

表 10.4.1 プーケット漁港の料金表

1. 水揚料			
(1) 屑魚		水揚量(kg)当たり0.02 Baht	( 20 Baht/t)
(2) 食用魚			
a. 旋網船		水揚量(kg)当たり0.04 Baht	( 40 Baht/t)
b. トロール船(タイ水域内)		船の馬力(HP), 水揚回数当たり	1.50 Baht
トロール船(外国の水域)		船の馬力(HP), 水揚回数当たり	2.50 Baht
c. 延縄船		水揚量(kg)当たり0.2 Baht	( 200 Baht/t)
d. 外国籍の延縄船		水揚量(kg)当たり0.2 Baht	( 200 Baht/t)
e. 外国船		船のGRT当たり 50 Baht	
2. 車両の入港料			
a. 4輪車		入港回数当たり	10 Baht
b. 6輪車		入港回数当たり	15 Baht
c. 10輪車		入港回数当たり	20 Baht
d. 観光車	4輪車	入港回数当たり	20 Baht
	有蓋自動車	入港回数当たり	25 Baht
	ミニバス	入港回数当たり	40 Baht
	大型バス	入港回数当たり	50 Baht
3. 係船料			
a. GRT 60t未満の船		100 Baht/隻	
b. GRT 60以上の船		200 Baht/隻	
c. GRT 100t未満の船		500 Baht/隻	
d. GRT 1,000以上の船		700 Baht/隻	
4. 構内使用料 (トラック箱詰め)			
a. 10輪車		台数当たり	300 Baht
b. 6輪車		台数当たり	200 Baht
c. 4輪車		台数当たり	150 Baht
5. 氷の供給手数料			
a. フロックアイス		本数当たり	0.5 Baht
b. クラッシュアイス		t当たり	3 baht
6. 燃料の供給手数料		1回当たり	0.065 Baht
7. 潤滑油の供給手数料		1回当たり	0.03 Baht
8. 照明料			
a. オークションホール内		消費量当たり	3 Baht
b. 船内		隻数当たり	150 Baht
10. エンジン等の電気使用料			
a. 6時間以内		50 Baht	
b. 12時間以内		100 Baht	
11. 修繕用の電気代		1日当たり	400 Baht
12. エンジンへの部屋賃貸料 (66部屋)		1部屋当たり月額	500 Baht
		年額	396,000 Baht
13. 土地賃貸料			
a. ショップヤード B(3,600 wa2)		1wa2当たり18 Baht	年額64,800 Baht
b. ショップヤード A(1,200 wa2)		1wa2当たり18 Baht	年額21,600 Baht
c. 加工工場(2,400 wa2)		1wa2当たり23 Baht	年額55,200 Baht
d. 燃料補給所		1ヶ月当たり	3,000 Baht
e. 食堂		1ヶ月当たり	3,000 Baht
		年額	36,000 Baht
		(注) 400 wa2=i rai	

表 10.4.2 プレーケット漁港収入(1996-2031)

(単位: 1,000 Baht)

項目	1996	2001	2002	2003	2004	2005	2006	2007	2031
<b>新規施設</b>									
(FMO)									
水揚料	0	0	4,142	4,418	4,913	7,681	12,691	17,701	17,701
車の人港料	0	0	18	20	22	25	26	28	28
係船料	0	0	646	690	733	812	934	1,061	1,061
車の構内使用料	0	0	18	20	22	25	26	28	28
水の供給手数料	0	0	117	125	141	159	168	177	177
燃料の供給手数料	0	0	664	710	756	834	918	1,004	1,004
電気料	0	0	222	238	253	285	337	390	390
不動産賃貸料	0	0	8,792	8,792	8,792	8,792	8,792	8,792	8,792
水揚艇に関する手数料	0	0	19,114	20,412	28,587	31,866	43,796	56,149	56,149
計	0	0	33,733	35,425	44,219	50,479	67,688	85,330	85,330
<b>既存施設</b>									
(FMO)									
水揚料	1,336	1,336	1,244	1,244	1,244	1,244	1,244	1,244	1,244
車の人港料	706	706	706	706	706	706	706	706	706
係船料	570	570	1,479	1,479	1,479	1,479	1,479	1,479	1,479
車の構内使用料	438	438	438	438	438	438	438	438	438
水の供給手数料	352	352	352	352	352	352	352	352	352
燃料の供給手数料	149	149	149	149	149	149	149	149	149
電気料	423	423	423	423	423	423	423	423	423
不動産賃貸料	610	610	610	610	610	610	610	610	610
水揚艇に関する手数料	0	0	5,775	5,775	5,775	5,775	5,775	5,775	5,775
その他	250	250	250	250	250	250	250	250	250
計	4,834	4,834	11,426	11,426	11,426	11,426	11,426	11,426	11,426
(民間施設)									
水揚料	4,604	4,604	4,604	4,604	4,604	4,604	4,604	4,604	4,604
係船料	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612
水揚艇に関する手数料	11,557	11,557	11,557	11,557	11,557	11,557	11,557	11,557	11,557
計	17,773	17,773	17,773	17,773	17,773	17,773	17,773	17,773	17,773
合計	22,607	22,607	29,199	29,199	29,199	29,199	29,199	29,199	29,199
総計	22,607	22,607	62,932	64,624	73,418	79,678	96,887	114,529	114,529

表 10.4.3 水産加工団地の収入

(単位: Baht)

項目	2005	2006	2007
分譲賃貸収入	5,992,000	11,984,000	17,976,000
公共サービス料等	336,000	672,000	2,519,000
計	6,328,000	12,656,000	20,495,000

表 10.4.3 (1) 分譲賃貸収入

(単位: Baht)

