

TABLES

Table 2.1 Breakdown of Financial Construction Cost and Estimate of Economic Construction Cost for Irrigation Project

Kategori/ Name of Scheme	Area (Ha)	Type of Scheme	Present in W/O w/ (Rp./Mn)	Rehabilitate Reservoir (Rp./Mn)	On-stream Grading-up (Rp./Mn)	Without Project (W/O) to W/In Project (W/P)		Total (Rp./Mn)	Total Cost (Percent to W/P)	Economic Construction Cost (Rp./Mn)
						New Cost- function (Rp./Mn)	Sub-Total (Rp./Mn)			
TARALONG										
1 Jero	625	Exist	0	8	-	-	8	8	8	6
2 Jero Bawah	200	Exist	315	82	191	-	273	905	620	218
3 Gumba	254	Exist	0	112	249	-	355	361	284	284
4 Sungai Kadi	260	New	0	-	-	745	745	790	790	596
5 Neman	64	New	0	-	-	197	197	207	207	158
6 Kibaru	408	New	0	-	-	1,225	1,225	1,525	1,525	1,008
7 Midum	203	New	0	-	-	627	627	659	659	502
8 Baryuput	225	New	0	-	-	598	598	634	634	478
9 Bilas	643	New	0	-	-	1,986	1,986	2,089	2,089	1,589
10 Bayya Tajan	750	New	0	-	-	2,367	2,367	2,487	2,487	1,894
HULLUSUNGAU UTARA										
1 Peria	188	Exist	77	87	180	-	257	281	358	214
2 Tundak	233	Exist	0	140	223	-	363	369	569	290
3 Sungai	116	Exist	0	94	110	-	204	207	207	163
4 Lok Batu	116	Exist	0	241	110	-	351	355	355	281
5 Balangan	2,172	New	0	-	-	13,040	13,040	13,388	13,388	10,432
6 Pispap	3,734	New	0	-	-	22,418	22,418	23,015	23,015	17,934
HULLUSUNGAU TENGAH										
1 Tabang	165	Exist	0	163	158	-	321	326	326	257
2 Tapak	186	Exist	0	87	278	-	265	270	270	212
3 Temiyang	266	Exist	0	120	159	-	279	283	283	223
4 Beruh Harau	160	Exist	57	17	153	-	170	180	237	136
5 Intangan	920	Exist	0	87	1,130	-	1,217	1,244	1,244	974
6 Sabunan	633	Exist	0	125	606	-	731	746	746	585
7 Mangayang	575	Exist	0	81	493	-	574	586	586	459
8 Harau Deyak	1,486	Exist	0	162	1,422	-	1,584	1,619	1,619	1,267
9 Bang Alai	6,223	New	0	-	-	37,758	37,758	38,754	38,754	30,206
10 Bantan	2,278	New	0	-	-	13,677	13,677	14,041	14,041	10,942
HULLUSUNGAU SELATAN										
1 Teaga Lemat	1,934	Exist	0	356	1,468	-	1,824	1,861	1,861	1,459
2 Tayub	178	Exist	0	54	191	-	245	250	250	196
3 Nunung	36	Exist	0	95	158	-	253	257	257	202
4 Kuaragan	143	Exist	0	108	225	-	333	339	339	266
5 Pernayan	214	Exist	0	56	335	-	391	399	399	313
6 Hawau	71	Exist	403	105	245	-	350	391	794	280
7 Tal	107	Exist	0	208	277	-	485	493	493	388
8 Jarai	143	Exist	0	14	76	-	90	97	97	72
9 Kayn Hibang	347	New	0	-	-	1,072	1,072	1,128	1,128	858
10 Acanadz	6,432	New	0	-	-	40,358	40,358	41,387	41,387	32,286
TAPIN										
1 Lok Pakar	392	Exist	294	67	375	-	442	484	778	354
2 Perapat	302	Exist	0	164	375	-	539	549	431	431
3 Nipadang	253	Exist	246	7	242	-	249	283	529	199
4 Tanbur	99	Exist	0	77	95	-	172	174	198	198
5 Pulau Pusing	270	Exist	0	2	259	-	261	267	209	209
6 Rempang	1,106	Exist	1,196	90	140	-	1,400	1,473	1,336	1,336
7 Binuang	5728	New	0	90	1,059	-	1,149	1,310	2,506	919
8 Tapin	500	New	0	-	-	34,107	34,107	34,960	34,960	27,286
9 Labuhan	500	New	0	-	-	927	927	975	975	742

Note: w/ Construction cost only for main system

Table 2.2 Breakdown of Financial Construction Cost and Estimate of Economic Construction Cost for Drainage Project

Kawasan/ Name of Scheme	Type of Scheme	Level of Improvement	Area (ha)	Present		W/P		W/O		Improvement Stage		Total Cost of		Economic Construction Cost (Rp. Mn)
				to W/O.P. (Rp. Mn)	to W/O.P. (Rp. Mn)	to W/P (Rp. Mn)	to W/P (Rp. Mn)	Type A to Type A (Rp. Mn)	Type D to Type D (Rp. Mn)	Type D to Type D (Rp. Mn)	Type E to Type E (Rp. Mn)	Sub-Total (Rp. Mn)	All Stages (Rp. Mn)	
TABALONG														
1 S. Gumpa	Exist	W/O to T-D	1,500	241	3,112	-	-	-	-	-	-	3,112	3,353	2,490
2 S. Rumpang	Exist	W/O to T-E	600	82	804	-	-	-	-	-	-	804	886	643
3 S. Palat	Exist	W/O to T-D	475	37	700	-	-	-	-	-	-	700	737	560
4 S. Pampang	Exist	W/O to T-D	150	10	299	-	-	-	-	-	-	299	309	239
5 S. Baco	Exist	W/O to T-D	100	3	172	-	-	-	-	-	-	172	175	138
6 S. Nanti	Exist	W/O to T-D	200	22	348	-	-	-	-	-	-	348	370	278
7 Temuran	New	W/O to T-E	150	0	585	-	-	-	-	-	-	585	585	468
8 Bangkiling	New	W/O to T-E	400	0	1,457	-	-	-	-	-	-	1,457	1,457	1,166
9 Pekan Kut	New	W/O to T-E	280	0	1,457	-	-	-	-	-	-	1,457	1,457	1,166
HULU SUNGAI UTARA														
1 S. Pampang Hibang	Exist	W/O to T-D	1,995	533	2,658	-	-	-	-	-	-	2,658	3,191	2,126
2 R. Batu Mandi	Exist	W/O to T-D	1,560	210	1,636	-	-	-	-	-	-	1,636	1,846	1,309
3 R. Pampang Kera	Planned	W/O to T-A	4,600	0	4,495	-	-	4,495	-	-	-	4,495	-	3,596
	-do-	T-A to T-D	4,600	0	-	-	-	-	7,397	-	-	7,397	11,892	5,918
HULU SUNGAI TENGAH														
1 R. Turas	Exist	W/O to T-D	300	39	725	-	-	-	-	-	-	725	764	580
2 R. Bangkuan	Exist	W/O to T-D	900	178	-	-	-	-	-	1,595	-	1,595	-	1,276
3 Tg. Jarakuh	Exist	W/O to T-E	1,194	0	1,510	-	-	-	-	-	-	1,510	1,048	1,048
4 Tg. Semayang Kambat	Exist	W/O to T-E	2,640	0	3,362	-	-	-	-	-	-	3,362	2,170	1,736
5 R. Bangkuan Extension	Planned	W/O to T-D	600	0	-	-	-	-	-	1,372	-	1,372	1,372	1,098
6 S. Sirang	New	W/O to T-D	2,500	0	-	-	-	-	-	5,719	-	5,719	4,575	4,575
7 Bukit	New	W/O to T-D	800	0	-	-	-	-	-	1,833	-	1,833	1,833	1,466
HULU SUNGAI SELATAN														
1 Tg. Longkan	Exist	W/O to T-E	2,005	237	2,758	-	-	-	-	-	-	2,758	2,995	2,206
2 Tg. Pengkaban	Exist	W/O to T-E	500	0	1,135	-	-	-	-	-	-	1,135	1,335	908
3 S. Kajang	Exist	W/O to T-D	1,500	0	1,844	-	-	-	-	-	-	1,844	1,844	1,475
4 S. Tera Bahalaye	Exist	W/O to T-E	600	98	1,150	-	-	-	-	-	-	1,150	1,248	920
5 S. Tanra	Exist	W/O to T-D	300	0	699	-	-	-	-	-	-	699	699	559
6 R. Negera	Exist	W/O to T-D	5,200	0	-	-	-	-	-	6,229	-	6,229	6,229	4,983
7 S. Balan	Exist	W/O to T-D	600	29	876	-	-	-	-	-	-	876	905	701
8 R. Auhang	Planned	W/O to T-D	1,500	0	-	-	-	-	-	3,525	-	3,525	3,525	2,820
9 R. Geras	Planned	W/O to T-D	1,500	0	-	-	-	-	-	3,525	-	3,525	3,525	2,820
10 R. Negera Extension	Planned	W/O to T-D	500	0	-	-	-	-	-	1,067	-	1,067	1,067	854
11 S. Hujung	New	W/O to T-A	3,800	0	-	-	-	2,522	-	-	-	2,522	-	2,018
	-do-	T-A to T-D	3,800	0	-	-	-	-	5,573	-	-	5,573	8,095	4,458
12 S. Batang Abai	New	W/O to T-A	1,500	0	-	-	-	996	-	-	-	996	-	797
	-do-	T-A to T-D	1,500	0	-	-	-	-	2,199	-	-	2,199	3,195	1,759
13 Tanjung Langit	New	W/O to T-A	5,000	0	-	-	-	3,319	-	-	-	3,319	-	2,625
	-do-	T-A to T-D	5,000	0	-	-	-	-	7,333	-	-	7,333	10,652	5,866
TAPAN														
1 S. Ulu	Exist	W/O to T-D	1,000	0	1,412	-	-	-	-	-	-	1,412	1,412	1,130
2 R. Muning	Exist	W/O to T-E	8,000	653	11,003	-	-	-	-	-	-	11,003	11,656	8,802
3 S. Geras Hajar	Exist	W/O to T-D	1,000	139	1,329	-	-	-	-	-	-	1,329	1,468	1,063
4 S. Terin Gasing	Exist	W/O to T-D	1,000	118	1,621	-	-	-	-	-	-	1,621	1,739	1,297
5 S. Pampang Babatin	Exist	W/O to T-E	300	10	581	-	-	-	-	-	-	581	591	465
6 R. Belant	Exist	W/O to T-E	2,750	0	4,205	-	-	-	-	-	-	4,205	4,205	3,364
7 S. Damar	Exist	W/O to T-D	1,250	158	1,588	-	-	-	-	-	-	1,588	1,746	1,270
8 S. Sekai	Exist	W/O to T-D	400	39	559	-	-	-	-	-	-	559	598	447
9 S. Masin	Exist	W/O to T-D	150	0	315	-	-	-	-	-	-	315	315	252
10 Sg. Fatah Air	Exist	W/O to T-E	400	0	627	-	-	-	-	-	-	627	627	502
11 R. Bahasan	Planned	W/O to T-D	2,000	0	-	-	-	-	-	3,991	-	3,991	3,991	3,193
12 R. Muning Extension	Planned	W/O to T-D	2,000	0	-	-	-	-	-	2,091	-	2,091	6,082	1,673
	-do-	T-D to T-E	2,000	0	-	-	-	-	-	3,929	-	3,929	-	3,143
13 R. Muning 2nd Extension	New	W/O to T-D	2,000	0	-	-	-	-	-	2,091	-	2,091	6,020	1,673
	-do-	T-D to T-E	2,000	0	-	-	-	-	-	2,091	-	2,091	-	1,673

Table 2.3 Breakdown of Financial Construction Cost and Estimate of Economic Construction Cost for Polder Project

Kabupaten/ Name of Scheme	Type of Scheme	Area (ha)	Present		Without Project (W/O) to With Project (W/P)			Total Cost	
			W/O (Rp.MN)	to (Rp.MN)	Rehabil. & Renewal (Rp.MN)	On-farm Grading-up (Rp.MN)	Sub-Total Acquisition (Rp.MN)	Land (Rp.MN)	(Present to W/P) (Rp.MN)
TABALONG									
1	Exist	418	0	348	0	348	0	348	278
2	Exist	144	0	283	0	283	0	283	226
HULU SUNGAI UTARA									
1	Exist	468	0	1,644	0	1,644	0	1,644	1,315
2	Exist	2,344	0	1,723	0	1,723	0	1,723	1,378
3	Exist	1,694	0	2,049	0	2,049	0	2,049	1,639
4	Exist	2,300	0	26	0	26	0	26	21
5	Exist	1,737	0	-	-	-	-	-	-
6	Exist	1,274	0	39	0	39	0	39	31
7	Exist	4,500	0	8,217	0	8,217	0	8,217	6,574
8	New	2,800	0	23,778	0	23,778	0	23,778	19,022
HULU SUNGAI SELATAN									
1	New	600	0	7,733	0	7,733	0	7,733	6,186

Table 2.4 Breakdown of Financial Construction Cost and Estimate of Economic Construction Cost for Fishery Project

Kabupaten/ Name of Scheme	Type of Scheme	Area (ha)	Present		Without Project (W/O) to With Project (W/P)			Total Cost	
			W/O (Rp.MN)	to (Rp.MN)	Rehabil. & Renewal (Rp.MN)	On-farm Grading-up (Rp.MN)	Sub-Total Acquisition (Rp.MN)	Land (Rp.MN)	(Present to W/P) (Rp.MN)
HULU SUNGAI UTARA									
1	New a/ New b/	100 1,000	0 0	522 8,816	0 0	522 8,816	0 0	522 8,816	418 7,053
TAPIN									
1	New c/	0	0	32,448	0	32,448	0	32,448	25,958

Note: a/ Level of development; from without project to with project of short-term development
b/ Level of development; from with project of short-term development to with project of medium-term development.
c/ Level of development; from without project to with project of long-term development

Table 2.5 Financial and Economic Prices of Agricultural Products and Inputs

	Unit		Financial 1988 a/	Economic 2000 b/
Products				
Paddy	Kg	Dry clean paddy	267	276 c/
Maize	Kg	Dry grain	300	209 c/
Cassava	Kg	Fresh roots	85	85 c/
Sweet potato	Kg	Fresh roots	150	150 c/
Soybeans	Kg	Dry beans	700	428 c/
Groundnuts	Kg	Shelled	885	820 c/
Mungbeans	Kg	Dry beans	825	635 d/
Vegetables	Kg	As cucumber	245	245 c/
Rubber	Kg	RSS	1,600	1,650 f/
Fishes	Kg	All kind, average	1,316	1,316 c/
Shrimps	Kg	head on	7,450	7,840 c/
Inputs				
Seeds				
Paddy	Kg		270	330 g/
Maize	Kg		500	250 g/
Cassava	Seedling		4	4 c/
Sweet potato	Seedling		2	2 c/
Soybeans	Kg		1,250	515 g/
Groundnuts	Kg		2,500	985 g/
Mungbeans	Kg		910	760 g/
Vegetables	Kg		15,000	15,000 e/
Rubber	Seedling		480	480 c/
Shrimps	fry		7.5	7.5 c/
Fertilizers				
Urea	Kg		135	399 c/
TSP	Kg		135	507 c/
KCL	Kg		135	325 c/
Agro-chemicals				
Pesticides	Kg		5,200	7,500 h/
Rodenticides	Kg		1,500	2,200 h/
Shrimp Feed	Kg		1,400	1,080 d/
Labor				
Family labor	man-day			2,100 i/
Hired labor	man-day		3,000	2,100 i/
Animal labor	team-day		8,000	8,000 e/

a/: Prevailing present prices in the Study Area which are estimated based on the data Kanwil Agriculture, South Kalimantan are assumed as 1988 financial farm gate prices.

b/: Forecasted 2000 prices based on 1988 constant US dollars.

c/: See Table 2.6

d/: Derived by applying the long-term average ratio between the financial prices of soybeans and groundnuts, and the projected these economic prices.

e/: Assumed that economic values are equal to the respective financial prices.

f/: Estimated ratio between 1988 price (US\$1.44/kg) and 2,000 price (US\$1.48/kg) both at CIF New York in terms of 1988 constant prices is applied to the financial price.

g/: A premium of 20% to allow for storage losses, handling, etc. is added to the equivalent economic farm gate prices.

h/: The estimated government pesticide subsidy (about Rp.42 billion for 14,210 tons in 1986/87) is added to the financial prices.

i/: Economic shadow wage ratio of 70% is applied.

Table 2.6 Economic Price Structure for Major Agricultural Products and Fertilizers

	Operation	US\$/ton	Rp/kg
Rice/Paddy (Import substitution value)			
Export price, Thai 5% broken, FOB Bangkok a/		234	
Quality adjustment	90%	211	
Freight and insurance	+	32	
CIF price Banjarmasin b/	=	243	421
Port handling, storage and losses	+		30
Transport to wholesaler	+		6
Transport mill to wholesaler	-		3
Traders margins	-		11
Ex-mill price	=		442
Conversion to paddy	68%		300
Milling cost	-		11
Transport farm to mill	-		13
Economic farm gate price	=		276
Malze (Import substitution value)			
FOB US Gulf port a/		102	
Freight and insurance	+	22	
CIF price Banjarmasin b/	=	124	214
Port handling, storage and losses	+		11
Transport to wholesaler	+		11
Traders margin	-		13
Transport farm to wholesaler	-		13
Economic farm gate price	=		209
Soybeans (Import substitution value)			
CIF Rotterdam a/		208	
Freight and insurance	+	38	
CIF price Banjarmasin b/	=	246	425
Port handling, storage and losses	+		21
Transport to wholesaler	+		6
Traders margin	-		11
Transport farm to wholesaler	-		13
Economic farm gate price	=		428
Groundnuts (Import substitution value)			
Groundnuts oil price a/		641	
Ratio Indonesian import/groundnuts oil price	72%	462	
CIF price Banjarmasin shelled groundnuts b/	=	462	798
Port handling, storage and losses	+		40
Transport to wholesaler	+		6
Traders margin	-		11
Transport farm to wholesaler	-		13
Economic farm gate price	=		820
Shrimps (Export substitution value)			
FOB Banjarmasin b/		6,500	11,245
Quality testing fee	0.1%		11
Handling and transport to processor	-		60
Processing cost and margin	-		2,860
Processor buying price	=		8,314
Transport and marketing cost farm to processing plant	-		475
Economic farm gate price	rounded		7,840
Urea (Export substitution value)			
FOB Europe a/		186	
Freight and insurance	+	16	
Ex-factory Palembang b/	=	202	350
Transport to wholesaler	+		22
Storage and wholesalers' margin	+		17
Transport to farm	+		11
Economic farm gate price	=		399
TSP (Import substitution value)			
FOB US Gulf a/		205	
Freight and insurance	+	60	
CIF Banjarmasin b/	=	265	458
Transport, storage and wholesalers' margin	+		39
Transport to farm	+		11
Economic farm gate price	=		507
KCL (Import substitution value)			
FOB Vancouver a/		105	
Freight and insurance	+	54	
CIF Banjarmasin b/	=	159	275
Transport, storage and wholesalers' margin	+		39
Transport to farm	+		11
Economic farm gate price	=		325

Note: a/ Based on Revision of Commodity Price Forecasts and Quarterly Review of Commodity Markets, September 1988, World Bank
 b/ Prices converted at an exchange rate of US\$ 1.0 = Rp. 1,730

Table 2.7 Crop Budget per Hectare under Without Project Condition (Economic Prices)

Item	Unit	(1) Wetland Paddy				(2) Palawija Crops (Mungbeans)				(3) Inland Open Water Fishery				
		(i) Existing Irrigation Scheme		(ii) Existing Drainage and Polder		Q'ty	Price (Rp.)	Amount ('000Rp)	Q'ty	Price (Rp.)	Amount ('000Rp)	Q'ty	Price (Rp.)	Amount ('000Rp)
		Q'ty	Price (Rp.)	Amount ('000Rp)	Q'ty									
A. Gross Income														
- Yield	(ton)	2.5	276,000	690.0	1.5	276,000	414.0	0.5	635,000	317.5	0.083	1,316,000	109.3	
	(ton)	3.5	276,000	966.0										
	(ton)	4.0	276,000	1,104.0										
B. Production Cost														
1) Farm Input														
- Seed	(kg)	25	330	8.3	20	330	6.6	25	760	19.0	0		0.0	
- Fertilizer	(kg)	100	399	39.9	0	399	0.0	0	399	0.0	0		0.0	
Urea	(kg)	50	507	25.4	0	507	0.0	0	507	0.0	0		0.0	
TSP	(kg)	0	325	0.0	0	325	0.0	0		0.0	0		0.0	
- Agro-chemical	(lit.)	3	7,500	22.5	0	7,500	0.0	0	7,500	0.0	0		0.0	
Pesticide	(kg)	3	2,200	6.6	0	2,200	0.0	0		0.0	0		0.0	
Rodenticide														
(Sub-Total)				102.6			6.6			19.0			0.0	
2) Labour Requirement (m/d)														
		140	2,100	294.0	120	2,100	252.0	50	2,100	105.0	15.5	2,100	32.6	
3) Miscellaneous a/ (% of Sub-Total 1 + 2)														
		10		39.7	10		25.9	5		6.2			31.1	
Total Production Cost				436.3			284.5			130.2			63.7	
C. Net Return														
a.				253.7			129.5			187.3			45.6	
b.				529.7										
c.				667.7										

Note: a/ For inland open water fishery, fishing gear purchase, boat depreciation cost, etc.

