10,999	33,349
I4-1	Pipe Laying	44,348	3,342	10,105
14-2	Pump Facility	· ·	14,341	43,454
	Sub-total	57,795	14,541	
	arm Level Facilities	1,031	521	510
	Block A	6,002	2,242	3,760
15-2				1,890
15-3	Block C	5,072		692
15-4	Block D	5,387	4,695	339
15-5	Block E	8,807	8,469	1,085
15-6	Block F	2,198		1,00.
15-7	Block G	2,999	2,817	
15-8	Block H	4,563	2,424	2,13
15-9	Block I	3,669	-	10
	Block J	2,264		12
15-11		6,323		35
	Sub-total	48,316	37,243	11,07
· · · .	B Construction Cost		2017	10.004
16-1	Branch Canal Facilities	18,846		13,030
16-2	On Farm Level Facilities	16,055		9,955
	Sub-total	34,901	11,916	22,985
	ge Construction Cost	2,695	2,695	• · ·
	oment Owing Cost	27,847		27,841
Total		451,773	156,165	295,608

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Des	cription	Unit	Quantity		I Cost	Local C			Currency
				Unit Price	Amount	Unit Price		Unit Price	Amoun
i. Inta	ke Works			(N.Rs)	(N Rs)	(N.Rs)	<u>(N.Rs)</u>	(N.Rs)	<u>(N Rs</u>
	n Structure								
	Piling	· m	. 60	3,196	191,760	3,196	191,760		
	Main Structure	b	1	576,201	576,201	\$76,201	576,201		
	Gate Installing	ls	i	2,967,900	2,967,900	311,400	311,400	2,656,500	2,656,50
	Riprap	ts	i	109,387	109,387	109,387	109,387	atee of a co	2 100 0170
	Sub-total				3,845,248		1,188,748		2,656,50
t-2 Pine	Laying D=1000(SP)	ls l	i i i	1,606,737	1.606.737	451,737	451,737		1,155,000
	Firm Diversion	ls	1	774.052	774,052	\$45,902	545,902		228,150
	Sub-total				2,380,789		997,639		1,383,150
1-4 Tea	porary Works		:		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		:		
	Sheet Piling	ls	2 C 1	1.11.1.1.1.1	1.556.509		546,597		1,009,913
	Strut & Wating	ix i	i	1 . A .	933,906	- · · · .	327,958		605,94
	Dewatering	ls	. i.		622,604		218,639		403,963
•••	Sub-total	ана I.	: •		3,113,018	4 4 4	1,093,193		2,019,825
[ote]		• • • • • • • •		- 1 N	9.339.055	· · ·	3,279,580		6,059,47
	In Canal Facilities	:	· ·						
	: Laying D-1000(SP)							•	
· a	at flat	តា	3,775	31.058	117,245,409	5,186	19,578,609	25,872	97,666,800
- b	atslop	ា	200	37,742	7,548,436	11,870	2,374,036	25,872	5,174,400
	at stop under ground	m -	125	33,898	4,237,275	8,026	1,003,275	25,872	3,234,000
	D=600(SP) at flat	m	900	13,435	12,091,233	3,214	2,892,225	10,221	9,199,008
3.	Chamber Tank	no.	- 3	299,948	899,843	299,948	899,843		
· · ·	Sub-total	· `			142,022,195		26,747,987	1.1	115,274,20
	er Bridge	ls	1	57,506,736	57,506,735	24,308,964	24,308,964	33,197,772	33,197,77
	reduct-1 (sta 0+900)	ls i	1 I.	22,349,729	22,349,729	9,975,329	9,975,329	12,374,400	12,374,400
2-4 Aqu	edect-2 (sta 4+000)	ls	1 - E	8,060,726	8,060,726	3,890,726	3,890,726	4,170,000	4,170,000
1.1	Sub-total				87,917,191		38,175,019		49,742,172
	aporary Works			а. — Аларана Аларана				1	• •
	Access Road for Water Bridge				17,252,021		7,292,689		9,959,33
	Access Road Aqueduci-1	i Is	. I.		6,704,919		2,992,599		3,712,32
3.	Access Road Aqueduct-2	ls –	I	1. S. S.	2,418,218		1,167,218	1	1,251,000
	Sub-total				26,375,157		11,452,506		14,922,652
Tot	al		<u>-:</u> :	· .	256,314,543	: ·	76,375,512		179,939,032
13. Pro	posed Control Tank								
	n Structure	1		0 730 330	0.510.510	0 120 220		<pre>cob.nco</pre>	
	n Structure inage Facilities	18 18	1	9,738,338 4,827,646	9,738,338 4,827,646	9,138,338 1,177,246	9,138,338	600,000 3,650,400	600,000 3,650,400
Total				- 	14,565,984		10,315,584	an an an Arrien. An Arrien an Arrien a Arrien an Arrien an A	4,250,400
<u> </u>	· · · · · · · · · · · · · · · · · · ·			<u>-</u>		· · · · · · · · · · · · · · · · · · ·			
								*** *** * *	1

(1/5)

Direct

	Description	Unit	Quantity	Total	Cost	Local Co	итепсу	Forein C	
	Deset provide	•••••		Unit Price	Amount	Unit Price	Ámount	Unit Price	Amount
			······	(N.Rs)	(N.8s)	(N.Rs)	(N.Rs)	(N.Rs)	(N.Rs)
1 .	Branch Canal Facilities								
-1							11 A.		
4- 1	I. to Block A						1. Start 1.		
	a VUISO at Bat	m	370	2,421	895,864	849	314.047	1,572	581,818
	b Chamber Tank	nos	. 1	299,943	299,943	299,948	299,948		
	2. P/H No.5	103	•			:			
	a SP150 at flat	'n	170	2,789	474,145	901	153,130	1,888	321,014
	b Chamber Tank	nos	1.	299,948	299,948	299,948	299,948		
	3. P/H No.4	1803	•						· · · ·
	a SP200 at flat	m	600	3,495	2.096.811	934	560,619	2,560	1,536,192
	b Chamber Tack	nos	ĩ	299,948	299,948	299,943	299,943		
	4. to PAI No.1	103	* i .•	*****				1.1.4.2	
	a VU250 at flat	a a a	820	4,142	3,396,091	929	762,120	3,212	2,633,971
	b SP150 at slop	m	130	2,520	327,574	631	82,072	1,888	245,48
1	c Chamber Tank	DOS	1	. 299,948	299,948	299,948	299,948		
	5. to P/H No.2-Block K	3.							
	a VU450 at flat	m	1,700	6,975	11,857,915	1,210	2.057,347	5,765	9,800,568
	d SP300 at slop	 M	250	5,703	1,426,897	1.131	282,817	4,576	1,144,080
	e SP300 at fiat	iii M	180		1.021,680	1,100	197,942	4,576	823,738
	f VU450 at flat	m	900	; 6,975	6.277.720	1,210	1,089,184	5,765	5,188,536
	g Chamber Tank	005	2	299,948	599,895	299,948	599,895		
	6. P/H No.2-Block G	IN I		2776770					
	a VU400 at flat	m	1,350	6,418	8 664,737	1,278	1 724,657	5,141	6,940,080
	b VU300 at flat	m	1.100	4,735	5,208,947	978	1.075,499	3,758	4,133,44
	c Chamber Tank	D05	3	299,948	899,843	299,948	899.843		
	C Unamoet Tank Sub-total	103			44,347,908		10,998,981		33,348,920
	300-10141								
14-2	Pump Facilities						e te state i		1997 - N.
	1. Proposed P/H No.1	ts	1	3,150,878	3,150,878	945,878	945,878	2,205,000	2,205,000
	2. Proposed P/H No.2	ls	· · ·	4,930,878	4 930 878	945,878	945 878	3,935,000	3,985,000
	3. Proposed P/H No.4	ls .	1	1,918,539	1 918,539	483,539	483,539	1,435,000	1,435,000
;	4. Proposed P/H No 5	ls is	i	1,633,539	1,633,539	483,539	483,539	1,150,000	1,150,000
	5. Proposed P/H No.6	ls ls	$(1, 1) \in \{i\}$	1,813,539	1,813,539	483,539	483,539	1,330,000	1,330,000
	Sub-total				13,447,374	•	3,342,374		10,105,000
		· · · · · ·		1. 1. 1.	57 705 703		14,343,356		43,453,920
Tot	al				57,795,282		[4,341,330		43,433,976

(2/5)

Direct

Description	Unit	Quantity	Total Unit Price		LA:al C		Forein C	
· <u>····································</u>			(N.Rs)	Amount (N.Rs)	Unit Price (N.Rs)	Arnount (N.Rs)	Unit Price (N.Rs)	Amour (N.R)
5. On-farm Level Facilities		· · ·				÷ ·		
5-1 Block A								
1. Pipe Laying		200	1 280	031.077				
a VU100 2. Open Canal	m	700	1,389	971,965	660	462,052	728	509,91
a Earthern	m	500	118	58,832	118	58,832		
3. Chamber Tank	nos	Õ	299,948	0	299,948	0		
Sub-total				1,030,797		520,854		509,91
-2 Block B				,	1			
1. Pipe Laying	4.11.1		· · · · ·			:		1.1
a VU200	, m	320	3,275	1,047,902	832	282,360	2,392	765,54
6 VUI50	m	1,450	2,421	3,510,819	849	1,230,723	1,572	2,280,09
c VU100	- i w	980	1,389	1,360,751	660	646,872	728	7,13,87
2. Open Canal		-						
a Earthern	M	700	118	82,365	118	82,365	• •	
3. Chamber Tank Sub-total	nos	0	299,948	0	299,948	0	1	
-3 Block C	5	· · ·		6,001,837		2,242,320	,	3,759,51
1. Pipe Laying			· · .			· · .		•
a VU200	m	450	3,275	1,473,612	882	397,068	2,392	1,076,54
5 VU100	m	1,000	1,389	1,388,522	660	660,074	728	728,44
c VU75	m	150	1,235	185,296	631	94,576	605	90,72
2. Open Canal					-			
a B+0.5m	m	750	1,985	1,488,504	1,985	1,488,504		1997 - 1997 1997 - 1997 - 1997 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19
b Earthern		2.010	118	236,501	118	236,504		
3. Chamber Tank	nos	1 B	299,948	299,948	299,948	299,948		
Sub-total	1.1	1.1		5,072,385		3,176,673		1,895,71
-4 Block D		2010	1 A.			1997 - Barris B		3 j.
1. Pipe Laying								
a VU100	n,	950	1,389	1,339,096	660	627,070	728	692,02
2. Open Canal a B=0.5m	· · · · ·	800	1025		1.000	1 607 000	t di tab	1
a B=0.4m		800	1,985	1,587,737	1,985	1,587,737	1	
c Earthern	៣	1,350	118	1,421,299	1,777	1,421,299	1.1.1.1.1.1.1	
3. Chamber Tank	DQS	3	299,948	899,843	299,948	158,846 899,843		
Sub-total		· •		5,386,820	472,740	4,694,795		692,02
-5 Block E			÷	110000000				097,02
1. Pipe Laying					1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		· .	
a VU150	m	100	2,421	242,125	849	84,877	1,572	157,24
5 VU75	n	.300	E,235	370,592	631	189,152	605	181,44
2. Open Canal				· · ·		i.		
a B=0.7m	m	580	3,373	1,956,181	3,373	1,956,181		
b B+0.6m	m	1,100	3,034	3,337,548	3,034	1,337,548		
c B+0.5m	123	1.020	1,985	2,024,365	1,985	2,024,365		
d Earthern 3. Chamber Tank	m	2,350	118	276,510	118	276,510		
S. Chamber Tank Sub-totat	n 05	2	299,948	599,895	299,948	599,895	. 11	
-6 Block F				8,807,216		8,468,528		338,68
L. Pipe Laying				· · · ·			1 A A	- 1
a VU100	៣	1,490	1,389	2,068,898	660	983,510	728	1.085.38
2. Open Canal		.,		1,000,000		201210	20	1,005,50
a Earthern	m	1,100	118	129,430	118	129,430		
Chamber Tank	nos	0	299,948	0	299,948	0		
Sub-total				2,198,328	• -	1,112,940		1,085,38
7 Block G				-			1	
1. Pipe Laying								
a VU75	m	.300	1,235	370,592	631	189,152	605	181,44
2. Open Canal								
a B=0.5m	m	1,080	1,985	2,143,445	1,985	2,143,445		
b Earthern	m	1,570	118	184,732	118	184,732		$t = -1, \dots, 0$
3. Chamber Tank	nos	1	299,948	299,948	299,948	299,943		
Sub-total			· · · · · · · · · · · · · · · · · · ·	2,998,717	1	2,817,277		181,44

(3/5)

Direct

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• •							ئر. حدید فسی جد رو	
Description	Unit	Quantity		Cost	Local C		Forein C Unit Price	Dirency
			Unit Price (N.Rs)	Amount (N.Rs)	Unit Price (N.Rs)	Amount (N.Rs)	(N.Rs)	Amoun (N.Rs
8 Block H		·	(11.1(3)	(they				
1. Pipe Laying	÷							· .
a VUI50	m	350	2,421	847,439	849	297,071	1,572	550,363
5 YU100	- пъ	2,180	1,389	3,026,978	660	1,438,961	728	1,588,017
2. Open Canal			•					
a Earthern	D	750	118	88,243	118	88 243		
3. Chamber Tank	nos	2	299,948	599,895	299,948	599,895		
Sub-total				4,562,559		2,424 175	1. je s	2,138,38
5-9 Block I	5 :							
1. Pipe Laying	m	0					1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	
2. Open Canal	m	-	2			÷ .		
a B=0,5m	m	450	1,985	893,102	1,985	893,102		
b B=0.4m	- m	530	1,777	941,610	1,777	941,610	1.1	
c Earthern	ំព	1,500			$X = \{1, 2\}$		가슴 가슴 가	
3. Chamber Tank	nos	0		1,834,713	1	1,834,713		
Sub-total			11 Jan 1997	3,669,425		3,669,425		
5-10 Block J		- <u></u>						
1. Pipe Laying				1.1			1.10	· .
a VU75	ភា	200	1,235	247,061	631	126,101	605	120,960
2. Open Canal	ព						1.11	- 1 - 1
a B=0.4m	ធ	1,050	1,777	1,865,454	1,777	1,865,454		
b Earthern	m	* . 1,290	118	151,786	118	151,786		
3. Chamber Tank	nos	0	299,948	0	299,948	- 0		
Sub-total		1. A.A.		2,264,302	1. 1. A. A.	2,143,342		120,96
5 11 Block K								
1. Pipe Laying							111	
a VU75	m	580	1,235	716,477	631	365,693	605	350,78
2. Open Canal						•		
a B+0.4m	· m	1,160	1,777	2,060,883	1,777	2,060,883	÷ *	
b B+0.5m	m	1,060	- 1,985	2,103,752	1,985	2,103,752	1. A. 1.	
c Earthern	n)	2,060	118	242,387	118	242,387		1 1 A
3. Chamber Tank	nos	4	299,948	1,199,790	299,948	1,199,790		
Sub-total				6,323,290	· .	5,972,506	· · · ·	350,78
							1. A.	
Total	· · · · ·	·	<u> </u>	48,315,676		37,242,863	·	11,072,81
6 Zone B Construction Cost							1.1	
1. Branch Canal Facilities	•							:
1-1. Pipe Laying				ade tao			4,576	228.81
a SP250 at slop	i m	50	5,708	285,379	1,131 631	56,563 63,148	1,888	188,83
b SP150 at slop	m	100	2,520	251,980		1,040,391	4,468	4 244,22
c VU350 at flat	នា	950	5,563	5,284,611	1,095		3,212	2,409,12
d VU250 at flat	តា	750	4,142	3,106,181	929	697,061	5,212	2,407,14
e Chamber Tank	nos	5	299,948	1,499,738	299,948	1,499,738	5,959,000	5,959,00
1-2. Proposed P/H No.3	ls	1	7,850,757	7,850,757	1,891,757	1,891,757	3,439,000	1,787,70
Access Road	ts.	1		2,355,227		567,527		13,029,98
Sub-total				18,846,172		5,816,184		10,029,95
2. On firm Level Facilities				· · · ·				
2-1. Pipe Laying			1.014	2 214 244	978	684,408	3,758	2,630,37
a VU300	ព	700	4,735	3,314,784	978 882	2,408,882	2,392	6,531,03
5 VU200	m	2,730	3,275	8,939,916	660 660	2,408,882	728	400,64
c VU100	តា	550	1,389	763,687	631		605	393,12
d VU75	m	650	1,235	802,949	031	409,829	003	373,12
2-2. Open Canal			1.001	1 704 704	1.025	1 704 305		
a B=0.5m	m	900	1,985	1,786,205	1,985	1,786,205		
b Earthern	m	1,250	118	147,080	811	147,080		
e Chamber Tank	nos	1	299,948	299,948	299,948	299,948		0.055.17
Sub-total				16,054,567		6,099,391		9,955,17
				34000	•	11016 674		22,985,16
Total	:			34,900,740		11,915,576		22,935,10