項目	ㄗ	賃貸価格	2005		2006		2007	
			数量	金額	数量	金額	数量	金額
缶詰工場	28	107,000	2	5,992,000	4	11,984,000	6	17,976,000

- (注) 1. 賃貸単価の推定: 投資費用の外貨分は6%、内貨分は3%の手数料を25年で償還するとして、償還費用/年は107,000 Baht。下記のIEATの分譲賃貸価格に較べると45%増。  
 2. IEATのGPZの分譲賃貸価格/ㄗは73,750 Baht。

表 10.4.3(2) 公共サービス料

(単位: Baht)

項目	ㄗ	単価	2005		2006		2007	
			数量	金額	数量	金額	数量	金額
公共サービス料	28	6,000	2	336,000	4	672,000	6	1,008,000
缶詰工場 維持修繕費				0		0		1,511,000
計				336,000		672,000		2,519,000

- (注) 1. 公共サービス料は団地内排水路列-ソク、補修作業、街路清掃作業、街灯照明、街路樹整備等についてIEATが通常定めている1ㄗ当たり500Baht/月を採用した。  
 2. 施設全体の維持修繕費は2007年から開始するとして、投資費用の0.5%とした。  
 維持修繕費: 投資費用302,232\*0.5%=1,511(1,000Baht)。

表10.5.1 投資費用 (市場價格)

科目	2000		2001		2002		2003		2004		2005		2006	
	千円	(百万円)	千円	(百万円)	千円	(百万円)	千円	(百万円)	千円	(百万円)	千円	(百万円)	千円	(百万円)
公共施設														
国庫	1,114,062	724,418	399,626	254,776	1,947,736	74,928	47,929	2,272,236	3,272,236	111,917				
地方自治体	540,767	154,601	704,166	21,487	70,454	248,924	115,113	133,612						
企業	162,236	0	192,219	0	20,232	14,986	0	141,966						
計	1,617,065	879,019	1,296,011	276,265	2,038,920	230,848	250,872	455,646	147,744	322,896	287,456	135,539	111,917	
国庫	1,024,274	0	1,024,274	0	1,997,704	0	1,997,704	0	1,024,274					
地方自治体	189,704	0	189,704	0	189,704	0	189,704	0	102,432					
企業	302,232	0	302,232	0	199,704	0	199,704	0	102,432					
計	1,516,209	861,017	1,516,209	1,014,712	2,187,112	449,708	449,708	465,640	147,744	322,896	349,964	135,539	214,443	
国庫														
地方自治体	1,103,266	34,977	1,070,319						349,432	11,028	350,728	349,432	349,432	11,028
計	3,074,574	895,094	2,128,541	1,019,911	797,874	449,848	449,848	465,640	147,744	322,896	349,964	135,539	214,443	11,028
国庫														
地方自治体	1,103,266	34,977	1,070,319						349,432	11,028	350,728	349,432	349,432	11,028
計	3,074,574	895,094	2,128,541	1,019,911	797,874	449,848	449,848	465,640	147,744	322,896	349,964	135,539	214,443	11,028

表 10.5.2 人件費

(単位：1,000 Baht)

区分	管理者	担当	人数		賃金		人件費(年)			
			現行	増加	月額	年額	現行	増加	計	
漁港	FMO	所長	1	0	1	30,000	360,000	360,000	0	360,000
		副所長	0	1	1	20,000	240,000	0	240,000	240,000
		経理・庶務係	4	1	5	13,000	156,000	624,000	156,000	780,000
		販売立会人	4	4	8	12,000	144,000	576,000	576,000	1,152,000
		漁船運航管理係	1	5	6	12,000	144,000	144,000	720,000	864,000
		漁業統計係	0	2	2	12,000	144,000	0	288,000	288,000
		岸壁監視員	4	6	10	8,000	96,000	384,000	576,000	960,000
		品質管理・検査長	0	1	1	15,000	180,000	0	180,000	180,000
		同僚	0	2	2	12,000	144,000	0	288,000	288,000
		資源管理	0	2	2	13,000	156,000	0	312,000	312,000
		計	14	24	38			2,088,000	3,336,000	5,424,000
水産輸出	FMO/TEXT	所長	0	1	1	20,000	240,000	0	240,000	240,000
		副所長	0	1	1	15,000	180,000	0	180,000	180,000
加工区		経理・庶務係	0	2	2	13,000	156,000	0	312,000	312,000
		技術者	0	2	2	13,000	156,000	0	312,000	312,000
		計認可係	0	1	1	12,000	144,000	0	144,000	144,000
		会計	0	1	1	12,000	144,000	0	144,000	144,000
		秘書	0	1	1	11,000	132,000	0	132,000	132,000
計	0	9	9			2,088,000	4,800,000	6,888,000		
合計	14	33	47			2,088,000	4,800,000	6,888,000		

(注) 1. FMOの人件費は7-カット漁港事務所の1995年の基本給と決算書にもとづき推定した。  
 2. 人件費は基本給とその他(基本給の36%)から成り、基本給の1.36として月額を計算した。  
 3. 水産輸出加工区の人件費はFMOの人件費を参考にして新規に設定した。  
 4. FMOの全体人件費は2002年から開始。  
 5. 水産加工団地の人件費は次のとおり。

- 2001年：所長(1)、技術者(1)、経理・庶務係(1) 552,000 Baht、2003年、2004年：同額、2005年以降1,464,000 Baht

表 10.5.3 管理費

区分	管理者	人件費	管理費率	管理費
漁港	FMO	5,424	50%	2,712
水産輸出 加工区	FMO/TEAT	1,464	50%	732
合計		6,888		3,444