Table 2.8 Crop Budget per Hectare under With Project Condition (Economic Prices) (1/2)

Item	Unit	(1) Wetland Paddy				(2) Palawija Crops (Mungbeans)					
		(i) Existing Irrigation Scheme		(ii) Existing Drainage and Polder		Qty	Price (Rp.)	Amount ('000Rp)	Qty	Price (Rp.)	Amount ('000Rp)
		Qty	Price (Rp.)	Amount ('000Rp)	Qty						
A. Gross Income											
- Yield	(ton)	5.5	276,000	1,518.0	3.0	276,000	828.0	1.5	635,000	952.5	
B. Production Cost											
1) Farm Input											
- Seed	(kg)	40	330	13.2	25	330	8.3	40	760	30.4	
- Fertilizer											
Urea	(kg)	200	399	79.8	100	399	39.9	100	399	39.9	
TSP	(kg)	150	507	76.1	50	507	25.4	100	507	50.7	
KCl	(kg)	100	325	32.5	0	325	0.0				
- Agro-chemical											
Pesticide	(lit.)	1	7,500	7.5	1	7,500	7.5	1	7,500	7.5	
Rodenticide	(kg)	3	2,200	6.6	3	2,200	6.6	2	2,200	4.4	
	(Sub-Total)			215.7			87.6			128.5	
2) Labour Requirement (m/d)		200	2,100	420.0	150	2,100	315.0	105	2,100	220.5	
3) Animal Power (t/d)		15	8,000	120.0	15	8,000	120.0	10	8,000	80.0	
4) Miscellaneous (% of Sub-Total 1 to 3)		5		37.8	10		52.3	5		21.5	
Total Production Cost				793.4			574.9			450.5	
C. Net Return				724.6			253.1			502.1	

Table 2.9 Estimate of Economic Benefit for Irrigation Project (1/7)

Name of Scheme	(Season)	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
KAB. TABALONG									
1. Jaro a/									
- WO/Project	(Wet)	625	5.5	3.44	276	793,433	948.75	495.90	452.85
	(Dry)	220	5.5	1.21	276	793,433	333.96	174.56	159.40
(Total)				4.65			1,282.71	670.45	612.26
- W/Project	(Wet)	625	5.5	3.44	276	793,433	948.75	495.90	452.85
	(Dry)	220	5.5	1.21	276	793,433	333.96	174.56	159.40
(Total)		845		4.65			1,282.71	670.45	612.26
- Incremental				0.00			0.00	0.00	0.00
2. Jaro Bawah									
- WO/Project	(Wet)	200	2.5	0.50	276	436,260	138.00	87.25	50.75
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
(Total)				0.50			138.00	87.25	50.75
- W/Project	(Wet)	200	5.5	1.10	276	793,433	303.60	158.69	144.91
	(Dry)	200	5.5	1.10	276	793,433	303.60	158.69	144.91
(Total)		400		2.20			607.20	317.37	289.83
- Incremental				1.70			469.20	230.12	239.08
3. Gumba									
- WO/Project	(Wet)	254	3.5	0.89	276	436,260	245.36	110.81	134.55
	(Dry)	254	3.5	0.89	276	436,260	245.36	110.81	134.55
(Total)				1.78			490.73	221.62	269.11
- W/Project	(Wet)	254	5.5	1.40	276	793,433	385.57	201.53	184.04
	(Dry)	254	5.5	1.40	276	793,433	385.57	201.53	184.04
(Total)		508		2.79			771.14	403.06	368.08
- Incremental				1.02			280.42	181.44	98.97
4. Sungai Kati									
- WO/Project	(Wet)	280	2.5	0.70	276	436,260	193.20	122.15	71.05
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
(Total)				0.70			193.20	122.15	71.05
- W/Project	(Wet)	280	5.5	1.54	276	793,433	425.04	222.16	202.88
	(Dry)	42	5.5	0.23	276	793,433	63.76	33.32	30.43
(Total)		322		1.77			488.80	255.49	233.31
- Incremental				1.07			295.60	133.33	162.26
5. Namun									
- WO/Project	(Wet)	64	2.5	0.16	276	436,260	44.16	27.92	16.24
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
(Total)				0.16			44.16	27.92	16.24
- W/Project	(Wet)	64	5.5	0.35	276	793,433	97.15	50.78	46.37
	(Dry)	22	5.5	0.12	276	793,433	33.40	17.46	15.94
(Total)		86		0.47			130.55	68.24	62.31
- Incremental				0.31			86.39	40.32	46.07
6. Kinarum									
- WO/Project	(Wet)	408	2.5	1.02	276	436,260	281.52	177.99	103.53
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
(Total)				1.02			281.52	177.99	103.53
- W/Project	(Wet)	408	5.5	2.24	276	793,433	619.34	323.72	295.62
	(Dry)	408	5.5	2.24	276	793,433	619.34	323.72	295.62
(Total)		816		4.49			1,238.69	647.44	591.25
- Incremental				3.47			957.17	469.45	487.72
7. Mihim									
- WO/Project	(Wet)	203	2.5	0.51	276	436,260	140.07	88.56	51.51
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
(Total)				0.51			140.07	88.56	51.51
- W/Project	(Wet)	203	5.5	1.12	276	793,433	308.15	161.07	147.09
	(Dry)	203	5.5	1.12	276	793,433	308.15	161.07	147.09
(Total)		406		2.23			616.31	322.13	294.17
- Incremental				1.73			476.24	233.57	242.67

a/: Jaro scheme has already achieved the target yield.

Table 2.9 Estimate of Economic Benefit for Irrigation Project (2/7)

Name of Scheme	(Season)	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
8. Bstupulut									
- WO/Project	(Wet)	225	2.5	0.56	276	436,260	155.25	98.16	57.09
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
	(Total)			0.56			155.25	98.16	57.09
- W/Project	(Wet)	225	5.5	1.24	276	793,433	341.55	178.52	163.03
	(Dry)	162	5.5	0.89	276	793,433	245.92	128.54	117.38
	(Total)	387		2.13			587.47	307.06	280.41
- Incremental				1.57			432.22	208.90	223.32
9. Bilas									
- WO/Project	(Wet)	643	2.5	1.61	276	436,260	443.67	480.52	163.15
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
	(Total)			1.61			443.67	280.52	163.15
- W/Project	(Wet)	643	5.5	3.54	276	793,433	976.07	510.18	465.90
	(Dry)	643	5.5	3.54	276	793,433	976.07	510.18	465.90
	(Total)	1286		7.07			1,952.15	1,020.35	931.79
- Incremental				5.47			1,508.48	739.84	768.64
10. Banyu Tajun									
- WO/Project	(Wet)	750	2.5	1.88	276	436,260	517.50	327.20	190.31
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
	(Total)			1.88			517.50	327.20	190.31
- W/Project	(Wet)	750	5.5	4.13	276	793,433	1,138.50	595.07	543.43
	(Dry)	750	5.5	4.13	276	793,433	1,138.50	595.07	543.43
	(Total)	1500		8.25			2,277.00	1,190.15	1,086.85
- Incremental				6.38			1,759.50	862.95	896.55
KAB. HULU SUNGAI UTARA									
1. Paran									
- WO/Project	(Wet)	188	3.5	0.66	276	436,260	181.61	82.02	99.59
	(Dry)	188	3.5	0.66	276	436,260	181.61	82.02	99.59
	(Total)			1.32			363.22	164.03	199.18
- W/Project	(Wet)	188	5.5	1.03	276	793,433	285.38	149.17	136.22
	(Dry)	188	5.5	1.03	276	793,433	285.38	149.17	136.22
	(Total)	376		2.07			570.77	298.33	272.44
- Incremental				0.75			207.55	134.30	73.26
2. Tindakan									
- WO/Project	(Wet)	233	3.5	0.82	276	436,260	225.08	101.65	123.43
	(Dry)	79	3.5	0.28	276	436,260	76.31	34.46	41.85
	(Total)			1.09			301.39	136.11	165.28
- W/Project	(Wet)	233	5.5	1.28	276	793,433	353.69	184.87	168.82
	(Dry)	79	5.5	0.43	276	793,433	119.92	62.68	57.24
	(Total)	312		1.72			473.62	247.55	226.07
- Incremental				0.62			172.22	111.44	60.79
3. Suapin									
- WO/Project	(Wet)	116	3.5	0.41	276	436,260	112.06	50.61	61.45
	(Dry)	40	3.5	0.14	276	436,260	38.64	17.45	21.19
	(Total)			0.55			150.70	68.06	82.64
- W/Project	(Wet)	116	5.5	0.64	276	793,433	176.09	92.04	84.05
	(Dry)	40	5.5	0.22	276	793,433	60.72	31.74	28.98
	(Total)	156		0.86			236.81	123.78	113.03
- Incremental				0.31			86.11	55.72	30.29
4. Lok Batu									
- WO/Project	(Wet)	116	3.5	0.41	276	436,260	112.06	50.61	61.45
	(Dry)	40	3.5	0.14	276	436,260	38.64	17.45	21.19
	(Total)			0.55			150.70	68.06	82.64
- W/Project	(Wet)	116	5.5	0.64	276	793,433	176.09	92.04	84.05
	(Dry)	40	5.5	0.22	276	793,433	60.72	31.74	28.98
	(Total)	156		0.86			236.81	123.78	113.03
- Incremental				0.31			86.11	55.72	30.39

Table 2.9 Estimate of Economic Benefit for Irrigation Project (3/7)

Name of Scheme	(Season)	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Totl. Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
5. Balangan									
- WO/Project	(Wet)	2,172	2.5	5.43	276	436,260	1,498.68	947.56	551.12
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
(Total)				5.43			1,498.68	947.56	551.12
- W/Project	(Wet)	2,172	5.5	11.95	276	793,433	3,297.10	1,723.34	1,573.76
	(Dry)	2,172	5.5	11.95	276	793,433	3,297.10	1,723.34	1,573.76
(Total)		4,344		23.89			6,594.19	3,446.67	3,147.52
- Incremental				18.46			5,095.51	2,499.11	2,596.40
6. Pitas									
- WO/Project	(Wet)	3,734	1.5	5.60	276	284,460	1,545.88	1,062.17	483.70
	(Dry)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
(Total)				5.60			1,545.88	1,062.17	483.70
- W/Project	(Wet)	3,734	5.5	20.54	276	793,433	5,668.21	2,962.68	2,705.53
	(Dry)	3,734	5.5	20.54	276	793,433	5,668.21	2,962.68	2,705.53
(Total)		7,468		41.07			11,336.42	5,925.36	5,411.07
- Incremental				35.47			9,790.55	4,863.18	4,927.36
KAB. HULU SUNGAI TENGAH									
1. Talang									
- WO/Project	(Wet)	165	3.5	0.58	276	436,260	159.39	71.98	87.41
	(Dry)	165	3.5	0.58	276	436,260	159.39	71.98	87.41
(Total)				1.16			318.78	143.97	174.81
- W/Project	(Wet)	165	5.5	0.91	276	793,433	250.47	130.92	119.55
	(Dry)	137	5.5	0.75	276	793,433	207.00	108.70	98.30
(Total)		302		1.66			457.47	239.62	217.85
- Incremental				0.50			138.69	95.65	43.04
2. Tapuk									
- WO/Project	(Wet)	186	3.5	0.65	276	436,260	179.68	81.14	98.53
	(Dry)	186	3.5	0.65	276	436,260	179.68	81.14	98.53
(Total)				1.30			359.35	162.29	197.06
- W/Project	(Wet)	186	5.5	1.02	276	793,433	282.35	147.58	134.77
	(Dry)	186	5.5	1.02	276	793,433	282.35	147.58	134.70
(Total)		372		2.05			564.70	295.16	269.54
- Incremental				0.74			205.34	132.87	72.48
3. Tamiyang									
- WO/Project	(Wet)	166	3.5	0.58	276	436,260	160.36	72.42	87.94
	(Dry)	164	3.5	0.57	276	436,260	158.42	71.55	86.88
(Total)				1.16			318.78	143.97	174.81
- W/Project	(Wet)	166	5.5	0.91	276	793,433	251.99	131.71	120.28
	(Dry)	164	5.5	0.90	276	793,433	248.95	130.12	118.83
(Total)		330		1.82			500.94	261.83	239.11
- Incremental				0.66			182.16	117.87	64.29
4. Banih Ilawang									
- WO/Project	(Wet)	160	3.5	0.56	276	436,260	154.56	69.80	84.76
	(Dry)	160	3.5	0.56	276	436,260	154.56	69.80	84.76
(Total)				1.12			309.12	139.60	169.52
- W/Project	(Wet)	160	5.5	0.88	276	793,433	242.88	261.95	115.93
	(Dry)	160	5.5	0.88	276	793,433	242.88	126.95	115.93
(Total)		320		1.76			485.76	253.90	231.86
- Incremental				0.64			176.64	114.30	62.34
5. Intangan									
- WO/Project	(Wet)	920	4.0	3.68	276	436,260	1,015.68	401.36	614.32
	(Dry)	437	4.0	1.75	276	436,260	482.45	190.65	291.80
(Total)				5.43			1,498.13	592.00	906.12
- W/Project	(Wet)	920	5.5	5.06	276	793,433	1,396.56	729.96	666.60
	(Dry)	437	5.5	2.40	276	793,433	663.37	346.73	316.64
(Total)		1,357		7.46			2,059.93	1,076.69	983.24
- Incremental				2.04			561.80	484.68	77.11

Table 2.9 Estimate of Economic Benefit for Irrigation Project (4/7)

Name of Scheme	(Season)	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp/kg)	Unit Prod. Cost (Rp/ha)	Grs. Prod. Value (Milln.Rp.)	Totl. Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
6. Kahakan									
- WO/Project	(Wet)	633	4.0	2.53	276	436,260	698.83	276.15	422.68
	(Dry)	301	4.0	1.20	276	436,260	332.30	131.31	200.99
(Total)				3.74			1,031.14	407.47	623.67
- W/Project	(Wet)	633	5.5	3.48	276	793,433	960.89	502.24	458.65
	(Dry)	301	5.5	1.66	276	793,433	456.92	238.82	218.09
(Total)		934		5.14			1,417.81	741.07	676.75
- Incremental				1.40			386.68	333.60	53.08
7. Mungunang									
- WO/Project	(Wet)	515	3.5	1.80	276	436,260	497.49	224.67	272.82
	(Dry)	515	3.5	1.80	276	436,260	497.49	224.67	272.82
(Total)				3.61			994.98	449.35	545.63
- W/Project	(Wet)	515	5.5	2.83	276	793,433	781.77	408.62	373.15
	(Dry)	515	5.5	2.83	276	793,433	781.77	408.62	373.15
(Total)		1,030		5.67			1,563.54	817.24	746.30
- Incremental				2.06			568.56	367.89	200.67
8. Haruyan Dayak									
- WO/Project	(Wet)	1,486	4.0	5.94	276	436,260	1,640.54	648.28	992.26
	(Dry)	1,486	4.0	5.94	296	436,260	1,640.54	648.28	992.26
(Total)				11.89			3,281.09	1,296.56	1,984.52
- W/Project	(Wet)	1,486	5.5	8.17	276	793,433	2,255.75	1,179.04	1,076.71
	(Dry)	1,486	5.5	8.17	276	793,433	2,255.75	1,179.04	1,076.71
(Total)		2,972		16.35			4,511.50	2,358.08	2,153.41
- Incremental				4.46			1,230.41	1,061.52	168.89
9. Batang Alai									
- WO/Project	(Wet)	6,223	1.5	9.33	276	284,460	2,576.32	1,770.19	806.13
	(Dry)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
(Total)				9.33			2,576.32	1,770.19	806.13
- W/Project	(Wet)	6,223	5.5	32.23	276	793,433	9,446.51	4,937.53	4,508.98
	(Dry)	6,223	5.5	34.23	276	793,433	9,446.51	4,937.53	4,508.98
(Total)		12,446		68.45			18,893.03	9,875.07	9,017.96
- Incremental				59.12			16,316.71	8,104.87	8,211.83
10. Barabai									
- WO/Project	(Wet)	2,278	1.5	3.42	276	284,460	943.09	648.00	295.09
	(Dry)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
(Total)				3.42			943.09	648.00	295.09
- W/Project	(Wet)	2,278	5.5	12.53	276	793,433	3,458.00	1,807.44	1,650.56
	(Dry)	2,278	5.5	12.53	276	793,433	3,458.00	1,807.44	1,650.56
(Total)		4,556		25.06			6,916.01	3,614.88	3,301.13
- Incremental				21.64			5,972.92	2,966.88	3,006.04
KAB. HULU SUNGAI SELATAN									
1. Telaga Langsat									
- WO/Project	(Wet)	1,534	4.0	6.14	276	436,260	1,693.54	669.22	1,024.31
	(Dry)	487	4.0	1.95	276	436,260	537.65	212.46	325.19
(Total)				8.08			2,231.18	881.68	1,349.50
- W/Project	(Wet)	1,534	5.5	8.44	276	793,433	2,328.61	1,217.13	1,111.49
	(Dry)	487	5.5	2.68	276	793,433	739.27	386.40	352.86
(Total)		2,021		11.12			3,067.88	1,603.53	1,464.35
- Incremental				3.03			836.69	721.85	114.85
2. Tayub									
- WO/Project	(Wet)	178	3.5	0.62	276	436,260	171.95	77.65	94.29
	(Dry)	57	3.5	0.20	276	436,260	55.06	24.87	30.20
(Total)				0.82			227.01	102.52	124.49
- W/Project	(Wet)	178	5.5	0.98	276	793,433	270.20	141.23	128.97
	(Dry)	57	5.5	0.31	276	793,433	86.53	45.23	41.30
(Total)		235		1.29			356.73	186.46	170.27
- Incremental				0.47			129.72	83.94	45.78

Table 2.9 Estimate of Economic Benefit for Irrigation Project (5/7)

Name of Scheme	(Season)	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
3. Nunungin									
- WO/Project	(Wet)	36	3.5	0.13	276	436,260	34.78	15.71	19.07
	(Dry)	11	3.5	0.04	276	436,260	10.63	4.80	5.83
(Total)				0.16			45.40	20.50	24.90
- W/Project	(Wet)	36	5.5	0.20	276	793,433	54.65	28.56	26.08
	(Dry)	11	5.5	0.06	276	793,433	16.70	8.73	7.97
(Total)		47		0.26			71.35	37.29	34.05
- Incremental				0.09			25.94	16.79	9.16
4. Kuangan									
- WO/Project	(Wet)	143	3.5	0.50	276	436,260	138.14	62.39	75.75
	(Dry)	45	3.5	0.16	276	436,260	43.47	19.63	23.84
(Total)				0.66			181.61	82.02	99.59
- W/Project	(Wet)	143	5.5	0.79	276	793,433	217.07	113.46	103.61
	(Dry)	45	5.5	0.25	276	793,433	68.31	35.70	32.61
(Total)		188		1.03			285.38	149.17	136.22
- Incremental				0.38			103.78	67.15	36.63
5. Pamujan									
- WO/Project	(Wet)	214	3.5	0.75	276	436,260	206.72	93.36	113.36
	(Dry)	68	3.5	0.24	276	436,260	65.69	29.67	36.02
(Total)				0.99			272.41	123.03	149.39
- W/Project	(Wet)	214	5.5	1.18	276	793,433	324.85	169.79	155.06
	(Dry)	68	5.5	0.37	276	793,433	103.22	53.95	49.27
(Total)		282		1.55			428.08	223.75	204.33
- Incremental				0.56			155.66	100.72	54.94
6. Hawatu									
- WO/Project	(Wet)	71	3.5	0.25	276	436,260	68.59	30.97	37.61
	(Dry)	23	3.5	0.08	276	436,260	22.22	10.03	12.18
(Total)				0.33			90.80	41.01	49.80
- W/Project	(Wet)	71	5.5	0.39	276	793,433	107.78	56.33	51.44
	(Dry)	23	5.5	0.13	276	793,433	34.91	18.25	16.67
(Total)		94		0.52			142.69	74.58	68.11
- Incremental				0.19			51.89	33.57	18.31
7. Taal									
- WO/Project	(Wet)	107	3.5	0.37	276	436,260	103.36	46.68	56.68
	(Dry)	34	3.5	0.12	276	436,260	32.84	14.83	18.01
(Total)				0.49			136.21	61.51	74.69
- W/Project	(Wet)	107	5.5	0.59	276	793,433	162.43	84.90	77.53
	(Dry)	34	5.5	0.19	276	793,433	51.61	26.98	24.64
(Total)		141		0.78			214.04	111.87	102.16
- Incremental				0.28			77.83	50.36	27.47
8. Jarau									
- WO/Project	(Wet)	143	4.0	0.57	276	436,260	157.87	62.39	95.49
	(Dry)	45	4.0	0.18	276	436,260	49.68	19.63	30.05
(Total)				0.75			207.55	82.02	125.54
- W/Project	(Wet)	143	5.5	0.79	276	793,433	217.07	113.46	103.61
	(Dry)	45	5.5	0.25	276	793,433	68.31	35.70	32.61
(Total)		188		1.03			285.38	149.17	136.22
- Incremental				0.28			77.83	67.15	10.68
9. Kayu Hlabang									
- WO/Project	(Wet)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
(Total)				0.00			0.00	0.00	0.00
- W/Project	(Wet)	347	5.5	1.91	276	793,433	526.75	275.32	251.42
	(Dry)	147	5.5	0.81	276	793,433	223.15	116.63	106.51
(Total)		494		2.72			749.89	391.96	357.94
- Incremental				2.72			749.89	391.96	357.94

Table 2.9 Estimate of Economic Benefit for Irrigation Project (6/7)