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B-211

Direct

	Description	Unit	Quantity	Tota	1 Cost	Local Cu	rrency	Forein C	Virency
	1 - · · · · · · · · · · · · · · · · · ·			Unit Price (N.Rs)	Amount (N.Rs)	Unit Price (N.Rs)	Amount (N.Rs)	Unit Price (N.Rs)	Amount (N.Rs)
17.	Storage Construction Cost								
	1. Bidur	m2	65	5,923	385,002	5,923	385,002		
	2. Battar	m2	130	5,923	770,003	5,923	770,003		
	3 Pipaltar	m2	130	5 923	770,003	5,923	770,003		
	4. Devighat	m2 -	130	5,923	770,003	5,923	770,003		
: ,	Total			4 - A	2,695,011		2,695,011		
	· · · · · · · · · · · · · · · · · · ·			: }					
8	Equipment Owning Cost for I	Pipe Laying V r. Day	orks		4		•		
	1. Backhoe 0.7m3 0		0	5,100	0		(5,100	0
٢.	2. Backhoe 0.4m3 0			3,195	ŏ	1. Sec. 1. Sec. 1.		3,195	ŏ
	3. Truck crane 25t 2			11,550	9,240,000			11,550	9,240,000
1	4. Crawler crane 30t 1	400 Nr.day		9,000	3,600,000			9,000	3,600,000
	5. Dump truck 10t 3			3,355	4,026,000			3,355	4,026,000
	6. Bulldozer 154 0			6,100	0			6,100	4,010,000
	7. Bulldozer 111 0			5,300	õ	1	1	5,300	ŏ
	8. Mixer 0.5m3 0			845	õ			845	ŏ
1	9. Mixer 0.2m3 0			675	ŏ			675	. ŏ
÷	10. Trailer 201 1	400 Nr.day		4,820	1,928,000			4,820	1,928,000
	11. Vibratory roll 2.81 0			1,570	0			1,570	0
	12. Cargo truck 11t 1			3,270	1.303.000	1997 - 19		3,270	1.308.000
	13. Cargo truck 8t 1	400 Nr.day		2 385	954,000	1	1.11	2,385	954,000
	14. Cargo truck 4t 1	400 Nr.day	400	1,650	660,000			1,650	660,000
2	15. Tank lorry 8kl 0	400 Nr.day	0	2,610	0			2,610	0
•	16. Water sprayer 8ki 0	400 Nr.day	0	2,610	0			2,610	0
·	17. Air compresse Sm3/min 2	400 Nr.day	800	970	776,000			970	776,000
	18. Generator 150kva 2	400 Nr.day	\$00	1,890	1,512,000			1,890	1,512,000
	19. Generator 100kva 2	400 Nr.day	800	1,295	1,036,000			1,295	1,036,000
	20, Generator 60kva 4	400 Nr day	1,600	1,030	1,648,000			1,030	1,648,000
- ;	21. Are welding 300A 6	400 Nr.day	2,400	99	237,600	1.1		99	237,600
	22. Water pump 6" 4	400 Nr.day		252	403,200		1.1	252	403,200
1	23. Water punip 4" 4			165	264,000	1.1.1.1.1.1.1	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10	165	264,000
	24. Water pump 2" 8	400 Nr.day	3,200	80	254,400			80	254,400
	Total	· ·	·		27,847,200				27,847,200

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(5/5)

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Direct

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Description	Unit Quanti	ty Tot	al Cost	Local C	urrency	Forein	Currency
		Unit Price	Amount U		Amount U		Amou
		(N.Rs)	<u>(N.Rs)</u>	(N.Rs)	(N.Rs)	(N.Rs)	<u>(N.R</u>
I-1 Common Temporary Co							
1. O&M for Construction Rd			1,750,000	1.1	1,750,000		
2. Topo, Surveys	ls 1		1,050,000		1,050,000		
3. Temporary Yard	ls l		5,250,000		5,250,000		`
4. Temporary Offices	ls l		10,500,000		10,500,000	÷	
5. Water Supply	ls 1	1 A. 11	1,400,000		1,400,000		1 × 4
6. Electlicity Supply	ls I		4,200,000		4,200,000		
7. Machinery Repair Works	ls I		10,500,000		10,500,000		
8. Facilities for Security	ls 1	e de la Color	350,000		350,000		a daga da
Sub-te	otal		35,000,000		35,000,000	1.1	t step
	la de la persoa	100 C 100 C					
II-2 Site Administration					•		1. A. A. A.
1. Office Equipment/Materia	ls ls 1	a a f	8,800,000	1. 1. j. e.	8,800,000		1
2. Vehicle Running/Expendit	ture is 👘 I		11,200,000	. 2.1	11,200,000		
3. Staffs Expenditure	ls l		14,000,000		14,000,000		· · ·
4. Insurance	ls 1	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	6,000,000	1	6,000,000		1
Sub-to	otal		40,000,000	· ' '	40,000,000		
	÷	•		. :	1 A.		
II-3 Supervision					·. ·		•
1: Forigner S/Vs Engineering	gfec Is I	11	8,800,000		8,800,000	1	
Expenditure	e Is I	1.1	5,600,000		5,600,000	1.10	
2. Local S/Vs Engineering	g fec Is 👘 📋	an a	3,200,000		3,200,000		
Expenditure	e ls ⊑ l≞		2,400,000		2,400,000		
Sub-te	otal		20,000,000		20,000,000		1997 - E. 1997 -
	· ·				1		
II-4 Transort & Packing		· · · · · · · · · · · · · · · · · · ·					
1. Steel Pipe & Valve	ls 1	· · · · · · · · · · · · · · · · · · ·	29,200,000		÷ .	·	29,200,00
2. Pump Units	ls 1	N 1	1,200,000		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		1,200,00
3. Water Bridge Materials	ls 1	n i san	2,000,000			a the A	2,000,00
4. Construction Machinery	ls 1		4,800,000				4,800,00
5. Sheet Pile, Steel Materials			2,400,000			1.1.1.1	2,400,00
6. Vehicles	ls I		400,000				400,00
Sub-te	otal		40,000,000				40,000,00
		1.1.1				1.1	
Total	<u></u>		135,000,000				

(1/1)

Indirect

App. 7.5-6 Cost Breakdown for Main Structures

Desci	rintion		Unit	Quantity		Cost		Currency		Currency
				•	Unit Price		Unit Price	Amount	Unit Frice	Amoun
					(N.Rs)	(N.Rs)	<u>(N.Rs)</u>	<u>(N.Rs)</u>	<u>(N.Rs)</u>	(N.Rs
		Structure	_							
		on Machinery		154.80	182	28,108	182	28,108		
		n Machinery	-	45.00	43	1,928	43	1,928		
	Removal of excavated		m3_	109.80	- 134	14,757	134	14,757		
	RC Concrete	Machinery .		37.76	5,683	214,593	5,683	214,593	· ·	
	Reinforcement 120kg		kg	4,446.24	. 41	182,658	41	182,658		
	Mass concrete	Machinery		2.82	3,233	9,117	3,233	9,117		
7.	Forneworks 3 uses		m2	48.49	598	29,006	598	29,006		
	Sub-total			ана (тр. 1996) 1997 — Прила Парадон, 1997 — Прила (тр. 1997) 1997 — Прила Парадон, 1997 — Прила (тр. 1997)	-	480,167	,	4\$0,167		
	Miscel works (20%)	line i a a				96,033		96,033		
	Total					576,201		576,201		
	Gate Installing				1 696 000					
	Gate	and a start of the	ls		1,595,000	1,595,000	250,000		1,345,000	1,345,000
	Spindle		ls	1.00	223,000	223,000	5,000	5,000	218,000	218,000
	Screen		m2	4.50	34,500	155,250	1,000	4,500	33,500	150,750
	Measuring Revices		ls	1,00	500,000	500,000			500,000	500,000
	Installing				250,000	0	250,000	260.600		0.010.000
	Sub-total					2,473,250	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	259,500		2,213,750
	Miscel works (20%)			-		494,650	1. A. A.	51,900	1.1	442,750
11.5	Total Intake Pipe	aying D+1000				2,967,900	· · · · · · · · · · · · · · · · · · ·	311,400		2,656,500
		on Machinery		225.50	182	40.044	182	. 10.015		
		on machinery - ra Machinery -		135.50	43	40,945 5,806	43	40,945 5,806		
	Removal of excavated	. machacity	m3	90.00	134	12,096	134	12,096		
	RC Concrete	Machinery		19.50	5,683	110,820	5,683	110,820		• .
	Reinforcement 63kg		kg	1,224.60	- 41	50,308	41	50,308		1 1 L
	Mass concrete	Machinery	mJ.	1,244.00	3,233	0	3,233	0		10 J
	Forneworks 3 uses		m2	25,50	598	15,254	598	15,254		
	Base sand		m3	48.50	21	1,019	21	1,019		1.
	Pipe & Laying SP10	n	m	50.00	22,054	1,102,700	2,804	140,200	19,250	962,500
	Sub-total					1,338,948	1,004	376,443	17,2.30	962,500
	Miscel works (20%)	1				267,790		75,290		192,500
	Total			·. 1		1,606,737		451,737		1,155,000
M-3	Intake Ripra	p								
1.	Excavation	Machinery	m3 -	28.50	182	5,175	182	5,175	1.4	
2,	Removal of excavated	· · ·	m3	28,50	. 134	3,830	134	3,830		
3.	Rubble masonry	Machinery	m3	28.50	2,882	82,151	2,882	82,151		· · · · ·
	Sub-total			-		91,156		91,156		
	Miscel works (20%)			·	18,231		18,231		
	Total		<u> </u>	·		109,387		109,387	• • • • • • • •	
		irm Diversion								1 1 1
		on Machinery		105.43	182	19,143	182	19,143		
		ni Machinery		64.89	43	2,781	43	2,781	· · · . ·	
	Removal of excavated		m	40.54	134	5,448	-134	5,448		- N
	RC Concrete	Machinery		43.85	5,683	249,203	5,683	249,203	,	+
-	Reinforcement 63kg	17 and 1	kg	2,753.78	41	113,129	41	113,129		
	Mass concrete	Machinery			3,233	0	. 3,233	0		
	Forneworks 3 uses		m2	33.03	598	19,758	598	19,7 58	; ;	
	Base sand Real Fillewine - SDS0	`	R13	9.75	21	205	21	205		100
У.	Fipe & Laying SP50 Sub-total	,	m	25.00	9,415	235,375	1,810	45,250	7,605	190,125
	Sub-total Missel works (2005					645,043		454,918	·	190,125
	Miscel works (20% Total					129,009		90,984		38,025
N <		r Bridge				774,052	······································	545,902	··· ·· -	228,150
	Excavation rock	Manual	m3	1,601.60	431	690,414	431	690,414		
	Backfilling	Machinery	៣ 3	100100	431	0,414	431	090,414	- <u>-</u>	· · · · ·
	Removal of excavated	mathematy	m3	1,601.60	- 134	215,247	134	215,247		it i i
	RC Concrete	Machinery		1,705.50	5,683	9,692,506	5,683	9,692,506		
	Reinforcement 120kg		kg	200,822.63	41	8,250,076	3,083	8,250,076		÷ .
	. Mass concrete	Machinery	m3	200,022.03	3,233	a,250,076 0	3,233	8,250,076 0	· · · ·	
	, Fómeworks – 3 use		m2	203,80	598	121,912	598	121,912	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	e de la composition d
	Base sand		n33		21	0	21	121,912	1997 - 19	1 A - A - A
	. Water Bridge		m	380.00				U U	solooo	19,000,000
	Fipe & Laying SP10	00	m	450.00	22,054	9,924,300	2,804	1,261,800		8,662,500
	Valve Accessory	~~	ls	1.00	25,621	25,621	25,236	25,236	385	1.4 1.4 .
	Anticorrosion/Welding		ls	1.00	2,205	2,205	280	280	1,925	385
12.	Sub-total		•••	1.00	4,400	47,922,280	20V	20,257,470	1,923	
	Miscel works (20%					9,584,456				27,664,810
							10 C C C C C C C C C C C C C C C C C C C	4,051,494	1.1	5,532,962
	fotal					57,506,736		24,308,964		33,197,77

(1/2)

Main works

B-214

App. 7.5-6 Cost Breakdown for Main Structures

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(2/2)

