

DETAILED COST ESTIMATES

A. Table of Contents

Introduction	1
Table 1: Summary of costs by Component	2
Table 2: Summary of costs by Financier (Including Phase 1 carry-over)	3
Table 3: Summary of Costs by Financier (Supplementary loan only)	4
Table 4: Project Components by Year (including contingencies)	5
Table 5: Detailed Cost Table: Project Management	6
Table 6: Detailed Cost Table: Consulting Services	7
Table 7: Detailed Cost Table: OSDP	8
Table 8: Detailed Cost Table: Resettlement	9
Table 9: Detailed Cost Table: Environmental Management (supplementary)	9
Table 10: Detailed Cost Table: Environmental Management (carry over from phase 1)	10
Table 11: Detailed Cost Table: Duc Hoa Irrigation System	11
Table 12: Detailed Cost Table: Tan Bien Irrigation System	12
Table 13: Summary of costs by Financier (Phase 1 and Phase 2)	13

B. Introduction

1. This document presents the detailed cost for phase 2 relating to the supplementary loan for the Phuoc Hoa Water Resources Project. It also presents total project costs by financier in Table 13.

Table 1: Summary of costs by Component: Phase 2

	(D Million)			(\$ Million)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
A. Part A: Support for Institutional and Integrated Development								
1. Project and Sustainable Management								
a. Management Services	32,683.4	6,952.7	39,636.1	1.7	0.4	2.1	18.0	2.0
b. Consultants	34,706.9	55,391.4	90,098.3	1.8	2.9	4.7	61.0	4.0
Subtotal Project and Sustainable Management	67,390.3	62,344.1	129,734.4	3.6	3.3	6.8	48.0	5.0
2. Support for On-farm and Social Development	32,692.6	3,632.5	36,325.1	1.7	0.2	1.9	10.0	1.0
3. Resettlement	815,457.9	170.8	815,628.7	43.0	0.0	43.0	-	33.0
4. Environmental Management	10,298.1	2,574.5	12,872.6	0.5	0.1	0.7	20.0	1.0
Subtotal Part A: Support for Institutional and Integrated Development	925,838.9	68,721.9	994,560.9	48.8	3.6	52.4	7.0	41.0
B. Part B: Water Resources Infrastructure								
3. Tan Bien Irrigation System								
Primary/Secondary/Tertiary Canals	230,291.1	53,983.3	284,274.4	12.1	2.8	15.0	19.0	12.0
On-farm & Lower Canals	20,279.2	487.6	20,766.8	1.1	0.0	1.1	2.0	1.0
UXO Clearance	2,076.1	230.7	2,306.8	0.1	0.0	0.1	10.0	-
Subtotal Tan Bien Irrigation System	252,646.5	54,701.5	307,348.0	13.3	2.9	16.2	18.0	13.0
4. Duc Hoa Irrigation System								
Main Canals	304,109.5	130,332.6	434,442.1	16.0	6.9	22.9	30.0	18.0
Primary/Secondary/Tertiary Canals	538,032.1	134,508.0	672,540.2	28.3	7.1	35.4	20.0	28.0
On-farm & Lower Canals	34,611.9	832.2	35,444.1	1.8	0.0	1.9	2.0	1.0
Subtotal Duc Hoa Irrigation System	876,753.5	265,672.8	1,142,426.3	46.2	14.0	60.2	23.0	47.0
Subtotal Part B: Water Resources Infrastructure	1,129,400.0	320,374.4	1,449,774.4	59.5	16.9	76.4	22.0	59.0
Total BASELINE COSTS	2,055,238.9	389,096.3	2,444,335.2	108.3	20.5	128.8	16.0	100.0
Physical Contingencies	205,523.9	38,909.6	244,433.5	10.8	2.1	12.9	16.0	10.0
Price Contingencies	206,520.0	7,574.1	214,094.2	10.9	0.4	11.3	4.0	9.0
Total PROJECT COSTS	2,467,282.9	435,580.1	2,902,862.9	130.0	22.9	152.9	15.0	119.0
Interest During Implementation	-	37,794.7	37,794.7	-	2.0	2.0	100.0	2.0
Total Costs to be Financed	2,467,282.9	473,374.7	2,940,657.6	130.0	24.9	154.9	16.0	120.0

Table 2: Summary of costs by Financier (Including Phase 1 carry-over)