Name of Scheme	(Season)	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
10. Amandit									
- WO/Project	(Wet)	6,432	1.5	9.65	276	284,460	2,662.85	1,829.65	833.20
	(Dry)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
(Total)				9.65			2,662.85	1,829.65	833.20
- W/Project	(Wet)	6,432	5.5	35.38	276	793,433	9,763.78	5,103.36	4,660.41
	(Dry)	5,393	5.5	29.66	276	793,433	8,186.57	4,278.98	3,907.59
(Total)		11,825		65.04			17,950.35	9,382.35	8,568.00
- Incremental				55.39			15,287.50	7,552.70	7,734.80
KAB. TAPIN									
1. Lok Paikat									
- WO/Project	(Wet)	392	4.0	1.57	276	436,260	432.77	171.01	261.75
	(Dry)	125	4.0	0.50	276	436,260	138.00	54.53	83.47
(Total)				2.07			570.77	225.55	345.22
- W/Project	(Wet)	392	5.5	2.16	276	793,433	595.06	311.03	284.03
	(Dry)	125	5.5	0.69	276	793,433	189.75	99.18	90.57
(Total)		517		2.84			784.81	410.20	374.60
- Incremental				0.78			214.04	184.66	29.38
2. Pampain									
- WO/Project	(Wet)	392	3.5	1.37	276	436,260	378.67	171.01	207.66
	(Dry)	125	3.5	0.44	276	436,260	120.75	54.53	66.22
(Total)				1.81			499.42	225.55	273.88
- W/Project	(Wet)	392	5.5	2.16	276	793,433	595.06	311.03	284.03
	(Dry)	125	5.5	0.69	276	793,433	189.75	99.18	90.57
(Total)		517		2.84			784.81	410.20	374.60
- Incremental				1.03			285.38	184.66	100.73
3. Nupadang									
- WO/Project	(Wet)	253	4.0	1.01	276	436,260	279.31	110.37	168.94
	(Dry)	91	4.0	0.36	276	436,260	100.46	39.70	60.76
(Total)				1.38			379.78	150.07	229.70
- W/Project	(Wet)	253	5.5	1.39	276	793,433	384.05	200.74	183.32
	(Dry)	91	5.5	0.50	276	793,433	138.14	72.20	65.94
(Total)		344		1.89			522.19	272.94	249.25
- Incremental				0.52			142.42	122.87	19.55
4. Tatakan									
- WO/Project	(Wet)	99	3.5	0.35	276	436,260	95.63	43.19	52.44
	(Dry)	34	3.5	0.12	276	436,260	32.84	14.83	18.01
(Total)				0.47			128.48	58.02	70.46
- W/Project	(Wet)	99	5.5	0.54	276	793,433	150.28	78.55	71.73
	(Dry)	34	5.5	0.19	276	793,433	51.61	26.98	24.64
(Total)		133		0.73			201.89	105.53	96.37
- Incremental				0.27			73.42	47.50	25.91
5. Pulau Pinang									
- WO/Project	(Wet)	270	3.5	0.95	276	436,260	260.82	117.79	143.03
	(Dry)	102	3.5	0.36	276	436,260	98.53	44.50	54.03
(Total)				1.30			359.35	162.29	197.06
- W/Project	(Wet)	270	5.5	1.49	276	793,433	409.86	214.23	195.63
	(Dry)	102	5.5	0.56	276	793,433	154.84	80.93	73.91
(Total)		372		2.05			564.70	295.16	269.54
- Incremental				0.74			205.34	132.87	72.48
6. Rampanang									
- WO/Project	(Wet)	146	4.0	0.58	276	436,260	161.18	63.69	97.49
	(Dry)	136	4.0	0.54	276	436,260	150.14	59.33	90.81
(Total)				1.13			311.33	123.03	188.30
- W/Project	(Wet)	146	5.5	0.80	276	793,433	221.63	115.84	105.79
	(Dry)	136	5.5	0.75	276	793,433	206.45	107.91	98.54
(Total)		282		1.55			428.08	223.75	204.33
- Incremental				0.42			116.75	100.72	16.03

Table 2.9 Estimate of Economic Benefit for Irrigation Project (7/7)

Name of Scheme	(Season)	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit.Prod. Cost (Rp./ha)	Grs.Prod. Value (Milln.Rp.)	Totl.Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
7. Biniang									
- WO/Project	(Wet)	1,106	4.0	4.42	276	436,260	1,221.02	482.50	738.52
	(Dry)	351	4.0	1.40	276	436,260	387.50	153.13	234.38
(Total)				5.83			1,608.53	635.63	972.90
- W/Project	(Wet)	1,106	5.5	6.08	276	793,433	1,678.91	877.54	801.37
	(Dry)	351	5.5	1.93	276	793,433	532.82	278.49	254.32
(Total)		1,457		8.01			2,211.73	1,156.03	1,055.69
- Incremental				2.19			603.20	520.40	82.80
8. Tapin									
- WO/Project	(Wet)	3,228	1.5	4.84	276	284,460	1,336.39	918.24	418.16
	(Dry)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
(Total)				4.84			1,336.39	918.24	418.16
- W/Project	(Wet)	5,328	5.5	29.30	276	793,433	8,087.90	4,227.41	3,860.49
	(Dry)	3,452	5.5	18.99	276	793,433	5,240.14	2,738.93	2,501.21
(Total)		8,780		48.29			13,328.04	6,966.34	6,361.70
- Incremental				43.45			11,991.65	6,048.10	5,943.54
9. Labuhan									
- WO/Project	(Wet)	300	2.5	0.75	276	436,260	207.00	130.88	76.12
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
(Total)				0.75			207.00	130.88	76.12
- W/Project	(Wet)	300	5.5	1.65	276	793,433	455.40	238.03	217.37
	(Dry)	159	5.5	0.87	276	793,433	241.36	126.16	115.21
(Total)		459		2.52			696.76	364.19	332.58
- Incremental				1.77			489.76	233.31	256.45

Table 2.10 Estimate of Economic Benefit for Drainage Project (1/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production (000 ton)	Unit Price (Rp/kg)	Unit Prod. Cost (Rp/ha)	Grs. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
KAB. TAGALONG									
1. S. Gampja									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	1,338	1.50	2.01	276	284,460	553.93	380.61	173.32
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	1,338		2.01			553.93	380.61	173.32
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	1,403	3.00	4.21	276	574,860	1,162.02	806.76	355.26
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	1,403		4.21			1,162.02	806.76	355.26
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			2.20			608.08	426.15	181.93
	Palawija			0.00			0.00	0.00	0.00
	Total						608.08	426.15	181.93
2. S. Rampang									
- WO/Project									
(Wet)	Wet Paddy	535	1.50	0.80	276	284,460	221.57	152.24	69.33
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	535		0.80			221.57	152.24	69.33
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type II									
(Wet)	Wet Paddy	565	3.00	1.69	276	574,860	467.59	324.63	142.95
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	565	1.50	0.85	635	450,450	537.90	254.38	283.52
	(Total) Wet Paddy	565		1.69			467.59	324.63	142.95
	(Total) Palawija	565		0.85			537.90	254.38	283.52
- Incremental Benefit									
	Wet Paddy			0.89			246.02	172.39	73.62
	Palawija			0.85			537.90	254.38	283.52
	Total						783.91	426.77	357.14
3. S. Palist									
- WO/Project									
(Wet)	Wet Paddy	424	1.50	0.64	276	284,460	175.37	120.50	54.87
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	424		0.64			175.37	120.50	54.87
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	444	3.00	1.33	276	574,860	368.03	255.51	112.52
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	444	1.50	0.67	635	450,450	423.37	200.22	223.15
	(Total) Wet Paddy	444		1.33			368.03	255.51	112.52
	(Total) Palawija	444		0.67			423.37	200.22	223.15
- Incremental Benefit									
	Wet Paddy			0.70			192.66	135.02	57.64
	Palawija			0.67			423.37	200.22	223.15
	Total						616.03	335.23	280.79
4. S. Pimping									
- WO/Project									
(Wet)	Wet Paddy	134	1.50	0.20	276	284,460	55.39	38.06	17.33
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	134		0.20			55.39	38.06	17.33
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	140	3.00	0.42	276	574,860	116.20	80.68	35.53
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	140	1.50	0.21	635	450,450	133.67	63.22	70.46
	(Total) Wet Paddy	140		0.42			116.20	80.68	35.53
	(Total) Palawija	140		0.21			133.67	63.22	70.46
- Incremental Benefit									
	Wet Paddy			0.22			60.81	42.62	18.19
	Palawija			0.21			133.67	63.22	70.46
	Total						194.48	105.83	88.65

Table 2.10 *Estimate of Economic Benefit for Drainage Project (2/13)*

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production (000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Totl. Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
5. S. Bintoro									
- WO/Project									
(Wet)	Wet Paddy	89	1.50	0.13	276	284,460	36.93	25.37	11.55
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	89		0.13			36.93	25.37	11.55
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	94	3.00	0.28	276	574,860	77.47	53.78	23.68
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	94	1.50	0.14	635	450,450	89.12	42.14	46.97
	(Total) Wet Paddy	94		0.28			77.47	53.78	23.68
	(Total) Palawija	94		0.14			89.12	42.14	46.97
- Incremental Benefit									
	Wet Paddy			0.15			40.54	28.41	12.13
	Palawija			0.14			89.12	42.14	46.97
	Total						129.65	70.55	59.10
6. S. Nanti									
- WO/Project									
(Wet)	Wet Paddy	178	1.50	0.27	276	284,460	73.86	50.75	23.11
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	178		0.27			73.86	50.75	23.11
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	187	3.00	0.56	276	574,860	154.94	107.57	47.37
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	187	1.50	0.28	635	450,450	178.23	84.29	93.94
	(Total) Wet Paddy	187		0.56			154.94	107.57	47.37
	(Total) Palawija	187		0.28			178.23	84.29	93.94
- Incremental Benefit									
	Wet Paddy			0.29			81.08	56.82	24.26
	Palawija			0.28			178.23	84.29	93.94
	Total						259.31	141.11	118.20
7. Tamunti									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	150	1.50	0.23	276	284,460	62.10	42.67	19.43
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	150		0.23			62.10	42.67	19.43
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type H									
(Wet)	Wet Paddy	140	3.00	0.42	276	574,860	116.20	80.68	35.53
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	140	1.50	0.21	635	450,450	133.67	63.22	70.46
	(Total) Wet Paddy	140		0.42			116.20	80.68	35.53
	(Total) Palawija	140		0.21			133.67	63.22	70.46
- Incremental Benefit									
	Wet Paddy			0.20			54.10	38.01	16.09
	Palawija			0.21			133.67	63.22	70.46
	Total						187.78	101.22	86.55
8. Bangkiling									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	400	1.50	0.60	276	284,460	165.60	113.78	51.82
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	400		0.60			165.60	113.78	51.82
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type H									
(Wet)	Wet Paddy	374	3.00	1.12	276	574,860	309.87	215.14	94.74
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	374	1.50	0.56	635	450,450	356.46	168.58	187.89
	(Total) Wet Paddy	374		1.12			309.87	215.14	94.74
	(Total) Palawija	374		0.56			356.46	168.58	187.89
- Incremental Benefit									
	Wet Paddy			0.52			144.27	101.35	42.92
	Palawija			0.56			356.46	168.58	187.89
	Total						500.73	269.93	230.81

Table 2.10 Estimate of Economic Benefit for Drainage Project (3/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
9. Pulau Kuu									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	280	1.50	0.42	276	284,460	115.92	79.65	36.27
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	280		0.42			115.92	79.65	36.27
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type B									
(Wet)	Wet Paddy	262	3.00	0.79	276	574,860	216.89	150.58	66.31
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	262	1.50	0.39	635	450,450	249.50	117.99	131.51
	(Total) Wet Paddy	262		0.79			216.89	150.58	66.31
	(Total) Palawija	262		0.39			249.50	117.99	131.51
- Incremental Benefit									
	Wet Paddy			0.37			100.97	70.93	30.04
	Palawija			0.39			249.50	117.99	131.51
	Total						350.46	188.92	161.54
KAB. HULU SUNGAI UTARA									
1. S. Pinang Hsbang									
- WO/Project									
(Wet)	Wet Paddy	1,861	1.50	2.79	276	284,460	770.42	529.36	241.06
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	1,861		2.79			770.42	529.36	241.06
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,900	3.00	5.70	276	574,860	1,573.27	1,092.28	480.99
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,900	1.50	2.85	635	450,450	1,809.83	855.89	953.94
	(Total) Wet Paddy	1,900		5.70			1,573.27	1,092.28	480.99
	(Total) Palawija	1,900		2.85			1,809.83	855.89	953.94
- Incremental Benefit									
	Wet Paddy			2.91			802.85	562.92	239.92
	Palawija			2.85			1,809.83	855.89	953.94
	Total						2,612.67	1,418.81	1,193.86
2. R. Batu Mandi									
- WO/Project									
(Wet)	Wet Paddy	1,269	1.50	1.90	276	248,460	525.37	315.30	210.07
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	248,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	1,269		1.90			525.37	315.30	210.07
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,295	3.00	3.89	276	248,460	1,072.26	321.76	750.50
	Palawija	0	1.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	248,460	0.00	0.00	0.00
	Palawija	1,295	1.50	1.94	635	130,200	1,233.49	168.61	1,064.88
	(Total) Wet Paddy	1,295		3.89			1,072.26	321.76	750.50
	(Total) Palawija	1,295		1.94			1,233.49	168.61	1,064.88
- Incremental Benefit									
	Wet Paddy			1.98			546.89	6.46	540.43
	Palawija			1.94			1,233.49	168.61	1,064.88
	Total						1,780.38	175.07	1,605.31
3. R. Pinang Kara									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type A									
(Wet)	Wet Paddy	4,349	1.50	6.52	276	284,460	1,800.42	1,237.07	563.35
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	4,349		6.52			1,800.42	1,237.07	563.35
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			6.52			1,800.42	1,237.07	563.35
	Palawija			0.00			0.00	0.00	0.00
	Total						1,800.42	1,237.07	563.35

Table 2.10 Estimate of Economic Benefit for Drainage Project (4/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production (000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Totl. Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
3. R. Pinang Kara									
- W/P Type A									
(Wet)	Wet Paddy	4,349	1.50	6.52	276	284,460	1,800.42	1,237.07	563.35
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	4,349		6.52			1,800.42	1,237.07	563.35
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	4,350	3.00	13.05	276	574,860	3,601.60	2,500.50	1,101.10
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	4,350	1.50	6.52	635	450,450	4,143.15	1,959.35	2,183.80
	(Total) Wet Paddy	4,350		13.05			3,601.60	2,500.50	1,101.10
	(Total) Palawija	4,350		6.52			4,143.15	1,959.35	2,183.80
- Incremental Benefit									
	Wet Paddy			6.53			1,801.18	1,263.43	537.75
	Palawija			6.52			4,143.15	1,959.35	2,183.80
	Total						5,944.33	3,222.78	2,721.55
KAB. HULU SUNGAI TENGAH									
1. R. Taras									
- WO/Project									
(Wet)	Wet Paddy	284	1.50	0.43	276	284,460	117.42	80.68	36.74
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	284		0.43			117.42	80.68	36.74
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	286	3.00	0.86	276	574,860	236.58	164.25	72.33
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	286	1.50	0.43	635	450,450	272.15	128.70	143.45
	(Total) Wet Paddy	286		0.86			236.58	164.25	72.33
	(Total) Palawija	286		0.43			272.15	128.70	143.45
- Incremental Benefit									
	Wet Paddy			0.43			119.16	83.57	35.59
	Palawija			0.43			272.15	128.70	143.45
	Total						391.31	212.27	179.03
2. R. Bangkau									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	851	1.50	1.28	276	284,460	352.26	242.04	110.22
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	851		1.28			352.26	242.04	110.22
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	857	3.00	2.57	276	574,860	709.73	492.75	216.98
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	857		2.57			709.73	492.75	216.98
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			1.30			357.47	250.71	106.76
	Palawija			0.00			0.00	0.00	0.00
	Total						357.47	250.71	106.76
3. Tg. Jernih									
- WO/Project									
(Wet)	Wet Paddy	1,137	1.50	1.71	276	248,460	470.72	282.50	188.22
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	248,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	1,137		1.71			470.72	282.50	188.22
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type H									
(Wet)	Wet Paddy	1,194	3.00	3.58	276	248,460	988.63	296.66	691.97
	Palawija	0	1.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	248,460	0.00	0.00	0.00
	Palawija	1,194	1.50	1.79	635	130,200	1,137.28	155.46	981.83
	(Total) Wet Paddy	1,194		3.58			988.63	296.66	691.97
	(Total) Palawija	1,194		1.79			1,137.28	155.46	981.83
- Incremental Benefit									
	Wet Paddy			1.88			517.91	14.16	503.75
	Palawija			1.79			1,137.28	155.46	981.83
	Total						1,655.20	169.62	1,485.58

Table 2.10 Estimate of Economic Benefit for Drainage Project (5/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grc. Prod. Value (Milln.Rp.)	Totl. Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
4. Tg. Senuanggi Kambst									
- WO/Project									
(Wet)	Wet Paddy	2,514	1.50	3.77	276	248,460	1,040.80	624.63	416.17
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	248,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	2,514	1.50	3.77			1,040.80	624.63	416.17
	(Total) Palawija	0	0.50	0.00			0.00	0.00	0.00
- W/P Type B									
(Wet)	Wet Paddy	2,640	3.00	7.92	276	248,460	2,185.92	655.93	1,529.99
	Palawija	0	1.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	248,460	0.00	0.00	0.00
	Palawija	2,640	1.50	3.96	635	130,200	2,514.60	343.73	2,170.87
	(Total) Wet Paddy	2,640	3.00	7.92			2,185.92	655.93	1,529.99
	(Total) Palawija	2,640	1.50	3.96			2,514.60	343.73	2,170.87
- Incremental Benefit									
	Wet Paddy			4.15			1,145.12	31.31	1,113.82
	Palawija			3.96			2,514.60	343.73	2,170.87
	Total						3,659.72	375.03	3,284.69
5. R. Bangkau Extension									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	571	3.00	1.71	276	574,860	473.15	328.50	144.65
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	571		1.71			473.15	328.50	144.65
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			1.71			473.15	328.50	144.65
	Palawija			0.00			0.00	0.00	0.00
	Total						473.15	328.50	144.65
6. S. Sirung									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	2,381	3.00	7.14	276	574,860	1,971.47	1,368.74	602.73
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	2,381	1.50	3.57	635	450,450	2,267.90	1,072.52	1,195.38
	(Total) Wet Paddy	2,381		7.14			1,971.47	1,368.74	602.73
	(Total) Palawija	2,381		3.57			2,267.90	1,072.52	1,195.38
- Incremental Benefit									
	Wet Paddy			7.14			1,971.47	1,368.74	602.73
	Palawija			3.57			2,267.90	1,072.52	1,195.38
	Total						4,239.37	2,441.26	1,798.11
7. Binjai									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	746	3.00	2.24	276	574,860	617.36	428.62	188.74
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	746	1.50	1.12	635	450,450	710.18	335.86	374.33
	(Total) Wet Paddy	746		2.24			617.36	428.62	188.74
	(Total) Palawija	746		1.12			710.18	335.86	374.33
- Incremental Benefit									
	Wet Paddy			2.24			617.36	428.64	188.72
	Palawija			1.12			710.18	355.86	374.32
	Total						1,327.54	764.50	563.04

Table 2.10 Estimate of Economic Benefit for Drainage Project (6/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln. Rp.)	Tot. Prod. Cost (Milln. Rp.)	Net Return (Milln. Rp.)
KAB. HULU SUNGAI SELATAN									
1. Tg. Lungau									
- WO/Project									
(Wet)	Wet Paddy	1,857	1.50	2.79	276	284,460	769.00	528.38	240.62
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	1,857		2.79			769.00	528.38	240.62
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type B									
(Wet)	Wet Paddy	1,912	3.00	5.74	276	574,860	1,583.40	1,099.32	484.08
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,912	1.50	2.87	635	450,450	1,821.48	861.40	960.08
	(Total) Wet Paddy	1,912		5.74			1,583.40	1,099.32	484.08
	(Total) Palawija	1,912		2.87			1,821.48	861.40	960.08
- Incremental Benefit									
	Wet Paddy			2.95			814.40	570.94	243.47
	Palawija			2.87			1,821.48	861.40	960.08
	Total						2,635.89	1,432.34	1,203.55
2. Tg. Penganbau									
- WO/Project									
(Wet)	Wet Paddy	476	1.50	0.71	276	284,460	197.15	135.46	61.69
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	476		0.71			197.15	135.46	61.69
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type B									
(Wet)	Wet Paddy	500	3.00	1.50	276	574,860	414.00	287.43	126.57
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	500	1.50	0.75	635	450,450	476.25	225.23	251.03
	(Total) Wet Paddy	500		1.50			414.00	287.43	126.57
	(Total) Palawija	500		0.75			476.25	225.23	251.03
- Incremental Benefit									
	Wet Paddy			0.79			216.85	151.97	64.88
	Palawija			0.75			476.25	225.23	251.03
	Total						693.10	377.20	315.91
3. S. Kajang									
- WO/Project									
(Wet)	Wet Paddy	1,435	1.50	2.15	276	284,460	594.05	408.17	185.88
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	1,435		2.15			594.05	408.17	185.88
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,500	3.00	4.50	276	574,860	1,242.00	862.29	379.71
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,500	1.50	2.25	635	450,450	1,428.75	675.68	753.08
	(Total) Wet Paddy	1,500		4.50			1,242.00	862.29	379.71
	(Total) Palawija	1,500		2.25			1,428.75	675.68	753.08
- Incremental Benefit									
	Wet Paddy			2.35			647.95	454.12	193.83
	Palawija			2.25			1,428.75	675.68	753.08
	Total						2,076.70	1,129.79	946.91
4. S. Tirta Bahafayung									
- WO/Project									
(Wet)	Wet Paddy	556	1.50	0.83	276	284,460	230.12	158.11	72.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	556		0.83			230.12	158.11	72.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type B									
(Wet)	Wet Paddy	600	3.00	1.80	276	574,860	496.80	344.92	151.88
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	600	1.50	0.90	635	450,450	571.50	270.27	301.23
	(Total) Wet Paddy	600		1.80			496.80	344.92	151.88
	(Total) Palawija	600		0.90			571.50	270.27	301.23
- Incremental Benefit									
	Wet Paddy			0.97			266.68	186.80	79.88
	Palawija			0.90			571.50	270.27	301.23
	Total						838.18	457.07	381.11

Table 2.10 Estimate of Economic Benefit for Drainage Project (7/13)