Desci	ription			Unit	Quantity	Tota	Cost		urrency		herency
	•					Unit Price		Unit Price	. Amount (N.Rs)	Unit Price (N.Rs)	Amount (N.Rs)
NIX.	Main Canal	Anusta	ct-1 (sta.0+5	1001		(N.Rs)	(N.Rs)	(N.Rs)	(14,15)	(11.15)	(11.10)
-	Excavation		Machinery		196.80	182	35,734	182	35,734		
	DACAMPHICO	rock	Machinery		704.00	431	303,479	431	303,479		
3	Backfilling		Machinery		92.80	43	3,976	43	3,976		
	Removal of exca		machinery	m 3	808.00	134	108,591	134	108,591		
	RC Concrete	YARCO	Machinery		50.20	5,683	285,291	5,683	285,291		
	Reinforcement	6360	machinery	kg	3,152.56	41	129,512	41	129,512		
		OUNE	Machinary		749.68	5,683	4,260,497	5,683	4,260,497		
	RC Concrete	1201.4	Machinery		5,911.05	41	242,834	41	242.834		
	Reinforcement	IZUNE	Mark and	kg	3,711.05	3,233	242,004	3,233	0		
	Mass concrete	i	Machinery	m3 m2	137.36	598	82,168	598	82,168		
	Fomeworks	3 uses		m3		21	612	21	612		
	Base sand		· · · ·		29.16	50,000	6,000,000	41	. 0	50,000	6,000,000
	. Water Bridge	0.01000	4.1	m		22.054		2,804	560,800		3,850,000
	Pipe & Laying			m	200.00		4,410,800		2,243,200	385	77,000
	Valve Accessory			ls	200.00	11,601	2,320,200	11,216 280	56,080		385,000
14.	Anticorrosion/W			ls	200,00	2,205	441,080	200		1,745	10,312,000
	Sub-total				:		18,624,774		8,312,774		2,062,400
3		(20%)					3,724,955		1,662,555		
	Total						22,349,729		9,975,329		12,374,400
	Main Canal		ct-2 (sta.4+6				a b b b b b b b b b b	103			
	. Excavation		Machinery		396.00	182	71,904		71,904		
	Backfilling		Machinery		264.00	43	11,312	43	11,312		
. 3.	. Removal of exca	ivated		m3	132.00	134	17,740		17,740		
	. RC Concrete		Machinery		264.66	5,683	1,504,086	5,683	1,504,086		
5.	. Reinforcement	120kg		kg	31,163.72	41	1,280,249	41	1,280,249		
6	. Mass concrete		Machinery	m3		3,233	0		0		•
- 7,	, Forneworks	3 uses	-	m2	128.02	598	76,581	598	76,581	i un inn	
8.	. Water Bridge	·		i m	31.00	50,000	1,550,000		0		1,550,000
<u> </u>	. Pipe & Laying	SP1000		- m _	100.00	22,054	2,205,400		280,400		1,925,000
10	. Valve Accessory	1	· · · ·	ls -	100.00	5,993	599,300		\$60,800		38,500
ાં માં	Anticorrosion/W	/elding		ls	100,00	2,205	220,540	280	28,040		192,500
1	Sub-tota	1				e ja terre	6,717,272	1.000	3,242,272		3,475,000
	Miscel works	(20%)					1,343,454		648,454		695,000
· · .	Total	1 I. I.	1.1			÷ .	8,060,726		3,890,726		4,170,000
M-8	Control Tank	Main S	tructure		÷ .		1.1		11	1 - E	
11 I .	. Excavation	രണത	n Machinery	_m3	2,419.20	182	439,266		439,266		
2	. Backfilling	random	Machinery	- m.3	465.93	43	19,965		19,965		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
3.	. Removal of exca	avated		-Em	1,953.27	: 134	262,509	134	262,509		; ·
4	. RC Concrete		Machinery	n13 -	610.90	5,683	3,471,798		3,471,798		· .
5	. Reinforcement	120kg		: kg	71,933.48	41	2,955,128	41	2,955,128		
6	Mass concrete		Machinery	m3	85.10	3,233	275,133		- 275,133		
7	, Forneworks	3 uses		m2	320.10	598	191,482	598	191,482		
8	. Mesuring Revice	e/Valves		i m	1.00	500,000	500,000		0		500,000
	Sub-tota)	· ·			1 - C	8,115,282		7,615,282		-500,000
· ·	Miscel works	(20%)				í.	1,623,056	· .	1,523,056		100,000
	Total						9,738,338		9,138,338		600,000
M1.9	Control Tank	Draina	ge Facilities	D=60	0						
	. Excavation		n Machinery		1,036.00	182	188,112	182	188,112		
	. Backfilling		Machinery		768.00	43	32,909		32,909		
	. Removal of exca			m 3	268.00		36,018	134	36,018	· .	· · · ·
	. RC Concrete		Machinery			5,683	0		0		1.1
	, Reinforcement			kg	0,00		ō		. 0	в	
	Mass concrete		Machinery		0.00	3,233	Ō		. 0	۰. I	
	Fomeworks	3 uses		m2	· ·	598	ŏ		Ō		· ·
	. Pipe & Laying	SP600		ញា	400.00		3,766,000		724,000	7,605	3,042,000
0	Sub-tola		1	• • •			4,023,038		981,038		3,042,000
	Miscel works	(20%)	· · · ·		1.1.1		\$04,608		196,203		608,400
		[20.6]		1	4 1 1 4 1 A		4,827,646		1,177,246		3,650,400
	Total	1				<u></u>	-10-110-10			منعف محجم وحجم	

App. 7.5-7 Cost Breakdown for Pipe Laying

Descri	ption			Unit	Quantity	Total (Unit Price	Cost	Local Cu Hoit Price	Amount	Forein Cu Unit Price	Irrency Amount
						(N.Rs)	(N.Rs)		(N.Rs)		(N.Rs)
	D=1000 (SP)	at flat								· · · · ·	
	Excavation		Machinery		4.46	182	810	182	810		
	Backfilling		Machinery	m3	2.71	43	116	43	116		
	Removal of Ex Base sand	cavated		กา3 กา3	1.75 0.97	134 21	235	134	235 20		
	Pipe & Laying			ា	1.00	22,054	22,054	2,804	2,804	19,250	10.250
	Valve Accesso	rv ·		ls	1.00	441	441	2,004	2,004	385	19,250 385
	Anticorrosion/		· · ·	ls	1.00	2 205	2,205	280	280	1,925	1,925
		Sub-total	;				25,882		4,322	1,20	21,560
· · · · 2	Miscel works	(20%)			- 1 C		5,176	1. The	864		4,312
	Total				. <u>.</u>		31,058	· · · · · ·	5,186		25,872
	D=600 (SP)	at flat						1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			
			Machinery		2.59	182	.470	182	470		
			Machinery	m3	1.92	43	82	43	82		
	Removal of Ex	cavated ::	(: m3	0.67	134	90	134	90		
	Base sand Pipe & Laying	۱.	-	៣3 ឆា	0.39	21	8	21	8	2 101	
	Valve Accesso	n.	14 A.	ls	1.00	9,415 188	9,415	1,810	1,810	7,605	7,605
	Anticorrosion/		· .	ls	1.00	942	942	181	. 181	152 761	152
		Sub-total		13		142	: 11,196	101	2,678	701	8,518
111	Miscel works	(20%)				•	2,239		536		1,704
	Total				•	· · · ·	13,435		3,214	engin engi	10,221
P-3 - 1	D=300 (SP)	at flat									
	Excavation		Machinery		1.05	182	191	182	- 191		
	Backfilling		Machinery	m3	0.79	43	34	43	34	· ·	
	Removal of Ex	cavated		m3	0.26	134	35	134	35		
	Base sand			m3	0.19	21	4	21	4		1 1
	Pipe & Laying		· ·	m) L	1.00	3,988	3,988	583		3,405	3,405
	Valve Accesso Anticorrosion/			ls Is	1.00	80 399	80	12	12	68	68
1.1	Anneonosion	Sub-total		is	1.00	2999	399	58	58	341	341
	Miscel works						4,730	· · ·	916 183		3,814 763
	Total	(10 //)				1.1.1	5,676		1,100		4,576
	D=250 (SP)	at flat							1,100		4,570
	Excavation	common	Machinery	m3	1.05	182	191	182	191	i e e	1.1.1
		random	Machinery	m3	0.79	43	34	43	34		
	Removal of Ex	cavated	х	m3	0.26	134	. 35	134	35		-
	Base sand			m3_	0.19	21	4	21	4		
	Pipe & Laying			m ·	1.00	3,040	3,040	495	495	2,545	2,545
	Valve Accesso			ls	1.00	61	61	10	10	51	51
1.1	Anticorrosion/	Sub-total		ls .	1.00	304	304	50	50	255	255
3	Miscel works						3,668		818 164		2,850
	Total	(10,0)					4,402		981		570 -3.420
	D=200 (SP)	at flat		······			.,				3,420
	Excavation	common	Machinery		1.05	182	191	182	191		
	Backfilling	random	Machinery		0.79	- 43	34	43	34		
	Removal of Ex		•	m3	0.26	134	35	134	35	· · ·	
	Base sand			m3	0.19	21	4	21	4		
	Pipe & Laying			m	1.00	2,365	2,365	460	460	1,905	1,905
	Valve Accesso			IS	1.00	47	: 47	9	9	38	- 38
1.1	Anticorrosion/			ls	1.00	237	237	46	46	191	191
,	Miscel works	Sub-total (20%)					2,912	· · · ·	779		2,134
	Total	(20/0)					582 3,495		156		427
	D=150 (SP)	at flat				······	.,		934	<u> </u>	2,560
	Excavation		Machinery	m3	1.05	182	191	182	191	18 - E	i e e e e
			Machinery	m3	0 79	43	34	43	34		· · · ·
	Removal of Ex		,	m3 -	0.26	134	35	134			
	Base sand			m3	0.19	21	4	21	4		1.5
	Pipe & Laying			m	1.00	1,840	1,840	435	435	1,405	1,405
	Valve Accesso			ls	1.00	37	37	9	9	28	28
7.7	Anticorrosion/			ls	1.00	184	184	44	44	141	: 141
		Sub-total	· · · · ·			· · · · ·	2,324		751		1,574
	Miscel works	(20%)		۰.			465		150		315
	Total		· · ·		1		2,789		901		: 1,888

(1/4)

101

B-216

Pipe Laying

411

App. 7.5-7	Cost Break	down for	Pipe Laying	
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(2/4)

Martin and a strand and a strand and the strand and and and a strand and a strand and a strand and a strand and		-						
Description	Unit	Quantity	Total		Local Ci	mency	Forein Ci	urrency
							Unit Price	
D 0 D 780/3/15			(N.Rs)	(N.Rs)	(N.Rs)	(N.Rs)	(N.Rs)	(N.Rs)
P-7 D=450(VU) at flat	·	1.20	1.1	101		101	· .	
1. Excavation common Manual	m3	1.35	. 134	181	134	181		
2. Backfilling random Manual	- m3	0.96	5	- 49	51	49		
3. Removal of Excavated	m3	0.39	134	52	134	52		
4. Base sand	m3	0.23	21	5	21	5		- 4 8 10
5. Pipe & Laying	ກາ	1.00	5,417	5,417	707	707		4,710
6. Valve Accessory	IS	1.00	108	108	- 14	14	94	94
7. Anticorrosion/Welding	s	0.00	542	0	71	: 0		0
Sub-total			1997 - 19	5,813	States -	1,009		4,804
Miscel works (20%)		· · ·		1,163		202		961
Total	:			6,975	<u> </u>	1,210	······································	5,765
P-8 D=400(VU) at flat				1.				() () () () () () () () () ()
1. Excavation common Manual	- ' m3	1.35	134	181	134	181		
2. Backfilling random Manual	_m3	0.96	51	49	51	- 49		. (
3. Removal of Excavated	- m3	0.39	134	52	134	52		
4. Base sand	⊡ m3	0.23	21	5	21	5		
5. Pipe & Laying	· m	1.00	4,962	4,962	762	762	4,200	4,200
6. Valve Accessory	ls	1.00	99	99	15	15		84
7. Anticorrosion/Welding	ls	0.00	496	0	76	0		
Sub-total	1.1	1.1		5,349	· ·	- 1,065		4,284
Miscel works (20%)				1,070		213		857
Total		4 - F		6,418	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	1,278		5,141
P-9 D=356(VU) at flat								
1. Excavation common Manual	m3	1.35	134	181	134	181		· · .
2. Backfilling random Manual	m3	0.96	51	- 49	51	49		
3. Removal of Excavated	m3	0.39	134	52		52		· · · ·
4. Base sand	m3	0.23	21	5	21	5		1 - L - L - L
5. Pipe & Laying	m	1.00	4,263	4,263		613		3,650
6. Valve Accessory	ls	1.00	85	85	12	12		73
7. Anticorrosion/Welding	ls	0.00	426	· · 0	61	- õ		Ő
Sub-total	1.5	0,00	420	4,636		913		3,723
Miscel works (20%)	· · · · ·			927		183		745
Total	1 . E.			5,563		1,095		4,468
P-10 D=300(VU) at flat						1,075	 	4,400
1. Excavation common Manual	m3	1.05	134	141	134	141		
2. Backfilling random Manual	m3	0.79	51	40	. 51			
3. Removal of Excavated	m3	0.26	134	35	134	35		
4. Base sand	- m3	0.20	21	4	21	33 4	:	
				3.653	583	583	2 020	3.070
5. Pipe & Laying	, m	1.00	3,653	•			3,070	
6. Valve Accessory	ls	1.00	73	73	12		61	61
7. Anticorrosion/Welding	ls	0.00	365	0	58	0	307	0
Sub-total			:	3,946		815		3,131
Miscel works (20%)				789		163		626
Total	: 		·	4,735		978	·	3,758
P-11 D=250(VU) at flat								
1. Excavation common Manual	់ ៣3	1.05	134	141	134	141		
2. Backfilling random Manual	m3	0.79	. 51	40	51	40		
3. Removal of Excavated	m3	0.26	134	35	134	35		
4. Base sand	m3	0,19	21	4	21	4		
5. Pipe & Laying	ព	1.00	2,885	2,885	495	495	2,390	2,390
6. Valve Accessory	ls	1.00	58	58	10	10	. 48 .	- 48
7. Anticorrosion/Welding	ls		289	289	50	50	239	239
Sub-total		2	1. P. 1	3,451		775	· · ·	2,677
Miscel works (20%)	: 			690		155	1.1.1	535
Total	но на Холани. По 1999 г. 1999			4,142	· · ·	929		3,212
P-12 D=200(VU) at flat		4						
I. Excavation common Manual	<u>ារ</u> 3	1.05	134	141	134	141	1.1.1	
2. Backfilling random Manual	m3 :	0.79	51	40	51	40		an she a
3. Removal of Excavated	កា3	0.26	134	35	134	35		
4. Base sand	3	0.19	21	4	21	4	1	
5. Pipe & Laying	m	1.00	2,240	2,240	460	460	1,780	1,780
6. Valve Accessory	· Is	1.00	45	45	9	9	36	36
7. Anticorrosion/Welding	ls	1.00	224	224	46	46	178	178
Sub-total	1.3	1.00		2,729	-+0	735	110	1,994
Miscel works (20%)		· .	· · · · ·	546		135	· · ·	399
Total				3,275		882		2,392
						004		- 6.J7L

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Pipe Laying

App. 7.5-7 Cost Breakdown for Pipe Laying

Descrip	ption	Unit	Quantity			Local Cu		Forein Ci	
:			•		Amount (N.Rs)	Unit Price (N.Rs)	Amount (N.Rs)		(N.Rs)
P-13 D	D=150(VU) at flat		· · · · ·	(11113)	(11.113)	(11.11.3)	(11.1(3)	(11,11,3)	(11.1(3)
	Excavation common Manual	3	1.05	134	141	134	141		
2.8	Backfilling random Manual	ກາ3	0.79	51	40	51	40		
– 3. R	Removal of Excavated	m3	0.26	134	- 35	134	- 35		
4 E	Base sand	ា នា3	0.19	21	- 4	21	- 4		
	Pipe & Laying	m	1.00	1,605	1,605	435	435		1,170
	Valve Accessory	ls	1.00		32	9	· · · · · ·		23
7.1	Anticorrosion/Welding	: Is	1.00	161	161	2 + 44	44		117
	Sub-total	1.11			2,018		707		- 1,310
	Miscel works (20%)				404		141		262
	fotal				2,421		849		1,572
	D=100(VU) at flat	1			1.000				
	Excavation common Manual	- m3	0.55	1 1 1	74	134	74		
	Backfilling random Manual	B3	0.46		23	51	23		-
	Removal of Excavated	: n3	0.09		12	134	12		1 - E
	Base sand	m3	0.08	21	2	21	2		1000
	Pipé & Laying	m k	1.00	934	934 19	392	392	542	542
	Valve Accessory Anticorrosion/Welding	ls . Is	1.00	93	: 93	8 39	8 39	11 54	54
1.1	Sub-total	15	1.00	93	95 1,157	35	550		607
	Miscel works (20%)		1		231	1	110		121
	Fotal		1.11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,389	.t	660		728
P-15 T				•·	1,002	· · · · · · · · · · · · · · · · · · ·			720
	Excavation common Manual	m3	0.55	134	74	134	74	- '	14.
	Backfilling random Manual	- m3	0.46	51	23	51	23		
	Removal of Excavated	m3	0.09		12	134	12		11
	Base sand	m3	0.08		2	21	2	-	
	Pipe & Laying	m			820	370	370	450	450
	Valve Accessory	ls	1.00	- 16	16	7	7	9	9
- 7. A	Anticorrosion/Welding	ls	1.00	82	82	37	37	45	45
	Sub-total				1,029		525		504
. N	Miscel works (20%)				206		105		101
	Fotal				1,235		631		605
	D=1000 (SP) at slop under grou		·				1		
	Excavation common Machiner		4.51		819	182	819		
	Backfilling random Machiner			43	116	43	116	2 C	1.1
	Removal of Excavated Base sand	B)3	1,80		242	134	242		
	RC Concrete Machiner	คา2 มาย	0.97	21 5,683	20 2,216	21	20		
	Reinforcement 63kg		24.49	3,083	1,006	5,683	2,216		· · ·
	Formworks 3 uses	kġ m2	0.51	598	305	41 598	1,006 305	a standing.	÷
	Pipe & Laying	m	1.00		22,054		2,804	19,250	19,250
	Valve Accessory	Is	1.00	441	441		2,004	385	385
- 10 Z	Anticorrosion/Welding	ls	1.00	2,205	2,205	280	280	1,925	1,925
	Sub-total		1150	-,,,,,,	28,248	200	6,688	11-20	21,560
N	Miscel works (20%)				5,650		1,338		4,312
	l'otal				33,898		8,026		25.872
P-17 T	D=450 (SP) at slop under grou	nd							2010/12
	Excavation common Machiner		1.37	182	249	182	249		
2. E	Backfilling random Machiner			43	41		. 41		1.1
	Removal of Excavated	_m3	0.41	134	55	134	55		1.1
	Base sand	m3	0.23	21	5		: 5	$(-1)_{ij} = (-1)_{ij}$	
	RC Concrete Machiner	y_m2	0.07	5,683	398	5,683	398		
6. F	Reinforcement 63kg	kg	4.40	: 41	181		181		
	Formworks 3 uses	m2	0.13	598	78		78		
	Pipe & Laying	m	1.00		5,942	707	707	5,235	5,235
	Valve Accessory	ts	1.00				14	105	105
10.7	Anticorrosion/Welding	15	1.00	594	594		71	524	524
	Sub-total				7,316		1,453	· · · ·	5,863
	Miscel works (20%)				1,463	х Х.	291	:	1,173
. 1	' otal		1. A. A. A.		8,779		1,743	1	7,036