	ADB - Phs 1		ADB - Phs 2		AFD - Phs 2		Farmers		GOV		Total		For.	Local	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	(Excl. Taxes)	Taxes
A. Part A: Support for Institutional and Integrated Development															
1. Project and Sustainable Management															
a. Management Services	-	-	2.27	89.0	-	-	-	-	0.28	11.0	2.55	1.6	0.41	1.85	0.29
b. Consultants	-	-	5.21	94.4	-	-	-	-	0.31	5.6	5.52	3.6	3.27	1.95	0.31
Subtotal Project and Sustainable Management	-	-	7.48	92.7	-	-	-	-	0.59	7.3	8.07	5.2	3.68	3.80	0.60
2. Support for On-farm and Social Development	-	-	-	-	2.14	90.0	-	-	0.24	10.0	2.38	1.5	0.21	1.93	0.24
3. Resettlement	-	-	18.92	38.4	-	-	-	-	30.34	61.6	49.26	31.8	0.01	49.24	0.01
4. Environmental Management	-	-	0.78	92.0	-	-	-	-	0.07	8.0	0.85	0.5	0.15	0.61	0.08
Subtotal Part A: Support for Institutional and Integrated Development	-	-	27.18	44.9	2.14	3.5	-	-	31.23	51.6	60.56	39.1	4.05	55.58	0.92
B. Part B: Water Resources Infrastructure															
3. Tan Bien Irrigation System															
Primary/Secondary/Tertiary Canals	-	-	-	-	16.17	90.0	-	-	1.80	10.0	17.96	11.6	3.18	12.97	1.81
On-farm & Lower Canals	-	-	-	-	0.15	9.7	1.37	88.7	0.02	1.6	1.54	1.0	0.03	1.49	0.02
UXO Clearance	-	-	-	-	0.12	90.0	-	-	0.01	10.0	0.14	0.1	0.01	0.11	0.01
Subtotal Tan Bien Irrigation System	-	-	-	-	16.44	83.7	1.37	7.0	1.84	9.3	19.64	12.7	3.22	14.57	1.85
4. Duc Hoa Irrigation System															
Main Canals	9.13	33.2	14.49	52.7	-	-	-	-	3.85	14.0	27.47	17.7	7.69	17.09	2.69
Primary/Secondary/Tertiary Canals	14.20	33.3	16.33	38.3	6.14	14.4	-	-	5.97	14.0	42.64	27.5	7.93	30.50	4.20
On-farm & Lower Canals	-	-	-	-	0.27	10.4	2.36	89.6	-	-	2.63	1.7	0.05	2.54	0.04
Subtotal Duc Hoa Irrigation System	23.33	32.1	30.82	42.4	6.41	8.8	2.36	3.2	9.82	13.5	72.74	46.9	15.67	50.13	6.94
Subtotal Part B: Water Resources Infrastructure	23.33	25.3	30.82	33.4	22.85	24.7	3.73	4.0	11.65	12.6	92.38	59.6	18.90	64.70	8.79
Total PROJECT COSTS	23.33	15.3	58.01	37.9	25.00	16.3	3.73	2.4	42.88	28.0	152.94	98.7	22.95	120.28	9.71
Interest During Implementation	-	-	1.99	100.0	-	-	-	-	-	-	1.99	1.3	-	-	-
Total Disbursement	23.33	15.1	60.00	38.7	25.00	16.1	3.73	2.4	42.88	27.7	154.93	100.0	22.95	120.28	9.71

Table 3: Summary of Costs by Financier (Supplementary loan only)

	ADB - Phs 2		AFD - Phs 2		Farmers		GOV		Total		Local		
											For. Exch.	(Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Part A: Support for Institutional and Integrated Development													
1. Project and Sustainable Management													
a. Management Services	2.27	89.0	-	-	-	-	0.28	11.0	2.55	1.9	0.41	1.85	0.29
b. Consultants	5.21	94.4	-	-	-	-	0.31	5.6	5.52	4.2	3.27	1.95	0.31
Subtotal Project and Sustainable Management	7.48	92.7	-	-	-	-	0.59	7.3	8.07	6.1	3.68	3.80	0.60
2. Support for On-farm and Social Development	-	-	2.14	90.0	-	-	0.24	10.0	2.38	1.8	0.21	1.93	0.24
3. Resettlement	18.92	38.4	-	-	-	-	30.34	61.6	49.26	37.4	0.01	49.24	0.01
4. Environmental Management	0.78	92.0	-	-	-	-	0.07	8.0	0.85	0.6	0.15	0.61	0.08
Subtotal Part A: Support for Institutional and Integrated Development	27.18	44.9	2.14	3.5	-	-	31.23	51.6	60.56	46.0	4.05	55.58	0.92
B. Part B: Water Resources Infrastructure													
3. Tan Bien Irrigation System													
Primary/Secondary/Tertiary Canals	-	-	16.17	90.0	-	-	1.80	10.0	17.96	13.6	3.18	12.97	1.81
On-farm & Lower Canals	-	-	0.15	9.7	1.37	88.7	0.02	1.6	1.54	1.2	0.03	1.49	0.02
UXO Clearance	-	-	0.12	90.0	-	-	0.01	10.0	0.14	0.1	0.01	0.11	0.01
Subtotal Tan Bien Irrigation System	-	-	16.44	83.7	1.37	7.0	1.84	9.3	19.64	14.9	3.22	14.57	1.85
4. Duc Hoa Irrigation System													
Main Canals	14.49	79.0	-	-	-	-	3.85	21.0	18.34	13.9	5.15	10.49	2.70
Primary/Secondary/Tertiary Canals	16.34	57.4	6.14	21.6	-	-	6.00	21.1	28.48	21.6	5.29	20.35	2.85
On-farm & Lower Canals	-	-	0.27	10.4	2.36	89.6	-	-	2.63	2.0	0.05	2.54	0.04
Subtotal Duc Hoa Irrigation System	30.83	62.3	6.42	13.0	2.36	4.8	9.85	19.9	49.45	37.6	10.49	33.37	5.59
Subtotal Part B: Water Resources Infrastructure	30.83	44.6	22.86	33.1	3.73	5.4	11.68	16.9	69.10	52.5	13.71	47.94	7.44
Total PROJECT COSTS	58.01	44.7	25.00	19.3	3.73	2.9	42.92	33.1	129.65	98.5	17.77	103.52	8.36
Interest During Implementation	1.99	100.0	-	-	-	-	-	-	1.99	1.5	-	-	-
Total Disbursement	60.00	45.6	25.00	19.0	3.73	2.8	42.92	32.6	131.65	100.0	17.77	103.52	8.36

Table 4: Project Components by Year (including contingencies)