Numo of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln. Rp.)	Totl. Prod. Cost (Milln. Rp.)	Net Return (Milln. Rp.)
5. S. Taniran									
- WO/Project									
(Wet)	Wet Paddy	287	1.50	0.43	276	284,460	118.81	81.63	37.18
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	287		0.43			118.81	81.63	37.18
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	300	3.00	0.90	276	574,860	248.40	172.46	75.94
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	300	1.50	0.45	635	450,450	285.75	135.14	150.62
	(Total) Wet Paddy	300		0.90			248.40	172.46	75.94
	(Total) Palawija	300		0.45			285.75	135.14	150.62
- Incremental Benefit									
	Wet Paddy			0.47			129.59	90.82	38.77
	Palawija			0.45			285.75	135.14	150.62
	Total						415.34	225.96	189.38
6. R. Negara									
- WO/Project									
(Wet)	Wet Paddy	4,916	1.50	7.37	276	284,460	2,035.26	1,398.43	636.83
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	4,916		7.37			2,035.26	1,398.43	636.83
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	4,952	3.00	14.86	276	574,860	4,100.65	2,846.98	1,253.67
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	4,952	1.50	7.43	635	450,450	4,717.24	2,230.84	2,486.39
	(Total) Wet Paddy	4,952		14.86			4,100.65	2,846.98	1,253.67
	(Total) Palawija	4,952		7.43			4,717.24	2,230.84	2,486.39
- Incremental Benefit									
	Wet Paddy			7.48			2,065.40	1,448.55	616.84
	Palawija			7.43			4,717.24	2,230.84	2,486.39
	Total						6,782.63	3,679.40	3,103.23
7. S. Balum									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	553	1.50	0.83	276	284,460	229.02	157.36	71.66
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	553		0.83			229.02	157.36	71.66
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	600	3.00	1.80	276	574,860	496.80	344.92	151.88
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	600		1.80			496.80	344.92	151.88
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			0.97			267.78	187.55	80.22
	Palawija			0.00			0.00	0.00	0.00
	Total						267.78	187.55	80.22
8. R. Ankinang									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,429	3.00	4.29	276	574,860	1,182.88	821.24	361.64
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,429	1.50	2.14	635	450,450	1,360.74	643.51	717.23
	(Total) Wet Paddy	1,429		4.29			1,182.88	821.24	361.64
	(Total) Palawija	1,429		2.14			1,360.74	643.51	717.23
- Incremental Benefit									
	Wet Paddy			4.29			1,182.88	821.24	361.64
	Palawija			2.14			1,360.74	643.51	717.23
	Total						2,543.62	1,464.76	1,078.86

Table 2.10 Estimate of Economic Benefit for Drainage Project (8/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln. Rp.)	Totl. Prod. Cost (Milln. Rp.)	Net Return (Milln. Rp.)
9. R. Garis									
- W/O/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,429	3.00	4.29	276	574,860	1,182.88	821.24	361.64
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,429	1.50	2.14	635	450,450	1,360.74	643.51	717.23
	(Total) Wet Paddy	1,429		4.29			1,182.88	821.24	361.64
	(Total) Palawija	1,429		2.14			1,360.74	643.51	717.23
- Incremental Benefit									
	Wet Paddy			4.29			1,182.88	821.24	361.64
	Palawija			2.14			1,360.74	643.51	717.23
	Total						2,543.62	1,464.76	1,078.86
10. R. Negara Extension									
- W/O/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	476	3.00	1.43	276	574,860	394.29	273.75	120.55
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	476	1.50	0.71	635	450,450	453.58	214.50	239.08
	(Total) Wet Paddy	476		1.43			394.29	273.75	120.55
	(Total) Palawija	476		0.71			453.58	214.50	239.08
- Incremental Benefit									
	Wet Paddy			1.43			394.29	273.75	120.55
	Palawija			0.71			453.58	214.50	239.08
	Total						847.87	488.25	359.62
11. S. Hadangan									
- W/O/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type A									
(Wet)	Wet Paddy	3,587	1.50	5.38	276	284,460	1,485.10	1,020.41	464.69
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	3,587		5.38			1,485.10	1,020.41	464.69
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			5.38			1,485.10	1,020.41	464.69
	Palawija			0.00			0.00	0.00	0.00
	Total						1,485.10	1,020.41	464.69
11. S. Hadangan									
- W/P Type A									
(Wet)	Wet Paddy	3,587	1.50	5.38	276	284,460	1,485.10	1,020.41	464.69
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	3,587		5.38			1,485.10	1,020.41	464.69
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	3,800	3.00	11.40	276	574,860	3,146.40	2,184.47	961.93
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	3,800	1.50	5.70	635	450,450	3,619.50	1,711.71	1,907.79
	(Total) Wet Paddy	3,800		11.40			3,146.40	2,184.47	961.93
	(Total) Palawija	3,800		5.70			3,619.50	1,711.71	1,907.79
- Incremental Benefit									
	Wet Paddy			6.02			1,661.30	1,164.05	497.25
	Palawija			5.70			3,619.50	1,711.71	1,907.79
	Total						5,280.80	2,875.76	2,405.04

Table 2.10 Estimate of Economic Benefit for Drainage Project (9/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
12. S. Batang Alai									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type A									
(Wet)	Wet Paddy	1,416	1.50	2.12	276	284,460	586.22	402.80	183.43
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	1,416		2.12			586.22	402.80	183.43
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			2.12			586.22	402.80	183.43
	Palawija			0.00			0.00	0.00	0.00
	Total						586.22	402.80	183.43
12. S. Batang Alai									
- W/P Type A									
(Wet)	Wet Paddy	1,416	1.50	2.12	276	284,460	586.22	402.80	183.43
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	1,416		2.12			586.22	402.80	183.43
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,500	3.00	4.50	276	574,860	1,242.00	862.29	379.71
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,500	1.50	2.25	635	450,450	1,428.75	675.68	753.08
	(Total) Wet Paddy	1,500		4.50			1,242.00	862.29	379.71
	(Total) Palawija	1,500		2.25			1,428.75	675.68	753.08
- Incremental Benefit									
	Wet Paddy			2.38			655.78	459.49	196.28
	Palawija			2.25			1,428.75	675.68	753.08
	Total						2,084.53	1,135.17	949.36
13. Tinjau Langit									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type A									
(Wet)	Wet Paddy	4,720	1.50	7.08	276	284,460	1,954.08	1,342.65	611.43
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	4,720		7.08			1,954.08	1,342.65	611.43
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			7.08			1,954.08	1,342.65	611.43
	Palawija			0.00			0.00	0.00	0.00
	Total						1,954.08	1,342.65	611.43
13. Tinjau Langit									
- W/P Type A									
(Wet)	Wet Paddy	4,720	1.50	7.08	276	284,460	1,954.08	1,342.65	611.43
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	4,720		7.08			1,954.08	1,342.65	611.43
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	5,000	3.00	15.00	276	574,860	4,140.00	2,874.30	1,265.70
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	5,000	1.50	7.50	635	450,450	4,762.50	2,252.25	2,510.25
	(Total) Wet Paddy	5,000		15.00			4,140.00	2,874.30	1,265.70
	(Total) Palawija	5,000		7.50			4,762.50	2,252.25	2,510.25
- Incremental Benefit									
	Wet Paddy			7.92			2,185.92	1,531.65	654.27
	Palawija			7.50			4,762.50	2,252.25	2,510.25
	Total						6,948.42	3,783.90	3,164.52

Table 2.10 Estimate of Economic Benefit for Drainage Project (10/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
KAB. TAPIN									
1. S.Udul									
- WO/Project									
(Wet)	Wet Paddy	944	1.50	1.42	276	284,460	390.82	268.53	122.29
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	944		1.42			390.82	268.53	122.29
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,000	3.00	3.00	276	574,860	828.00	574.86	253.14
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,000	1.50	1.50	635	450,450	952.50	450.45	502.05
	(Total) Wet Paddy	1,000		3.00			828.00	574.86	253.14
	(Total) Palawija	1,000		1.50			952.50	450.45	502.05
- Incremental Benefit									
	Wet Paddy			1.58			437.18	306.33	130.85
	Palawija			1.50			952.50	450.45	502.05
	Total						1,389.68	756.78	632.90
2. R.Muning									
- WO/Project									
(Wet)	Wet Paddy	8,000	1.50	12.00	276	284,460	3,312.00	2,275.68	1,036.32
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	8,000		12.00			3,312.00	2,275.68	1,036.32
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type E									
(Wet)	Wet Paddy	8,000	3.00	24.00	276	574,860	6,624.00	4,598.88	2,025.12
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	8,000	1.50	12.00	635	450,450	7,620.00	3,603.60	4,016.40
	(Total) Wet Paddy	8,000		24.00			6,624.00	4,598.88	2,025.12
	(Total) Palawija	8,000		12.00			7,620.00	3,603.60	4,016.40
- Incremental Benefit									
	Wet Paddy			12.00			3,312.00	2,323.20	988.80
	Palawija			12.00			7,620.00	3,603.60	4,016.40
	Total						10,932.00	5,926.80	5,005.20
3. S.Garis Hulat									
- WO/Project									
(Wet)	Wet Paddy	952	1.50	1.43	276	284,460	394.13	270.81	123.32
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	952		1.43			394.13	270.81	123.32
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,000	3.00	3.00	276	574,860	828.00	574.86	253.14
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,000	1.50	1.50	635	450,450	952.50	450.45	502.05
	(Total) Wet Paddy	1,000		3.00			828.00	574.86	253.14
	(Total) Palawija	1,000		1.50			952.50	450.45	502.05
- Incremental Benefit									
	Wet Paddy			1.57			433.87	304.05	129.82
	Palawija			1.50			952.50	450.45	502.05
	Total						1,386.37	754.50	631.87
4. S.Tapin Gndang									
- WO/Project									
(Wet)	Wet Paddy	960	1.50	1.44	276	284,460	397.44	273.08	124.36
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	960		1.44			397.44	273.08	124.36
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,000	3.00	3.00	276	574,860	828.00	574.86	253.14
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,000	1.50	1.50	635	450,450	952.50	450.45	502.05
	(Total) Wet Paddy	1,000		3.00			828.00	574.86	253.14
	(Total) Palawija	1,000		1.50			952.50	450.45	502.05
- Incremental Benefit									
	Wet Paddy			1.56			430.56	301.78	128.78
	Palawija			1.50			952.50	450.45	502.05
	Total						1,383.06	752.23	630.83

Table 2.10 Estimate of Economic Benefit for Drainage Project (11/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln. Rp.)	Totl. Prod. Cost (Milln. Rp.)	Net Return (Milln. Rp.)
5. S. Pinang Baharis									
- WO/Project									
(Wet)	Wet Paddy	300	1.50	0.45	276	284,460	124.20	85.34	38.86
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	300		0.45			124.20	85.34	38.86
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type B									
(Wet)	Wet Paddy	300	3.00	0.90	276	574,860	248.40	172.46	75.94
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	300	1.50	0.45	635	450,450	285.75	135.14	150.62
	(Total) Wet Paddy	300		0.90			248.40	172.46	75.94
	(Total) Palawija	300		0.45			285.75	135.14	150.62
- Incremental Benefit									
	Wet Paddy			0.45			124.20	87.12	37.08
	Palawija			0.45			285.75	135.14	150.62
	Total						409.95	222.26	187.70
6. R. Belanti									
- W.O./Project									
(Wet)	Wet Paddy	2,619	1.50	3.93	276	284,460	1,084.31	745.03	339.28
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	2,619		3.93			1,084.31	745.03	339.28
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type E									
(Wet)	Wet Paddy	2,750	3.00	8.25	276	574,860	2,277.00	1,580.87	696.14
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	2,750	1.50	4.13	635	450,450	2,619.38	1,238.74	1,380.64
	(Total) Wet Paddy	2,750		8.25			2,277.00	1,580.87	696.14
	(Total) Palawija	2,750		4.13			2,619.38	1,238.74	1,380.64
- Incremental Benefit									
	Wet Paddy			4.32			1,192.69	835.84	356.86
	Palawija			4.13			2,619.38	1,238.74	1,380.64
	Total						3,812.07	2,074.57	1,737.49
7. S. Damar									
- WO/Project									
(Wet)	Wet Paddy	1,200	1.50	1.80	276	284,460	496.77	341.33	155.44
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	1,200		1.80			496.77	341.33	155.44
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	1,250	3.00	3.75	276	574,860	1,035.00	718.58	316.43
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	1,250	1.50	1.88	635	450,450	1,190.63	563.06	627.56
	(Total) Wet Paddy	1,250		3.75			1,035.00	718.58	316.43
	(Total) Palawija	1,250		1.88			1,190.63	563.06	627.56
- Incremental Benefit									
	Wet Paddy			1.95			538.23	377.25	160.99
	Palawija			1.88			1,190.63	563.06	627.56
	Total						1,728.86	940.31	788.55
8. S. Selai									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	369	1.50	0.55	276	284,460	152.68	104.91	47.77
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	369		0.55			152.68	104.91	47.77
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	400	3.00	1.20	276	574,860	331.20	229.94	101.26
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	400		1.20			331.20	229.94	101.26
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			0.65			178.52	125.04	53.48
	Palawija			0.00			0.00	0.00	0.00
	Total						178.52	125.04	53.48

Table 2.10 Estimate of Economic Benefit for Drainage Project (12/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln. Rp.)	Total Prod. Cost (Milln. Rp.)	Net Return (Milln. Rp.)
9. S. Masira									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	138	1.50	0.21	276	284,460	57.21	39.31	17.90
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	138		0.21			57.21	39.31	17.90
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	150	3.00	0.45	276	574,860	124.20	86.23	37.97
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	150		0.45			124.20	86.23	37.97
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			0.24			66.99	46.92	20.07
	Palawija			0.00			0.00	0.00	0.00
	Total						66.99	46.92	20.07
10. 5bh Pintu Air									
- WO/Project									
(Wet)	Wet Paddy	381	1.50	0.57	276	248,460	157.73	94.66	63.07
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	248,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	381		0.57			157.73	94.66	63.07
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type II									
(Wet)	Wet Paddy	400	3.00	1.20	276	248,460	331.20		
	Palawija	0	1.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	248,460	0.00	0.00	0.00
	Palawija	400	1.50	0.60	635	130,200	381.00	52.08	328.92
	(Total) Wet Paddy	400		1.20			331.20	99.38	231.82
	(Total) Palawija	400		0.60			381.00	52.08	328.92
- Incremental Benefit									
	Wet Paddy			0.63			173.47	4.72	168.75
	Palawija			0.60			381.00	52.08	328.92
	Total						554.47	56.80	497.67
11. R. Bahanu									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	2,000	3.00	6.00	276	574,860	1,656.00	1,149.72	506.28
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	2,000	1.50	3.00	635	450,450	1,905.00	900.90	1,004.10
	(Total) Wet Paddy	2,000		6.00			1,656.00	1,149.72	506.28
	(Total) Palawija	2,000		3.00			1,905.00	900.90	1,004.10
- Incremental Benefit									
	Wet Paddy			6.00			1,656.00	1,149.72	506.28
	Palawija			3.00			1,905.00	900.90	1,004.10
	Total						3,561.00	2,050.62	1,510.38
12. R. Musing Extension									
- WO/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type I)									
(Wet)	Wet Paddy	2,000	3.00	6.00	276	574,860	1,656.00	1,149.72	506.28
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	2,000		6.00			1,656.00	1,149.72	506.28
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			6.00			1,656.00	1,149.72	506.28
	Palawija			0.00			0.00	0.00	0.00
	Total						1,656.00	1,149.72	506.28

Table 2.10 Estimate of Economic Benefit for Drainage Project (13/13)

Name of Scheme/ (Season)	Crop	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Gra. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
12. R. Muning Extension									
- W/Type D									
(Wet)	Wet Paddy	2,000	3.00	6.00	276	574,860	1,656.00	1,149.72	506.28
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	2,000		6.00			1,656.00	1,149.72	506.28
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type B									
(Wet)	Wet Paddy	2,000	3.00	6.00	276	574,860	1,656.00	1,149.72	506.28
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	2,000	1.50	3.00	635	450,450	1,905.00	900.90	1,004.10
	(Total) Wet Paddy	2,000		6.00			1,656.00	1,149.72	506.28
	(Total) Palawija	2,000		3.00			1,905.00	900.90	1,004.10
- Incremental Benefit									
	Wet Paddy			0.00			0.00	0.00	0.00
	Palawija			3.00			1,905.00	900.90	1,004.10
	Total						1,905.00	900.90	1,004.10
13. R. Muning 2nd Extension									
- W/O/Project									
(Wet)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
(Dry)	Wet Paddy	0	1.50	0.00	276	284,460	0.00	0.00	0.00
	Palawija	0	0.50	0.00	635	130,200	0.00	0.00	0.00
	(Total) Wet Paddy	0		0.00			0.00	0.00	0.00
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/P Type D									
(Wet)	Wet Paddy	2,000	3.00	6.00	276	574,860	1,656.00	1,149.72	506.28
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	2,000		6.00			1,656.00	1,149.72	506.28
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- Incremental Benefit									
	Wet Paddy			6.00			1,656.00	1,149.72	506.28
	Palawija			0.00			0.00	0.00	0.00
	Total						1,656.00	1,149.72	506.28
13. R. Muning 2nd Extension									
- W/Type D									
(Wet)	Wet Paddy	2,000	3.00	6.00	276	574,860	1,656.00	1,149.72	506.28
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
	(Total) Wet Paddy	2,000		6.00			1,656.00	1,149.72	506.28
	(Total) Palawija	0		0.00			0.00	0.00	0.00
- W/Type B									
(Wet)	Wet Paddy	2,000	3.00	6.00	276	574,860	1,656.00	1,149.72	506.28
	Palawija	0	1.50	0.00	635	450,450	0.00	0.00	0.00
(Dry)	Wet Paddy	0	3.00	0.00	276	574,860	0.00	0.00	0.00
	Palawija	2,000	1.50	3.00	635	450,450	1,905.00	900.90	1,004.10
	(Total) Wet Paddy	2,000		6.00			1,656.00	1,149.72	506.28
	(Total) Palawija	2,000		3.00			1,905.00	900.90	1,004.10
- Incremental Benefit									
	Wet Paddy			0.00			0.00	0.00	0.00
	Palawija			3.00			1,905.00	900.90	1,004.10
	Total						1,905.00	900.90	1,004.10

Table 2.11 Estimate of Economic Benefit for Polder Project (1/2)

Name of Scheme	(Season)	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Totl. Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
KAB. TABALONG									
1. Ampukung									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	365	1.5	0.55	276	284,460	151.11	103.83	47.28
(Total)				0.55			151.11	103.83	47.28
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	418	3.0	1.25	276	574,860	346.10	240.29	105.81
(Total)				1.25			346.10	240.29	105.81
- Incremental				0.71			194.99	136.46	58.53
2. Tigaron									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	115	1.5	0.17	276	284,460	47.61	32.71	14.90
(Total)				0.17			47.61	32.71	14.90
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	144	3.0	0.43	276	574,860	119.23	82.78	36.45
(Total)				0.43			119.23	82.78	36.45
- Incremental				0.26			71.62	50.07	21.56
KAB. HULU SUNGAI UTARA									
1. Padang Gusti									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	468	1.5	0.70	276	284,460	193.75	133.13	60.62
(Total)				0.70			193.75	133.13	60.62
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	468	3.0	1.40	276	574,860	387.50	269.03	118.47
(Total)				1.40			387.50	269.03	118.47
- Incremental				0.70			193.75	135.91	57.84
2. Bakar									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	2,050	1.5	3.08	276	284,460	848.70	583.14	265.56
(Total)				3.08			848.70	583.14	265.56
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	2,344	3.0	7.03	276	574,860	1,940.83	1,347.47	593.36
(Total)				7.03			1,940.83	1,347.47	593.36
- Incremental				3.96			1,092.13	764.33	327.80
3. Pakacangan									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	1,444	1.5	2.17	276	284,460	597.82	410.76	187.06
(Total)				2.17			597.82	410.76	187.06
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	1,694	3.0	5.08	276	574,860	1,402.63	973.81	428.82
(Total)				5.08			1,402.63	973.81	428.82
- Incremental				2.92			804.82	563.05	241.76
4. Kaludan									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	1,800	1.5	2.70	276	284,460	745.20	512.03	233.17
(Total)				2.70			745.20	512.03	233.17
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	2,300	3.0	6.90	276	574,860	1,904.40	1,322.18	582.22
(Total)				6.90			1,904.40	1,322.18	582.22
- Incremental				4.20			1,159.20	810.15	349.05
5. Murung Bayun									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	1,687	1.5	2.53	276	284,460	698.42	479.88	218.53
(Total)				2.53			698.42	479.88	218.53
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	1,687	3.0	5.06	276	574,860	1,396.84	969.79	427.05
(Total)				5.06			1,396.84	969.79	427.05
- Incremental				2.53			698.42	489.90	208.51

Table 2.11 Estimate of Economic Benefit for Polder Project (2/2)

Name of Scheme	(Season)	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit Prod. Cost (Rp./ha)	Grs. Prod. Value (Milln.Rp.)	Total Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
6. Simpang Empat									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	1,274	1.5	1.91	276	284,460	527.44	362.40	165.03
	(Total)			1.91			527.44	362.40	165.03
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	1,274	3.0	3.82	276	574,860	1,054.87	732.37	322.50
	(Total)			3.82			1,054.87	732.37	322.50
- Incremental				1.91			527.44	369.97	157.47
7. Alabio									
- WO/Project	(Wet)	4,500	2.5	11.25	276	436,260	3,105.00	1,963.17	1,141.83
	(Dry)	0	2.5	0.00	276	436,260	0.00	0.00	0.00
	(Total)			11.25			3,105.00	1,963.17	1,141.83
- W/Project	(Wet)	4,500	5.5	24.75	276	793,433	6,831.00	3,570.45	3,260.55
	(Dry)	4,500	5.5	24.75	276	793,433	6,831.00	3,570.45	3,260.55
	(Total)			49.50			13,662.00	7,140.89	6,521.11
- Incremental				38.25			10,557.00	5,177.72	5,379.28
8. Lampihong									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	1,400	1.5	2.10	276	284,460	579.60	398.24	181.36
	(Total)			2.10			579.60	398.24	181.36
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	2,800	3.0	8.40	276	574,860	2,318.40	1,609.61	708.79
	(Total)			8.40			2,318.40	1,609.61	708.79
- Incremental				6.30			1,738.80	1,211.36	527.44
KAB. HUJU SUNGAI SELATAN									
1. Kalumpang									
- WO/Project	(Wet)	0	1.5	0.00	276	284,460	0.00	0.00	0.00
	(Dry)	600	1.5	0.90	276	284,460	248.40	170.68	77.72
	(Total)			0.90			248.40	170.68	77.72
- W/Project	(Wet)	0	3.0	0.00	276	574,860	0.00	0.00	0.00
	(Dry)	600	3.0	1.80	276	574,860	496.80	344.92	151.88
	(Total)			1.80			496.80	344.92	151.88
- Incremental				0.90			248.40	174.24	74.16