- (注) 1. 管理費率はFMOの1994,1995の決算資料を参考にして推定した。  
 2. FMOの1996-2001年の管理費は  $2,038 \times 50\% = 1,019$ 千Baht。  
 3. FMOの全体管理費は2002年から開始。  
 4. 水産加工区の管理費は2001年から開始。  
 2001,2003,2004年 276,000Baht/年  
 2005年以降 732,000 Baht

表 10.5.4(1) プークット漁港, FMO維持修繕費

(単位: 1,000 Baht)

年	取得価格	修繕率	修繕費
新規資産			
2001	114,043	0.5%	570
2002	363,657	0.5%	1,818
2003	790,772	0.5%	3,954
2004	1,078,369	0.5%	5,392
2005	1,078,369	0.5%	5,392
2006	1,078,369	0.5%	5,392
2007	1,078,369	1.0%	10,784
既存資産			
1996	37,988	1.3%	494
2031	37,988	1.3%	494

表 10.5.4(2) 水産加工団地維持修繕費

(単位: 1,000 Baht)

年	取得価格	修繕率	修繕費
新規資産			
2004	302,232	0.0%	0
2005	302,232	0.0%	0
2006	302,232	0.0%	0
2007	302,232	0.5%	1,511

表 10.5.5 引船による操船経費

(単位: 1,000 Baht)

年	船	入港隻数	操船時間	引船賃借料	市場価格 操船経費
2006	冷凍運搬船	15	2	8,000	240
2007	冷凍運搬船	31	2	8,000	496
2031	冷凍運搬船	31	2	8,000	496

- (注)1. 操船時間: 入港時1時間30分、出港時30分 合計2時間  
 2. 引船賃借料: プーケット港の引船借用. 距離5km、速度10ノット  
 賃借料 最初の1時間 4,000 Baht,  
 30分毎の追加料 2,000 Baht

表 10.5.6(1) プーケット漁港の運営費用

(単位: 1,000 Baht)

年	人件費	管理費	維持修繕費	引船の操船 経費	計
1996	2,088	1,044	494	0	3,626
1997	2,088	1,044	494	0	3,626
1998	2,088	1,044	494	0	3,626
1999	2,088	1,044	494	0	3,626
2000	2,088	1,044	494	0	3,626
2001	2,088	1,044	1,064	0	4,196
2002	5,424	2,712	2,312	0	10,448
2003	5,424	2,712	4,448	0	12,584
2004	5,424	2,712	5,886	0	14,022
2005	5,424	2,712	5,886	0	14,022
2006	5,424	2,712	5,886	240	14,262
2007	5,424	2,712	11,278	496	19,910
↓					
2031	5,424	2,712	11,278	496	19,910

表 10.5.6(2) 水産加工団地の運営費用

(単位: 1,000 Baht)

年	人件費	管理費	維持修繕費	計
2001	552	276	0	828
2002	0	0	0	0
2003	552	276	0	828
2004	552	276	0	828
2005	1,464	732	0	2,196
2006	1,464	732	0	2,196
2007	1,464	732	1,511	3,707
↓				
2031	1,464	732	1,511	3,707





表 10.6.2 水産加工団地の固定資産

Item	Unit: 600千円											
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Fixed Assets at beginning Year												
New Facilities	0	0	0	302,232	294,676	287,120	279,564	272,008	264,452	256,896	249,340	241,784
Investment												
Facilities & Equipments	199,704	0	102,578	0	0	0	0	0	0	0	0	0
Depreciation	0	0	0	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556
New Facilities												
Fixed Assets at end of Year												
New Facilities	0	0	302,232	294,676	287,120	279,564	272,008	264,452	256,896	249,340	241,784	234,228
Work in Progress	199,704	199,704	0	0	0	0	0	0	0	0	0	0
Total	199,704	199,704	302,232	294,676	287,120	279,564	272,008	264,452	256,896	249,340	241,784	234,228
Item	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Fixed Assets at beginning Year												
New Facilities	234,228	226,672	219,116	211,560	204,004	196,448	188,892	181,336	173,780	166,224	158,668	151,112
Investment												
Facilities and Equipment	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556
New Facilities												
Fixed Assets at end of Year												
New Facilities	226,672	219,116	211,560	204,004	196,448	188,892	181,336	173,780	166,224	158,668	151,112	143,556
Work in Progress	0	0	0	0	0	0	0	0	0	0	0	0
Total	226,672	219,116	211,560	204,004	196,448	188,892	181,336	173,780	166,224	158,668	151,112	143,556
Item	2025	2026	2027	2028	2029	2030	2031					
Fixed Assets at beginning Year												
New Facilities	143,556	136,000	128,444	120,888	113,332	105,776	98,220					
Investment												
Facilities and Equipment	0	0	0	0	0	0	0					
Depreciation	7,556	7,556	7,556	7,556	7,556	7,556	7,556					
New Facilities												
Fixed Assets at end of Year												
New Facilities	136,000	128,444	120,888	113,332	105,776	98,220	90,664					
Work in Progress	0	0	0	0	0	0	0					
Total	136,000	128,444	120,888	113,332	105,776	98,220	90,664					

表10.7.1 プケット漁港のRepayment Schedule of Loan

A. Borrowing Conditions (2000年の借入れ)

Borrowing	79,876,000	Interest rate	3.0%	Grace period	7years
				Repayment period	18years

1. Payment of Interest for Grace Period

Grace period	Interest	
1	2,396,280	2000
2	2,396,280	2001
3	2,396,280	2002
4	2,396,280	2003
5	2,396,280	2004
6	2,396,280	2005
7	2,396,280	2006