	Totals Including Contingencies (D Million)						Totals Including Contingencies (\$ Million)					
	2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total
A. Part A: Support for Institutional and Integrated Development												
1. Project and Sustainable Management												
a. Management Services	9,271.9	17,167.4	18,497.2	1,682.1	1,764.1	48,382.7	0.49	0.90	0.97	0.09	0.09	2.55
b. Consultants	24,166.7	36,996.8	36,835.3	3,123.4	3,655.0	104,777.1	1.27	1.95	1.94	0.16	0.19	5.52
Subtotal Project and Sustainable Management	33,438.6	54,164.2	55,332.6	4,805.4	5,419.1	153,159.8	1.76	2.85	2.92	0.25	0.29	8.07
2. Support for On-farm and Social Development	2,931.5	27,128.9	6,767.9	4,980.4	3,383.5	45,192.2	0.15	1.43	0.36	0.26	0.18	2.38
3. Resettlement	918,516.4	6,101.6	5,011.4	5,312.0	-	934,941.4	48.39	0.32	0.26	0.28	-	49.26
4. Environmental Management	886.4	4,929.4	4,760.4	5,221.5	314.6	16,112.1	0.05	0.26	0.25	0.28	0.02	0.85
Subtotal Part A: Support for Institutional and Integrated Development	955,772.9	92,324.0	71,872.2	20,319.4	9,117.2	1,149,405.6	50.36	4.86	3.79	1.07	0.48	60.56
B. Part B: Water Resources Infrastructure												
3. Tan Bien Irrigation System												
Primary/Secondary/Tertiary Canals	68,733.1	201,061.4	70,424.8	714.0	-	340,933.2	3.62	10.59	3.71	0.04	-	17.96
On-farm & Lower Canals	-	-	-	14,211.0	15,047.4	29,258.4	-	-	-	0.75	0.79	1.54
UXO Clearance	2,628.2	-	-	-	-	2,628.2	0.14	-	-	-	-	0.14
Subtotal Tan Bien Irrigation System	71,361.3	201,061.4	70,424.8	14,925.0	15,047.4	372,819.8	3.76	10.59	3.71	0.79	0.79	19.64
4. Duc Hoa Irrigation System												
Main Canals	98,298.1	154,706.0	268,433.6	-	-	521,437.8	5.18	8.15	14.14	-	-	27.47
Primary/Secondary/Tertiary Canals	152,727.3	403,172.4	253,362.8	-	-	809,262.4	8.05	21.24	13.35	-	-	42.64
On-farm & Lower Canals	-	-	-	24,254.9	25,682.4	49,937.3	-	-	-	1.28	1.35	2.63
Total PROJECT COSTS	1,278,159.7	851,263.7	664,093.3	59,499.2	49,847.0	2,902,862.9	67.34	44.85	34.99	3.13	2.63	152.94

Table 5: Detailed Cost Table: Project Management

	Unit	Quantities						Unit Cost (D '000)	Unit Cost (\$)	Base Cost (D Million)						Base Cost (\$ '000)					
		2011	2012	2013	2014	2015	Total			2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total
I. Investment Costs																					
A. ICMB9 /a																					
Vehicle	ls	1	-	-	-	-	1	949,000	50,000	949.0	-	-	-	-	949.0	50.0	-	-	-	-	50.0
Office Operating Costs	ls	0.5	1	1	0.5	0.5	3.5	797,160	42,000	398.6	797.2	797.2	398.6	398.6	2,790.1	21.0	42.0	42.0	21.0	21.0	147.0
Vehicle Operating Costs	ls	0.5	1	1	0.5	0.5	3.5	130,962	6,900	65.5	131.0	131.0	65.5	65.5	458.4	3.5	6.9	6.9	3.5	3.5	24.2
Subtotal ICMB9										1,413.1	928.1	928.1	464.1	464.1	4,197.4	74.5	48.9	48.9	24.5	24.5	221.2
B. Provincial Project Management Boards (2 No.) /b																					
Office Operating Costs	2 ls	0.5	1	1	0.5	0.5	3.5	683,280/ls	36,000/ls	683.3	1,366.6	1,366.6	683.3	683.3	4,783.0	36.0	72.0	72.0	36.0	36.0	252.0
Vehicle Operating Costs	2 ls	0.5	1	1	0.5	0.5	3.5	130,962/ls	6,900/ls	131.0	261.9	261.9	131.0	131.0	916.7	6.9	13.8	13.8	6.9	6.9	48.3
Subtotal Provincial Project Management Boards (2 No.)										814.2	1,628.5	1,628.5	814.2	814.2	5,699.7	42.9	85.8	85.8	42.9	42.9	300.3
Total										2,227.3	2,556.6	2,556.6	1,278.3	1,278.3	9,897.1	117.4	134.7	134.7	67.4	67.4	521.5

^a Continuing support to ICMB9 in Ho Chi Minh City.

^b Continuing support to PPMBs in Tay Ninh and Long An provinces.