Table 2.12 Estimate of Economic Benefit for Fishery Project

Name of Scheme	Area Harvested (ha)	Yield (t/ha)	Production ('000 ton)	Unit Price (Rp./kg)	Unit.Prod. Cost (Rp./ha)	Grs.Prod. Value (Milln.Rp.)	Totl.Prod. Cost (Milln.Rp.)	Net Return (Milln.Rp.)
KAB. HULU SUNGAI UTARA								
1.1 Alabio (WO/P to W/P Short-Term)								
- W.O./Project	100	0.1	0.01	1,316	63,700	10.93	6.37	4.56
(Total)	0	0.1	0.00	1,316	63,700	0.00	0.00	0.00
			0.01			10.93	6.37	4.56
- W./Project S.T	100	0.4	0.04	7,840	713,500	313.60	71.35	242.25
(Total)	0	0.4	0.00	7,840	713,500	0.00	0.00	0.00
			0.04			313.60	71.35	242.25
- Incremental			0.03			302.67	64.98	237.69
1.2 Alabio (W/P Short-Term to W/P Medium-Term)								
- W/Project S.T	100	0.4	0.04	7,840	713,500	313.60	71.35	242.25
(Total)	900	0.1	0.07	1,316	63,700	98.36	57.33	41.03
			0.11			411.96	128.68	283.28
- W/Project M.T	1,000	1.2	1.20	7,840	3,634,900	9,408.00	3,634.90	5,773.10
(Total)	0	1.2	0.00	7,840	3,634,900	0.00	0.00	0.00
			1.20			9,408.00	3,634.90	5,773.10
- Incremental			1.09			8,996.04	3,506.22	5,489.82
KAB. TAPIN								
2. Margasari								
- WO/Project	2,000	0.1	0.17	1,316	63,700	218.59	127.40	91.19
(Total)			0.17			218.59	127.40	91.19
- W/Project	2,000	2.4	4.80	7,840	9,324,800	37,632.00	18,649.60	18,982.40
(Total)			4.80			37,632.00	18,649.60	18,982.40
- Incremental			4.80			37,413.41	18,522.20	18,891.21

Table 3.1 Economic Comparison of Irrigation Project and Selection of Prior Schemes

Kabupaten/ Name of Scheme	Type of Scheme	Area (ha)	Economic Benefit NPV a/ (Rp.MN)	Economic Cost NPV a/ (Rp.MN)	IRR (%)	B-C a/ b/ (Rp.MN)	B-C/ha a/ b/ (Rp.MN)	B/C a/ (Rp.MN)	Paddy Increment (tons)	Prior Scheme B/C>1.00 (*)
TABALONG										
1 Jaro c/	Exist	625	0.0	109.4		(109.4)	(0.18)	0.00	0	
2 Jaro Bawah	Exist	200	1,510.1	214.4	50.75	1,295.8	6.48	7.04	1,700	(*)
3 Gumba	Exist	254	625.2	277.7	22.07	347.4	1.37	2.25	1,020	(*)
4 Sungai Kati	New	280	1,024.9	540.7	18.54	484.2	1.73	1.90	1,070	(*)
5 Namun	New	64	291.0	141.6	14.83	149.4	2.33	2.06	310	(*)
6 Kinaruni	New	408	3,080.6	903.5	29.24	2,177.1	5.34	3.41	3,470	(*)
7 Mahim	New	203	1,532.8	449.6	29.24	1,083.2	5.34	3.41	1,730	(*)
8 Dasupulut	New	225	1,410.6	434.1	28.39	976.5	4.34	3.25	1,570	(*)
9 Bilas	New	643	4,855.0	1,424.1	29.24	3,430.9	5.34	3.41	5,470	(*)
10 Hanyu Tajun	New	750	5,662.9	1,694.6	28.79	3,968.3	5.29	3.34	6,380	(*)
Sub-Total		3,652							22,720	
HULU SUNGAI UTARA										
1 Peran	Exist	188	462.7	208.4	21.80	254.3	1.35	2.22	750	(*)
2 Tundakan	Exist	233	384.0	279.5	14.10	104.4	0.45	1.37	620	(*)
3 Suapin	Exist	116	192.0	154.6	12.69	37.4	0.32	1.24	310	(*)
4 Lok Batu	Exist	116	192.0	252.1	7.10	(60.1)	(0.52)	0.76	310	
5 Balangan	New	2,172	16,399.8	9,009.4	17.60	7,390.4	3.40	1.82	18,460	(*)
6 Pitap	New	3,734	29,109.0	16,110.6	17.73	12,998.4	3.48	1.81	35,470	(*)
Sub-Total		6,559							55,920	
HULU SUNGAI TENGAH										
1 Tsiang	Exist	165	406.1	240.4	16.97	165.7	1.00	1.69	660	(*)
2 Tapuk	Exist	186	457.8	206.7	21.74	251.1	1.35	2.21	740	(*)
3 Tantiyang	Exist	166	406.1	212.7	19.01	193.4	1.17	1.91	660	(*)
4 Barah Hawang	Exist	160	393.8	139.4	27.07	254.4	1.59	2.83	640	(*)
5 Intangan	Exist	920	487.1	960.3	2.50	(473.2)	(0.51)	0.51	2,040	
6 Kahakan	Exist	633	335.3	590.2	3.50	(255.0)	(0.40)	0.57	1,400	
7 Mangunang	Exist	515	1,267.5	466.4	26.14	801.1	1.56	2.72	2,060	(*)
8 Haruyan Dayak	Exist	1,486	1,066.8	1,298.0	7.59	(231.2)	(0.16)	0.82	4,460	
9 Batang Alai	New	6,223	48,512.4	27,112.6	17.58	21,399.8	3.44	1.79	59,120	(*)
10 Barabal	New	2,278	17,758.5	9,828.9	17.73	7,929.6	3.48	1.81	21,640	(*)
Sub-Total		12,752							93,420	
HULU SUNGAI SELATAN										
1 Telaga Lansat	Exist	1,534	725.4	1,465.1	2.08	(739.7)	(0.48)	0.50	3,030	
2 Tayub	Exist	178	289.2	192.1	15.48	97.1	0.55	1.51	470	(*)
3 Nunungin	Exist	36	57.8	173.8	0.39	(115.9)	(3.22)	0.33	90	
4 Kuangan	Exist	143	231.4	244.7	9.36	(13.3)	(0.09)	0.95	380	
5 Pamajaan	Exist	214	347.0	294.9	11.99	52.1	0.24	1.18	560	(*)
6 Hawatu	Exist	71	115.7	243.9	2.97	(128.3)	(1.81)	0.47	190	
7 Tani	Exist	107	173.5	339.5	3.56	(165.9)	(1.55)	0.51	280	
8 Jarau	Exist	143	67.5	83.5	7.05	(16.0)	(0.11)	0.81	280	
9 Kayu Habang	New	347	2,260.9	768.7	26.19	1,492.2	4.30	2.94	2,720	(*)
10 Armandit	New	6,432	45,711.23	28,733.42	15.82	16,977.8	2.64	1.59	55,390	(*)
Sub-Total		9,205							63,390	
TAPIN										
1 Lok Paikat	Exist	392	185.6	358.4	2.47	(172.8)	(0.44)	0.52	780	
2 Parapain	Exist	392	636.2	422.7	15.48	213.5	0.54	1.50	1,030	(*)
3 Nupadang	Exist	253	123.5	207.3	3.80	(83.8)	(0.33)	0.60	520	
4 Takaan	Exist	99	163.7	130.6	12.82	33.1	0.33	1.25	270	(*)
5 Pulsu Pintang	Exist	270	457.8	218.1	21.40	239.7	0.89	2.10	740	(*)
6 Rampanang	Exist	146	101.2	137.1	6.40	(35.8)	(0.25)	0.74	420	
7 Binuang	Exist	1,106	523.0	946.2	3.04	(423.2)	(0.38)	0.55	2,190	
8 Tapin	New	5,328	36,780.0	24,175.5	15.19	12,604.6	2.37	1.52	43,450	(*)
9 Labuhan	New	300	1,612.0	665.0	22.55	947.0	3.16	2.42	1,770	(*)
Sub-Total		8,286							51,170	
Total		40,434							286,620	

Note: a/ At discount rate of 10%

b/ Figures in parentheses indicate minus balance.

c/ Jaro scheme is excluded from the project works, and its works are proposed to be covered by O&M.

Table 2.2 Economic Comparison of Drainage Project and Selection of Prior Schemes

Kategori/ Name of Scheme	Type of Scheme	Level of Improvement	Area (ha)	Economic Benefit: NPV of (Rp. Mn)	Investment Cost: NPV of (Rp. Mn)	EIRR (%)	B-C Rat. (Rp. Mn)	B-C/N Rat. (Rp. Mn/ha)	B/C Rat.	Priority Increment (Rat.)	Prior Scheme B/C > 1.00 (*)
TABALONG											
1 S. Gumpa	Exist	W/O to T-D	1,500	1,492	2,119.6	3.53	(970.4)	(0.65)	0.54	2,200	(*)
2 S. Rangkap	Exist	W/O to T-E	600	2,255.8	595.9	32.10	1,660.0	2.77	3.79	890	(*)
3 S. Pajit	Exist	W/O to T-D	475	1,773.6	513.6	29.86	1,260.0	2.65	3.45	700	(*)
4 S. Pampang	Exist	W/O to T-D	150	560.0	213.9	23.93	346.1	2.31	2.62	220	(*)
5 S. Buntar	Exist	W/O to T-D	100	373.3	124.5	26.70	248.9	2.49	3.00	180	(*)
6 S. Nanti	Exist	W/O to T-D	200	1,035.6	251.6	33.60	784.0	3.92	3.92	290	(*)
7 Tamani	New	W/O to T-E	150	546.7	403.5	13.55	143.2	0.95	1.35	200	(*)
8 Bangkiling	New	W/O to T-E	400	1,457.9	1,007.8	14.40	450.1	1.13	1.45	520	(*)
9 Pulau Kun	New	W/O to T-E	280	1,020.4	995.3	10.27	25.1	0.09	1.03	370	(*)
Sub-Total											
BULU SUNGAI UTARA											
1 S. Pinang Habang	Exist	W/O to T-D	1,995	7,540.9	1,973.7	32.34	5,567.2	2.79	3.82	2,910	(*)
2 R. Bani Mardi	Exist	W/O to T-D	1,360	2,651.4	1,439.1	18.59	1,212.3	0.89	1.84	1,980	(*)
3 R. Pinang Kara	Planned	W/O to T-D	4,600	20,743.6	8,397.1	22.74	12,351.5	2.69	2.47	15,050	(*)
Sub-Total											
BULU SUNGAI TENGAH											
1 R. Taras	Exist	W/O to T-D	300	1,130.8	512.5	20.80	618.3	2.06	2.21	450	(*)
2 R. Bangkar	Exist	W/O to T-D	900	673.5	1,152.9	4.53	(679.6)	(0.53)	0.58	1,500	(*)
3 Tg. Jannah	Exist	W/O to T-E	1,194	2,234.7	1,171.7	19.07	1,057.0	0.89	1.90	1,890	(*)
4 Tg. Semang Kambat	Exist	W/O to T-E	2,640	8,647.7	2,749.2	29.38	5,898.5	2.23	3.15	4,150	(*)
5 R. Bangau Extension	Planned	W/O to T-D	600	913.7	973.3	9.31	(59.6)	(0.10)	0.94	1,710	(*)
6 S. Sirang	New	W/O to T-D	2,800	11,557.5	4,057.0	24.10	7,500.5	2.92	2.80	7,140	(*)
7 Bripai	New	W/O to T-D	800	5,634.2	1,800.2	23.07	2,354.2	2.92	2.80	2,240	(*)
Sub-Total											
BULU SUNGAI SELATAN											
1 Tg. Lurgkau	Exist	W/O to T-E	2,005	7,602.1	2,641.3	31.69	5,560.7	2.77	3.72	2,550	(*)
2 Tg. Pergambau	Exist	W/O to T-E	500	1,995.4	808.2	22.81	1,187.2	2.37	2.47	790	(*)
3 S. Karang	Exist	W/O to T-D	1,500	5,981.0	1,389.4	35.50	4,591.6	3.06	4.30	2,350	(*)
4 S. Tina Bahayur	Exist	W/O to T-E	600	2,407.2	829.3	26.00	1,578.0	2.63	2.90	970	(*)
5 S. Tahun	Exist	W/O to T-D	300	1,198.2	498.8	22.35	699.4	2.33	2.41	470	(*)
6 R. Negara	Exist	W/O to T-D	5,200	19,601.2	4,680.8	34.78	14,920.4	2.87	4.19	7,480	(*)
7 S. Balam	Exist	W/O to T-D	600	506.7	647.6	7.30	(140.8)	(0.23)	0.78	970	(*)
8 R. Ankhang	Planned	W/O to T-D	1,500	6,814.5	2,496.3	24.60	4,318.2	2.89	2.73	4,290	(*)
9 R. Gawi	Planned	W/O to T-D	1,500	6,814.5	2,496.3	24.60	4,318.2	2.89	2.73	4,290	(*)
10 R. Negara Extension	Planned	W/O to T-D	500	2,371.5	760.5	26.42	1,511.0	3.02	2.99	1,430	(*)
11 S. Hadang	New	W/O to T-D	3,800	18,126.2	3,799.2	27.41	14,333.0	3.77	4.78	11,400	(*)
12 S. Batang Alai	New	W/O to T-D	1,500	7,155.1	2,283.4	27.42	4,869.7	3.23	3.13	4,500	(*)
13 Timau Langit	New	W/O to T-D	5,000	23,850.3	7,619.2	27.41	16,231.1	3.23	3.13	15,000	(*)
Sub-Total											
TAPIN											
1 S. Ulu	Exist	W/O to T-D	1,000	3,977.7	1,047.4	32.30	2,930.3	2.95	3.82	1,580	(*)
2 R. Mung	Exist	W/O to T-E	8,000	31,641.7	8,185.1	32.59	23,429.6	2.99	3.85	12,000	(*)
3 S. Gari Hilat	Exist	W/O to T-D	1,000	3,991.1	992.4	33.66	2,998.7	3.00	4.02	1,570	(*)
4 S. Tapin Gedung	Exist	W/O to T-D	1,000	3,984.6	1,186.0	29.22	2,798.6	2.80	3.36	1,560	(*)
5 S. Prang Babaris	Exist	W/O to T-E	500	1,185.6	418.6	25.50	766.9	2.56	2.83	450	(*)
6 R. Bekari	Exist	W/O to T-E	2,750	10,974.7	3,084.0	30.50	7,890.7	2.87	3.55	4,370	(*)
7 S. Demar	Exist	W/O to T-D	1,250	4,980.8	1,191.9	34.68	3,788.9	3.05	4.18	1,950	(*)
8 S. Saha	Exist	W/O to T-D	400	337.8	413.1	7.70	(77.3)	(0.19)	0.81	650	(*)
9 S. Saha	Exist	W/O to T-D	150	126.8	223.6	4.23	(98.8)	(0.66)	0.56	240	(*)
10 S. Pira: Air	Exist	W/O to T-E	400	330.1	460.2	6.43	(130.1)	(0.33)	0.72	690	(*)
11 R. Baharu	Planned	W/O to T-D	2,000	9,540.1	2,686.8	28.74	6,853.4	3.43	3.55	6,000	(*)
12 R. Mung Extension	Planned	W/O to T-E	2,000	9,540.1	4,225.4	20.97	5,314.7	2.66	2.26	6,000	(*)
13 R. Mung and Extension	New	W/O to T-E	2,000	9,540.1	4,214.3	21.14	5,325.8	2.66	2.26	6,000	(*)
Sub-Total											
Total											
										42,950	142,170

Note: a) A: discount rate of 10 %
b) Figures in parentheses indicate minus balance.

Table 3.3 Economic Comparison of Polder Project and Selection of Prior Schemes

Kabupaten/ Name of Scheme	Type of Scheme	Area (ha)	Economic			EIRR (%)	B-C a/ b/ (Rp.MN)	B-C/ha a/ b/ (Rp.MN/ha)	B/C a/	Paddy increment (tons)	Prior Scheme B/C > 1.00 (*)
			Benefit NPV a/ (Rp.MN)	Cost NPV a/ (Rp.MN)	Economic						
TABALONG											
1 Ampukung	Exist	418	369.7	300.4	12.89	69.3	0.17	1.23	710	(*)	
2 Tigaron	Exist	144	136.2	211.7	5.26	(75.5)	(0.53)	0.64	260		
Sub-Total		562							970		
HULU SUNGAI UTARA											
1 Padang Gusti	Exist	468	365.4	1,168.2	-0.58	(802.8)	(1.71)	0.31	700	(*)	
2 Bakar	Exist	2,344	2,070.5	1,533.1	14.37	537.5	0.23	1.35	3,960	(*)	
5 Pakacangan	Exist	1,694	1,527.1	1,641.0	9.12	(113.9)	(0.07)	0.93	2,920	(*)	
4 Kaludan	Exist	2,300	2,204.7	440.3	195.44	1,764.4	0.77	5.51	4,200	(*)	
5 Murung Bayun c/	Exist	1,737	-	-	-	-	-	-	-	(*)	
6 Simpang Empat	Exist	1,274	994.6	238.1	104.20	756.6	0.59	4.18	1,910	(*)	
7 Alabio	Exist	4,500	33,977.5	6,948.2	41.27	27,029.3	6.01	4.89	38,250	(*)	
8 Lamphong	New	2,800	3,331.5	16,235.0	-2.83	(12,903.5)	(4.61)	0.21	6,300	(*)	
Sub-Total		15,380							58,240		
HULU SUNGAI SELATAN											
1 Kalumpang	New	600	468.4	5,228.2	-7.57	(4,759.7)	(7.93)	0.09	900		
Total		16,542							60,110		

Note: a/; At discount rate of 10 %

b/; Figures in parentheses indicate minus balance.

c/; No merit from improvement of hardware

Table 3.4 Economic Comparison of Irrigation Project and Ranking of Prior Schemes

Kabupaten/ Name of Scheme	Type of Scheme	Area (ha)	Economic			EIRR (%)	B-C (Rp.MN)	B-C/ha (Rp.MN/ha)	B/C a/	Paddy Increment (tons)	Ranking	
			Benefit NPV a/ (Rp.MN)	Cost NPV a/ (Rp.MN)	NPV a/ (Rp.MN)						EIRR	B-C/ha
TABALONG												
2 Jaro Bawah	Exist	200	1,510.1	214.4	50.75	1,295.8	6.48	7.04	1,700	A	1	
3 Gumba	Exist	254	625.2	277.7	22.07	347.4	1.37	2.25	1,020	A	2	
4 Sungai Kati	New	280	1,024.9	540.7	18.54	484.2	1.73	1.90	1,070	B	3	
5 Nanun	New	64	291.0	141.5	19.74	149.4	2.33	2.06	310	B	2	
6 Kinsrun	New	408	3,080.6	903.5	29.24	2,177.1	5.34	3.41	3,470	A	1	
7 Mihin	New	203	1,532.8	449.6	29.24	1,083.2	5.34	3.41	1,730	A	1	
8 Barupatur	New	225	1,410.6	434.1	28.39	976.5	4.34	3.25	1,570	A	1	
9 Bilas	New	643	4,855.0	1,424.1	29.24	3,430.9	5.34	3.41	5,470	A	1	
10 Baryu Tajun	New	750	5,652.9	1,694.6	28.79	3,968.3	5.29	3.34	6,380	A	1	
Sub-Total		3,027							22,720			
HULU SUNGAI UTARA												
1 Paran	Exist	188	462.7	208.4	21.80	254.3	1.35	2.22	750	A	2	
2 Tundakan	Exist	233	384.0	279.5	14.10	104.4	0.45	1.37	620	C	4	
3 Suapin	Exist	116	192.0	154.6	12.69	37.4	0.32	1.24	310	D	5	
5 Balangan	New	2,172	16,399.8	9,009.4	17.60	7,390.4	3.40	1.82	18,460	C	2	
6 Pitap	New	3,734	29,109.0	16,110.5	17.73	12,998.4	3.48	1.81	35,470	C	2	
Sub-Total		6,443							55,610			
HULU SUNGAI TENGAH												
1 Tabang	Exist	165	406.1	240.4	16.97	165.7	1.00	1.69	660	C	4	
2 Tapuk	Exist	186	457.8	206.7	21.74	251.1	1.35	2.21	740	A	2	
3 Tamiyang	Exist	166	406.1	212.7	19.01	193.4	1.17	1.91	660	B	3	
4 Baruh Hawang	Exist	160	393.8	139.4	27.07	254.4	1.59	2.83	640	C	2	
7 Mangurang	Exist	515	1,267.5	466.4	26.14	801.1	1.56	2.72	2,060	A	2	
9 Beang Alai	New	6,223	48,512.4	27,112.6	17.58	21,399.8	3.44	1.79	59,120	C	2	
10 Batabai	New	2,278	17,758.5	9,828.9	17.73	7,929.6	3.48	1.81	21,640	C	2	
Sub-Total		9,693							85,520			
HULU SUNGAI SELATAN												
2 Tayub	Exist	178	289.2	192.1	15.48	97.1	0.55	1.51	470	C	4	
5 Pamujan	Exist	214	347.0	294.9	11.99	52.1	0.24	1.18	560	E	5	
9 Kayu Habang	New	347	2,260.9	768.7	26.19	1,492.2	4.30	2.94	2,720	A	1	
10 Arandit	New	6,432	45,711.23	28,733.42	15.82	16,977.8	2.64	1.59	55,390	C	2	
Sub-Total		7,171							59,140			
TAPIN												
2 Pampain	Exist	392	636.2	422.7	15.48	213.5	0.54	1.50	1,030	C	4	
4 Tarakan	Exist	99	163.7	130.6	12.82	33.1	0.33	1.25	270	D	5	
5 Pulau Phaang	Exist	270	457.8	218.1	21.40	239.7	0.89	2.10	740	A	3	
8 Tapin	New	5,328	36,780.0	24,175.5	15.19	12,604.6	2.57	1.52	43,450	C	3	
9 Labuhan	New	300	1,612.0	665.0	22.55	947.0	3.16	2.42	1,770	A	1	
Sub-Total		6,389							47,260			
Total		32,723							270,250			