2. Repayment

Total Repayment 81,786,474

Borrowing	79,876,000	Interest rate	3.0%	Repayment year	18	
					(unit: Baht)	
Repayment Year	Principal	Interest	Principal Repayment	Total Repayment	Balance	
1	79,876,000	199,690	4,344,003	4,543,693	75,531,997	2007
2	75,531,997	188,829	4,354,864	4,543,693	71,177,133	2008
3	71,177,133	177,942	4,365,751	4,543,693	66,811,382	2009
4	66,811,382	167,028	4,376,665	4,543,693	62,434,717	2010
5	62,434,717	156,086	4,387,607	4,543,693	58,047,110	2011
6	58,047,110	145,117	4,398,576	4,543,693	53,648,534	2012
7	53,648,534	134,121	4,409,572	4,543,693	49,238,962	2013
8	49,238,962	123,097	4,420,596	4,543,693	44,818,366	2014
9	44,818,366	112,045	4,431,648	4,543,693	40,386,718	2015
10	40,386,718	100,966	4,442,727	4,543,693	35,943,991	2016
11	35,943,991	89,859	4,453,834	4,543,693	31,490,157	2017
12	31,490,157	78,725	4,464,968	4,543,693	27,025,189	2018
13	27,025,189	67,562	4,476,131	4,543,693	22,549,058	2019
14	22,549,058	56,372	4,487,321	4,543,693	18,061,737	2020
15	18,061,737	45,154	4,498,539	4,543,693	13,563,198	2021
16	13,563,198	33,907	4,509,786	4,543,693	9,053,412	2022
17	9,053,412	22,633	4,521,060	4,543,693	4,532,352	2023
18	4,532,352	11,330	4,532,363	4,543,693	-11	2024
Total		1,910,463	79,876,011	81,786,474		

表10.7.2 プケット漁港のRepayment Schedule of Loan

A. Borrowing Conditions (2001年の借り入れ)

Borrowing	502,858,000	Interest rate	3.0%	Grace period	7years
				Repayment period	18years

1. Payment of Interest for Grace Period

Grace period	Interest	
1	15,085,740	2001
2	15,085,740	2002
3	15,085,740	2003
4	15,085,740	2004
5	15,085,740	2005
6	15,085,740	2006
7	15,085,740	2007

2. Repayment

Total Repayment 514,885,356

Borrowing	502,858,000	Interest rate	3.0%	Repayment year	18
					(unit: Baht)

Repayment Year	Principal	Interest	Principal Repayment	Total Repayment	Balance	
1	502,858,000	1,257,145	27,347,597	28,604,742	475,510,403	2008
2	475,510,403	1,188,776	27,415,966	28,604,742	448,094,437	2009
3	448,094,437	1,120,236	27,484,506	28,604,742	420,609,931	2010
4	420,609,931	1,051,524	27,553,218	28,604,742	393,056,713	2011
5	393,056,713	982,641	27,622,101	28,604,742	365,434,612	2012
6	365,434,612	913,586	27,691,156	28,604,742	337,743,456	2013
7	337,743,456	844,358	27,760,384	28,604,742	309,983,072	2014
8	309,983,072	774,957	27,829,785	28,604,742	282,153,287	2015
9	282,153,287	705,383	27,899,359	28,604,742	254,253,928	2016
10	254,253,928	635,634	27,969,108	28,604,742	226,284,820	2017
11	226,284,820	565,712	28,039,030	28,604,742	198,245,790	2018
12	198,245,790	495,614	28,109,128	28,604,742	170,136,662	2019
13	170,136,662	425,341	28,179,401	28,604,742	141,957,261	2020
14	141,957,261	354,893	28,249,849	28,604,742	113,707,412	2021
15	113,707,412	284,268	28,320,474	28,604,742	85,386,938	2022
16	85,386,938	213,467	28,391,275	28,604,742	56,995,663	2023
17	56,995,663	142,489	28,462,253	28,604,742	28,533,410	2024
18	28,533,410	71,333	28,533,409	28,604,742	1	2025
Total		12,027,357	502,857,999	514,885,356		

表10.7.3 プケット漁港のRepayment Schedule of Loan

A. Borrowing Conditions (2002年の借入れ)

Borrowing	142,744,000	Interest rate	3.0%	Grace period	7years
				Repayment period	18years

1. Payment of Interest for Grace Period

Grace period	Interest	
1	4,282,320	2002
2	4,282,320	2003
3	4,282,320	2004
4	4,282,320	2005
5	4,282,320	2006
6	4,282,320	2007
7	4,282,320	2008

2. Repayment

Total Repayment 146,158,146

Borrowing	142,744,000	Interest rate	3.0%	Repayment year	18	
					(unit: Baht)	
Repayment Year	Principal	Interest	Principal Repayment	Total Repayment	Balance	
1	142,744,000	356,860	7,763,037	8,119,897	134,980,963	2009
2	134,980,963	337,452	7,782,445	8,119,897	127,198,518	2010
3	127,198,518	317,996	7,801,901	8,119,897	119,396,617	2011
4	119,396,617	298,491	7,821,406	8,119,897	111,575,211	2012
5	111,575,211	278,938	7,840,959	8,119,897	103,734,252	2013
6	103,734,252	259,335	7,860,562	8,119,897	95,873,690	2014
7	95,873,690	239,684	7,880,213	8,119,897	87,993,477	2015
8	87,993,477	219,983	7,899,914	8,119,897	80,093,563	2016
9	80,093,563	200,233	7,919,664	8,119,897	72,173,899	2017
10	72,173,899	180,434	7,939,463	8,119,897	64,234,436	2018
11	64,234,436	160,586	7,959,311	8,119,897	56,275,125	2019
12	56,275,125	140,687	7,979,210	8,119,897	48,295,915	2020
13	48,295,915	120,739	7,999,158	8,119,897	40,296,757	2021
14	40,296,757	100,741	8,019,156	8,119,897	32,277,601	2022
15	32,277,601	80,694	8,039,203	8,119,897	24,238,398	2023
16	24,238,398	60,595	8,059,302	8,119,897	16,179,096	2024
17	16,179,096	40,447	8,079,450	8,119,897	8,099,646	2025
18	8,099,646	20,249	8,099,648	8,119,897	-2	2026
Total		3,414,144	142,744,002	146,158,146		