Table 6: Detailed Cost Table: Consulting Services

		Quantities						Unit Cost	Unit Cost	Base Cost (D Million)							Base Cost (\$ '000)						
	Unit	2011	2012	2013	2014	2015	Total	(D '000)	(\$)	2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total		
I. Investment Costs /a																							
A. Part A																							
1. International																							
a. Personnel																							
Team Leader/Integrated Management Specialist	Pmnth	8	8	8	3	3	30	455,520	24,000	3,644.2	3,644.2	3,644.2	1,366.6	1,366.6	13,665.6	192.0	192.0	192.0	72.0	72.0	720.0		
PIM, Training, Agricultural Extension and Institutions	Pmnth	2	1	1	1	2	7	455,520	24,000	911.0	455.5	455.5	455.5	911.0	3,188.6	48.0	24.0	24.0	24.0	48.0	168.0		
Social Support Specialist	Pmnth	1	1	1	-	-	3	455,520	24,000	455.5	455.5	455.5	-	-	1,366.6	24.0	24.0	24.0	-	-	72.0		
Environment Specialist	Pmnth	-	1	-	-	-	1	455,520	24,000	-	455.5	-	-	-	455.5	-	24.0	-	-	-	24.0		
Unallocated Specialists /b	Pmnth	1	1	1	-	-	3	455,520	24,000	455.5	455.5	455.5	-	-	1,366.6	24.0	24.0	24.0	-	-	72.0		
Subtotal Personnel										5,466.2	5,466.2	5,010.7	1,822.1	2,277.6	20,042.9	288.0	288.0	264.0	96.0	120.0	1,056.0		
2. Domestic																							
a. Personnel																							
Deputy Team leader/Irrigation System Management :	Pmnth	12	12	12	6	6	48	47,450	2,500	569.4	569.4	569.4	284.7	284.7	2,277.6	30.0	30.0	30.0	15.0	15.0	120.0		
Resettlement Specialist	Pmnth	8	4	4	-	-	16	47,450	2,500	379.6	189.8	189.8	-	-	759.2	20.0	10.0	10.0	-	-	40.0		
PIM, Training & Ag Extension Specialist	Pmnth	12	12	12	12	12	60	47,450	2,500	569.4	569.4	569.4	569.4	569.4	2,847.0	30.0	30.0	30.0	30.0	30.0	150.0		
Social Support Expert	Pmnth	4	3	3	-	-	10	47,450	2,500	189.8	142.4	142.4	-	-	474.5	10.0	7.5	7.5	-	-	25.0		
Environmental Expert	Pmnth	3	3	3	-	-	9	47,450	2,500	142.4	142.4	142.4	-	-	427.1	7.5	7.5	7.5	-	-	22.5		
Unallocated Specialists	Pmnth	2	2	2	2	2	10	47,450	2,500	94.9	94.9	94.9	94.9	94.9	474.5	5.0	5.0	5.0	5.0	5.0	25.0		
Subtotal Personnel										1,945.5	1,708.2	1,708.2	949.0	949.0	7,259.9	102.5	90.0	90.0	50.0	50.0	382.5		
Subtotal Part A										7,411.7	7,174.4	6,718.9	2,771.1	3,226.6	27,302.7	390.5	378.0	354.0	146.0	170.0	1,438.5		
B. Part B																							
1. International																							
a. Personnel																							
Senr Hydraulic Structures Design Engineer	Pmnth	1	-	-	-	-	1	455,520	24,000	455.5	-	-	-	-	455.5	24.0	-	-	-	-	24.0		
Geotechnical Engineer	Pmnth	1	-	-	-	-	1	455,520	24,000	455.5	-	-	-	-	455.5	24.0	-	-	-	-	24.0		
Chief Resident Engineer	Pmnth	6	11	11	-	-	28	455,520	24,000	2,733.1	5,010.7	5,010.7	-	-	12,754.6	144.0	264.0	264.0	-	-	672.0		
Unallocated Specialists	Pmnth	1	1	-	-	-	2	455,520	24,000	455.5	455.5	-	-	-	911.0	24.0	24.0	-	-	-	48.0		
Subtotal Personnel										4,099.7	5,466.2	5,010.7	-	-	14,576.6	216.0	288.0	264.0	-	-	768.0		
2. Domestic																							
a. Personnel																							
Senior Hydraulic Structures Design Engineer	Pmnth	1	-	-	-	-	1	47,450	2,500	47.5	-	-	-	-	47.5	2.5	-	-	-	-	2.5		
Geotechnical Engineer	Pmnth	1	-	-	-	-	1	47,450	2,500	47.5	-	-	-	-	47.5	2.5	-	-	-	-	2.5		
Mechanical Design Engineer	Pmnth	2	2	2	-	-	6	47,450	2,500	94.9	94.9	94.9	-	-	284.7	5.0	5.0	5.0	-	-	15.0		
Irrigation Design Engineer	Pmnth	5	-	-	-	-	5	47,450	2,500	237.3	-	-	-	-	237.3	12.5	-	-	-	-	12.5		
Contracts Engineer	Pmnth	6	11	11	-	-	28	47,450	2,500	284.7	522.0	522.0	-	-	1,328.6	15.0	27.5	27.5	-	-	70.0		
Resident Engineer (3)	Pmnth	18	33	33	-	-	84	47,450	2,500	854.1	1,565.9	1,565.9	-	-	3,985.8	45.0	82.5	82.5	-	-	210.0		
Unallocated Specialists	Pmnth	2	1	1	-	-	4	47,450	2,500	94.9	47.5	47.5	-	-	189.8	5.0	2.5	2.5	-	-	10.0		
Subtotal Personnel										1,660.8	2,230.2	2,230.2	-	-	6,121.1	87.5	117.5	117.5	-	-	322.5		
Subtotal Part B										5,760.4	7,696.4	7,240.9	-	-	20,697.7	303.5	405.5	381.5	-	-	1,090.5		
Total										13,172.1	14,870.8	13,959.8	2,771.1	3,226.6	48,000.4	694.0	783.5	735.5	146.0	170.0	2,529.0		

^a Consultant rates include fee, international travel, per diem, office costs and domestic travel.