Note: a/ At discount rate of 10 %

Table 3.5 Economic Comparison of Drainage Project and Ranking of Prior Schemes

Kategori/ Name of Scheme	Type of Scheme	Level of Improvement	Area (ha)	Economic			EIRR (%)	B-C (Rp. Mn)	B-C/ha (Rp. Mn/ha)	B/C w	Increment (tons)	Ranking	
				Benefit NPV w/ (Rp. Mn)	Cost NPV w/ (Rp. Mn)	EIRR						EIRR	B-C/ha
TABALONG													
2 S.Rampang	Exist	W/O to T-E	600	2,255.8	595.9	32.10	1,660.0	2.77	3.79	890	A	A	1
3 S.Palati	Exist	W/O to T-D	475	1,773.6	513.6	29.86	1,260.0	2.65	3.45	700	A	A	1
4 S.Pimping	Exist	W/O to T-D	150	560.0	213.9	23.93	346.1	2.31	2.62	220	A	B	2
5 S.Sinero	Exist	W/O to T-D	100	373.3	124.5	26.70	248.8	2.49	3.00	150	A	D	2
6 S.Narit	Exist	W/O to T-D	200	1,035.6	231.6	33.65	784.0	3.92	4.12	290	A	A	1
7 Tampung	New	W/O to T-E	150	546.7	403.5	13.55	143.2	0.95	1.35	200	D	D	4
8 Bangkuing	New	W/O to T-E	400	1,457.9	1,007.8	14.40	450.1	1.13	1.45	529	C	C	3
9 Pulau Kuc	New	W/O to T-E	280	1,020.4	995.3	10.27	25.1	0.09	1.03	370	E	E	5
Sub-Total			2,355							3,340			
HULU SUNGAI UTARA													
1 S.Pinang Hibeng	Exist	W/O to T-D	1,995	7,540.9	1,973.7	32.34	5,567.2	2.79	3.82	2,310	A	A	1
2 R.Satu Mandi	Exist	W/O to T-D	1,360	2,651.4	1,439.1	18.59	1,212.3	0.89	1.84	1,980	B	D	3
3 R.Prang Kara	Planned	W/O to T-D	4,600	20,748.6	8,397.1	22.74	12,351.5	2.69	2.47	13,050	A	A	1
Sub-Total			7,955							17,940			
HULU SUNGAI TENGAH													
1 R.Taras	Exist	W/O to T-D	300	1,130.8	512.5	20.80	618.3	2.06	2.21	430	A	B	2
3 Tg.Jarauh	Exist	W/O to T-E	1,194	2,254.7	1,177.7	19.07	1,077.0	0.89	1.90	1,880	B	D	3
4 Tg.Semangi Kambat	Exist	W/O to T-E	2,640	8,647.7	2,749.2	28.38	5,898.5	2.23	3.15	4,150	A	B	2
6 S.Siring	New	W/O to T-D	2,500	11,257.5	4,057.0	25.10	7,200.5	2.92	2.80	7,140	A	A	1
7 Binjai	New	W/O to T-D	800	3,634.4	1,300.2	25.07	2,334.2	2.92	2.80	2,240	A	A	1
Sub-Total			7,434							15,840			
HULU SUNGAI SELATAN													
1 Tg.Langkau	Exist	W/O to T-E	2,095	7,602.1	2,041.3	31.69	5,560.7	2.77	3.72	2,950	A	A	1
2 Tg.Pengabau	Exist	W/O to T-E	500	1,993.4	808.2	22.81	1,185.2	2.37	2.47	790	A	B	2
3 S.Kajang	Exist	W/O to T-D	1,500	5,981.0	1,389.4	35.50	4,591.6	3.06	4.30	2,350	A	A	1
4 S.Tira Bahayu	Exist	W/O to T-E	600	2,407.2	829.3	26.00	1,578.0	2.63	2.90	970	A	A	1
5 S.Taniran	Exist	W/O to T-D	300	1,196.2	496.8	22.35	699.4	2.33	2.41	470	A	B	2
6 R.Negar	Exist	W/O to T-D	5,200	19,601.2	4,680.8	34.76	14,920.4	2.87	4.19	7,480	A	A	1
8 R.Ankunang	Planned	W/O to T-D	1,500	6,814.5	2,496.3	24.60	4,318.2	2.88	2.73	4,290	A	A	1
9 R.Gari	Planned	W/O to T-D	1,500	6,814.5	2,496.3	24.60	4,318.2	2.88	2.73	4,290	A	A	1
10 R.Negara Extension	Planned	W/O to T-D	500	2,271.5	760.5	26.42	1,511.0	3.02	2.99	1,430	A	A	1
11 S.Hateng	New	W/O to T-D	3,800	18,126.2	3,793.2	27.41	14,333.0	3.77	4.78	11,400	A	A	1
12 S.Banyu Alai	New	W/O to T-D	1,500	7,153.1	2,285.4	27.42	4,867.7	3.25	3.12	4,500	A	A	1
13 Ticiu Langi	New	W/O to T-D	5,000	23,850.3	7,619.2	27.41	16,231.1	3.25	3.13	15,000	A	A	1
Sub-Total			23,905							55,920			
TAPAN													
1 S.Udul	Exist	W/O to T-D	1,000	3,997.7	1,047.4	32.30	2,950.2	2.95	3.82	1,580	A	A	1
2 R.Muning	Exist	W/O to T-E	8,000	31,614.7	8,185.3	32.63	23,429.6	2.93	3.86	12,000	A	A	1
3 S.Garis Halat	Exist	W/O to T-D	1,000	3,991.1	992.4	33.66	2,998.7	3.00	4.02	1,570	A	A	1
4 S.Tapau Gadang	Exist	W/O to T-D	1,000	3,984.6	1,186.9	29.22	2,797.6	2.80	3.56	1,560	A	A	1
5 S.Pinang Babaris	Exist	W/O to T-E	300	1,135.6	418.6	25.50	766.9	2.56	2.83	450	A	A	1
6 R.Bebani	Exist	W/O to T-E	2,750	10,974.7	3,094.0	30.50	7,880.7	2.87	3.55	4,320	A	A	1
7 S.Damar	Exist	W/O to T-D	1,250	4,980.8	1,191.9	34.68	3,788.9	2.03	4.18	1,950	A	A	1
11 R.Babau	Planned	W/O to T-D	2,000	9,540.1	2,684.8	28.74	6,855.4	3.43	3.55	6,000	A	A	1
12 R.Muning Extension	Planned	W/O to T-E	2,000	9,540.1	4,225.4	20.97	5,314.7	2.66	2.26	6,000	A	A	1
15 R.Muning 2nd Extension	New	W/O to T-E	2,000	9,540.1	4,214.3	21.14	5,325.8	2.66	2.26	6,000	A	A	1
Sub-Total			21,300							41,430			
Total			62,949							134,470			

Note: w/ At discount rate of 10%
T-E: Type E
W/O: without Project
T-D: Type D

Table 3.6 Economic Comparison of Polder Project and Ranking of Prior Schemes

Kabupaten/ Name of Scheme	Type of Scheme	Area (ha)	Economic Benefit		Economic Cost		EIRR (%)	B-C a/ (Rp.MN)	B-C/ha a/ (Rp.MN/ha)	B/C a/	Paddy Increment (tons)	Ranking	
			NPV a/ (Rp.MN)	NPV a/ (Rp.MN)	EIRR B-C/ha	Rank							
TABALONG													
1 Ampukung	Exist	418	369.7	300.4	12.89	69.3	0.17	1.23		710	D	E	5
HULU SUNGAI UTARA													
2 Bakar	Exist	2,344	2,070.5	1,533.1	14.37	537.5	0.23	1.35		3,960	C	E	4
4 Kahudan	Exist	2,300	2,204.7	440.3	195.44	1,764.4	0.77	5.51		4,200	A	D	3
6 Simpang Empat	Exist	1,274	994.6	238.1	104.20	756.6	0.59	4.18		1,910	A	D	3
7 Alabio	Exist	4,500	33,977.5	6,948.2	41.27	27,029.3	6.01	4.89		38,250	A	A	1
Sub-Total		10,418								48,320			
Total		10,836								49,030			

Note: a/. At discount rate of 10 %

Table 3.7 Economic Comparison of Fishery Project and Ranking of Prior Schemes

Kabupaten/ Name of Scheme	Type of Scheme	Level of Development	Project		Economic		EIRR (%)	B-C (Rp.MN)	B-C/ha (Rp.MN)	B/C a/	Shrimp Increment ('000 ton)	Ranking	
			Area (ha)	Benefit (Rp.MN)	Cost (Rp.MN)	EIRR B-C/ha Rank							
HULU SUNGAI UTARA													
1 Alabio	New	W/O to W/P short-term	100	1,068.6	388.9	31.30	679.6	6.80	2.75	0.04	A	A	1
		W/P short-term to medium-term	1,000	24,679.7	6,568.5	39.82	18,111.1	18.11	3.76	1.16	A	A	1
TAPIN													
2 Margasari	New	W/O to W/P long-term	2,000	84,926.1	32,401.4	38.50	52,524.7	26.26	2.62	4.80	A	A	1

Note: a/ Net present values at discount rate of 10%

Table 3.8 List of Alternative Development Plans (1/2)

Case No.	Component of Scheme	Field Condition	Name of Scheme included in Component	Piap (Kab. H.S.U.)				Sarang Alai (Kab. H.S.U.)				Barabai (Kab. H.S.U.)				(Unit: ha)			
				WOP		W/P		WOP		W/P		WOP		W/P					
				Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry				
1.	New Irrigation Scheme	Irrigated Rainfed Drainage	(Piap)	0	0	3,734	3,734	0	0	6,223	0	6,223	6,223	0	0	2,278	0	2,278	2,278
2.	New Irrigation Scheme + Water Supply to Existing Drainage Scheme	Irrigated Rainfed Drainage	- Bani Mandi	0	0	3,734	4,519	0	0	6,223	0	6,823	6,823	0	0	2,278	0	3,078	3,078
3.	New Irrigation Scheme + Supplemental Water Supply to Existing Irrigation Scheme Located within Command Area of New Irrigation Scheme	Irrigated Rainfed Drainage	- Suapin, Lok Batu	0	0	4,292	4,444	0	0	6,627	0	6,627	7,442	0	0	800	0	0	0
4.	New Irrigation Scheme + Water Source Conversion of Existing Irrigation Scheme Located within Command Area of New Irrigation Project	Irrigated Rainfed Drainage	- Intangan, Kabakan	-	-	-	-	815	0	6,627	0	7,442	7,442	-	-	-	-	-	-
6.	Complex (Case 1 + 2 + 4)	Irrigated Rainfed Drainage	- Suapin, Lok Batu - Bani Mandi	222 4,292 785	80 0 0	4,524 0 785	5,309 0 0	1,555 6,627 600	738 0 0	8,780 0 0	8,780 0 0	8,780 0 0	8,780	-	-	-	-	-	-

Table 3.8 List of Alternative Development Plans (2/2)

Case No.	Component of Scheme	Field Condition	Name of Scheme included in Component	Amandit (Kab. H.S.S.)				Iscin (Kab. Tapin)				(Unit: ha)			
				WOP		W/P		WOP		W/P					
				Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry				
1.	New Irrigation Scheme	Irrigated Rainfed Drainage Bush	(Amandit)	0	0	6,432	5,393	0	0	3,228	3,452	0	0	5,328	3,452
2.	New Irrigation Scheme + Water Supply to Existing Drainage Scheme	Irrigated Rainfed Drainage Bush		-	-	-	-	-	-	2,100	2,100	0	0	0	0
3.	New Irrigation Scheme + Supplemental Water Supply to Existing Irrigation Scheme Located within Command Area of New Irrigation Scheme	Irrigated Rainfed Drainage Bush	- Tayub, Nuungin, Kuangan, Hawatu, Taal	0	0	7,042	5,393	0	0	0	0	0	0	5,818	3,452
4.	New Irrigation Scheme + Water Source Conversion of Existing Irrigation Scheme Located within Command Area of New Irrigation Scheme	Irrigated Rainfed Drainage Bush	- Tayub, Nuungin, Kuangan, Hawatu, Taal	7,042	0	0	0	0	0	3,718	0	0	0	0	0
5.	New Irrigation Scheme + Water Source Conversion of Existing Irrigation Scheme Located within and around Command Area of New Irrigation Scheme	Irrigated Rainfed Drainage Bush	- Tayub, Nuungin, Kuangan, Hawatu, Taal, T. Langsat, Pannijane, Jarau, Kayu Habang	535	0	7,577	5,393	0	0	2,100	2,100	0	0	6,510	3,452
6.	Complex (Case 1 + 2 + 4)	Irrigated Rainfed Drainage Bush	- Tayub, Nuungin, Kuangan, Hawatu, Taal, T. Langsat, Pannijane, Jarau, Kayu Habang	2,426	0	11,399	5,393	0	0	2,559	964	0	0	9,039	3,452
7.	Dem + Case 4	Irrigated Rainfed Drainage Bush	Same as Case 4	535	0	7,577	7,577	0	0	392	0	0	0	6,510	6,510
				7,042	0	0	0	0	0	4,018	0	0	0	0	0
				-	-	-	-	-	-	2,100	2,100	0	0	0	0
				-	-	-	-	-	-	2,100	2,100	0	0	0	0
				-	-	-	-	-	-	392	0	0	0	6,510	6,510
				-	-	-	-	-	-	4,018	0	0	0	0	0
				-	-	-	-	-	-	400	0	0	0	0	0
				-	-	-	-	-	-	2,100	2,100	0	0	0	0
				-	-	-	-	-	-	392	0	0	0	6,510	6,510
				-	-	-	-	-	-	4,018	0	0	0	0	0
				-	-	-	-	-	-	2,100	2,100	0	0	0	0
				-	-	-	-	-	-	2,100	2,100	0	0	0	0

Table 3.9 Economic Comparison of Alternative Development Plans of Irrigation Schemes and Ranking

Alternative/ Name of Scheme	Case No.	Area (ha)	Economic		EIRR (%)	B-C		B/C a/	Paddy		Ranking	
			Benefit NPV a/ (Rp.MN)	Cost NPV a/ (Rp.MN)		a/ b/ (Rp.MN)	B-C/ha a/ b/ (Rp.MN/ha)		Increment (tons)	EIRR B-C/ha Rank		
HULU SUNGAI UTARA												
6 Pipap												
	Case 1	3,734	29,109.0	16,110.6	17.73	12,998.4	3.48	1.81	35,470	C	2	
	Case 2	4,519	33,002.3	19,410.4	16.80	13,591.9	3.01	1.70	40,970	C	2	
	Case 3	4,444	34,107.2	20,946.0	16.16	13,161.1	2.96	1.63	41,610	C	2	
	Case 6	5,309	38,349.1	25,933.6	14.80	12,415.4	2.34	1.48	47,730	C	2	
HULU SUNGAI TENGAH												
9 Bazang Alai												
	Case 1	6,223	48,512.4	27,112.6	17.58	21,399.8	3.44	1.79	59,120	C	2	
	Case 2	6,823	53,189.8	29,768.5	17.58	23,421.3	3.43	1.79	64,820	C	2	
	Case 3	7,442	55,137.2	32,815.6	16.62	22,321.6	3.00	1.68	67,440	C	2	
	Case 4	7,441	56,047.8	35,934.2	15.55	20,113.6	2.70	1.56	69,070	C	2	
	Case 6	8,780	62,374.5	38,116.4	16.23	24,258.1	2.76	1.64	77,720	C	2	
10 Barabai												
	Case 1	2,278	17,758.5	9,828.9	17.73	7,929.6	3.48	1.81	21,640	C	2	
	Case 2	3,078	23,995.1	15,598.9	15.37	8,396.1	2.73	1.54	29,240	C	2	
HULU SUNGAI SELATAN												
10 Arrandit												
	Case 1	6,432	45,711.2	28,733.4	15.82	16,977.8	2.64	1.59	55,390	C	2	
	Case 3	7,042	47,865.4	31,089.8	15.35	16,775.7	2.38	1.54	57,830	C	2	
	Case 4	7,577	48,463.2	33,157.1	14.64	15,306.1	2.02	1.46	58,900	C	2	
	Case 5	11,399	57,395.5	57,139.6	10.05	255.9	0.02	1.00	70,410	E	5	
	Case 6	7,577	47,928.3	33,535.1	14.34	14,393.2	1.90	1.43	58,300	C	3	
	Case 7	7,577	57,776.2	53,181.6	10.93	4,594.6	0.61	1.09	70,910	E	5	
TAPIN												
8 Tapin												
	Case 1	5,328	36,780.0	24,175.5	15.19	12,604.6	2.37	1.52	43,450	C	3	
	Case 2	5,728	38,192.6	25,692.9	14.85	12,499.7	2.18	1.49	45,650	C	3	
	Case 3	5,818	35,150.5	26,040.2	14.78	9,110.3	1.57	1.48	45,410	C	3	
	Case 4	6,510	40,007.9	28,713.9	13.99	11,294.0	1.73	1.39	47,390	D	4	
	Case 5	9,039	40,674.1	62,573.0	5.76	(21,898.9)	(2.42)	0.65	49,800	E	5	
	Case 6	6,910	41,420.5	30,828.3	13.52	10,592.2	1.53	1.34	48,990	D	4	
	Case 7	6,510	52,575.7	69,095.5	7.23	(16,519.8)	(2.54)	0.76	64,210	E	5	

Note: a/; At discount rate of 10%

b/; Figures in parentheses indicate minus balance.

Table 3.10 Economic Comparison of Combination Development of Drainage and Irrigation Schemes and Ranking

Kabupaten/ Name of Scheme	Area (ha)	Economic		EIRR (%)	B-C a/ b/ (Rp.MN)	B-C/ha a/ b/ (Rp.MN/ha)	B/C a/	Paddy Increment (tons)	Ranking	
		Benefit NPV a/ (Rp.MN)	Cost NPV a/ (Rp.MN)						EIRR	B-C/ha Rank
HULU SUNGAI UTARA										
2 R. Batu Mandi										
- Drainage Scheme	1,360	2,651.4	1,439.1	18.59	1,212.3	0.89	1.84	1,980	B	D
- Irrigation Scheme	785	3,592.7	3,256.2	11.09	336.4	0.43	1.10	4,320	E	5
Total	2,145	6,244.0	4,695.3	13.43	1,548.8	0.72	1.33	6,300	D	4
HULU SUNGAI TENGAH										
3 Tg. Jaranth										
- Drainage Scheme	1,194	2,234.7	1,177.7	19.07	1,057.0	0.89	1.90	1,890	B	D
- Irrigation Scheme	800	7,322.6	3,657.2	19.30	3,665.4	4.58	2.00	8,800	B	A
Total	1,994	9,557.4	4,835.0	19.25	4,722.4	2.37	1.98	10,690	B	B
4 Tg. Semangi Kambat										
- Drainage Scheme	2,640	8,647.7	2,749.2	29.38	5,898.5	2.23	3.15	4,180	A	B
- Irrigation Scheme	600	5,492.0	3,285.1	16.31	2,206.9	3.68	1.67	6,600	C	A
Total	3,240	14,139.7	6,034.3	22.24	8,105.4	2.50	2.34	10,780	A	B
TAPIN										
10 5bh Pintu Air										
- Drainage Scheme	400	330.1	460.2	6.43	(130.1)	(0.33)	0.72	630	-	-
- Irrigation Scheme	400	3,661.3	2,388.0	15.25	1,273.3	3.18	1.53	4,400	C	A
Total	800	3,991.4	2,848.2	14.07	1,143.2	1.43	1.40	5,030	C	C
Grand-total	8,179							32,800		

Note: a/ At discount rate of 10%

b/: Figures in parentheses indicate minus balance.