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App. 7.5-7 Cost Breakdown for Pipe Layir
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(4/4)Forein Currency

Pipe Laying

Description		Unit Quantity				Local Currency		Forein Currency		
									Unit Price	
	-				(N.Rs)	(N.Rs)	<u>(N.Rs)</u>	(N.Rs)	(N.Rs)	(N.Rs
	D=1000 (SP) at slop									
		Machinery		1.23	182	223	182	223		
2.	Backfilling random	Machinery	i m3	0.23	43	10		10		
3.	Removal of Excavated	· · · ·	m3	1.00	134	134				
· 4.	Base sand		m3		21	0	21	· 0		
5.	RC Concrete	Machinery	m2	0.77	5,683	4,376	5,683			
6.	Reinforcement 63kg	•	kg	48.36	41	1,987	a ng 15 41	1,987		÷.,
	Formworks 3 uses	:	mŽ	0.65	598	389	598	389		
	Pipe & Laying		D)	1.00		22,054		2,804	19,250	19,250
	Valve Accessory	1.1	ls	1.00		441		56	385	385
	Anticorrosion/Welding		ls	1.00	2,205			280	1,925	1,925
	Sub-tota	, 1				31,452		9,892		21,550
1. i j	Miscel works (20%)			e 1 - 1		6,290		1,978		4,312
1.1.1	Total	•		1999 - 1999 1999 - 1999		37,742		11,870		25,87
D. 10	D=300 (SP) at slop		;				<u>`</u> `			
		Machinery	m3	0.05	182	9	182	9		
		Machinery		0.02	43	1	43			1. 1.
2.	Removal of Excavated	масшасту	m3	0.02	134	4	134			
			m3	0.05	21	0		0		
	Base sand	Machinery		0.02	5.683	170	,			
	RC Concrete	маститету		0.03		170	5,085	77		
	Reinforcement 63kg		kg	1.88						
	Formworks 3 uses		in2	0.07	598	42				
	Pipe & Laying	and the second	m	1.00		3,988				3,405
	Valve Accessory	gen en se	IS	1.00						68
· 10.	Anticorrosion/Welding		is	1.00	399					341
	Sub-tota	E se la				4,756		943		3,814
	Miscel works (20%)	1 A. 14	: •			951		-189		763
	Total		· · ·		· · · · · · · · · · · · · · · · · · ·	5,708		1,131		4,570
	D=150(SP) at slop	1	1			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				
		Machinery		0.03		5	182			
		Machinery	_m3	0.02	43	1	43			
3.	Removal of Excavated		m3	0.001	134	1	.134	•		
4,	Base sand		• m3		21	0	= •	- 0		
· 5.	RC Concrete	Machinery	_m2	0.004	5,683	23				
6.	Reinforcement 63kg		: kg	0.25	41	· · · 10	41	- 10		· . ·
	Formworks 3 uses		່ ກາ2	0.01	598	6				
	Pipe & Laying		· m	1.00	1,840	1,840	435	435	1,405	1,40
	Valve Accessory		ls	1.00		37		. 9		28
	Anticorrosion/Welding		ls	1.00		184	44	44	141	141
	Sub-tota	1 ¹			• - •	2,100		526		1,57
	Miscel works (20%)			1.		420		105		315
1.	Total	1				2,520		631		1,888
						<u>-</u>			<u> </u>	

APP. 7.5-8 Cost Breakdown for Open Canal

Description Unit Quantity Local Currency Total Cost Forein Currency Unit Price Unit Price Amount Unit Price Amount Amount (N.Rs) (N.Rs) (N.Rs) (N.Rs) (N.Rs) (N.Rs) C-1 Lined Canal Bill = 0.70x0.55m 1. Excavation 0.20 Manual common 134 134 m3 27 27 Backfilling random 0.75 51 51 Manual m3 38 38 3. Rubble Masonry Manual m. 0.28 3,673 1,028 3,673 1.028 0.20 4,419 4,419 41 4. Concrete Manual m2 884 884 5. Reinforcement 6.3kg kg m2 \$16 516 Formworks 0.10 598 60 598 6. 3 uses 60 7. Plastering ŧ=20 m2 1.80 102 183 102 £83 8. Grass Sod m2 2 84 30 21 73 30 73 9. Sand 0.07 n12 1 1 Sub-total 2,811 2.811 Miscel works (20%) 562 562 Total C-2 Lined Canal 3,373 3,373 Ball = 0.60x0.50m I. Excavation common Manual m3 0.18 134 24 134 24 Backfilling Rubble Masonry 0.66 51 3.673 33 2 random Manual m3 33 51 918 Manual m3 3 673 918 4 Concrete Manual m2 0.18 4 4 1 9 796 4,419 796 5. Reinforcement 6. kg kg m2 11.30 41 464 41 464 0.10 598 598 102 60 163 6. Formworks 3 uses 60 7. Plastering 1-20 1.60 102 m2 163 30 21 30 21 Grass Sod 2.30 62 69 m2 9. Sand m2 0.06 I 2,528 Sub-total 2 528 506 Miscel works (20%) Total 3,034 3,034 C-3 Lined Canal Ball - 0.50x0.45m Excavation common Manual 0.10 134 13 13 m3 134 Backfilling Rubble Masonry 29 661 442 random Manual 0.58 51 29 51 2 m³ 0.18 3 673 661 442 3.673 ٦ Manual m3 4. Concrete 0.10 Manual m2 4,419 4,419 5. Reinforcement 6. kg kg 6.28 41 258 41 258 6. Fermiverks m2 0.07 503 3 uses 42 598 42 Plastering t=20 7. m2 102 142 102 142 Grass Sed 2.16 65 65 m2 30 30 9. Sand m^2 0.05 21 I 21 Sub-total 1,654 - 331 1,654 Miscel works (20%) 331 Trial 1,985 1,985 C-4 Lined Canal Ball = 0.40x0.40m I. Excavation common Manuał 0.07 134 m3 12 134 12 0.50 2. Backfilling random Masual m3 51 25 51 25 3. Rubble Masonry 0.16 3 6 7 1 588 Manual m3 1673 588 4. Concrete 0.09 4,419 398 Manoal m2 398 4,419 kg m2 5.65 0.07 5. Reinforcement 6.11g 41 232 41 232 593 6. Ferinworks 3 uses 593 42 42 7. Plastering t=20 102 m2 1.20 122 102 122 8. Grass Sod 9. Sand m2 2.02 30 6 10 61 21 21 m2 0.05 ì Sub-iotal 1.481 1.431 Miscel works (20%) 296 296 Total 1,777 1,777 C-5 Earth Canal 1. Excavation 2. Backfiffing common Mənuat 0.09 m3 134 12 12 134 51 3,673 Manual Manual 51 3,673 random m.3 0.50 25 25 Rubble Masonry m3 0 0 Concrete m2 ō 4,419 ŏ A Manual 4,419 5. Reinforcement kg m2 6.3kg 0.00 41 0 41 ō Formworks 523 6. 3 uses 598 0 0 0 7. Plastering t=20 102 m2 102 0 .30 21 8. Grass Sou m2 2.02 30 61 61 9. Sand 21 m^2 0 0 98 Sub-total 98 Miscel works (20%) 20 20 Total O-3 Chamber Tank 118 118 L Excavation common Manual 37.21 134 5,001 134 5,001 2. Backfilling 12.00 25.21 - **51** 134 51 134 random Manual m.) 609 609 Removal of excavated Manuat **m3** 3,388 3.388 **RC** Concrete 28.49 125,911 125,911 4 Manual **m**3 4,419 1,119 1,789.17 73 502 5. Reinforcement 63kg kg m3 - 41 41 73,502 Manual Mass concrete 3.620 3,620 528 13,502 6 7. Fomeworks 3 uses 46.88 28 043 m2 598 28.043 Sub-total 249,956 249,956 Miscel works (20%) 49,991 49,991 Tetal 299,948 299,948

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App. 7.5-9 Cost Breakdown for Pump Station

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Description	. :	Unit	Quantity	Unit Price	Cost	 LOCALC Unit Drice 	Amount	Unit Price	Amount
				(N.Rs)	(N.Rs)		(N.Rs)	(N.Rs)	(N.Rs)
II-1 Pump House	No 1	^		(11.13)	(11.1(3)	(11.15)	((1.1(3)	(111(3)	
1. Pump	39mHx15kw	500	3	285,000	855,000		0	285,000	855,000
2. Pump House	DZUITATAN	m2	64	5,923	379,078	5,923			,
3. Suction Sump		is	1	545,800	545,800		545,800		
4. Switch Board		ls		1,350,000	1,350,000	545,000		1,350,000	1 350 000
	IWKYA	ls		21,000	21,000	21,000	21,000	1,000,000	1,000,000
5. Installation	· · · ·	15	. 1	21,000	3,150,878		945,878	i i e e A	2,205,000
<u> </u>			<u> </u>		3,130,070	<u> </u>	745,010		2,200,000
H-2 Pump House	No 2						4.2.1.5		
1, Pump	45mhx55kw	nos	3	695,000	2,085,000		0	695,000	2,085,000
2. Pump House		m2			379,078	5 923	379,078		
3. Suction Sump		ls	1		545,800	545 800	545,800		
4, Switch Board	200614	ls		1,900,000	1,900,000	2 10 10 000		1,900,000	1 900 000
	JUNTA	ls		21,000	21,000		21,000		1,200,000
5. Installation Total		15		21,000	4,930,878	21,000			3,985,000
					-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		7,0,010		011001000
H-3 Pump House	No.3	: 1	1 - 1 - 1 - 1 		· · ·	· · ·			· · · ·
<p 3a="" h=""></p>	1997 - 1997 - 1997 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -								
1. Pump	33mHx37kw	nos	3	573,000	1,719,000	· · · ·	0	573,000	1,719,000
2. Pump House		m2		5,923	379,078	5,923	379,078		
3. Suction Sump	, 11 1	Is	1		545,800				
4. Switch Board		ls	1	1,900,000	1,900,000			1,900,000	1,900,000
5. Installation		ls	1		21,000				
J. Instantation	Sub-total		•		4,564,878			a di	3,619,000
<p 11="" 3b=""></p>	000 1010	. <u>1</u> . 1	$(1,2,\ldots,2,n) \in \mathbb{R}^{n}$		1,001,010	· .			.,,
	55mhk30kw	nos	. 3	330,000	990,000	· · · · ·	· 0	330,000	990,000
2. Pump House					379,078		379,078		
3. Suction Sum		ls	1		545,800	545,800	545,800		
A Switch Board	100KVA	10		1,350,000	1,350,000		0	1,350,000	1.350.000
5. Installation	Joonth	ls		21,000		21,000	21,000		
	Sub-total	•.2	· · · ·	D1,000	3,285,878		945,878		2,340,000
Total	500-10101	· ·		1	7,850,757		1,891,757		5,959,000
									· · · · · · · · · · · · · · · · · · ·
H-4 Pump House	No.4						· ,		
I. Punip	30mHx7.5kw	nos	3	145,000	435,000		0	145,000	435,000
2. Pump House		_m2		5,923	189,539		189,539		
3. Suction Sum)	i ls i	1	273,000	273,000	273,000	273,000		5
4. Switch Board	50KVA	Is		1,000,000	1,000,000		0	1,000,000	1,000,000
5. Installation		Is	1	21,000	21,000		21,000		
Total					1,918,539		483,539		1,435,000
					<u>,</u>				
H-5 Pump House	No.5		× '	· · · · ·					
1. Pump	9mHx1.5kw	nos	3				0	50,000	150,000
2. Pump House		m2	32	5,923	189,539		189,539		
3. Suction Sum)	ls	1	273,000	273,000	273,000	273,000		
4. Switch Board	50KVA	ls	1	1,000,000	1,000,000		0	1,000,000	1,000,000
5. Installation	1	ls	. 1	21,000	21,000	21,000	21,000		
Total	<u>, i</u> ,				1,633,539		483,539		1,150,000
	N. /	•							
H-6 Pump House		1.1		110 000		:	•	110.000	330,000
	27mH35.5kw			•	330,000	6000	0	110,000	220,000
2. Pump House		_m2			189,539		189,539	1. A.	
3. Suction Sum		Is	1	273,000	273,000	273,000	273,000	1 000 000	1.000.000
4. Switch Board	50KVA	ls	1	1,000,000	. 1,000,000		0	1,000,000	1,000,000
5. Installation	a e to 114	- I s	1	21.000	21,000	21,000	21,000	이 가격 가슴 가슴	
Total					1,813,539		483,539		1,330,000

Pump

App. 7.5-10 Unit Construction Cost

tal Cost	L/C	F/C
it Price	Unit Price	Unit Price
N.Rs)	(N.Rs)	(N.Rs)
	· · ·	

	Description		Unit	Total Cost	I/C	F/C
				Unit Price	Unit Price	Unit Price
Ā	Earthworks			(N.Rs)	(N.Rs)	(N.Rs)
A		Manual			1244	
	1. Excavation Common		m3	134.4	134.4	
		Machinery	m3	181.6	181.6	-
: :	Rock	Manual	m3	431.1	431.1	
	2. Backfill	Manual	-m3	50.7	50.7	
		Machinery	m3	42.9	42.9	
		Manuał	m3	134.4	134.4	
i.	4. Grass Sod	Manual	- m2	30.0	30.0	
R	Stone Works	1 .				
	1. Rubble Masonary	Manual	m3	3,673.1	3,673.1	
		Machinery	m3	2,882.5	2,882.5	
	2. Brick works	Manual	m3	3,403.9	3,403.9	
	3. Gabions Box	Manual	m3	1,494.0	1,494.0	
				1,727.0	1,777.0	
С	Cement Works					
•	I. Mass concrete	Manual	m3	3,619.9	3,619.9	
		Machinery	m3	3,233.1	3,233.1	
	2. Reinforced Concrete	Manual	m3	4,419.5	4,419.5	
		Machinery	m3 .	5,683.1	5,683.1	i i ka se
	3. Plastering 20mm	Manual	m2	101.6	101.6	an The State States
Ď	Reinforcement tor steel	Manual	kg	41.1	41.1	
B	Pormworks	Manual	m2	598.2	598.2	:
F	Pipe & Pipe Laying				Pipe laying	Materia
•	1. SP1000mm	· · · ·	m	22,054.0	2,804.0	19,250
	2. SP 600mm		m	9,415.0	1,810.0	7,605
	3. SP 450mm		m	5,942.0	707.0	5,235
	4. SP 300mm		m	3,988.0	583.0	3,405
	5. SP 250mm		m	3,040.0	495.0	2,545
	6. SP 200mm		m	2,365.0	460.0	1,905
	7. SP 150mm		m	1,840.0	435.0	1,405
	8. VU 450mm	·	m :	5,417.0	707.0	4,710
	9. VU 400mm		m	4,962.0	762.0	4,200
	10. VU 350mm		m	4,263.0	613.0	3,650
	11. VU 300mm		m	3,653.0	583.0	3,070
	12. VU 250mm		m	2,885.0	495.0	2,390
	13. VU 200mm		m	2,240.0	460.0	1,780
	14. VU 150mm		m	1,605.0	435.0	1,170
	15. VU 100mm		m	934.0	392.0	542
	16, VU 75mm		m	820.0	370.0	450
_	Storage	5 	m2	5,923.1	5,923.1	