^b To be specified during implementation as required.

Table 7: Detailed Cost Table: OSDP

	Unit	Quantities						Base Cost (D Million)						Base Cost (\$ '000)					
		2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total
I. Investment Costs																			
A. Supplementary support to Phase 2 /a																			
1. Duc Hoa sub-project																			
Consulting services	Is	-	0.106	0.298	0.298	0.298	1	-	271.6	763.6	763.6	763.6	2,562.3	-	14.3	40.2	40.2	40.2	135.0
Implementation support/program budget	Is	0.244	0.402	0.195	0.159	-	1	1,773.9	2,922.5	1,417.6	1,155.9	-	7,269.9	93.5	154.0	74.7	60.9	-	383.0
Subtotal Duc Hoa sub-project								1,773.9	3,194.1	2,181.2	1,919.5	763.6	9,832.2	93.5	168.3	114.9	101.1	40.2	518.0
2. Tan Bien sub-project																			
Consulting services	Is	-	0.25	0.25	0.25	0.25	1	-	737.1	737.1	737.1	737.1	2,948.3	-	38.8	38.8	38.8	38.8	155.3
Implementation support/program budget	Is	0.082	0.327	0.327	0.143	0.121	1	596.3	2,378.0	2,378.0	1,039.9	879.9	7,272.1	31.4	125.3	125.3	54.8	46.4	383.1
Subtotal Tan Bien sub-project								596.3	3,115.0	3,115.0	1,777.0	1,617.0	10,220.4	31.4	164.1	164.1	93.6	85.2	538.5
3. Binh Phuoc sub-project																			
Consulting services	Is	0.311	0.689	-	-	-	1	100.9	223.6	-	-	-	324.6	5.3	11.8	-	-	-	17.1
Implementation support/program budget	Is	-	1	-	-	-	1	-	10,660.6	-	-	-	10,660.6	-	561.7	-	-	-	561.7
Subtotal Binh Phuoc sub-project								100.9	10,884.2	-	-	-	10,985.2	5.3	573.5	-	-	-	578.8
4. Binh Duong sub-project																			
Consulting services	Is	0.311	0.689	-	-	-	1	100.3	222.3	-	-	-	322.7	5.3	11.7	-	-	-	17.0
Implementation support/program budget	Is	-	1	-	-	-	1	-	4,964.7	-	-	-	4,964.7	-	261.6	-	-	-	261.6
Subtotal Binh Duong sub-project								100.3	5,187.0	-	-	-	5,287.4	5.3	273.3	-	-	-	278.6
Total								2,571.5	22,380.4	5,296.2	3,696.5	2,380.6	36,325.1	135.5	1,179.2	279.0	194.8	125.4	1,913.9

\a Supplementary support in addition to Phase 1 funds

Table 8: Detailed Cost Table: Resettlement

	Unit	Quantities						Base Cost (D Million)					Base Cost (\$ '000)						
		2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total
I. Investment Costs																			
A. Tan Bien																			
1. Compensation	ls	1	-	-	-	-	1	65,336.2	-	-	-	-	65,336.2	3,442.4	-	-	-	-	3,442.4
2. Income Restoration/OSDP /b	ls	0.25	0.25	0.25	0.25	-	1	681.8	681.8	681.8	681.8	-	2,727.3	35.9	35.9	35.9	35.9	-	143.7
3. Implementation Costs	ls	1	-	-	-	-	1	1,437.4	-	-	-	-	1,437.4	75.7	-	-	-	-	75.7
Subtotal Tan Bien								67,455.4	681.8	681.8	681.8	-	69,500.9	3,554.0	35.9	35.9	35.9	-	3,661.8
B. Duc Hoa Main Canal																			
1. Compensation	ls	1	-	-	-	-	1	182,132.9	-	-	-	-	182,132.9	9,596.0	-	-	-	-	9,596.0
2. Income Restoration/OSDP /c	ls	0.25	0.25	0.25	0.25	-	1	1,818.2	1,818.2	1,818.2	1,818.2	-	7,272.7	95.8	95.8	95.8	95.8	-	383.2
3. Implementation Costs	ls	1	-	-	-	-	1	4,006.9	-	-	-	-	4,006.9	211.1	-	-	-	-	211.1
Subtotal Duc Hoa Main Canal								187,958.0	1,818.2	1,818.2	1,818.2	-	193,412.6	9,903.0	95.8	95.8	95.8	-	10,190.3
C. Duc Hoa PST system																			
1. Resettlement monitoring team /d	ls	-	1	-	-	-	1	-	1,138.8	-	-	-	1,138.8	-	60.0	-	-	-	60.0
2. Compensation	ls	1	-	-	-	-	1	534,365.8	-	-	-	-	534,365.8	28,154.2	-	-	-	-	28,154.2
3. Income Restoration/OSDP /e	ls	0.25	0.25	0.25	0.25	-	1	1,363.6	1,363.6	1,363.6	1,363.6	-	5,454.5	71.8	71.8	71.8	71.8	-	287.4
4. Implementation Costs	ls	1	-	-	-	-	1	11,756.0	-	-	-	-	11,756.0	619.4	-	-	-	-	619.4
Total								802,899.0	5,002.4	3,863.6	3,863.6	-	815,628.7	42,302.4	263.6	203.6	203.6	-	42,973.1

^a Compensation needs are subject to change once the detailed design process has been completed in each irrigation system.

^b Assistance to gain access to credit programmes is estimated in Social Support table.

^c Assistance to gain access to credit programmes is estimated in Social Support table.