表10.7.4 プケット漁港のRepayment Schedule of Loan

A. Borrowing Conditions (2003年の借入れ)

Borrowing	135,539,000	Interest rate	3.0%	Grace period	7years
				Repayment period	18years

1. Payment of Interest for Grace Period

Grace period	Interest	
1	4,066,170	2003
2	4,066,170	2004
3	4,066,170	2005
4	4,066,170	2006
5	4,066,170	2007
6	4,066,170	2008
7	4,066,170	2009

2. Repayment

Total Repayment 138,780,810

Borrowing	135,539,000	Interest rate	3.0%	Repayment year	18
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(unit: Baht)

Repayment Year	Principal	Interest	Principal Repayment	Total Repayment	Balance	
1	135,539,000	338,847	7,371,198	7,710,045	128,167,802	2010
2	128,167,802	320,419	7,389,626	7,710,045	120,778,176	2011
3	120,778,176	301,945	7,408,100	7,710,045	113,370,076	2012
4	113,370,076	283,425	7,426,620	7,710,045	105,943,456	2013
5	105,943,456	264,858	7,445,187	7,710,045	98,498,269	2014
6	98,498,269	246,245	7,463,800	7,710,045	91,034,469	2015
7	91,034,469	227,586	7,482,459	7,710,045	83,552,010	2016
8	83,552,010	208,880	7,501,165	7,710,045	76,050,845	2017
9	76,050,845	190,127	7,519,918	7,710,045	68,530,927	2018
10	68,530,927	171,327	7,538,718	7,710,045	60,992,209	2019
11	60,992,209	152,480	7,557,565	7,710,045	53,434,644	2020
12	53,434,644	133,586	7,576,459	7,710,045	45,858,185	2021
13	45,858,185	114,645	7,595,400	7,710,045	38,262,785	2022
14	38,262,785	95,656	7,614,389	7,710,045	30,648,396	2023
15	30,648,396	76,620	7,633,425	7,710,045	23,014,971	2024
16	23,014,971	57,537	7,652,508	7,710,045	15,362,463	2025
17	15,362,463	38,406	7,671,639	7,710,045	7,690,824	2026
18	7,690,824	19,227	7,690,818	7,710,045	6	2027
Total		3,241,816	135,538,994	138,780,810		

表10.7.5 水産加工団地のRepayment Schedule of Loan

A. Borrowing Conditions (2001年の借り入れ)

Borrowing	135,539,000	Interest rate	3.0%	Grace period	7years
				Repayment period	18years

1. Payment of Interest for Grace Period

Grace period	Interest	
1	4,066,170	2001
2	4,066,170	2002
3	4,066,170	2003
4	4,066,170	2004
5	4,066,170	2005
6	4,066,170	2006
7	4,066,170	2007

2. Repayment

Total Repayment 138,780,810

Borrowing	135,539,000	Interest rate	3.0%	Repayment year	18
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Repayment Year	Principal	Interest	Principal Repayment	Total Repayment	Balance	
1	135,539,000	338,847	7,371,198	7,710,045	128,167,802	2008
2	128,167,802	320,419	7,389,626	7,710,045	120,778,176	2009
3	120,778,176	301,945	7,408,100	7,710,045	113,370,076	2010
4	113,370,076	283,425	7,426,620	7,710,045	105,943,456	2011
5	105,943,456	264,858	7,445,187	7,710,045	98,498,269	2012
6	98,498,269	246,245	7,463,800	7,710,045	91,034,469	2013
7	91,034,469	227,586	7,482,459	7,710,045	83,552,010	2014
8	83,552,010	208,880	7,501,165	7,710,045	76,050,845	2015
9	76,050,845	190,127	7,519,918	7,710,045	68,530,927	2016
10	68,530,927	171,327	7,538,718	7,710,045	60,992,209	2017
11	60,992,209	152,480	7,557,565	7,710,045	53,434,644	2018
12	53,434,644	133,586	7,576,459	7,710,045	45,858,185	2019
13	45,858,185	114,645	7,595,400	7,710,045	38,262,785	2020
14	38,262,785	95,656	7,614,389	7,710,045	30,648,396	2021
15	30,648,396	76,620	7,633,425	7,710,045	23,014,971	2022
16	23,014,971	57,537	7,652,508	7,710,045	15,362,463	2023
17	15,362,463	38,406	7,671,639	7,710,045	7,690,824	2024
18	7,690,824	19,227	7,690,818	7,710,045	6	2025
Total		3,241,816	135,538,994	138,780,810		

表10.7.6 水産加工団地のRepayment Schedule of Loan

B. Borrowing Conditions (2003年の借り入れ)

Borrowing	61,517,000	Interest rate	3.0%	Grace period	7years
				Repayment period	18years

1. Payment of Interest for Grace Period

Grace period	Interest	
1	1,845,510	2003
2	1,845,510	2004
3	1,845,510	2005
4	1,845,510	2006
5	1,845,510	2007
6	1,845,510	2008
7	1,845,510	2009