Unit Construction

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App. 7.5-11 Construction Works Rate Analysis in Manual

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	· · · · · · · · · · · · · · · · · · ·		Resource Labour					<u> </u>		on structu	n Materia	ł.		Total Rate	Remarks
S.No.	Description of Work	Unit			wantity	init Ratel	Cost	Type			Init Rate	Cost	Basic Rat	(1.2075 • 8	
. Site	1- Fell trees, cut up & dispose 5m					ſ				· · · · · ·					
reparation	away from the construction sile		1			1			1						
	(the dia, of tree is measured from tm above the ground)					1									
	a. 12-30 cm dia.	carh	Unskilled		0.13	20,00	9.10				. [1.42	9.1		Sheet I
	b. 31-60 cm dia.	caub	Unskilled	mđ	0.39	70,00	27.30					÷	27.3 68.6	33.0	
	c. 61-90 cm dia.	cach each	Unskilled Unskilled	md md	0,98	70.00	68,60 68,60					11	68.6	82.5	2
	d. 91 - 120 cm dia. e. 121 - 180 cm, dia	cach cach	Unskilled	nd.	4.00	70.00	280,00	1				11	210.0	338.1	1
	f. 181-240 cm. dia.	cach	Unskilled		4,00	70.00	280,00	1. A.					280.0		
	g. 241-300 cm dia.	each	Unskilled		10.40	70,00	726.00	$\mathcal{T}_{i} = \mathcal{T}_{i} \mathcal{T}_{i}$			- ÷		228.0	879.1 3521.2	
·	h. above 301 cm.	<u>cach</u>	Unskilled	md	41.67	70.00	2916.90	-÷	<u> </u>				2916.9	3348.4	
anhworks	 Uprooting trees & disposal 15 m away from the construction site 						1. 1.	an al an	1.1						
	a. 12-30 cm dia.	cach	Uaskilled		0.40	70,00	28.00				1.1.1		28,0	3.08	Sheet
	b. 31-60 cm dia.	each cach	Unskilled Unskilled		0.53	70,00	37.10		-3		1.40		176.4		
	c. 61-90 cm dia. d. 91 - 120 cm dia.	cach	Unskilled		2.52	70,00	176,40	1 - E	1	1		11.1	176.4	213.0	1.1
1.1	e. 121 - 180 cm. địa	cach	Unskilled	mJ	12.00	70.00	\$40,00		1	$\mathcal{T} = \mathcal{T} = \{ i \in \mathcal{T} \}$	11.31		840.0		
	f, 181-240 cm, dia.	cach	Unstilled	md	12.00	70,00	640,00]	1 - A -				1.1	8 10.0 2074.1	1014.3 2504.5	
	g. 241-300 cm dia.	<u>e</u> ach	Unskilled Unskilled		29.63	70.00	2074.10					1.1	20.4.1	1304.5	
4.1	h. above 301 cm.	cach	Ouskinco	<u>Dig</u>	·										
3	14. Excavation for pipeline in boulder mixed soil disposal opto					-		1 A A		4	1.1		10.3	1140	Sheet 4. Manpowe
1.1	130 m and 1.5 m lift.	<u>cu.m.</u>	unskilled	md	1.59	70,00	111.30								
	13. Trench cutting in hard took with drifting and blasting, discosal	CH.15.	unskilled	mđ	4,50	70.00	315.00	Gelutine	kg	0.25	111.00	27.75	342.8	413.9	Sheet 4, 1
		Cu.m.	skilled	mđ	0.05	125.00	6.25	Detonator	No.	2.00	2.00	4,00	: 10.3	4.8	1
								Fuse wird Total	. m.	2.00	2.00	4,00	4.0 357,0	431.1	1.
· ·	39. Filling seils in pipeline										·				
	beaches in 20 cm thick layers			E . I					1.5		111				1 .
	including hand compaction and water sprinkling				- 1.1 - 1										
				1.1								1.1			Sheet-B.
	d, gravel and boulder mixed soil	cu.m.	unskilled	<u>m</u> d	0.60	70.00	42.00			·	iiiiiiiii		42.0	50.7	Manpowe
i. Intelligender	 Brick masonary works along with supplying bricks, making 	1. A.					1997 B.		1.1			1.1.1.1		1.1	
	coment sand mortar and						1.1		-						
	construction of Brick walls		1.17				1	1.1	\mathcal{N}_{i}						
	including haulage distance upto 30 m	1.1					· ·		÷.,	* • •				1.10	
	a. Machine made bricks-1:3			L		125.00	187,50	Brick	No.	530.00	2.75	1458.56	1646.1	A [80]	Sheet-14, Manpowe
	cement sand mortar	cu.m.	skilled Unskilled	m 3 m 3	2.20	20.00	154.00	Cement	MT	0.13	6297.00	818,61	972.6		Мапроче
•			C A MAR A												Material
								sand	ຕ່າ.ຫ.	0.27	741.72	200.26	200.3		19, and 1
	D. Akta muse	1				·		•	<u> </u>		·	`	2818.9	3-403.9	
6. Stone works	1. Rubble masonary works including supply of hard stone	1 :					1.11	1 . T					· ·		
	blocks, pregaring coment mortar,	1 :		1	1.1	1.1						1		1.11	1 i i i i i i i i i i i i i i i i i i i
· .*	and construction of walls upto 5m bigh , haulage upto 10 m	.		1. • •							1.1		ł	· ·	1.1
	A Cement mortar 1:3	ci.m.	skilled	[mJ	1.50	125.00	: 157.50	cement	MŤ	0.19	6297,00	1221.62	(409.1	1701.5	Sheet 16
1 1		Ľ –		- mJ	5.00	70.00	3 50.00	sand	cù.m.	0.42	341.72	3(1.52	661.5	798.8	Manpowe and 3
1.1.2		•	unskäled	1.00		,0.00							•		Materials
- ¹ - 1		i -		Ľ				Block Stone	çų.m.	1.00	883.00	883.00 88.30			19, and I
		1		ľ				Bond stone	CB.ML	0,10	810.00	88.00	30 11.9		
: S'Gabion	16. Bos Size 2ms1mx0.5m	ćų.m.	skiled	md	1.65	125.00	206.25	GIwire	kg	24.55		859.25	1065.5		Sheer-65
e JU 401011	The Lord Cold Ford The Call		Unskilled		0.83	70.00	57.75	Sel Wire	kg	3.00	38,00	114,00	171.8	207,4	
	I	<u></u>	1	[L				L_	فسبب		<u> </u>	. 1237.3	1494.0	
P. Cement		. T	1: 1	1	[· ·]			L. 1	1	· ·				5. 1.	l .
Contrate Norks	vertical faces, walls and abutments (coment concrete)	1 1		1		. ·		[1] [1					[****	
	including supply of nuterials and	:	1	1					1				1.1	l	ļ
	hautage distance upto 30 m. b. P.C.C. 1:2:4	ca.m.	skilled	nd.	0.30	125.00	37.50	conest	MC	0.32	6297.00	20(5,04	2052.5	2478.4	Sheet-19
	0. F. M. N. 1	1		1										1. inter	Manpowe
	A STATE OF A STATE	I.	unskilled	md	4,00	70,00	280,00	Agg. 40 mm	eu.m.	0.52	9200.87	624,45	904.5		Material-
		1 -	ł	1	1	· ·		Agg 20 mm	cu.m	022		264.19			and L1
		1		1				Agg. 10 mm	cu.m.	0.11	958.95	i08.79	108,8	01.4	
	1	1 -	<u> </u> .	1		1	.	sand	ça.m.	0,45	741.72	330.06	330.1		
-		I	<u> </u>	<u>+</u>				<u> </u>		<u> </u>			- 2000/.0		
	 Concreting works of superstructure, deck slab, beams 	1	1. 5. 5	1			1		1	·			h · · ·	1	1
· ·	including supply of materials and	1	· ·	1			· ·	1 ·					l	1	1
· .	haulage distance upto 30 m. a. P.C.C. 1-2.4	CS.M.	skilled	md	0 ,80	125,00	- 100,00	cenent	мт	0,32	6297.00	2015,04	2115.0	2553.9	Shoct-19
1.1.1		1		í		1.1	1	l	:				1		manpowe
 			unstalled	md	7,00	70.00	400.00	Agy. 40 mm	CU.III.	0.52	1209,87	624,45	1 1143		and 3 Material-
2			1 · `	1	1	•		Agg. 20 mm	cu m.	0.22		264.19			10, 17, 12
1.1.1		1.1	1 · · ·		1	1 1		Agg. 10 mm	i cu.m.	0.11	988.96				
	The second s	1 × 1	1.1	18	1			sand	ca.m.	0.45	741,72	330.06	330.1		
	<u> </u>			ł÷-	0.30	125.00	37.50	ecinent	MT	0.22	6297.00	1385.33	1422		Sheet 19
1.1	4. Mass Concrete	eu.m.	skilku unskilku	m3 m3	2.00		140.00			0.14		168.12	308.1	372.1	1
		1		17				Agg. 20 mm	ccù m.	0.60	1200.87	120.52	720.5	870.0	
i.		1		1 -		1		Agg. 10 mm		0.20		197.79			
		1	1 .		1 ¹ .			sand	EN ID	0.07	741.72	348.61	2997.9		
	12 4/20 - 01 10 1			ł		<u> </u>				<u>-</u>				1	
5 S	12.4 (29mm) thick coment sand Plaster 1:4	100-4.8	skilled	mJ	14.00	425.00		Sand	ខម្មរភា.	2.35	741.72			4217.8	Sheet 44
	In the second seco	1	easkilled		19.00	79,00	1110.00	Coment	Mi	0.57	6297.00	3589.29	4919.3	5940.0	
	 A second sec second second sec	1 · ·	BASKROU	1 1100		1		Total					8412.3		

Rate Analy

App. 7.5-11 Construction Works Rate Analysis in Manual

			Resour							michnier	ion Materi			Total Rate	Bernark
S.No.	Description of Work	Unit			Duantity	Juit Rate	Cost	Type	rins ¹	Quantite Quantite	on Materi Unit Rate	Corl	Basic Par	(1.2075*	
Reinfoce	5. Cutting, bending, placing in	[- <u></u>			1.000010	[<u></u>		[1 Marinell		f	Passa Rd	10.601.5	í''
cat	position as per drawing and binding by G.1, wire of	•								[
	binding by O.1, wire of	ŀ		1	E			· ·]					1		
	reinforcement steel bars for R.C.C works including haulage upto 30														Sheet-20
	worke including nausse upto 50	MT .	skilled	പ	12.00	125.00	1500.00	Reinfore, bar-	мг	1.05	29808 17	31298.78	32798,8	39604.3	Manpower and 3
															Material-2
	· · · · · · · · · · · · · · · · · · ·		unskilled	гъ	12.00	70,00	\$40,00	Binding wires	kg.	10.00	38.31	383.68	1223.1	1476.9	and 29
			<u></u>			1.1		-					3.021.9	41081.4	1
5 - L	2. Making wooden forms	1.1													
ormverks	including supply and selection of			5 1	1.1		:				1.5				:
	materials, fixing, nailing						1	1			1	1			1
	according to drawings, placing separators, dismantling forats and	1		· 7	1		· · · ·	1 ± 1			1	1.1.1			
	hauting upto 30 m distance.			9							· .				
	a. Flooring and slub works											1.1.1.1			Manpowei
		10 sq.m	unskilled	md	1.72	70,00	\$20,40	Timber	cu.m.	0.53	\$388,46	4412.33	4532,7	\$473.3	
			skilled	nat	2.57	125.00	321.25	Nails		2.50	40,00	. 100.00	4213	508.7	Material-3
			36.14.0			11.2,00		trains .	kg	. 4.50		100.00	19510	3981.9	3 2
	b. Vertical surface, wall etc 4 m		·				·····			. س. عدت م				3701.7	Мапроже
,	high and 0.5 m wide.	10 sq.m	Unskilled	m2	. L44	70,00	100,80	Timber	cu.m	0.53	8388.46	4412.33	4513.1	\$449.6	3
						1	1.1		1						Material-3
			skilled	mJ	2.10	125.00	262.50	Naits	kg	2 50	40,00	100.00	362.5	437,7	33
			<u> </u>		<u>.</u>								4875.6	5887.3	
	c. Vertical surface, wall etc 4.5 m														Manpower
. *	high and 0.5 m wide.	un schu	Unskilled	ത്	3.19	70,60	223,30	Timber	¢9.m	0.66	8388,45	\$519.61	\$742.9	6934.6	
			skilled	ind	3.10	125.00	387.50	Nails	kg	3,13	40.00	125.20	592.7	619.1	Material-3 33
			100 C					1-47-5	~*		40.170	12.3.20	6255.6	7553.6	,,,
· · ·	d. Vertical surface, wall etc 5 to		·										0433.0	1222/8	Manpower
	10 m high and 0.5 m wide.	10 s.j.m	Uaskilled	പ	5.19	70,00	363.30	Timber	¢u,m	1.48	8388.45	12398.15	12761.4	15409.4	3
											1.1				Material-3
		1	skilled	md.	7.50	125.00	937.50	Nails	kg	6.93	40.00	277,20		ì 466,8	33
111			· ·				· · · · · · · · · · · · · · · · · · ·	2					13976.1	16876.2	
	c. Vertical surface, wall excupio 5	10 sq m	13-1-138-1	md	3.14	10.00		-							Manpower
	m high and 0.5 m to 1 m wide.	io sq.m	Unskilled	mu	2,16	70,00	151.20	Timber	€u.m	0.53	1381.46	4412.33	4563.5	5510.5	3
1.1		:	لمأأذها	md	3.24	125.00	405,00	Nails	kg (2.50	40.00	100,00	505.0	609.8	Material-3
		1.1	1					C * 01(E2		~	10.00	1.00.00	5068.5	6120.3	
	f. Vertical surface, wall etc 5 to 10							·				·			Manpower
4.14	m high and 0.5 m to 1 m wide.	10 sq.m	Unskilled	md	\$.16	70,00	361.20	Timber	៩ ម.៣	1.33	8388,46	11290.87	11652.1	14069.9)
1.11									1.1		1.16				Material-3
			stiled	md	7.64	125,60	955.00	Nails	kg	6.30	40,00	252,00	1207.0	1457.5	33
S. Road	I. Making Road side ditch from								<u> </u>		· · · · · ·		12859.1	13313	
Vorks	rubble store masonary and	1. 1						1. A. A.							
	coment sand mortar including										:				
1	supply of materials, preparing					1.6.1			. •						
1.1	mortar, and hauting upto 30 m.	·	Ġ.	12					·				1.12		•
. *	a. coment mortar (1:3)	CÚ.M	Skilled Unstilled	md md	1.50 4.80	125.00 70.00	187.50	cement sand	MT	0.19	6297,00	1221.62	1409.1	1701 5	
			CHNABCO	100	4,50	70.00	330.00	sand Block stone	са.т са.т	0.42	741.72 883.00	311,52 883-00	647.5 883.0	781.9	
								Bond stone	cu.m	0.10	883.00	\$8,30	88.3	1066.5	
			1.1				· ·						3011.9	6441	
											· · ·	· ·	· · · · · · · · · · · · · · · · · · ·		
	3. Cleaning sub-grade by cutting													<u> </u>	
	erass, hauting and temoving upto 10 m distance from the		14 1				1		1 A.		· .				
	to moistance from the	sq.m	unstitled	æđ	0.05	70.00	3.50		7	. I	14 A		3.5	1 . San	Manpower
	4. Sub-grade preparation by									·			······	4.1	manpower
	cutting common soils hauting and														1
	removing upto 10 m away from								. 1				14.5		1.1
	the construction site. b. Upto 20 cm depth	sam	unskilled	സർ	0.18	70,00	12,60		1		1.1				
	5. Sub-grade preparation by				0.98					·			12.6		Manpewer
	cutting stone mixed common soil.				· ·		,			4.1		•			·
	including hautage and remeval			1.1										19 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -	
	unto 10 m from the construction							1997 - 1997 - 1997 1997 - 1997		1	I				
	c. stone 20 % to 40 % and 20 cm		unskilled	mf	0.36	70,00	25.20								
	ikep 6. Making subgrade by bringing	- 2U'L	MAN DR POINT OF				····						25.2		Manpower
	 Making subgrade by bringing soil and filling including levelling. 					. 1									
	and hautang up to 10 m de tance.					· · · ·									
	b. upto 20 cm depth.		unskilled	ndl	0,16	20.00	11.20						0.2		Mangower