^d One year contract extension of local consultant team hired by ICMB9 equivalent to US\$60,000

^e Assistance to gain access to credit programmes is estimated in Social Support table.

Table 9: Detailed Cost Table: Environmental Management (supplementary)

	Unit	Quantities						Base Cost (D Million)					Base Cost (\$ '000)						
		2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total
I. Investment Costs																			
A. EMP Implementation /a																			
1. Supplementary expenditure for Phase 2																			
Extension of MT10 - capacity building	ls	0.5	0.5	-	-	-	1	510.1	510.1	-	-	-	1,020.2	26.9	26.9	-	-	-	53.8
Extension of MT7 - construction and environment	ls	-	0.15	0.55	0.3	-	1	-	61.2	224.4	122.4	-	408.1	-	3.2	11.8	6.5	-	21.5
Extension of OP4 duration	ls	-	-	0.25	0.75	-	1	-	-	25.6	76.9	-	102.5	-	-	1.4	4.1	-	5.4
Total								510.1	571.3	250.1	199.3	-	1,530.7	26.9	30.1	13.2	10.5	-	80.7

^a Extra expenditure for Phase 2 activities funded by ADB

Table 10: Detailed Cost Table: Environmental Management (carry over from Phase 1)

	Unit	Quantities						Unit Cost	Base Cost (\$ '000)					
		2011	2012	2013	2014	2015	Total	(\$)	2011	2012	2013	2014	2015	Total
I. Investment Costs														
A. EMP Implementation /b														
1. Expenditure for Phase 2														
MT1 - Tan Bien Forest National Park	Is	-	0.3333	0.3333	0.3333	-	0.9999	256,620	-	85.5	85.5	85.5	-	256.6
MT3 - Duc Hoa water supply scheme	Is	-	0.3333	0.3333	0.3333	-	0.9999	260,000	-	86.7	86.7	86.7	-	260.0
MT9 - Post Evaluation of Environmental Impact	Is	-	-	-	0.5	0.5	1	24,000	-	-	-	12.0	12.0	24.0
OP1- Contingency for Hazardess Waste	Is	0.25	0.25	0.25	0.25	-	1	15,000	3.8	3.8	3.8	3.8	-	15.0
OP2 - O&M of Water Supply	Is	0.25	0.25	0.25	0.25	-	1	18,000	4.5	4.5	4.5	4.5	-	18.0
OP3 - O&M of Salinity Monitoring	Is	0.25	0.25	0.25	0.25	-	1	24,000	6.0	6.0	6.0	6.0	-	24.0
Total									14.3	186.4	186.4	198.4	12.0	597.6

\a Carry over of activities Phase 1 funded by ADB under new contracts

\b EMP: Environmental Management Plan.

Table 11: Detailed Cost Table: Duc Hoa Irrigation System

	Base Cost (D Million)					Base Cost (\$ '000)						
	2011	2012	2013	2014	2015	Total	2011	2012	2013	2014	2015	Total
I. Investment Costs												
A. Main Canal												
1. Civil Works /a												
Canal construction package /b	86,888.4	130,332.6	217,221.1	-	-	434,442.1	4,577.9	6,866.8	11,444.7	-	-	22,889.5
Project Management	961.6	1,442.4	2,404.0	-	-	4,808.0	50.7	76.0	126.7	-	-	253.3
Consultants costs	4,114.4	6,171.6	10,286.0	-	-	20,572.0	216.8	325.2	541.9	-	-	1,083.9
Other costs	2,187.8	3,281.7	5,469.5	-	-	10,939.0	115.3	172.9	288.2	-	-	576.3
Subtotal Civil Works	94,152.2	141,228.3	235,380.6	-	-	470,761.1	4,960.6	7,440.9	12,401.5	-	-	24,803.0
B. PST Canals and Structure												
1. PST Construction /c												
Package 1 - Canal N2 /d	14,937.9	37,344.7	22,406.8	-	-	74,689.5	787.0	1,967.6	1,180.6	-	-	3,935.2
Package 2 - Canal N2 km9-15 /e	11,928.7	29,821.9	17,893.1	-	-	59,643.7	628.5	1,571.2	942.7	-	-	3,142.5
Package 3 - Canal N2-4 /f	12,933.7	32,334.3	19,400.6	-	-	64,668.7	681.4	1,703.6	1,022.2	-	-	3,407.2
Package 4 - Canal N2-6; N2-8 /g	14,716.6	36,791.4	22,074.9	-	-	73,582.9	775.4	1,938.4	1,163.1	-	-	3,876.9
Package 5 - Canal & structures on N2 /h	12,962.5	32,406.3	19,443.8	-	-	64,812.6	683.0	1,707.4	1,024.4	-	-	3,414.8
Package 6 - Canal & structures on N3 /i	13,692.9	34,232.2	20,539.3	-	-	68,464.3	721.4	1,803.6	1,082.2	-	-	3,607.2
Package 7 - Canal & structures on N3 /j	13,466.1	33,665.3	20,199.2	-	-	67,330.6	709.5	1,773.7	1,064.2	-	-	3,547.4
Package 8 - Canal & structures on N3-1 /k	14,839.5	37,098.8	22,259.3	-	-	74,197.5	781.8	1,954.6	1,172.8	-	-	3,909.2
Package 9 - Canal & structures on N3-2 /l	13,792.1	34,480.1	20,688.1	-	-	68,960.3	726.7	1,816.7	1,090.0	-	-	3,633.3
Package 10 - Canal & structures on N3-2 /m	11,238.0	28,095.1	16,857.0	-	-	56,190.1	592.1	1,480.2	888.1	-	-	2,960.5
Subtotal PST Construction	134,508.0	336,270.1	201,762.1	-	-	672,540.2	7,086.8	17,717.1	10,630.2	-	-	35,434.2
2. Design and Overheads												
Project management	1,551.9	3,879.7	2,327.8	-	-	7,759.4	81.8	204.4	122.6	-	-	408.8
Consultants Design & Supervision costs	4,305.2	10,763.0	6,457.8	-	-	21,525.9	226.8	567.1	340.2	-	-	1,134.1
Other overhead costs /n	1,246.5	3,116.3	1,869.8	-	-	6,232.6	65.7	164.2	98.5	-	-	328.4
Subtotal Design and Overheads	7,103.6	17,759.0	10,655.4	-	-	35,517.9	374.3	935.7	561.4	-	-	1,871.3
Subtotal PST Canals and Structure	141,611.6	354,029.0	212,417.4	-	-	708,058.1	7,461.1	18,652.7	11,191.6	-	-	37,305.5
C. On-Farm System												
Canals	-	-	-	13,561.3	13,561.3	27,122.5	-	-	-	714.5	714.5	1,429.0
Structures	-	-	-	4,160.8	4,160.8	8,321.6	-	-	-	219.2	219.2	438.4
Subtotal On-Farm System	-	-	-	17,722.0	17,722.0	35,444.1	-	-	-	933.7	933.7	1,867.4
Total	235,763.8	495,257.4	447,798.0	17,722.0	17,722.0	1,214,263.2	12,421.7	26,093.6	23,593.1	933.7	933.7	63,975.9