2. Repayment

Total Repayment 62,988,354

Borrowing	61,517,000	Interest rate	3.0%	Repayment year	18	
(unit: Baht)						
Repayment Year	Principal	Interest	Principal Repayment	Total Repayment	Balance	
1	61,517,000	153,792	3,345,561	3,499,353	58,171,439	2010
2	58,171,439	145,428	3,353,925	3,499,353	54,817,514	2011
3	54,817,514	137,043	3,362,310	3,499,353	51,455,204	2012
4	51,455,204	128,638	3,370,715	3,499,353	48,084,489	2013
5	48,084,489	120,211	3,379,142	3,499,353	44,705,347	2014
6	44,705,347	111,763	3,387,590	3,499,353	41,317,757	2015
7	41,317,757	103,294	3,396,059	3,499,353	37,921,698	2016
8	37,921,698	94,804	3,404,549	3,499,353	34,517,149	2017
9	34,517,149	86,292	3,413,061	3,499,353	31,104,088	2018
10	31,104,088	77,760	3,421,593	3,499,353	27,682,495	2019
11	27,682,495	69,206	3,430,147	3,499,353	24,252,348	2020
12	24,252,348	60,630	3,438,723	3,499,353	20,813,625	2021
13	20,813,625	52,034	3,447,319	3,499,353	17,366,306	2022
14	17,366,306	43,415	3,455,938	3,499,353	13,910,368	2023
15	13,910,368	34,775	3,464,578	3,499,353	10,445,790	2024
16	10,445,790	26,114	3,473,239	3,499,353	6,972,551	2025
17	6,972,551	17,431	3,481,922	3,499,353	3,490,629	2026
18	3,490,629	8,726	3,490,627	3,499,353	2	2027
Total		1,471,356	61,516,993	62,988,354		

表 10.8.1 ブレーケット漁港の費用/便益及び内部収益率 (FIRR) (市場価格)

FIRR = 4.17%

No	年度	費用			便益	純便益	現在価値		現在価値 (割引率 = 11%)
		合計	建設費	運営費			(割引率 = 4.17%)	(割引率 = 3%)	
0	2000	154,537	150,911	3,626	-149,704	1,000,000	-149,704	1,000,000	
1	2001	577,238	733,040	4,196	-732,403	0.959390	-730,489	0.970874	
2	2002	576,088	485,840	10,448	-413,156	0.921582	-389,439	0.942586	
3	2003	260,040	247,456	12,584	-185,416	0.884710	-178,833	0.915142	
4	2004	4,022	14,072	14,072	59,398	0.849313	52,773	0.889287	
5	2005	4,022	14,022	14,022	65,658	0.815332	55,635	0.867309	
6	2006	4,282	14,262	14,262	64,671	0.782711	59,197	0.837484	
7	2007	9,910	19,910	19,910	94,619	0.751395	76,934	0.813082	
8	2008	9,910	19,910	19,910	94,619	0.721332	74,658	0.789409	
9	2009	9,910	19,910	19,910	94,619	0.692472	72,518	0.768417	
10	2010	9,910	19,910	19,910	94,619	0.664767	70,405	0.749094	
11	2011	9,910	19,910	19,910	94,619	0.638170	68,355	0.732421	
12	2012	9,910	19,910	19,910	94,619	0.612637	66,364	0.718380	
13	2013	9,910	19,910	19,910	94,619	0.588126	64,431	0.706951	
14	2014	9,910	19,910	19,910	94,619	0.564635	62,554	0.697118	
15	2015	9,910	19,910	19,910	94,619	0.542066	60,732	0.688862	
16	2016	9,910	19,910	19,910	94,619	0.520320	58,963	0.682167	
17	2017	9,910	19,910	19,910	94,619	0.499503	57,246	0.676916	
18	2018	9,910	19,910	19,910	94,619	0.479518	55,579	0.673055	
19	2019	9,910	19,910	19,910	94,619	0.460382	53,960	0.670299	
20	2020	9,910	19,910	19,910	94,619	0.441915	52,388	0.668376	
21	2021	9,910	19,910	19,910	94,619	0.424234	50,862	0.667549	
22	2022	9,910	19,910	19,910	94,619	0.407291	49,381	0.667893	
23	2023	9,910	19,910	19,910	94,619	0.390966	47,943	0.669392	
24	2024	9,910	19,910	19,910	94,619	0.375374	46,546	0.671994	
25	2025	9,910	19,910	19,910	94,619	0.360507	45,191	0.675760	
26	2026	9,910	19,910	19,910	94,619	0.346362	43,874	0.679695	
27	2027	9,910	19,910	19,910	94,619	0.332833	42,596	0.683814	
28	2028	9,910	19,910	19,910	94,619	0.320053	41,356	0.688122	
29	2029	9,910	19,910	19,910	94,619	0.307977	40,151	0.692622	
30	2030	9,910	19,910	19,910	94,619	0.296564	38,982	0.697322	
31	2031	-405,564	1,617,047	563,088	521,093	0.285770	208,430	0.702222	
Total		1,761,483	1,617,047	563,088	1,488,947	0.280574	280,574	-740,574	

(単位:1000千円)



表10.8.2 水産加工団地の費用/便益及び内部収益率(FIRR) (市場価格)