(2/2)

B-224

Rate Analy

Description	Unit Q	uantity	Unit Price	Amoun
			(N.Rs)	(N.Rs)
-1 Excavation	(output:	20.0 m ³)		
1. Skilled Labourer	m³/hour	5.0	18.0	90.0
2. Unskilled Labourer	m ³ /hour	12.0	8.0	96.0
3. Excavator (90HP)	m ³ /hour	1.5	2,297.0	3,445.5
Total			1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	3,631.5
			Per m ³ :	181.6
-2 Backfill	(output:	10.0 m ³)	<u></u>	· :
1. Foreman	m ³ /hour	1.0	16.0	16.0
2. Skilled Labourer	m ³ /hour	4.0	18.0	72.0
3. Unskilled Labourer	m ³ /hour	20.0	8.0	160.0
	m ³ /hour	0.2	550.0	110.0
4. Pedestrian Roller	m ³ /hour	1.5	47.0	70.
5. Water on Site		1.5	47.0	428.
Total	. :		n	420.
		10.0	Per m ³ :	42,
t-3 Mass Concrete	(output:	10.0 m ³)	17.0	1.0
1. Foreman	m³/hour	1.0	16.0	16.
2. Skilled Labourer	m ³ /hour	2.0	18.0	36.
3. Unskilled Labourer	m³/hour	8.0	8.0	64.
4. Cement	m ³ /hour	2.5	10,213.0	25,532.
5. Concrete Mixer (20HP)	m ³ /hour	2.0	153.0	306.
6. Coarse Aggregate	m³/hour	8.9	245.0	2,180.
7. Load/haul Aggregate to site	m ³ /hour	· 8.9	156.0	1,388.
8. Extract/screen sand,load on truck		5.2	228.0	1,185.
9. Wash sand	m ³ /hour	5.2	160.0	832.
10. Load/haul sand to site	m ³ /hour	4.7	156.0	733.
11. Water on Site	m ³ /hour	1.2	47.0	56.
Ti. water of Site		1.2	11.0	32,330.
10(4)			Per m ³ :	3,233.
R-4 Reinforced Concrete	(output:	8.0 m ³)		
1. Foreman	m ³ /hour	2.0	16.0	32.
2. Skilled Labourer	m ³ /hour	4,0	18.0	72.
	m ³ /hour	18.0	8.0	144.
3. Unskilled Labourer	m ³ /hour	3.0	10,213.0	30,639.
4. Cement			153.0	306.
5. Concrete Mixer (20HP)	m ³ /hour	2.0		
6. Coarse Aggregate	m ³ /hour	6.8	245.0	1,666.
7. Load/haul Aggregate to site	m³/hour	6.8	156.0	1,060.
8. Extract/screen sand, load on truck		4.5	258.0	1,161.
9. Haul sand	m³/hour	4.5	2,271.0	10,219.
10. Concrete Vibrator	m³/hour	1.0	108.0	108.
11. Water on Site	m³/hour	1.2	47.0	56.
Total	l j			45,464.
			Per m':	5,683.
R-5 Rubble Masonary	(output:	10.0 m ³)	i .	
1. Foreman	m³/hour	1.0	16.0	16.
2, Skilled Labourer	m³/hour	15.0	18.0	270.
3. Unskilled Labourer	m³/hour	42.0	8.0	336.
4. Cement	m³/hour	1.9	10,213.0	19,404.
5. Sand	m³/hour	4.2	229.0	961.
6. Haul sand	m ³ /hour	4.2	398.0	1,671.
7. Extraction Stones	m ³ /hour	11.0	162.0	1,782
8. Haul Stones	m ³ /hour	11.0	398.0	4,378.
	m ³ /hour	0.1	47.0	4.
	1117180111	V.1	47.0	· •••
9. Water on Site Total				28,824.

APP. 7.5-12 Construction Works Rate Analysis in Machinery Use

(1/1)

Machin Rate

Part B

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Appendix 8.2 Economic and Financial Evaluation

			· ·			(L	Init: GW
Station	1995	1996	1997	1998	1999	2000	2001
Marsyangdi	430	430	430	430	430	430	430
Kulckhani I	165	165	165	165	165	165	165
Kulckhani II	65	65	65	65	65	65	65
Frisuli	139	157	160	160	160	160	160
Devighat	96	109	109	109	109	109	109
Sunkoshi	50	50	50	50	50	50	50
Gandak	50	50	50	50	50	50	50
Small Hydro	20	20	20	20	20	20	20
Andhikhola	20	20	20	20	20	20	20
lhimruk	78	78	78	78	78	78	78
Khimti Khola						350	350
Upper Bhote Koshi	· .		a.				244
Puwa				44	44	44	44
Chilime				136	136	136	136
Modi					91	91	-91
Kaligandaki - A							840
Total	1,113	1,144	1,147	1,327	1,418	1,768	2,608
NEA forecast		1,272	1,392	1,530	1,688	1,860	2,047
Energy Balance	Deficit	Deficit	Deficit	Deficit	Deficit	Deficit	Surptu

App. 8.2.2-1 Projected Energy Generation Capability of Power Stations

Source: "Report on Water Availability for Trisuli Irrigation Project from Trisuli Hydro Project", CEMAT, February 1997.

Note:

The gap between supply and demand is within manageable limit of 20%, which can be met by import or generation by stand by diesel generators.

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Price Structure	Unit	Rice Paddy	Maize	Wheat	Urea	DAP	MOP
Not Trade Status		Import	Import	Import	Import	Import	Insport
2005 Projected International Market Price (Constant 1926)	US\$'mt	297	101	162	156	177	114
Quality Factor	%	90	90	95	100	100	100
justed FOB	US\$'mt	267	91	154	156	177	. 114
reight & Insurance	US\$'mt	30	40	40	30	40	35
IF Price (Cakutta)	US\$'mt	297	131	194	1\$6	217	: 149
text Handling Charges	US\$'mi	7	7	7	7	7	·. 7
ransport from Calcutta to Nepal Border	US\$'nx	31	31	31	31	31	31
IF Price at Birgunj	US\$ mt	335	169	232	224	255	187
Equivalent to Rs. (US\$1 - Rs. 56.7)	Rs/mt	18,995	9,582	13,154	12,703	14,459	10,603
Fransport Handling Costs from Nepal Border to Wholesale Market	Rs'mi	1,710	862	1,184	1,143	1,301	954
Vholesale Price	Rs/mt	20,705	10,444	14,338	13,844	15,760	11,557
Tansport Handling Costs from Wholesale Market to Farmgate	Rs/m	-1,863	-940	-1,290	1,246	1,418	1,040
Yice in Project Area	R√na	18,842	9,504	13,048	15,090	17,178	12,597
rocessing Ratio	%	65	100	90	100	100	·: 100
Processing Cost	Rsinit	- 450	0	· · · · 0	0	0	0
By-product Value from Processing	Rstat	689	0	0	0	0	0
conomic Faringate Price (2005 Constant)	Rs/m t	12,486	9,504	11,743	15,090	17,178	12,597
inancial Fanngate Price (1996)	Rs/mt	9,250	8,500	7,000	6,950	17,100	8,700

App.8.2.2-2 Price Structures of Traded Commodities

data, reference was made to "Commodity Markets and the Developing Countries", November 1994.

2) Agricultural commodities and inputs

- Rice: Thai 5% broken, FOB Bangkok

- Maize: US No 2 Yellow, FOB Gulf ports

- Wheat: Canadian No.1 Western Red Spring, FOB St. Lawrence

- Urea: Bagged, FOB NW Europe

- DAP: Bulk, FOB US Gulf

- MOP: Bulk, FOB Vancouver

3) Transport handling costs (Nepal border - wholesale market) were calculated at 10% of CIF at Birgunj, multiplied by SCF of 0.9. 4) Transport handling costs (wholesale market - farmgate) were calculated at 10% of wholesale prices multiplied by SCF of 0.9. 5) Processing cost and by-product value were multiplied by SCF of 0.9.

Item	Unit	Financial Cost	Conversion Factor	Economic Cost
Paddy	Rs/kg	9.25	1.35	12.50
Upland Paddy	Rs/kg	8.00	1.35	10.80
Maize	Rs∕kg	8.50	1.12	9.50
Millet	Rs/kg	6.75	0.90	6.10
Wheat	Rs⁄kg	7.00	1.67	11.70
Niger	Rs/kg	20.00	0.90	18.00
Vegetables	Rs/kg	5.25	0.90	4.73
Bran	Rs/kg	7.50	0.90	6.75
Chaff	Rs/kg	0.75	0.90	0.68
Urea	Rs/kg	6.95	2.17	15.10
DAP	Rs/kg	17.10	1.006	17.20
мор	Rs/kg	8.70	1.45	12.60
Organic Manure	Rs/kg	0.80	0.90	0.72
Agro-chemical	Rs/100ml	150.00	0.90	135.00
Draft Animals	Rs/ad	100.00	0.90	90.0
Farm Labour	Rs/md	40.00	0.675	27.00

App.8.2.2-3 Price Summary of Agricultural Commodities and Inputs

Note: Vegetables comprise potato, cabbage, radish and beans.

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App. 3.2.3-1 Conversion Factor of Construction Cost App. 3.2.3-1 Conversion Factor of Construction Cost Traded Cost State Labour Construction Cost Traded Cost State Labour Construction Cost Conversion Factor of Construction Cost Wells 2.1 (6) (7) (9) (13) (7) Wells 2.1 (6) (7) (7) (13) (70) Mail fieldines 56.7 (7) (7) (13) (70) (10) More Cost 1.2 (7) (7) (13) (70) (10) Mail fieldines 1.2 (7) (2) (13) (70) (10) Mail fieldines 1.2 (13) (13) (10) (10) (10) Construction Cost 1.3 (13) (13) (10) (10) (10) Construction Cost 1.3 (13) (13) (10) (10) (10) Construction Cost 1.3 (13) (13) (10)			(1) x (2)	1		0.018		0.482		0.028		0.114	÷	0.092	•	0.065		0.004		0.056		0.859	·				-								
App. 8.2.3-1 Conversion Factor of Construction Cost Traded Cool Still of Labour Unstilled Labour Non-maker Royant (1) Proportion (%) 10° 00° 0014 0° Modes 21 0(5) 00° 0014 0° Modes 21 0(5) 00° 0014 0° Modes 21 0(5) 00° 0014 0° Modes 21 00° 00° 00° 0° 0° Modes 21 00° 00° 0° <td< th=""><th></th><th>I-WISC</th><th>1</th><th> </th><th>÷.</th><th>4</th><th>ŝ</th><th>S</th><th>â</th><th></th><th></th><th></th><th></th><th>. 10</th><th></th><th></th><th></th><th>Ś</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></td<>		I-WISC	1	 	÷.	4	ŝ	S	â					. 10				Ś	~			•••													
App. 8.2.3-1 Conversion Factor of Construction Cost App. 8.2.3-1 Construction Cost Transfer Ecolor Transfer Ecolor Transfer Payment (1) Proportion (%) 10° (1) Works 2.1 (%)		(2) Item	Conversion		5	0.8	5	0.8	U S S	0.8	00	0.8	01)	0.8	(10	0.8	100 10	0.7	001	0.9(1	•			·									
App. 8.2.3-1 Conversion Factor of Construction Cost App. 8.2.3-1 Conversion Factor of Construction Cost Traded Good Stilled Labour Unskilled Labour Non-maded Good Works 2.1 (6) (7) (9) (1) Model 2.1 (6) (7) (9) (1) Model 2.1 (7) (9) (9) (1) Model 2.2 (10) (10) (10) (1) (1) Construction Cost (10) (10) (1) (10) (1) Construction Cost (10) (1) (10) (1) (2) (3) Construction Cost (10) (1) (2) (3) (3) Construction Cost (1) <td></td> <td>yment</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td>-</td> <td>:</td> <td>:</td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td>. :</td> <td></td> <td></td> <td></td> <td>- - </td> <td>-</td> <td></td> <td>:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>· .</td> <td></td> <td>-;</td> <td></td>		yment						•		-	:	:		•					. :				- - 	-		:						· .		-;	
App. 8.2.3-1 Conversion Factor of Construction Cost Traded Cood Skilted Labour Unskilted Labour Non-maded Coods (1) Proportion (%) 1.0* 0.0* 0.05* 0.0* Works 2.1 (%) (7) (7) (7) (7) Mail Facilities 56.7 7.22 0.03 0.05 0.05 0.05 Modes 2.1 (6) (7)		ransfer Pa	*0		(c1) ²	0	(12)	0	(9) (9)	0	6	•	3	0.0	(12)	0	(15)	0	(01)	0		•	- - - - -			•				;				:	
App. 8.2.3-1 Conversion Factor of Const App. 8.2.3-1 Conversion Factor of Const Traded Good Skilled Labour (1) Proportion (%) 1.0* 0.9* 0.657* Works 2.1 (6) 0.9* 0.657* Works 2.1 (6) 0.0 0.05 0.05 Mail Facilities 3.2 (1) 0.9* 0.657* 0.05 Mores 2.1 (6) 0.1 0.0 0.657* 0.05 0.05 Mail Facilities 3.2 (31) (3) (3) 0.05 0						· ·		•						•		:-	· · ·		:				· · ·	•	•			:	. :	-	•		·		
App. 8.2.3-1 Conversion Factor of Const App. 8.2.3-1 Conversion Factor of Const Traded Good Skilled Labour (1) Proportion (%) 1.0* 0.9* 0.657* Works 2.1 (6) 0.9* 0.657* Works 2.1 (6) 0.0 0.05 0.05 Mail Facilities 3.2 (1) 0.9* 0.657* 0.05 Mores 2.1 (6) 0.1 0.0 0.657* 0.05 0.05 Mail Facilities 3.2 (31) (3) (3) 0.05 0	ion Cost	-traded G	0.9*	,	(01)	0.14	6	0.06	(52)	0.47	(£)	0.03	(26)	-0.50	(41)	0.13	(89)	0.61	() ()	0		•	1 						•	•	•	•	•••	•	
App. 8.2.3-1 Works 2.1 (65) Works 2.1 (65) Works 2.1 (65) anal Facilities 56.7 (72) anal Facilities 56.7 (72) anal Facilities 1.0* 0.72 of Control Tank 3.2 (31) of Control Tank 3.2 (31) of Construction Cost 0.7 0.16 Construction Cost 0.6 (0) Total 1000 6.2 (0) Total 1000 0.66 (0) Total 1000 0.66 (0) Total 1000 0.66 (0) Y indicates conversion factors. 0.5 0.90	- 5 .				-	•	•		.*	•		. •		•		:							1				:					•	:		
App. 8.2.3-1 Morks 2.1 Works 2.1 (1) Proportion (%) 1.0* Works 2.1 (5) 0.65 anal Facilities 56.7 (2) 0.72 of Control Tank 3.2 (1) 7.7 (2) 0.31 (2) 0.31 (3) 0.75 of Construction Cost 1.0.7 (10) 0.16 (10) 0.16 (11) 0.62 (2) 0.75 (2) 0.75 (10) 0.16 (10) 0.66 (10) 0.66 (10) 0.66 (2) 0.90 (3) 0.66 (10) 0.66 (10) 0.66 (10) 0.66 (10) 0.66 (10) 0.66 (10) 0.66 (10) 0.66 (10) 0.66 (10) 0.90 (10) 0.90 (10) 0.90 (10) 0.90 (10) 0.90 (10) 0.90 (10)	ctor of C	tilled Lab	0.675*		Ð Ş	0.03	6	0.05	(8)	0.05	(13)	0.09	(13)	0.09	(01)	0.07	(12)	0.08	6	0		•	• • • •												
App. 8.2.3-1 Works 2.1 Mail Facilities 56.7 App. 6.5 72 App. 6.5 0.75 Activities 1.0.7 App. 6.5 0.75 App. 6.5 0.75 App. 7.5 0.16 App. 7.7 0.16 App. 7.7 0.16 App. 7.7 0.62 App. 7.7 0.62 App. 7.7 0.62 App. 7.7 0.65 App. 7.7 0.66 App. 10.00	rsion Fa	ur Unsl													· · ·			•						•	,							- - -			
App. 8.2.3. App. 8.2.4. Works 1.0* Works 2.1 Works 2.1 Works 2.1 Works 2.1 Solution 3.2 Solution 3.3 Solution 3.4 Solution 3.5 Solution 3.4 Solution 3.5 Solution <td></td> <td>illed Labo</td> <td>*6'0</td> <td>Ę</td> <td>(7)</td> <td>0.02</td> <td>(C)</td> <td>0.02</td> <td>(C)</td> <td>0.03</td> <td>9</td> <td>0.02</td> <td>(12)</td> <td>0.11</td> <td>ି ପି</td> <td>0.02</td> <td>(2)</td> <td>0.04</td> <td>(<u>)</u></td> <td>0</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>• 7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		illed Labo	*6'0	Ę	(7)	0.02	(C)	0.02	(C)	0.03	9	0.02	(12)	0.11	ି ପି	0.02	(2)	0.04	(<u>)</u>	0	-								• 7						
Trade 1 Works 2.1 (1) Works 2.1 (2) anal Facilities 56.7 (2) anal Facilities 12.8 (2) cd Control Tank 3.2 (2) ded Construction Cost 10.7 (2) Total 100.0 (2) Total 100.0 (3) 1) Calcution is based on direct construction cost only. (3) 2) * indicates conversion factors. (3)	8	,															·					•							-	•	:	:	: :		
(1) Proportion (%) Works 2.1 Works 2.1 anal Facilities 56.7 ad Control Tank 3.2 ad Control Tank 3.2 Canal Facilities 10.7 Tuberel Facilities 12.8 n Level Facilities 10.7 Construction Cost 0.6 Total 100.0 Total 100.0 2) * indicates conversion factors. 2.2	Apr	Traded G	1.0*	(88)		0.65	(12)	0.72	(31)	0.31	(51)	0.75	(16)	0.16	(62)	0.62	0	o	(06)	0.00			aly.			N				·. :			-		
tern (1) Proporti ake Works 2.1 ake Works 2.1 in Canal Facilities 26.7 posed Control Tank 3.2 noch Canal Facilities 12.8 farm Level Facilities 12.8 farm Level Facilities 12.8 farm Level Facilities 12.8 farm Level Facilities 2.8 farm 2.8 farm Level Facilities 2.8 farm 2.8 farm 1.0 farm 2.8 farm 3.8 farm		ļ	on (%)															÷					ion cost o									•			
ttem (1) ake Works boosed Control Tank posed Control Tank much Canal Facilities -farm Level Facilities) Proporti	~	i		56.7		04 10		12.8		10.7		7.7	• •	0.6		6.2	•	0.61	2.25	construct					:						•	
ttem ake Works ake Works posed Control Tank posed Control Tank and Facilities -farm Level Facilities -farm Level Facilities rage Construction Cost rage Construction Cost ipment Owing Cost in Total total 2) * indicates conve 2) * indicates conve			U														· · ·		•				d on direc	rsion facto	•		•	•					· · ·	· · · ·	
ttem ake Works ake Works -farm Level Faci ange Construc rage Construc te: 1) Calcuti 2) * indice 2) * indice							litics		l Tank	:	cilities		acilitics	:	tion Cost	n An An	tion Cost		g Cost		oral		on is base	ates conve	•		· · ·	: : :		•	•		•		
terre a service a ser			-	Worke		. .	Canal Faci		ed Contro		Canal Fa	÷.,	n Level F		Construc		Construc		tent Owin		F		1) Calcut	2) * indic						•				•	
		· ·	Item	Tate	-		Main (Propos		Branch		09-60		Zone B	4	Storage		Equipa				Note:			·				:					