\a Base construction costs plus 0.6% insurance

\b Includes equipment

\c Base construction costs plus 0.6% insurance.

\d Package1: Canal and Structures on Canal N2 from K0 ~ K9+862 (Canal N16)

\e Package 2: Canal and Structures on N2 from K9+862 ~ K15+704 (Kf) and on VC1; VC2; VC4; Canal N2-2

\f Package 3: Canal and Structures on N2-4 and Tertiary Canals

\g Packet 4: Canal and Structures on N2-6; N2-8 and Tertiary Canals

\h Package 5: Canal and Structures on N2-(10; 12; 14; 16; 18; 20; 22; 24; 26; 28)

\i Packet 6: Canal and Structures on N3 (K0 ~ Prov. Road 9)

\j Package 7: Canal and Structures on N3 (Prov.Road 9~ Kf)

\k Package 8: Canal and Structures on N3-1; N3-3; N3-5; N3-7; N3-9; N2-1

\l Package 9: Canal and Structures on N3-2; N3-4; N3-6; N3-8 and Tertiary Canals

\m Package 10: Canal and Structures on N3-9 (10; 11; 12; 13; 15; 17; 19) and Tertiary Canals; Management house + Axialiry structures + Observation and Water Quality Gauge Equipments

\n Staff training in O&M, appraisal and auditing costs

Table 12: Detailed Cost Table: Tan Bien Irrigation System

	Base Cost (D Million)					Base Cost (\$ '000)					Total
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	
I. Investment Costs											
A. Primary/Secondary Canals											
1. Civil Works PST Canal Net work											
Package 1: Pump station and N2 (km 0 - 10) /a	15,727.6	47,182.9	15,727.6	-	-	78,638.1	828.6	2,485.9	828.6	-	4,143.2
Package 2: N2 Canal & Structures on Transfer Canal /b	14,005.5	42,016.5	14,005.5	-	-	70,027.5	737.9	2,213.7	737.9	-	3,689.5
Package 3: N3, N6, N7, N8, N9, N13 Canal & structures /c	8,838.6	26,515.9	8,838.6	-	-	44,193.2	465.7	1,397.0	465.7	-	2,328.4
Package 4: N14, N16, N17 Canals & Structures /d	11,164.4	33,493.3	11,164.4	-	-	55,822.2	588.2	1,764.7	588.2	-	2,941.1
Subtotal Civil Works PST Canal Net work	49,736.2	149,208.6	49,736.2	-	-	248,681.1	2,620.5	7,861.4	2,620.5	-	13,102.3
2. Supervision and Overheads											
Temporary worker housing	4,672.8	-	-	-	-	4,672.8	246.2	-	-	-	246.2
Project management	822.2	2,466.5	822.2	-	-	4,110.8	43.3	130.0	43.3	-	216.6
Consulting costs and supervision	5,169.3	15,508.0	5,169.3	-	-	25,846.7	272.4	817.1	272.4	-	1,361.8
UXO clearance	2,306.8	-	-	-	-	2,306.8	121.5	-	-	-	121.5
Auditing	-	-	-	532.8	-	532.8	-	-	-	28.1	28.1
Other overhead costs	86.0	172.1	172.1	-	-	430.2	4.5	9.1	9.1	-	22.7
Subtotal Supervision and Overheads	13,057.2	18,146.6	6,163.6	532.8	-	37,900.2	687.9	956.1	324.7	28.1	1,996.8
Subtotal Primary/Secondary Canals	62,793.4	167,355.2	55,899.8	532.8	-	286,581.2	3,308.4	8,817.5	2,945.2	28.1	15,099.1
B. On-Farm System											
Canals	-	-	-	7,945.6	7,945.6	15,891.2	-	-	-	418.6	837.3
Structures	-	-	-	2,437.8	2,437.8	4,875.6	-	-	-	128.4	256.9
Subtotal On-Farm System	-	-	-	10,383.4	10,383.4	20,766.8	-	-	-	547.1	1,094.1
Total	62,793.4	167,355.2	55,899.8	10,916.2	10,383.4	307,348.0	3,308.4	8,817.5	2,945.2	575.1	16,193.3

\a Package 1: Pump equipments supply and instal ; Pump Station, Management House and Road, Canal and Structures on N2 from K0~K10+944(Kf).