FIRR = 3.07%

No	年度	合計		費用		便益	純便益	現在価値		(単位:1000Yant)	
		建設費	運営費	建設費	運営費			(割引率 = 3.07%)	(割引率 = 3%)	現在価値 (割引率 = 11%)	現在価値 (割引率 = 11%)
0	2000	0	0	0	0	0	0	1.000000	0	1.000000	0
1	2001	200.582	0	189.704	828	0	-200.582	-194.558	-194.691	0.970874	-180.659
2	2002	0	0	0	0	0	0	0.941303	0	0.942556	0
3	2003	103.356	828	102.528	828	0	-103.356	-94.391	-95.585	0.913260	-75.573
4	2004	828	828	0	828	0	-828	-734	-886.052	0.886052	-736
5	2005	2.196	2.196	0	2.196	6.328	4.132	3.552	3.552	0.859551	2.572
6	2006	2.196	2.196	0	2.196	12.656	10.460	8.724	8.724	0.831433	5.592
7	2007	3.707	3.707	0	3.707	20.495	16.788	13.585	13.585	0.801195	8.086
8	2008	3.707	3.707	0	3.707	20.495	16.788	13.180	13.180	0.780088	7.89409
9	2009	3.707	3.707	0	3.707	20.495	16.788	12.787	12.787	0.761698	7.563
10	2010	3.707	3.707	0	3.707	20.495	16.788	12.405	12.405	0.743006	7.242
11	2011	3.707	3.707	0	3.707	20.495	16.788	12.037	12.037	0.724928	6.927
12	2012	3.707	3.707	0	3.707	20.495	16.788	11.678	11.678	0.707380	6.621
13	2013	3.707	3.707	0	3.707	20.495	16.788	11.330	11.330	0.690351	6.322
14	2014	3.707	3.707	0	3.707	20.495	16.788	10.993	10.993	0.673747	6.035
15	2015	3.707	3.707	0	3.707	20.495	16.788	10.665	10.665	0.657533	5.759
16	2016	3.707	3.707	0	3.707	20.495	16.788	10.348	10.348	0.641682	5.492
17	2017	3.707	3.707	0	3.707	20.495	16.788	10.039	10.039	0.626166	5.231
18	2018	3.707	3.707	0	3.707	20.495	16.788	9.740	9.740	0.610941	4.974
19	2019	3.707	3.707	0	3.707	20.495	16.788	9.450	9.450	0.596039	4.721
20	2020	3.707	3.707	0	3.707	20.495	16.788	9.168	9.168	0.581429	4.471
21	2021	3.707	3.707	0	3.707	20.495	16.788	8.895	8.895	0.567159	4.224
22	2022	3.707	3.707	0	3.707	20.495	16.788	8.630	8.630	0.553183	3.981
23	2023	3.707	3.707	0	3.707	20.495	16.788	8.373	8.373	0.539458	3.741
24	2024	3.707	3.707	0	3.707	20.495	16.788	8.124	8.124	0.525939	3.504
25	2025	3.707	3.707	0	3.707	20.495	16.788	7.882	7.882	0.512682	3.271
26	2026	3.707	3.707	0	3.707	20.495	16.788	7.647	7.647	0.499645	3.041
27	2027	3.707	3.707	0	3.707	20.495	16.788	7.419	7.419	0.486785	2.814
28	2028	3.707	3.707	0	3.707	20.495	16.788	7.198	7.198	0.474159	2.591
29	2029	3.707	3.707	0	3.707	20.495	16.788	6.984	6.984	0.461726	2.371
30	2030	3.707	3.707	0	3.707	20.495	16.788	6.776	6.776	0.449453	2.154
31	2031	-86.957	3.707	-90.664	3.707	20.495	107.452	42.075	42.075	0.391569	4.229
Total		311.119	98.723	302.232	98.723	531.359	220.240	2	3.402		-169.573

表10. S. 3 漁港・水産加工団地全体の費用/便益及び内部収益率 (FIRR) (市場価格)

FIRR = 3.99%

No	年度	費用			便益	純便益	現在価値		(割引率 = 3%)	現在価値	
		合計	建設費	運営費			費用/便益	(割引率 = 3.99%)		(割引率 = 3%)	(割引率 = 11%)
0	2000	154,537	150,911	3,626	0	-149,704	1,000,000	-149,704	1,000,000	-149,704	1,000,000
1	2001	957,188	952,744	5,024	0	-925,935	0.981876	-925,180	0.970874	-858,500	0.940891
2	2002	476,088	465,640	10,448	0	-392,095	0.924821	-339,439	0.942598	-335,376	0.811622
3	2003	362,395	349,984	12,411	0	-255,721	0.899378	-218,419	0.915167	-218,459	0.731191
4	2004	14,850	14,850	0	0	38,568	0.855294	32,837	0.888487	38,581	0.658731
5	2005	16,218	16,218	0	0	36,006	0.822515	29,709	0.857609	41,416	0.592451
6	2006	16,458	16,458	0	0	109,543	0.790993	77,957	0.837484	49,767	0.526641
7	2007	23,617	23,617	0	0	35,024	0.740719	30,584	0.813092	58,660	0.461658
8	2008	23,617	23,617	0	0	35,024	0.71527	31,948	0.789409	48,342	0.433926
9	2009	23,617	23,617	0	0	35,024	0.703492	35,384	0.768417	48,552	0.390925
10	2010	23,617	23,617	0	0	35,024	0.676532	32,897	0.747094	39,286	0.352184
11	2011	23,617	23,617	0	0	35,024	0.650604	30,483	0.722421	35,348	0.317283
12	2012	23,617	23,617	0	0	35,024	0.625670	28,139	0.70380	31,845	0.285841
13	2013	23,617	23,617	0	0	35,024	0.601692	25,863	0.680951	28,689	0.257514
14	2014	23,617	23,617	0	0	35,024	0.578693	23,653	0.661118	25,846	0.231955
15	2015	23,617	23,617	0	0	35,024	0.556653	21,503	0.641662	23,235	0.209004
16	2016	23,617	23,617	0	0	35,024	0.535132	19,425	0.623167	20,977	0.188942
17	2017	23,617	23,617	0	0	35,024	0.514824	17,403	0.605016	18,898	0.169533
18	2018	23,617	23,617	0	0	35,024	0.494901	15,440	0.587395	17,025	0.152822
19	2019	23,617	23,617	0	0	35,024	0.475385	13,534	0.570286	15,338	0.137678
20	2020	23,617	23,617	0	0	35,024	0.457195	11,683	0.553676	13,818	0.124094
21	2021	23,617	23,617	0	0	35,024	0.440154	9,887	0.537549	12,449	0.111742
22	2022	23,617	23,617	0	0	35,024	0.424286	8,143	0.521893	11,215	0.100659
23	2023	23,617	23,617	0	0	35,024	0.407054	6,449	0.506692	10,104	0.090933
24	2024	23,617	23,617	0	0	35,024	0.391463	4,805	0.491994	9,103	0.081705
25	2025	23,617	23,617	0	0	35,024	0.376461	3,209	0.477606	8,200	0.073808
26	2026	23,617	23,617	0	0	35,024	0.362034	1,659	0.463695	7,388	0.066914
27	2027	23,617	23,617	0	0	35,024	0.348159	1,154	0.450189	6,636	0.061492
28	2028	23,617	23,617	0	0	35,024	0.334816	693	0.437077	5,996	0.056992
29	2029	23,617	23,617	0	0	35,024	0.321985	47,275	0.424346	5,402	0.048488
30	2030	23,617	23,617	0	0	35,024	0.309645	45,898	0.411987	4,857	0.043353
31	2031	-498,521	-498,521	0	0	187,167	0.297778	251,410	0.399987	24,736	0.039354
Total		2,072,602	1,919,279	661,811	1,709,187	0	283,876	-910,250			