Table 3.1.1 Economic Comparison of Step-wise Development for Drainage Schemes and Ranking

Kabupaten/ Name of Scheme	Type of Scheme	Level of Improvement:	Area (ha)	Economic			EIRR (%)	B-C (Rp.MN)	B-C/ha (Rp.MN/ha)	B/C a/	Paddy Increment (tons)	Ranking	
				Economic Benefit NPV a/ (Rp.MN)	Economic Cost NPV a/ (Rp.MN)	EIRR (%)						EIRR	B-C/ha Rank
HULU SUNGAI UTARA													
3 R.Pinang Kara	Planned	W/O to T-A	4,600	3,558.3	3,491.7	10.23	66.6	0.01	1.02	13,050	E	E	5
	-do-	T-A to T-D	4,600	17,190.3	5,416.2	28.02	11,774.1	2.56	3.17	0	A	A	1
	-do-	W/O to T-D	4,600	20,748.6	8,397.1	22.74	12,351.5	2.69	2.47	13,050	A	A	1
HULU SUNGAI SELATAN													
11 S.Hadangan	New	W/O to T-A	3,800	2,955.1	2,094.4	14.67	840.7	0.22	1.40	10,760	C	E	4
	-do-	T-A to T-D	3,800	15,191.1	4,117.8	31.45	11,073.4	2.91	3.69	640	A	A	1
	-do-	W/O to T-D	3,800	18,126.2	3,793.2	27.41	14,333.0	3.77	4.78	11,400	A	A	1
12 S.Batang Alai	New	W/O to T-A	1,500	1,158.6	827.1	14.66	331.5	0.22	1.40	4,250	C	E	4
	-do-	T-A to T-D	1,500	5,996.5	1,524.9	31.46	4,371.7	2.91	3.69	250	A	A	1
	-do-	W/O to T-D	1,500	7,155.1	2,285.4	27.42	4,869.7	3.25	3.13	4,500	A	A	1
13 Tinjan Langit	New	W/O to T-A	5,000	3,862.0	2,756.2	14.67	1,105.8	0.22	1.40	14,160	C	E	4
	-do-	T-A to T-D	5,000	19,988.3	5,418.2	31.45	14,570.1	2.91	3.69	840	A	A	1
	-do-	W/P 2 to T-D	5,000	23,850.3	7,619.2	27.41	16,231.1	3.25	3.13	15,000	A	A	1
TAPIN													
12 R.Muning Extension	Planned	W/O to T-D	2,000	3,197.9	2,368.8	11.26	329.1	0.16	1.11	6,000	E	E	5
	-do-	T-D to T-E	2,000	6,342.3	1,508.8	33.69	4,733.5	2.37	3.94	0	A	A	1
	-do-	W/O to T-E	2,000	9,540.1	4,225.4	20.97	5,314.7	2.66	2.26	6,000	A	A	1
13 R.Muning 2nd Extension	New	W/O to T-D	2,000	3,197.9	2,827.6	11.43	370.2	0.19	1.15	6,000	E	E	5
	-do-	T-D to T-E	2,000	6,342.3	1,508.8	33.69	4,733.5	2.37	3.94	0	A	B	2
	-do-	W/O to T-E	2,000	9,540.1	4,214.3	21.14	5,325.8	2.56	2.26	6,000	A	A	1

Note: a/; At discount rate of 10 %
T-A ; Type A
T-D ; Type D
T-E ; Type E

Table 4.2. List of Irrigation Schemes with Construction Cost (Financial Prices) and Paddy Increment by Subsystem and Ranking

	Taburan				Hulu Sungai Ulu				Hulu Sungai Tengah				Hulu Sungai Selatan				Tengah				Total		
	Scheme	Area (ha)	Const. Cost (RM)	Paddy Incr. (tons)	Scheme	Area (ha)	Const. Cost (RM)	Paddy Incr. (tons)	Scheme	Area (ha)	Const. Cost (RM)	Paddy Incr. (tons)	Scheme	Area (ha)	Const. Cost (RM)	Paddy Incr. (tons)	Scheme	Area (ha)	Const. Cost (RM)	Paddy Incr. (tons)	Area (ha)	Const. Cost (RM)	Paddy Incr. (tons)
RANK 1 - Existing	2 Jero Berain Sub-total	200	620	1,700	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	200	620	1,700
RANK 2 - Existing	3 Cimble Sub-total	254	361	1,020	1 Puro	138	358	750	2 Tapak	186	270	740	4 B. Hawang	160	237	640	7 Mangarong	515	586	2,060	628	989	2,510
RANK 3 - Planned + New	6 Kinawan 7 YGala 8 Bampulur 9 Bilas 10 Bero Tajen Sub-total	408	1,325	3,470	-	0	0	0	-	0	0	0	9 K. Habang	347	1,128	2,720	-	0	0	0	300	975	1,770
RANK 4 - Planned + New	5 Naman Sub-total	64	207	310	5 Badangan	2,172	13,388	18,469	9 Bg. Alai	6,223	38,754	59,126	10 Armatik	6,432	41,387	55,290	-	0	0	0	0	14,891	93,736
RANK 5 - Existing	4 Sempu, Mudi Sub-total	280	790	1,070	6 Pisp	3,734	23,015	33,470	10 Sabah	2,278	14,041	21,640	Sub-total	6,432	41,387	55,290	5 Pul. Pusing	270	267	740	270	267	740
RANK 4 and RANK 5	Sub-total	0	0	0	2 Tondokan	233	369	620	1 Talang	163	326	660	2 Terys	178	250	470	5 Peranjau	214	399	560	392	549	1,030
	Total	3,027	9,172	22,720	Total	6,443	37,337	55,610	Total	9,693	54,497	85,520	Total	7,171	43,164	59,140	Total	6,389	36,925	47,260	32,723	181,095	270,260

Table 4.2. List of Damaging Schemes with Construction Cost (Financial Index) and Policy Increase by Kabupaten and Ranking

Scheme	Scheme			Hulu Sungai Ulu			Hulu Sungai Tengah			Hulu Sungai Hilir			Sub-total			Total	
	Area (ha)	Cost (Rp-Mt)	Policy Incr. (tmt)	Area (ha)	Cost (Rp-Mt)	Policy Incr. (tmt)	Area (ha)	Cost (Rp-Mt)	Policy Incr. (tmt)	Area (ha)	Cost (Rp-Mt)	Policy Incr. (tmt)	Area (ha)	Cost (Rp-Mt)	Policy Incr. (tmt)		
RANK 1 -Exist +New	600 475 280 0 0 0 1,275	886 737 570 0 0 0 1,995	3,191 0 0 0 0 0 3,191	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	
RANK 2 -Exist +New	150 100 250	309 175 484	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
RANK 3 -Planned +New	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
RANK 4 and RANK 5	400 150 250 430	1,457 585 1,457 2,042	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
Total	2,355	5,976	16,929	17,940	18,301	24,650	8,234	18,301	24,650	23,935	44,279	55,920	21,300	38,910	63,769	124,395	143,280

Note: 1) For 78,000 schemes, combination development is recommended after the new development of the Bawang Alai irrigation scheme.

Table 4.3 List of Polder Schemes with Construction Cost (Financial Prices) and Paddy Increment by Kabupaten and Ranking

	Kabupaten				Muda Sungai Lera				Muda Sungai Lera				Muda Sungai Seblan				Lera				Total							
	Scheme	Area (ha)	Const. Cost (Rp.MN)	Paddy Inere. (tons)	Scheme	Area (ha)	Const. Cost (Rp.MN)	Paddy Inere. (tons)	Scheme	Area (ha)	Const. Cost (Rp.MN)	Paddy Inere. (tons)	Scheme	Area (ha)	Const. Cost (Rp.MN)	Paddy Inere. (tons)	Scheme	Area (ha)	Const. Cost (Rp.MN)	Paddy Inere. (tons)	Scheme	Area (ha)	Const. Cost (Rp.MN)	Paddy Inere. (tons)	Scheme	Area (ha)	Const. Cost (Rp.MN)	Paddy Inere. (tons)
RANK 1 - Eksis	-	0	0	0	7 Albbic	4,500	8,217	38,250	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	0	0	0	0
	Sub-total	0	0	0	Sub-total	4,500	8,217	38,250	Sub-total	0	0	0	Sub-total	0	0	0	Sub-total	0	0	0	Sub-total	0	0	0	Sub-total	0	0	0
RANK 3 - Eksis	-	0	0	0	4 Kahudun	2,300	26	4,200	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0
	Sub-total	0	0	0	Sub-total	2,300	26	4,200	Sub-total	0	0	0	Sub-total	0	0	0	Sub-total	0	0	0	Sub-total	0	0	0	Sub-total	0	0	0
RANK 4 and RANK 5	1 Ampunung	418	348	710	2 Balire	2,344	1,723	3,960	-	0	0	0	1	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0
	Sub-total	418	348	710	Sub-total	2,344	1,723	3,960	Sub-total	0	0	0	Sub-total	0	0	0	Sub-total	0	0	0	Sub-total	0	0	0	Sub-total	0	0	0
Total	418	348	710	710	Total	10,418	10,005	48,370	Total	0	0	0	Total	0	0	0	Total	0	0	0	Total	0	0	0	Total	10,836	10,353	49,030

Table 4.4 List of All Schemes with Construction Cost (Financial Prices) and Paddy Increase by Subsystem and Ranking

Ranking	Flooded				Flood-Semi-Saline				Flood-Saline				Flood-Super-Saline				Total				
	Schemes	Area (ha)	Cost (Rp./ha)	Paddy Incr. (tons)	Schemes	Area (ha)	Cost (Rp./ha)	Paddy Incr. (tons)	Schemes	Area (ha)	Cost (Rp./ha)	Paddy Incr. (tons)	Schemes	Area (ha)	Cost (Rp./ha)	Paddy Incr. (tons)	Area (ha)	Cost (Rp./ha)	Paddy Incr. (tons)		
RANK 1 - Exist + New	I. Jem Barwah	200	620	1,700	D. S.P. Hembang	1,995	3,191	2,310													
	D. S. Ampung	600	886	800	P. Alahio	4,500	8,217	38,250													
	D. S. Paksi	573	777	700																	
	D. S. Mant	293	370	290																	
	Sub-total	1,666	2,613	3,580	6,495	11,408	41,160														
RANK 2 - Exist	I. Gembira	254	561	1,020	I. Purno	138	338	750	I. Tepak	186	270	740	I. Paganbans	500	1,155	790					
	D. S. Panying	150	309	220					I. B. Farweng	190	257	640	D. T. Paganbans	300	699	470					
	D. S. Baitro	100	175	150					I. Mangrawang	215	316	2,060	D. S. Tanten	0	0	0					
		0	0	0					D. T. Karna	250	764	430									
	Sub-total	504	845	1,390	188	338	790	3,020	3,601	3,219	10,320	800	1,834	0	0	0	1,260				
RANK 3 - Planned + New	I. Kemeru	408	1,325	3,470	D. R. P. Kera	4,600	11,892	13,050	D. S. Suring	2,500	5,719	7,140	I. Kerya Hembang	347	1,128	2,720	I. Labedian	300	975	1,770	
	I. Mekar	203	659	1,720	P. Alahio	1,000	5,116	0	D. B. Jaya	800	1,833	2,240	D. R. Anandang	1,500	3,325	4,290	D. R. Bahasan	2,000	3,951	6,000	
	I. Bangsal	225	824	1,570					D. P. Geger	1,500	3,325	4,290	D. R. Munding Ex	2,000	6,082	6,000	D. R. Munding Ex	2,000	6,082	6,000	
	I. Bilas	643	2,083	5,476					D. R. Negeri Exst	500	1,067	1,430	D. R. Munding Ex	2,000	6,082	6,000	D. R. Munding Ex	2,000	6,082	6,000	
	I. Bery, Tiyaka	750	2,487	6,380					D. S. Hadangin	3,800	8,095	11,400	P. Mangrami	2,000	32,448	0	P. Mangrami	2,000	32,448	0	
Sub-total	2,229	7,194	18,620	5,700	21,230	23,050	9,380	7,432	14,147	43,630	14,147	43,630	8,300	49,516	19,770	8,300	49,516	19,770	8,300	49,516	
RANK 4 - Planned + New	I. Namaso	64	207	310	I. Chalangan	2,172	23,286	18,460	I. Bawang Ala	6,225	38,754	59,120	I. Anomaki	6,432	41,387	55,390					
		0	0	0	I. Pung	3,734	23,015	35,470	I. Baraban	2,278	14,941	21,640									
		0	0	0	Sub-total	5,906	36,403	53,930	Sub-total	8,401	52,795	80,760	Sub-total	6,432	41,387	55,390					
		0	0	0	D. R. B. Mand	1,560	1,846	1,280	I. Tanyang	166	283	660									
	Sub-total	0	0	0	P. Kalandi	2,300	2,994	2,994	D. T. Jambak	2,994	6,023	10,690									
RANK 5 - Exist	I. Sungai Kae	260	790	1,070																	
	D. Bantaling	400	1,457	520																	
	Sub-total	660	2,247	1,590																	
		150	585	290	I. Tundikan	233	369	620	I. Tanyab	155	326	660	I. Paganan	178	250	470	I. Paganan	362	565	1,030	
		280	1,457	370	I. Susanto	1,16	207	370	I. Paganan	214	399	560	I. Tumban	99	174	270	I. Tumban	99	174	270	
Sub-total	848	2,990	1,280	5,653	2,299	4,190	6,660	11,250	165	326	660	392	649	1,030	491	723	1,300	88,690	108,283	88,690	
Total	5,808	15,646	26,770	25,916	73,609	121,370	17,927	72,798	110,170	31,976	87,443	115,660	29,689	108,283	88,690	110,408	557,659	469,560			

I. Irrigation schemes D. Drainage schemes P. Polder scheme F. Fishery schemes

Note: For Tj. Jambak schemes, construction development is recommended after the new development of the Bawang Ala irrigation schemes.

Table 4.5 Estimate of Public Investment for Irrigation, Drainage, Forder and Fishery Projects

	Tabalong				H.S.U				H.S.T				H.S.S				Tapih				Total			
	To be Assigned		Accumulated		To be Assigned		Accumulated		To be Assigned		Accumulated		To be Assigned		Accumulated		To be Assigned		Accumulated		To be Assigned	Accumulated		
Case 1	1,239	5,888	1,239	5,888	5,825	5,825	5,825	5,825	6,996	6,996	6,996	6,996	8,664	8,664	8,664	8,664	8,664	8,664	8,664	28,612	28,612	28,612	28,612	
Repelita V	690	3,280	1,929	9,169	3,245	9,071	3,897	10,893	4,827	13,490	4,827	13,490	4,827	13,490	4,827	13,490	4,827	13,490	4,827	13,490	15,940	44,552	44,552	44,552
Repelita VI	3,541	16,830	5,470	25,999	16,650	25,721	19,995	30,888	24,762	38,253	24,762	38,253	24,762	38,253	24,762	38,253	24,762	38,253	24,762	38,253	81,778	126,330	126,330	126,330
Rep. VII+VIII	11,723	55,720	17,194	81,719	55,125	80,845	66,198	97,086	81,983	120,236	81,983	120,236	81,983	120,236	81,983	120,236	81,983	120,236	81,983	120,236	270,750	397,080	397,080	397,080
Rep. IX+X	17,194	81,719	17,194	81,719	80,845	97,086	97,086	120,236	120,236	120,236	120,236	120,236	120,236	120,236	120,236	120,236	120,236	120,236	120,236	120,236	397,080	397,080	397,080	397,080
Case 2	1,239	5,888	1,239	5,888	5,825	5,825	5,825	5,825	6,996	6,996	6,996	6,996	8,664	8,664	8,664	8,664	8,664	8,664	8,664	28,612	28,612	28,612	28,612	
Repelita V	614	2,920	1,853	8,809	2,889	8,714	3,469	10,465	4,297	12,960	4,297	12,960	4,297	12,960	4,297	12,960	4,297	12,960	4,297	12,960	14,190	42,802	42,802	42,802
Repelita VI	2,347	11,155	4,200	19,964	11,036	19,750	13,253	23,718	16,413	29,373	16,413	29,373	16,413	29,373	16,413	29,373	16,413	29,373	16,413	29,373	54,203	97,005	97,005	97,005
Rep. VII+VIII	5,404	25,684	9,604	45,647	25,409	45,159	30,514	54,231	37,789	67,163	37,789	67,163	37,789	67,163	37,789	67,163	37,789	67,163	37,789	67,163	124,800	221,805	221,805	221,805
Rep. IX+X	9,604	45,647	9,604	45,647	45,159	54,231	54,231	67,163	67,163	67,163	67,163	67,163	67,163	67,163	67,163	67,163	67,163	67,163	67,163	67,163	221,805	221,805	221,805	221,805
Case 3	1,239	5,888	1,239	5,888	5,825	5,825	5,825	5,825	6,996	6,996	6,996	6,996	8,664	8,664	8,664	8,664	8,664	8,664	8,664	28,612	28,612	28,612	28,612	
Repelita V	565	2,685	1,804	8,574	2,657	8,482	3,190	10,186	3,951	12,615	3,951	12,615	3,951	12,615	3,951	12,615	3,951	12,615	3,951	12,615	13,049	41,661	41,661	41,661
Repelita VI	1,746	8,300	3,550	16,874	8,211	16,693	9,861	20,047	12,212	24,827	12,212	24,827	12,212	24,827	12,212	24,827	12,212	24,827	12,212	24,827	40,330	81,991	81,991	81,991
Rep. VII+VIII	3,079	14,632	6,629	31,506	14,476	31,169	17,384	37,431	21,529	46,356	21,529	46,356	21,529	46,356	21,529	46,356	21,529	46,356	21,529	46,356	71,099	153,090	153,090	153,090
Rep. IX+X	6,629	31,506	6,629	31,506	31,169	37,431	37,431	46,356	46,356	46,356	46,356	46,356	46,356	46,356	46,356	46,356	46,356	46,356	46,356	46,356	153,090	153,090	153,090	153,090
Case 4	1,239	5,888	1,239	5,888	5,825	5,825	5,825	5,825	6,996	6,996	6,996	6,996	8,664	8,664	8,664	8,664	8,664	8,664	8,664	28,612	28,612	28,612	28,612	
Repelita V	502	2,386	1,741	8,274	2,360	8,186	2,834	9,830	3,510	11,593	3,510	11,593	3,510	11,593	3,510	11,593	3,510	11,593	3,510	11,593	11,593	40,205	40,205	40,205
Repelita VI	1,152	5,477	2,893	13,751	5,418	13,604	6,507	16,337	8,058	20,232	8,058	20,232	8,058	20,232	8,058	20,232	8,058	20,232	8,058	20,232	26,612	66,817	66,817	66,817
Rep. VII+VIII	1,383	6,572	4,276	20,323	6,502	20,106	7,808	24,145	9,670	29,902	9,670	29,902	9,670	29,902	9,670	29,902	9,670	29,902	9,670	29,902	31,936	98,753	98,753	98,753
Rep. IX+X	4,276	20,323	4,276	20,323	20,106	24,145	24,145	29,902	29,902	29,902	29,902	29,902	29,902	29,902	29,902	29,902	29,902	29,902	29,902	29,902	98,753	98,753	98,753	98,753

Table 4.6 Investment Plan for Irrigation, Drainage, Power and Pabery Projects by Kabupaten in Case 1

Scheme	Kawanan				Hulu Sungai Utara				Hulu Sungai Tengah				Hulu Sungai Selatan				Total			
	Area (Ha)	Cost (Rp. Mn)	Fully Inscr. (Mn)	Const. Cost (Rp. Mn)	Area (Ha)	Cost (Rp. Mn)	Fully Inscr. (Mn)	Const. Cost (Rp. Mn)	Area (Ha)	Cost (Rp. Mn)	Fully Inscr. (Mn)	Const. Cost (Rp. Mn)	Area (Ha)	Cost (Rp. Mn)	Fully Inscr. (Mn)	Const. Cost (Rp. Mn)	Area (Ha)	Cost (Rp. Mn)	Fully Inscr. (Mn)	Const. Cost (Rp. Mn)
REPELITA V	230	620	1,700	8,217	38,250	430	764	430	764	5,200	6,299	7,400	1,000	1,789	1,560	11,200	17,659	49,620	2,457	2,780
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,486	2,457	2,780	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	469	828	1,099	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,515	1,998	3,640	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,990	5,108	6,100	0	0
Sub-total	230	620	1,700	8,217	38,250	430	764	430	764	5,200	6,299	7,400	1,000	1,789	1,560	18,551	28,010	63,009	0	0
REPELITA VI	600	866	890	522	0	800	1,853	2,240	0	1,500	1,844	2,250	2,750	4,205	4,320	5,750	9,290	9,800	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	968	2,468	3,310	0	0
	600	866	890	522	0	800	1,853	2,240	0	1,500	1,844	2,250	2,750	4,205	4,320	6,758	11,758	13,110	0	0
Accumulate	806	1,506	2,590	5,997	39,300	4,601	7,052	10,260	0	7,500	9,977	11,050	7,600	12,156	13,200	28,289	39,762	74,340	0	0
REPELITA VII	475	737	700	3,191	2,910	2,500	5,719	7,140	0	600	2,248	2,970	8,000	11,656	12,300	13,570	22,551	23,720	0	0
	200	370	290	8,816	0	2,278	14,041	21,640	0	2,005	2,995	2,950	2,000	3,991	6,000	7,483	30,213	30,880	0	0
	150	309	220	0	0	0	0	0	0	547	1,128	2,720	2,000	6,082	6,000	2,497	7,519	8,940	0	0
	100	175	150	0	0	0	0	0	0	1,500	3,525	4,290	0	0	0	1,600	3,700	4,440	0	0
	254	361	310	0	0	0	0	0	0	1,500	3,525	4,290	0	0	0	1,754	3,886	5,310	0	0
	203	659	1,730	0	0	0	0	0	0	500	1,067	1,450	0	0	0	703	1,726	2,160	0	0
Sub-total	1,382	2,611	4,110	12,007	2,910	4,778	19,760	28,780	0	6,452	13,488	16,650	12,000	21,729	24,000	27,607	69,595	76,450	0	0
Accumulate	2,382	4,117	6,700	21,104	41,210	9,378	26,812	39,040	0	13,952	25,465	27,740	19,600	33,665	37,200	52,896	109,563	152,590	0	0
REPELITA VIII	543	2,089	5,670	11,892	13,050	4,660	38,754	59,120	0	3,800	8,995	11,400	2,000	6,020	6,000	17,266	66,250	95,240	0	0
	408	1,525	3,470	23,015	35,470	1,666	293	660	0	1,500	3,195	4,500	2,000	32,448	0	7,209	60,266	44,100	0	0
	225	654	1,570	13,398	18,460	1,994	6,623	10,690	0	5,000	10,652	15,000	2,700	2,677	740	9,661	31,564	46,460	0	0
	750	2,487	6,380	1,345	1,960	0	326	660	0	6,432	41,387	55,590	3,920	34,960	43,650	4,035	81,006	107,860	0	0
	280	790	1,070	0	26	0	0	0	0	178	399	470	0	549	1,030	3,159	1,615	6,770	0	0
	400	1,457	520	39	1,910	0	0	0	0	214	399	560	0	174	270	1,987	2,069	3,260	0	0
	64	207	310	369	602	0	0	0	0	0	0	0	0	0	0	297	576	790	0	0
	150	585	200	116	310	0	0	0	0	0	0	0	0	0	0	266	792	510	0	0
	290	1,457	370	207	310	0	0	0	0	0	0	0	0	0	0	2,024	3,180	4,530	0	0
	418	348	710	1,723	3,960	0	0	0	0	0	0	0	0	0	0	418	348	710	0	0
Sub-total	3,619	11,379	20,070	52,505	79,960	8,448	45,986	71,130	0	17,124	63,978	87,320	10,089	74,418	51,490	57,512	248,266	309,970	0	0
Accumulate	5,900	12,496	26,770	73,605	121,870	17,927	72,798	110,170	0	31,076	87,463	115,060	29,689	108,283	86,690	110,408	357,625	462,560	0	0

I: Irrigation scheme D: Drainage scheme P: Pabery scheme
 Note: For Tg.Jayanti scheme, contribution development as proposed after the new development of the Bawang Aji irrigation scheme.