\b Package 2: Canal and Structures on Transfer Canal N2, on Secondary and Tertiary Canals N2-(6,9,10,16,17, 18, 19,20, 22), Electricity line.

\c Package 3: Canal and Structures on Primary, Secondary and Tertiary Canals N3; N6; N7; N8; N9; N13 and TN10

\d Package 4: Canal and Structures on Primary, Secondary and Tertiary Canals N14; N16; N17.

Table 13: Summary of costs by Financier (Phase 1 and Phase 2)

	ADB - Phs 1		ADB - Phs 2		AFD -Phs1 PtA		AFD -Phs1 PtB		AFD - Phs 2		Farmers		GOV		GOV Phs 1		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Part A: Support for Institutional and Integrated Development																		
1. Project and Sustainable Management																		
a. Management Services	2.29	45.4	2.27	45.1	0.00	-	0.00	-	0.00	-	0.00	-	0.28	5.5	0.20	4.0	5.04	100.0
b. Consultants	7.08	44.7	5.21	32.9	2.20	13.9	0.00	-	0.00	-	0.00	-	0.31	1.9	1.03	6.5	15.83	100.0
Subtotal Project and Sustainable Management	9.37	44.9	7.48	35.9	2.20	10.5	-	-	-	-	-	-	0.59	2.8	1.23	5.9	20.87	100.0
2. Support for On-farm and Social Development	-	-	-	-	1.00	28.8	-	-	2.14	61.5	-	-	0.24	6.8	0.10	2.8	3.48	100.0
3. Resettlement	-	-	18.92	18.9	-	-	-	-	-	-	-	-	30.34	30.3	51.02	50.9	100.28	100.0
4. Environmental Management	1.11	53.9	0.78	38.1	-	-	-	-	-	-	-	-	0.08	4.0	0.08	4.0	2.05	100.0
Subtotal Part A: Support for Institutional and Integrated Development	10.48	8.3	27.18	21.5	3.20	2.5	-	-	2.14	1.7	-	-	31.25	24.7	52.43	41.4	126.68	100.0
B. Part B: Water Resources Infrastructure																		
1. Phuoc Hoa Basin Transfer																		
Barrage	39.50	86.0	-	-	-	-	-	-	-	-	-	-	0.00	0.0	6.43	14.0	45.93	100.0
Transfer Canal	12.82	24.6	-	-	-	-	32.80	62.8	-	-	-	-	0.00	0.0	6.58	12.6	52.20	100.0
UXO Clearance	0.70	86.0	-	-	-	-	-	-	-	-	-	-	-	-	0.11	14.0	0.81	100.0
Subtotal Phuoc Hoa Basin Transfer	53.01	53.6	-	-	-	-	32.80	33.2	-	-	-	-	0.00	0.0	13.12	13.3	98.94	100.0
3. Tan Bien Irrigation System																		
Main Canals	8.18	86.0	-	-	-	-	-	-	-	-	-	-	0.00	0.0	1.33	14.0	9.51	100.0
Primary/Secondary/Tertiary Canals	-	-	-	-	-	-	-	-	16.17	90.0	-	-	1.80	10.0	-	-	17.96	100.0
On-farm & Lower Canals	-	-	-	-	-	-	-	-	0.15	9.7	1.37	88.7	0.02	1.6	-	-	1.54	100.0
UXO Clearance	-	-	-	-	-	-	-	-	0.12	90.0	-	-	0.01	10.0	-	-	0.14	100.0
Subtotal Tan Bien Irrigation System	8.18	28.1	-	-	-	-	-	-	16.44	56.4	1.37	4.7	1.84	6.3	1.33	4.6	29.16	100.0
4. Duc Hoa Irrigation System																		
Main Canals	9.13	33.3	14.49	52.8	-	-	-	-	-	-	-	-	3.85	14.0	-	-	27.47	100.0
Primary/Secondary/Tertiary Canals	14.20	33.3	16.33	38.3	-	-	-	-	6.14	14.4	-	-	5.97	14.0	-	-	42.64	100.0
On-farm & Lower Canals	-	-	-	-	-	-	-	-	0.27	10.4	2.36	89.6	-	-	-	-	2.63	100.0
Subtotal Duc Hoa Irrigation System	23.33	32.1	30.82	42.4	-	-	-	-	6.41	8.8	2.36	3.2	9.82	13.5	-	-	72.74	100.0
Subtotal Part B: Water Resources Infrastructure	84.53	42.1	30.82	15.3	-	-	32.80	16.3	22.85	11.4	3.73	1.9	11.65	5.8	14.45	7.2	200.84	100.0
Total PROJECT COSTS	95.00	29.0	58.01	17.7	3.20	1.0	32.80	10.0	25.00	7.6	3.73	1.1	42.90	13.1	66.88	20.4	327.51	100.0
Interest During Implementation	-	-	1.99	100.0	-	-	-	-	-	-	-	-	-	-	-	-	1.99	100.0
Total Disbursement	95.00	28.8	60.00	18.2	3.20	1.0	32.80	10.0	25.00	7.6	3.73	1.1	42.90	13.0	66.88	20.3	329.51	100.0