			(Unit: Rs.1,000
Iteni F	inancial Cost	Conversion Factor	Economic Cost
1) Construction Cost			
Direct Cost	451,773	0.859	388,073
Indirect Cost	135,000	0.9	121,500
Land Acquisition	2,259	0.9	2,033
Administration	500	0.9	450
Engineering Services	36,142	0.9	32,528
Physical Contingency	9,035	0.9	8,132
Price Contingency	63,471	0	0
Sub-toal	698,181		552,716
2) Cost for Program			
Training Program	500	0.9	450
Equipment for Water Management	1,020	0.9	918
Equipment for Training	750	0.9	675
Multipurpose Community Hall	1,220	0.9	1,098
Sub-total	3,490	•	3,141
Total	701,671	-	555,857

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App. 8.2.3-2 Breakdown of Project Cost

ltern	Case	Ist Year	2nd Year	Ard Year	4th Year	Sth Year	6th Year	7th Year	8th Year	9th Year	10-25th Years
Cropped Area (ha)											
								•			· · · ·
(1) Paddy	FW/O	212	212	212	212.	212	212	212	- 212 -	212	212
	FW	212	212	472	472	472	472	472	472	472	472
(2) Upland Paddy	FW/O	33	S.	£	11	53	33	33	33	33	33
•	ΡV	33	33	4	\$, 4	\$	\$	\$	46	\$
(3) Maize	FW/O	432	432	432	432	432	432.	432	432	432	432
-	Ϋ́	432	432	279	279	279	279	279	279	279	279
(4) Millet	FW/O	153	153	153	153	153	153	153	153	153	153
	FW	0	0	0	0	0	0	0	0	0	o
(5) Wheat	FW/O	6£	39	39	39	62	39	39	39	39	39
	Ϋ́	<u>.</u> 65	<u> 3</u> 9	\$	\$	243	243	243	243	243	243
(6) OFCs (Niger)	FW/O	177	17	171	171	171	11	177	177	177.	171
	FW	ò	ō	0	0	ò	0	0	Ö	0	0
(7) Vegetables	FW/O	0	0	0	0	0	•	0	0	0	•
	FW	0	235	783	783	1.233	1,233	1.233	1.233	1,233	1,23
Average Yield (kg/ha)											
			. •		·	· .			: : : .	:	
(1) Paddy	FW/O	2.400	2.400	2,400	2,400	2,400	2.400	2.400	2,400	2,400	2.40
	Μď	2,400	3.050	3,700	5,000	5,000	5,000	5.000	5.000	5.000	5,000
(2) Upland Paddy	FW/O	2.060	2,060	2,060	2.060	2,060	2,060	2.060	2.060	2.060	2,06
	Μ	2.060	2.545	3.030	4,000	4,000	4,000	4,000	4,000	4,000	4,00
(3) Maize	FW/O	2,080	2.080	2,080	2.080	2.080	2.080	2.080	2.080	2,080	2.08
· · ·	M	2.080	2.560	3,040	4,000	4,000	4,000	4,000	4,000	4,000	4.00
(4) Millet	FW/O	1.880	1.880	1,880	1.880	1.880	1,880	1.880	1,880	1.880	1,88
	ΡW	0	Ö	0	0	0	0	0	0	0	0
(5) Wheat	FW/O	1.360	1,360	1.360	1.360	1,360	1,360	1,360	1,360	1,360	1,36
	Ρ	1.360	2.020	2.680	4,000	4,000	4,000	4,000	4,000	4,000	8
(6) OFCs (Niger)	FW/O	97 97	44 64	077	4	44 0	440	440	3 1	44 014	440
	2	0	0	0	0	0	0	0	0	0	0
(7) Vegetables	FW/O	0	0	0	0	0	0	0	0	0	Ò
	ALC: N	<									

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App.8.2.4-1 Annual Changes in Cropped Area and Vield (9 and 12 Months Irrigation)

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App.S.2.4.2 Crop Budget of Agricultural Products (Future Without Project Case)

						•					C Prove C					•				(140)
				Corch	Unit Phee/Conve	Version Factor			raddy		Ann's nimido	Appe	STIEIN	2	WILLE		TEOU M		ACCS (14) Set /	1.72
	Price for	÷		Upland			~ .	OFC.	:	۰.				:						
Item	Evaluation	Unit	t Pady	Paddy	Maize .	Millet V	Wheat C	(Niger) A	Amount	Value A	Amount	Value	Amount ' Value	Value	Amount Value		Amount	Value	Amount	Value
						•											•	•		•
Value of Output	- 1. -				•		· .									1	-			
(1) Yield	•	kg/ha	•				•	•	8 7 7	•	2:060	•	2.080	i t	1,880		1.360		đ	•
(2) Production value	: . (L.	Rske	9.25	8.8	8.50	6.75	7.00	20.00	•	22:200	!	16,480	•	17,680	•	12.690	•	9.520	•.	8,800
	់ ស	Rskg	12.50	10.80	9.50	6.10	11.70	18.00	:	30,000	•	22,248	•	19,760	:	11,468		15.912	٠	7.920
(3) Bv-product vlaue		• •				•	:	:				:	•	: .			•		:	
(a) Bran	در	Rske	7.50	7.50		:	:	•	192	0440	165	1,238	•	•.	•		•	ł	•	•
		Defe	10 0	á		•	·		- 18	308	165	1.1.4	i		•	•	•	•	,	•
10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	ມ ເມ	2	(CO)	2 T C		•	• •	•	i č	202	1 54 1	UP.	•	;				,	,	•
(o)					•	•	•				} \$. '		:					:
	ш	Rsks	(6.0)	(6.0)	•		٠	•	87.0	ន្តំ	C 4	2	•		• :		•		•	
Total	ы.	Ryha	•	•	:	•		•	1	24,036	•	20'81 277 cc		0.990		0.00.11	•	5 010 S	• •	7 000
	4	KSNA	•			•				700'10	, 	000*77	•	20, 21						
•		•						:			•	-	•		•		•			
Input Costs		•									:.				ін ₁					
(i) Seeds	į .,	Rukg	11.38	0.0	9,85			20.00	65	9	8	88	56	126	2	8	2	ĝ	R	₿ ;
	ເມ	Rskg	(0.9)	(6.0)	(6.0)	(0,9)	(6.0)	(0.9)	65	999	8	540	26	กึ	ខ្ល	ž	120	\$10	ຊ	995
(2) Fertilizer			•							· · .	: .	•		• .						
(a) Urea	¢.	Rake	6.95	6.95	6.95	6.95	6.95	6.95	081	1.251	50	1.390	300	1,390	. 051	1,043	2 0	1,390	•	
	ш	Ruke	15.10	15.10	15.10	15.10	15.10	15.10	180	2.718	8	3.020	8	020	150	2,265.	8	3,020	•	,
(A) DAP	ц.	Ruke	17.10	17.10	17.10	17.10	17.10	17.10	8	2.736	•	•	8	1,710	•	•	8	1,710	٠	
	р і	Rs/kg	17.20	17.20	17.20	17.20	17.20	17.20	<u>8</u>	2,752			18	1,720	•	•	8	1,720		٠
(c) Organic Manure	ţ۲.	Ru/kg	0.30	0.30	0.0	•	020		3.000	8	6,000	1,800	000°C	8	•		3,000	86	•	•
	Ш	Rykg	(0.9)	(0,9)	(6:0)	,	(0.9)	•	3,000	018	6,000	1,620	3.000	810	: • •	•	3.000	810	•	•
(3) Asm-chemical		, :					•	÷		•					•		÷ .			
Intertionides and	¢.	R < 100mi	150.00	00.051	•			t	150	\$25	350	2	•				-	•	•	
Fungerides	μ	Rs/100ml	(0.0)	(6.0)	, •		:		350	473	350	473	•	•					•	3 - • *
(4) Draft Animals	(L.	R.J.ad	00.001	00.001	100.00		100.00		28	2,800	20	2,000	- 4 2	2,400	•	:		1,400	•	t L
	ω	Rivad	(6.0)	(6.0)	(6.0)		(0.9)	:	ส	2.520	ล	1.800	24	2,160	•	•	14	:260	•	•
(5) Labour		•	• .	• .•								1				: : : : :	- - - - 	1	1	•
(a) Family Labour	ξL,	Rs/md	8.9 1	40.00	40.00	40.00	40.09	40:00	8	6,000	150	6,000	8	4,000	120	4,800	8	3,200	8	- 4,000
	ധ	Rs/md	(0.675)	(0.675) (0.675)			(0.675) ((0.675)	150	4,050	8	4,050	8	2,700	22		: 8	2,160	8	70
(b) Hired Labour	υ.,	Rymd	60.0 3	40.00	_	40.04	40.00	40.00	8	3,600	33	1,400	ŝ	2.000	8	2.400	30	1,200	2	80%
	ш	Rvmd	(0.675)	(0.675)	(0.675) ((0.675) ((0.675) ((0.675)	8	2,430	33	945	50	1.350	\$	·	8	810	ล	<u></u>
(6) Others	į1.	Rvha	•	,	•	•	•	•	•	575	j.	8	•	8	•	500	•	200	•	8
	ω	Rs/ha	(6.0)	(0.9)	(6.0)	(6.0)	(6.0)	(6.0)		518	:	540		540		180	•	130	•	180
Totai	<u>i</u> z.,	Rsha	•	•		•		•	•	19,127	•	14315	•	13,256	•	8,603	•	10,900	•	5,400
	с Э	Rs/ha	,	,	•	7	- 1	 	۰. ۱	16.937		12.983	-	12.530		7.449		10,770		3.780
Net Value	В	Reha	· .							14.715		10,680		7,230		4,019		5.142		4,140
Net Crop Income	ŭ.	Rs/ha							. * .	606'01		9,743		8.424	N S THE THE	3.887	•	1.820	 1	7.400
•														:						

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App.8.2.4-4

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Net Incremental Value of Agricultural Commodities at Full Development (9 Months Irrigation)

ltem	Price of Evaluation	Net Value (Rs/ha)	Cropped Area (ha)	Total Net Value (Rs)
1. FW/O (1) Paddy	E	14,715	212.22	3,122,817
(2) Upland Paddy	E	10,680	33.36	356,285
(3) Maize	В	7,230	432.27	3,125,312
(4) Millet	B	4,019	153.19	615,671
(5) Wheat	Е	5,142	38.52	198,070
(6) OFCs (Niger)	E	4,140	176.44	730,462
Total	B		1,046.00	8,148,617
2. FW (1) Paddy	В	47,693	472.18	22,519,681
(2) Upland Paddy	E	30,157	45,50	1,372,144
(3) Maize	Е	22,219	279.45	6,209,100
(4) Wheat	В	33,199	64.25	2,133,036
(5) Vegetables	В	54,847	782.52	42,918,874
Total	E B	. • -	1,643.90	75,152,835
3. Net Incremental Value	Е		597.90	67,004,218

Note: 1) E represents economic prices.