Table 4.7 Investment Plan for Irrigation, Drainage, Polder and Fishery Projects by Kabupaten in Case 2

District	Scheme	Fishery			Polder			Drainage			Irrigation			Total		
		Area (Ha)	Unit (Rp/ha)	Total (Rp. M\$)	Area (Ha)	Unit (Rp/ha)	Total (Rp. M\$)	Area (Ha)	Unit (Rp/ha)	Total (Rp. M\$)	Area (Ha)	Unit (Rp/ha)	Total (Rp. M\$)	Area (Ha)	Unit (Rp/ha)	Total (Rp. M\$)
REPELITA V	I. Zero Bawah	200	0	0	700	0	0	600	0	0	1,700	0	0	200	0	0
	Sub-total	200	0	0	700	0	0	600	0	0	1,700	0	0	200	0	0
REPELITA VI	D. S. Rempang	500	885	890	0	0	0	0	0	0	522	0	0	500	885	890
	Sub-total	500	885	890	0	0	0	0	0	0	522	0	0	500	885	890
REPELITA VII	I. Peran	475	737	702	700	1,700	38,250	0	0	0	0	0	0	475	737	702
	Sub-total	475	737	702	700	1,700	38,250	0	0	0	0	0	0	475	737	702
REPELITA VIII	I. R. Negeri	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	200	0	0	0	0	0	0	0	0	0	0	0	200	0	0
REPELITA IX	I. R. Negeri	640	2,089	5,470	0	0	0	0	0	0	0	0	0	640	2,089	5,470
	Sub-total	640	2,089	5,470	0	0	0	0	0	0	0	0	0	640	2,089	5,470
REPELITA X	I. R. Negeri	225	634	1,570	0	0	0	0	0	0	0	0	0	225	634	1,570
	Sub-total	225	634	1,570	0	0	0	0	0	0	0	0	0	225	634	1,570

I: Irrigation scheme D: Drainage scheme P: Polder scheme F: Fishery scheme

Note: For Zero Bawah scheme, cost transfer development as proposed after the new developments of the Basing Alir Irrigation scheme.

Table 4.8 Investment Plan for Irrigation, Drainage, Pickler and Fishery Projects by Subsystem in Case 3

Subsystem	Irrigation			Drainage			Pickler			Fishery			Subtotal		
	Area (ha)	Cost (Rp./ha)	Total Cost (Rp.)	Area (ha)	Cost (Rp./ha)	Total Cost (Rp.)	Area (ha)	Cost (Rp./ha)	Total Cost (Rp.)	Area (ha)	Cost (Rp./ha)	Total Cost (Rp.)	Area (ha)	Cost (Rp./ha)	Total Cost (Rp.)
REPETA V	D. S. Runyong	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Accumulate	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
REPETA VI	D. S. Runyong	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Accumulate	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
REPETA VII	D. S. Runyong	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Accumulate	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
REPETA VIII	D. S. Runyong	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Accumulate	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
REPETA IX	D. S. Runyong	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Accumulate	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
Other	D. S. Runyong	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Accumulate	600	886	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-total	600	886	0	0	0	0	0	0	0	0	0	0	0	0

I: Irrigation scheme; D: Drainage scheme; P: Pickler scheme; F: Fishery scheme

Note: For "T" harvest scheme, construction development is proposed after the development of the Ranzang Aisi irrigation scheme.

Table 4.9 Investment Plan for Irrigation, Drainage, Polder and Fishery Projects by Subproject in Case 4

Subproject	Fishery				Irrigation				Drainage				Polder				Total					
	Schemes	Area (Ha)	Cost (Rp. Mily)	Ready Incom. (Years)	Schemes	Area (Ha)	Cost (Rp. Mily)	Ready Incom. (Years)	Schemes	Area (Ha)	Cost (Rp. Mily)	Ready Incom. (Years)	Schemes	Area (Ha)	Cost (Rp. Mily)	Ready Incom. (Years)	Schemes	Area (Ha)	Cost (Rp. Mily)	Ready Incom. (Years)		
REVELTA V	I. Yano Berah	200	625	0	P. Alabio	4,500	8,217	38,250	D. R. Terns	300	764	0	D. R. Terns	300	6,299	7,480	D. S.T. Ghatang	1,000	1,739	11,200	17,639	49,624
	-	0	0	0	I. Tepak	386	270	0	I. B. Rerwang	300	699	0	D. S. Car. Hatak	1,000	1,466	1,370	D. S.P. Babuets	300	450	1,486	2,437	2,780
	-	0	0	0	I. Mangwang	515	386	0	D. T.S. Kambet	2,640	3,362	0	D. S.U. Odai	1,000	1,472	1,580	D. S. Dromar	1,250	1,746	1,515	1,998	1,990
	-	0	0	0	Sub-total	3,801	5,219	39,250	Sub-total	3,801	6,998	7,956	Sub-total	4,500	6,956	7,110	Sub-total	3,890	5,108	31,010	28,510	63,520
REVELTA VI	D. S. Kempang	600	886	0	D. S. Bayaji	800	1,233	2,240	D. S. Kajang	1,500	1,844	2,350	D. R. Rdians	2,750	4,205	4,320	D. R. Rdians	2,750	4,205	5,656	8,768	9,800
	-	0	0	0	Sub-total	800	1,233	2,240	Sub-total	1,500	1,844	2,350	Sub-total	2,750	4,205	4,320	Sub-total	2,750	4,205	5,656	8,768	9,800
	-	0	0	0	Accumulation	4,500	8,217	38,250	Accumulation	7,000	8,842	10,300	Accumulation	7,000	8,842	10,300	Accumulation	7,000	8,842	24,201	36,778	72,830
	-	0	0	0	Sub-total	4,500	8,217	38,250	Sub-total	4,500	8,217	38,250	Sub-total	4,500	8,217	38,250	Sub-total	4,500	8,217	24,201	36,778	72,830
REVELTA VII + VIII	D. S. Pakik	475	737	760	R. Alabio	100	522	0	D. S. S. Irtang	2,500	5,719	7,140	D. T. Pugambet	500	1,135	790	I. Labuhan	300	975	3,675	9,985	10,400
	D. S. Nanti	200	370	280	I. Prens	180	358	0	D. S. T. S. Babudiy	600	1,248	570	D. S. T. S. Babudiy	600	1,248	570	D. S. T. S. Babudiy	600	1,248	570	988	2,010
	-	0	0	0	D. S. P. Habang	1,995	3,191	2,910	I. Luang	2,005	2,995	2,950	I. Luang	2,005	2,995	2,950	I. Luang	2,005	2,995	2,950	4,000	5,860
	-	0	0	0	Sub-total	2,293	4,071	3,660	Sub-total	2,500	5,719	7,140	Sub-total	3,452	6,506	7,430	Sub-total	3,000	975	3,675	9,985	10,400
REVELTA IX + X	Sub-total	675	1,107	960	Accumulation	6,783	12,288	41,910	Accumulation	7,101	12,771	17,400	Accumulation	10,452	15,248	17,790	Accumulation	7,600	12,156	15,200	25,268	20,990
	-	0	0	0	Sub-total	675	1,107	960	Sub-total	675	1,107	960	Sub-total	675	1,107	960	Sub-total	675	1,107	960	14,207	11,130
	-	0	0	0	Accumulation	6,783	12,288	41,910	Accumulation	7,101	12,771	17,400	Accumulation	10,452	15,248	17,790	Accumulation	7,600	12,156	15,200	25,268	20,990
	-	0	0	0	Sub-total	675	1,107	960	Sub-total	675	1,107	960	Sub-total	675	1,107	960	Sub-total	675	1,107	960	14,207	11,130
REVELTA XI + XII	D. S. P. Pangsang	150	309	228	D. S. P. Kera	1,000	8,816	0	I. Bantasi	2,278	14,941	21,640	D. S. Hadang	3,800	8,095	11,400	D. R. Maming	8,000	11,656	9,650	15,990	16,510
	D. S. Bantasi	100	175	150	D. S. P. Kera	1,000	8,816	0	I. Bantasi	2,278	14,941	21,640	D. S. Hadang	3,800	8,095	11,400	D. R. Maming	8,000	11,656	9,650	15,990	16,510
	I. Chubis	254	361	1,020	I. Prens	3,784	23,015	35,470	I. Bantasi	2,278	14,941	21,640	D. S. Hadang	3,800	8,095	11,400	D. R. Maming	8,000	11,656	9,650	15,990	16,510
	I. Mabo	205	659	1,720	D. S. P. Habang	1,995	3,191	2,910	D. S. P. Habang	1,995	3,191	2,910	D. S. P. Habang	1,995	3,191	2,910	D. S. P. Habang	1,995	3,191	2,910	4,000	5,860
REVELTA XIII + XIV	Sub-total	707	1,504	3,120	Sub-total	6	0	0	Sub-total	0	0	0	Sub-total	3,500	8,117	10,010	Sub-total	10,000	15,647	18,000	25,268	20,990
	-	0	0	0	Sub-total	6	0	0	Sub-total	0	0	0	Sub-total	3,500	8,117	10,010	Sub-total	10,000	15,647	18,000	25,268	20,990
	-	0	0	0	Accumulation	6,783	12,288	41,910	Accumulation	7,101	12,771	17,400	Accumulation	13,952	23,465	27,740	Accumulation	17,600	27,763	31,200	47,518	55,156
	-	0	0	0	Sub-total	6,783	12,288	41,910	Sub-total	6,783	12,288	41,910	Sub-total	6,783	12,288	41,910	Sub-total	6,783	12,288	41,910	14,207	11,130
REVELTA XV + XVI	I. Bala	643	2,069	5,470	R. Alabio	1,000	8,816	0	I. Bantasi	2,278	14,941	21,640	D. S. Hadang	3,800	8,095	11,400	D. R. Maming	8,000	11,656	9,650	15,990	16,510
	I. Kerasan	498	1,320	3,470	D. R. P. Kera	4,600	13,932	13,650	I. Bantasi	2,278	14,941	21,640	D. S. Hadang	3,800	8,095	11,400	D. R. Maming	8,000	11,656	9,650	15,990	16,510
	I. Kerasan	225	634	1,570	I. Prens	3,784	23,015	35,470	I. Bantasi	2,278	14,941	21,640	D. S. Hadang	3,800	8,095	11,400	D. R. Maming	8,000	11,656	9,650	15,990	16,510
	I. Bantasi	750	2,487	6,380	I. Bantasi	2,172	13,388	18,660	D. T. Pugambet	1,984	6,623	10,690	I. Bantasi	2,278	14,941	21,640	D. R. Maming	8,000	11,656	9,650	15,990	16,510
REVELTA XVII + XVIII	Sub-total	280	780	1,970	D. R. B. Mandi	1,340	1,846	4,200	I. Tepak	183	306	660	I. Tepak	183	306	660	I. Tepak	183	306	660	4,200	4,500
	-	0	0	0	P. Kambet	2,300	26	4,200	I. Tepak	183	306	660	I. Tepak	183	306	660	I. Tepak	183	306	660	4,200	4,500
	-	0	0	0	P. Kambet	2,300	26	4,200	I. Tepak	183	306	660	I. Tepak	183	306	660	I. Tepak	183	306	660	4,200	4,500
	-	0	0	0	Sub-total	2,300	26	4,200	Sub-total	2,300	26	4,200	Sub-total	2,300	26	4,200	Sub-total	2,300	26	4,200	4,200	4,500
REVELTA XIX + XX	D. S. P. Pangsang	64	207	310	P. Sempitopok	1,274	29	1,910	I. Tepak	0	0	0	I. Tepak	0	0	0	I. Tepak	0	0	0	1,910	2,490
	D. S. P. Pangsang	150	585	200	I. Tepak	753	369	310	I. Tepak	0	0	0	I. Tepak	0	0	0	I. Tepak	0	0	0	1,910	2,490
	D. P. Kera	200	1,457	770	I. Sempu	2,118	207	310	I. Tepak	0	0	0	I. Tepak	0	0	0	I. Tepak	0	0	0	1,910	2,490
	P. Alabio	424	1,379	20,070	Sub-total	19,133	61,321	79,660	Sub-total	19,133	61,321	79,660	Sub-total	19,133	61,321	79,660	Sub-total	19,133	61,321	79,660	277,105	337,610
REVELTA XXI + XXII	Sub-total	3,618	11,379	20,070	Accumulation	25,916	75,609	121,870	Accumulation	17,927	72,798	110,170	Accumulation	31,076	87,443	115,066	Accumulation	29,089	108,283	86,690	397,628	462,360
	-	0	0	0	Sub-total	25,916	75,609	121,870	Sub-total	17,927	72,798	110,170	Sub-total	31,076	87,443	115,066	Sub-total	29,089	108,283	86,690	397,628	462,360

I: Irrigation schemes; D: Drainage schemes; P: Polder schemes; F: Fishery schemes

Note: For Ty. Irtang scheme, construction development is proposed after the new development of the Prens Alin irrigation scheme.

Table 5.1 Estimate of Incremental Labor Requirement

		Present Condition			With Project Condition			Increment (1000 MD)
		b/	a/	Total Labor Requirement (1000 MD)	b/	a/	Total Labor Requirement (1000 MD)	
		Area (ha)	Unit Labor Requirement (MD/ha)		Area (ha)	Unit Labor Requirement (MD/ha)		
Case 1	Existing	49,391	125.2	6,183.8	49,391	273.6	13,513.4	7,329.6
	Planned + New	0		0.0	61,017	273.6	16,694.3	16,694.3
	Total	49,391		6,183.8	110,408		30,207.6	24,023.9
Case 2	Existing	38,034	125.2	4,761.9	38,034	273.6	10,406.1	5,644.2
	Planned + New	0		0.0	34,682	273.6	9,489.0	9,489.0
	Total	38,034		4,761.9	72,716		19,895.1	15,133.2
Case 3	Existing	38,034	125.2	4,761.9	38,034	273.6	10,406.1	5,644.2
	Planned + New	0		0.0	27,813	273.6	7,609.6	7,609.6
	Total	38,034		4,761.9	65,847		18,015.7	13,253.9
Case 4	Existing	38,034	125.2	4,761.9	38,034	273.6	10,406.1	5,644.2
	Planned + New	0		0.0	9,584	273.6	2,622.2	2,622.2
	Total	38,034		4,761.9	47,618		13,028.3	8,266.4

a/: Weighted average requirement estimated as below;

1) Present Condition

	Unit require- ment * (MD/ha)	Areal Extent ** (%)	Require- ment (MD/ha)
Irrigation Schemes	140	26.1	36.5
Drainage Schemes	120	41.6	49.9
Polder Schemes	120	32.3	38.8
Weighted average			125.2

2) With Project Condition

	Unit require- ment * (MD/ha)	Areal Extent ** (%)	Require- ment (MD/ha)
Irrigation Schemes	420	26.1	109.6
Drainage Schemes	270	41.6	112.3
Polder Schemes	160	32.3	51.7
Weighted average			273.6

*; Unit requirement per hectare by cropping pattern

**; Estimated based on the present land use by facility

Source: b/; Tables 4.6, 4.7, 4.8 and 4.9

Table 5.2 Farm Budget Analysis under With and Without Project Conditions (1/2)

(1) Rawa Negara Drainage Scheme
Farmer with 1.0 ha land

	Without Project			With Project			Amount (Rp.'000)
	Area (ha)	Unit Gross Income/Cost (Rp.'000/ha)	Amount (Rp.'000)	Area (ha)	Unit Gross Income/Cost (Rp.'000/ha)	Amount (Rp.'000)	
1. Gross Income			1,423			2,541	1,119
a. Farm income			401			1,791	1,391
- Wetland paddy	a/ 1.0	400.5	401	1.0	801.0	801	
- Palawija	a/ 0.0	412.5	0	1.0	990.0	990	
b. Off-farm income	b/		1,022			750	(272)
2. Gross Outgo			173			731	558
a. Production Cost			164			696	532
- Wetland paddy	a/ 1.0	164.3	164	1.0	395.0	395	
- Palawija	a/ 0.0	86.6	0	1.0	301.1	301	
b. Tax and others	c/		8			35	27
3. Net Income (1-2)			1,250			1,810	560
4. Living Expenses	d/		1,250			1,250	0
5. Net Reserve (3-4)			0			560	560

Table 5.2 Farm Budget Analysis under With and Without Project Conditions (2/2)

(2) Jaro Bawa Irrigation Scheme
Farmer with 0.5 ha land

	Without Project			With Project			Amount (Rp.'000)
	Area (ha)	Unit Gross Income/Cost (Rp.'000/ha)	Amount (Rp.'000)	Area (ha)	Unit Gross Income/Cost (Rp.'000/ha)	Amount (Rp.'000)	
1. Gross Income			1,337			2,219	882
a. Farm income			334			1,469	1,135
- Wetland paddy	a/ 0.5	667.5	334	1.0	1,468.5	1,469	
- Palawija	a/ 0.0	412.5	0	0.0	990.0	0	
b. Off-farm income	b/		1,003			750	(253)
2. Gross Outgo			86			511	425
a. Production Cost			82			487	404
- Wetland paddy	a/ 0.5	164.3	82	1.0	486.6	487	
- Palawija	a/ 0.0	86.6	0	0.0	301.1	0	
b. Tax and others	c/		4			24	20
3. Net Income (1-2)			1,250			1,708	457
4. Living Expenses	d/		1,250			1,250	0
5. Net Reserve (3-4)			0			457	457

a/: Estimated based on Tables 5.3 and 5.4

b/: Off-farm income of Rp. 750,000 which is taken for with project condition is estimated based on the preliminary study results of Riam Kanan Project Post-beneficiary Evaluation and Monitoring Survey 1988, Kyoto University, Japan. Under without project condition, Rp. 272,000 and Rp. 253,000 are added to the estimated Rp. 750,000 for the Rawa Negara Drainage Scheme and Jaro Bawa Irrigation Scheme, respectively, on the assumption that the amount of net income would be equal to that of living expenses.

c/: 5% of production cost

d/: Estimated based on Statistical Yearbook of Indonesia 1986, CBS

Table 5.3 Crop Budget per Hectare under Without Project Condition (Financial Prices)

Item	Unit	(1) Wetland Paddy				(2) Palawija Crops (Mungbeans)				
		(i) Existing Irrigation Scheme		(ii) Existing Drainage and Polder		(i) Existing Irrigation Scheme		(ii) Existing Drainage and Polder		
		Q'ty	Price (Rp.)	Amount ('000Rp)	Q'ty	Price (Rp.)	Amount ('000Rp)	Q'ty	Price (Rp.)	Amount ('000Rp)
A. Gross Income										
- Yield	(ton)	3.5	267,000	934.5	1.5	267,000	400.5	0.5	825,000	412.5
B. Production Cost										
1) Farm Input										
- Seed	(kg)	25	270	6.8	20	270	5.4	25	900	22.5
- Fertilizer										
- Urea	(kg)	100	135	13.5	0	135	0.0	0	135	0.0
- TSP	(kg)	50	135	6.8	0	135	0.0	0	135	0.0
- KCl	(kg)	0	135	0.0	0	135	0.0	0		0.0
- Agro-chemical										
- Pesticide	(lit.)	3	5,200	15.6	0	5,200	0.0	0	5,200	0.0
- Rodenticide	(kg)	3	1,500	4.5	0	1,500	0.0	0		0.0
	(Sub-Total)			47.1			5.4			22.5
2) Labour Requirement (m/d)										
- Family Labour		84	0	0.0	72	0	0.0	30	0	0.0
- Hired Labour		56	3,000	168.0	48	3,000	144.0	20	3,000	60.0
	(Sub-Total)			168.0			144.0			60.0
3) Miscellaneous										
- % of Sub-Total 1) and 2)		10		21.5	10		14.9	5		4.1
Total Production Cost				236.6			164.3			86.6
C. Net Return				697.9			236.2			325.9

Table 5.4 Crop Budget per Hectare under the With Project Condition (Financial Prices)

Item	Unit	(1) Wetland Paddy				(2) Palawija Crops (Mungbeans)					
		(i) Existing Irrigation Scheme		(ii) Existing Drainage and Polder		Qty	Price (Rp.)	Amount ('000Rp)	Qty	Price (Rp.)	Amount ('000Rp)
		Qty	Price (Rp.)	Qty	Price (Rp.)						
A. Gross Income											
- Yield	(ton)	5.5	267,000	1,468.5	3.0	267,000	801.0	1.2	825,000	990.0	
B. Production Cost											
1) Farm Input											
- Seed	(kg)	40	270	10.8	25	270	6.8	40	900	36.0	
- Fertilizer											
Urea	(kg)	200	135	27.0	100	135	13.5	100	135	13.5	
TSP	(kg)	150	135	20.3	50	135	6.8	100	135	13.5	
KCl	(kg)	100	135	13.5	0	135	0.0	10	135	1.4	
- Agro-chemical											
Pesticide	(lit.)	3	5,200	15.6	3	5,200	15.6	2	5,200	10.4	
Rodenticide	(kg)	3	1,500	4.5	3	1,500	4.5	2	5,200	10.4	
(Sub-Total)				91.7			47.1			74.8	
2) Labour Requirement (m/d)											
- Family Labour		126	0	0.0	96	0	0.0	66	0	0.0	
- Hired Labour		84	3,000	252.0	64	3,000	192.0	44	3,000	132.0	
(Sub-Total)				252.0			192.0			132.0	
3) Animal Power (t/d)		15	8,000	120.0	15	8,000	120.0	10	8,000	80.0	
4) Miscellaneous											
- % of Sub-Total 1), 2) and 3)		5		23.2	10		35.9	5		14.3	
Total Production Cost				486.8			395.0			301.1	
C. Net Return				981.7			406.0			688.9	

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