2) The proportion of cabbage, french beans, radish, and potato cultivation

to the total cropped area is assumed at 50%, 30%, 10%, and 10%, respectively.

Item	Price of Evaluation	Net Value (Rs/ha)	Cropped Area (ha)	Total Net Value (Rs)
1. FW/O	• • • • • • • • • • • • • • • • • • •			
(1) Paddy	Е	14,715	212.22	3,122,817
(2) Upland Paddy	E	10,680	33.36	356,285
(3) Maize		7,230	432.27	3,125,312
(4) Millet	Е	4,019	153.19	615,671
(5) Wheat	E	5,142	38.52	198,070
(6) OFCs (Niger)	E	4,140	176.44	730,462
Total	B		1,046.00	8,148,617
2. FW				
(1) Paddy	Е	47,693	472.18	22,519,681
(2) Upland Paddy	È	30,157	45.50	1,372,144
(3) Maize	Е	22,219	279.45	6,209,100
(4) Wheat	E	33,199	243.13	8,071,673
(5) Vegetables	В	54,847	1,232.84	67,617,575
Total	Е	- .	2,273.10	105,790,173
3. Net Incremental Value	Е		1,227.10	97,641,556

App.8.2.4-5Net Incremental Value of Agricultural Commodities
at Full Development (12 Months Irrigation)

Note: 1) E represents economic prices.

2) The proportion of cabbage, french beans, radish, and potato cultivation to the total cropped area is assumed at 50%, 30%, 10%, and 10%, respectively.

					<u> </u>	(Unit: Rs.1,0
		······································	ost			
Year	Construction	Program	O&M	Total	Benefit	Balance
1	30,572	942	540	32,054	0	-32,054
2	349,078	1,257	495	350,830	6,409	-344,421
3	176,207	942	2,778	179,927	40,564	-139,363
4	0	0	3,349	3,349	64,779	61,430
5	0	0	3,349	3,349	97,642	94,293
6	0	0	3,349	3,349	97,642	94,293
: 7	0	0	3,349	3,349	97,642	94,293
8	0	0	3,349	3,349	95,416	92,067
9		0	3,349	3,349	97,642	94,293
10	0	0	3,349	3,349	97,642	94,293
11	0	0	3,349	3,349	97,642	94,293
12	0	0	3,349	3,349	95,416	92,067
13	0	0	3,349	3,349	97,642	94,293
14	0	0	3,349	3,349	97,642	94,293
15	0	0	3,349	3,349	97,642	94,293
16	0	0	3,349	3,349	95,416	92,067
17	0	0	3,349	3,349	97,642	94,293
18	0.	0 ° °	3,349	3,349	97,642	94,293
19	0	0	3,349	3,349	97,642	94,293
20	0	0	3,349	3,349	95,416	92,067
21	0	0	3,349	3,349	97,642	94,293
22	0	0	3,349	3,349	97,642	94,293
23	0	0	3,349	3,349	97,642	94,293
24	0	0	3,349	3,349	95,416	92,067
25	0	0	3,349	3,349	97,642	94,293
*						

App. 8.2.5-1 Flow of Economic Project Cost and Benefit

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I.

App.8.2.5-2 Economic Profitability

Year	Cost	D.F.	Present Worth	Beaefits	D.F.	Present Worth
· ' .		10%			108	
1 1	32,054	1.000	32,054	0	1.000	0
2	350,830	0.909	318,904	6.409	0.909	5,826
3	179,927	0.826	148.620	40.564	0.826	33,506
4	3,349	0.751	2,515	64,779	0.751	48,649
5	3,349	0.683	2,287	97,642	0.683	66,689
. 6	3,349	0.621	2,080	97,642	0.621	60,636
7	3,349	0.564	1.889	97,642	0.564	55,070
8	3,349	0.513	1 718	95,416	0.513	48,948
9	3,349	0.467	1,554	97,642	0.467	45,599
10	3,349	0.424	1,420	97,642	0.424	41,400
11	3,349	0.385	1,293	97,642	0.385	37,690
12	3,349	0,350	1,172	95,416	0.350	33, 396
13	3,349	0.319	1,068	97,642	0.319	31,148
14	3,349	0.290	971	97.642	0.290	28, 316
15	3, 349	0.263	881	97,642	0.263	25,680
16	3,349	0.239	800	95,416	0.239	22,804
17	3,349	0.218	730	97,642	0.218	21,286
18	3,349	0.198	663	97,642	0.198	19, 333
19	3,349	0.180	603	97,642	0.180	17,576
20	3,349	0.164	549	95,416	0.164	15,648
21	3,349	0.149	499	97,642	0.149	14,549
22	3,349	0.135	452	97,642	0.135	13,182
23	3,349	0.123	412	97.642	0.123	12,010
24	3,349	0.112	375	95,416	0.112	10,687
25	3,349	0.102	342	97,642	0.102	9,959
	(Total)		523,861			719,587
	and the state of the second					

*** Net Present Value and Benefit-Cost Ratio ***

Net Fresent Value at: 10% 195,726

Benefit-Cost Ratio at: 10% 1.37

*** Internal Rate of Return ***

1

			:			
Year	Incremental	D.F.	Present Worth	D.F.	Present Worth	-
	Benefits	14%		15%		
				1 A 1	÷	· .
1	-32,054	1.000	-32,054	1.000	-32,054	:
5	-344,421	0.877	-302,058	0.870	-299,647	
5	-139,363	0.769	-107,171	0.756	-105, 359	
	61,430	0.675	41,465	0.658	40,420	
5	94,293	0.592	55,821	0.572	53,935	
2	94,293	0.519	48,938	0.497	46,863	
2	94,293	0.456	42,997	0.432	40,734	
<i>'</i>	92,067	0.400	36,826	0.376	34,617	
8 9	94,293	0.351	33,096		30,833	
10	94,293	0.308	29,042	0.284	26.779	
10	94,293	0.270	25,459	0.247	23,290	
12	92,067	0.237	21,819	0.215	19,794	
	94,293	0.208	19,612	0.187	17,632	
13		0.182	17,161	0.163	15,369	1.1
14	94,293	0.160	15,086	0.141	13,295	N
15	94,293	0.140	12,889	0.123	11,324	6 F. 1
16	92,067	0.123	11,598	0.107	10,089	
17	94,293	0.108	10,183	0.093	8,769	
18	94,293		8,957	0.081	7,637	1
19	94, 293	0.095		0.070		
20	92,067	0.083	7,641		6,444 5.751	
21	94,293	0.073	6,883	0.061		
22	94,293	0.064	6,034	0.053	4,997	
23	94,293	0.056	5,280	0.046	4,337	· · · .
24	92,067	0.049	4,511	0.040	3,682	
25	94,293	0.043	4,054	0.035	3,300	
	(Total)		24,069		-7,169	

(Total)

Internal Rate of Return : 14.77

Per Capital	22		2.74 9.6		
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EW (9.) Cross Income Per Capita P	6	2		12.25 12.25	
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App. 8.2.7 Unit Return Net Income					4
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App. 8.2.7-1 Irrigation Block-wise-Crop Incomes (24)

ation Crops	x Cropped Area		Unit Roum Gross Income		Grow Income		Income Unit Return Net Income	Net Income		Net Income	11111
Plack			(Rv.) (000)	Per Household	Per Capita	Per Capita	(R+ 1.000)	(Rul.000)	Per Houwhold	Per Capita Per Capita	Capita
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Total			3078	113,66	14.63	13:35	1 H H	2474	70,69	12	×
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Total	222.9			16.60	6.4.5	5,X7			26.5	5 4,2X	0611
V Paddy	21,20	2 50.075	3261				14, 165	1122			
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Item		Unit	Marginal	Small	Medium	Large	Average
(1) Incremental Net Income							
- 9 Months Condition		Rs/year	8,981	27,280	57,096	121,028	39,175
- 12 Months Condition		Rs/year	13,199	40,407	84,607	177,360	57,399
(2) O & M Cost Borne by Ben	eficiaries			1. S. S.			
1) Gravity Irrigation				: :			
- 9 Months Condition	· · ·	Rs/year	120	370	780	1,600	524
-12 Months Condition	ана сала 1919 - Сала Сала Сала Сала Сала Сала Сала Са	Rs/year	150	463	975	2,000	655
2) Pump Irrigation							
- 9 Months Condition		Rs/year	780	2,405	5,070	10,400	3,406
- 12 Months Condition		Rs/year	1,080	3,330	7,020	14,400	4,716
(2)/(1)							
1) Gravity Irrigation						* .	
- 9 Months Condition		%	1.3	1.4	1.4	1.3	1.3
-12 Months Condition		%	1.1	1.1	1.2	1.1	1.1
2) Pump Irrigation		1	an the tag	4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			
- 9 Months Condition		%	8.7	8.8	8.9	8.6	8.7
- 12 Months Condition		%	8.2	8.2	8.3	8.1	8.2

App. 8.2.8-1 O & M Cost Payment Capacity

App. 8.2.8-2 Capital Cost Payment Capacity

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Item	Unit	Marginal	Small	Medium	Large	Average
(1)Incremental Net Income				· .		
1)Gravity Irrigation			14 1		. *	
-9 Months Condition	Rs/year	8,861	26,910	56,316	119,428	38,651
-12 Months Condition	Rs/year	13,049	39,944	83,632	175,360	56,744
2)Pump Irrigation						
-9 Months Condition	Rs/year	8,201	24,875	52,026	-110,628	35,769
-12 Months Condition	Rs/year	12,119	37,077	77,587	162,960	52,683
(2)Capital Cost Payment	Rs/year	7,867	24,257	51,136	104,894	34,353
-Labour (2 years), or	md/2 years	112	344	731	1,498	491
-Loan (20 years at 5%)	Rs/year	631	1,946	4,103	8,417	2,757
(3)Repayment of Loan (2)/(1)						
1)Gravity Irrigation		4				
-9 Months Condition	%	7.1	7.2	7.3	7.0	7.1
-12 Months Condition	%	4.8	4.9	4.9	4.8	4.9
2)Pump Irrigation		· · .	: · ·			
-9 Months Condition	%	7.7	7.8	7.9	7.6	7.7
-12 Months Condition	<i>%</i>	5.2	5.2	5,3	5.2	5.2

Note: 1) The net farm income is calculated subtracting production cost and O & M cost from gross farm income.

2) The annual capital cost payment cosisting of sum of the principal and interest is calculated based on twenty year repayment period at 5% interest rate.

1 - E - E - E - E - E - E - E - E - E -	FW/O	FW (9	FW (9 Months Irrigation) FW (12 Mont				
Crops	Input Volume	- Increment		Incremental Income	Input Volume	Incrément	Incremental Income
	(mt)	(mt)	(mt)	(Rs.1,000)	(mt)	(mt)	(Rs.1,000)
Paddy	13.8	26.0	12.2	38.2	26.0	12.2	38.2
Upland Paddy	1.5	2.5	1.0	3.5	2.5	1.0	3.5
Maize	11.3	5.6	-57	-1.2	5.6	-5.7	-1.2
Millet	3.0	0	-3.0	-2.1	0	-3.0	-2.1
Wheat	4.6	6.4	1.8	6.4	24.3	19.7	70.0
OFCs (Niger)	3.5	0	-3.5	-6.3	0	-3,5	6.3
Vegetables	0	978.9	978.9	6,313.9	1,542.3	1,542.3	9,947.8
Total	37.7	1,019.4	981.7	6,352.4	1,600.7	1,563.0	10,049.9

App. 8.2.9-1 Incremental Income of Seed Sales Outlets

App. 8.2.9-2 Incremental Income of Fertilizer Sales Outlets

E.

	FW/O	FW (9 Months Inig	ation)	FW (12 Months Inigation)				
Crops	Input Volume	Input Volume	Increment	Incremental Income	Input Volume	Increment	Incremental Income		
4	(mt)	(mt)	(mt)	(Rs.1,000)	(m)	(mt)	(Rs.1,000)		
Paddy	72.2	141.6	69.4	16.8	141.6	69.4	16.8		
Upland Paddy	6.7	13.7	7.0	2.5	13,7	7.0	2.5		
Маілс	129.6	83.8	-45.8	-12.7	83.8	-45.8	-12.7		
Millet	23.0	0	-23.0	-4.5	0	23.0	-4.5		
Wheat	11.5	19.3	7,8	2.1	72.9	61.4	16.5		
OFCs (Niger)	0	0	0	0	0	0	0		
Vegetables	0	254.3	254.3	73.5	400.7	400.7	115.8		
Total	243.0	512.7	269.7	77.7	712.7	469.7	134.4		

App. 8.2.9-3 Incremental Income of Agro-chemical Sales Outlets

Сгоря	I·W/O	FW (9 Months Iniga	ation)	FW (12 Months Irrigation)			
	Input Volume	Input Volume	Increment Increm		Input Volume	Increment	Incremental Income	
	(liter)	(mt)	(mt)	(Rs.1,000)	(mi)	(mt)	(Rs.1,000)	
Paddy	74.3	165.3	91.0	7.7	165.3	91.0	7.7	
Upland Paddy	11.7	15.9	4.2	0.4	15.9	4.2	0.4	
Maize	0	97,8	97.8	8.3	97.8	97,8	8.3	
Millet	0	0	0	0	0	0	0	
Wheat	0 .	22.5	22.5	1.9	85.1	85.1	7.2	
OFCs (Niger)	0	0	0	0	0	0	0	
Vegetables	0	1,226.2	1,226.2	104.2	1,931.9	1,931.9	164.2	
Total	86.0	1,527.7	1,441.7	122.5	2,296.0	2,210.0	187.8	

	F/W (9 Mont	hs Irrigation)	F/W (12 Months Irrigation)			
Crops	Kathmandu Markets (mt)	Incremental Income (Rs.1,000)	Kathmandu Markets (mt)	Incremental Income (Rs.1,000)		
Paddy	428	428	487	487		
Maize	94	47	231	116		
Wheat	54	54	439	439		
Total	576	529	1,157	1,042		
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App.8.2.9-4 Incremental Income of Cereal Collectors

App.8.2.9-5 Incremental Income of Millers

	FW (9 Months Irrigation)		In	cremental Inco	one	FW (12 Mc	ooths Irrigation)	igation) Incremental Income			
Crops	Local Markets	Kathmandu Markets		Kathmandu Markets	Total	Local Markets	Kathmindu Markets	Local Markets	Kathmandu Markets	Total	
	(nit)	(mt)	(Rs.1,000)	(Rs.1,000)	(Rs.1,000)	(nx)	(nit)	(Rs.1,000)	(Rs.1,000)	(Rs.1,000)	
Paddy	497.0	428.0	248.5	214.0	462.5	497.0	487.0	248.5	243.5	492.0	
Maize	191.0	94.0	191.0	94.0	285.0	191.0	231.0	191.0	231.0	422.0	
Wheat	129.0	54.0	129.0	54.0	183.0	129.0	439.0	129.0	439.0	568.0	
Total	817.0	576.0	568.5	362.0	930.5	817.0	1,157.0	568.5	913.5	1,482.0	

App. 8.2.9-6 Incremental Income of Agricultural Wage Laborers

	FW/O	FW (9 Months Irr	igation)	FW (12 Months Irrigation)			
Crops	Input Volume (md)	Input Volume (md)	Increment (md)	Incremental Income (Rs.1,000)	Input Volume (md)	Increment (mi)	Incremental Income (Rs.1,000)	
Paddy	31,835	70,828	38,993	1,560	70,828	38,993	1,560	
Upland Paddy	5,006	6,826	1,820	73	6,826	1,820	73	
Maize	43,227	27,945	-15,282	-611	27,945	-15,282	-611	
Millet	18,383	Ó	-18,383	-735	0	-18,383	-735	
Wheat	3,082	5,140	2,058	82	19,451	16,369	655	
OFCs (Niger)	17,644	0	-17.644	-706	· :0	-17,644	-706	
Vegetables	0	187,804	187,804	7,512	295,882	295,882	11,835	
Total	119,177	298,543	179,366	7,175	420,932	301,755	12,071	