表10.8.4 ブレーケット漁港の費用/便益及び内部収益率(FIRR) (市場価格)  
(維持費を含み)

FIRR = 1.95%

No	年度	費用			便益	純便益	現在価値		現在価値 (割引率 = 11%)
		合計	建設費	運営費			現在価値 (割引率 = 1.95%)	現在価値 (割引率 = 3%)	
0	2000	154,587	150,911	3,676	4,833	-149,704	1,000,000	1,000,000	-149,704
1	2001	757,236	733,040	24,196	4,833	-752,203	-737,925	0.970874	-737,925
2	2002	503,588	469,560	34,028	62,932	-440,636	-423,974	0.942556	-423,974
3	2003	287,540	257,456	30,084	64,624	-222,916	-210,378	0.915142	-210,378
4	2004	41,522	41,522	0	73,418	31,896	29,527	0.925171	29,527
5	2005	41,522	41,522	0	73,418	31,896	29,527	0.908925	29,527
6	2006	41,782	41,782	0	96,887	55,105	49,098	0.890871	49,098
7	2007	47,410	47,410	0	114,529	67,119	58,638	0.873649	58,638
8	2008	47,410	47,410	0	114,529	67,119	58,638	0.856852	58,638
9	2009	47,410	47,410	0	114,529	67,119	58,638	0.840575	58,638
10	2010	47,410	47,410	0	114,529	67,119	58,638	0.824810	58,638
11	2011	47,410	47,410	0	114,529	67,119	58,638	0.809562	58,638
12	2012	47,410	47,410	0	114,529	67,119	58,638	0.794827	58,638
13	2013	47,410	47,410	0	114,529	67,119	58,638	0.780601	58,638
14	2014	47,410	47,410	0	114,529	67,119	58,638	0.766880	58,638
15	2015	47,410	47,410	0	114,529	67,119	58,638	0.753669	58,638
16	2016	47,410	47,410	0	114,529	67,119	58,638	0.740964	58,638
17	2017	47,410	47,410	0	114,529	67,119	58,638	0.728761	58,638
18	2018	47,410	47,410	0	114,529	67,119	58,638	0.717056	58,638
19	2019	47,410	47,410	0	114,529	67,119	58,638	0.705846	58,638
20	2020	47,410	47,410	0	114,529	67,119	58,638	0.695127	58,638
21	2021	47,410	47,410	0	114,529	67,119	58,638	0.684904	58,638
22	2022	47,410	47,410	0	114,529	67,119	58,638	0.675173	58,638
23	2023	47,410	47,410	0	114,529	67,119	58,638	0.665931	58,638
24	2024	47,410	47,410	0	114,529	67,119	58,638	0.657175	58,638
25	2025	47,410	47,410	0	114,529	67,119	58,638	0.648901	58,638
26	2026	47,410	47,410	0	114,529	67,119	58,638	0.641106	58,638
27	2027	47,410	47,410	0	114,529	67,119	58,638	0.633787	58,638
28	2028	47,410	47,410	0	114,529	67,119	58,638	0.626941	58,638
29	2029	47,410	47,410	0	114,529	67,119	58,638	0.620565	58,638
30	2030	47,410	47,410	0	114,529	67,119	58,638	0.614656	58,638
31	2031	47,410	47,410	0	114,529	67,119	58,638	0.609201	58,638
Total		2,586,493	1,617,027	1,969,466	3,250,530	664,037			-955,976

表 10.9.1 ブレークダウンの漁港のIncome Statement

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Income	4,802	4,833	4,833	4,833	4,833	4,833	4,833	64,624	64,624	73,416	78,678	86,867	114,529
Expenditure	3,332	3,626	3,626	3,626	3,626	3,626	4,196	10,448	12,384	14,022	14,022	14,202	19,910
Interest	0	0	0	0	0	2,396	17,482	21,764	25,830	25,830	25,830	25,830	26,030
Profit before Depreciation	1,470	1,207	1,207	1,207	1,207	-1,188	-16,845	-30,720	-26,210	-33,566	-39,826	-56,785	-68,589
Depreciation	787	787	787	787	787	787	3,638	23,945	34,025	41,213	41,213	41,213	41,213
Profit after Depreciation	683	420	420	420	420	-1,976	-20,483	7,375	-7,813	-7,647	-1,387	15,582	27,376
Income Tax	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Profit after Income Tax	683	420	420	420	420	-1,976	-20,483	7,375	-7,813	-7,647	-1,387	15,582	27,376
Accumulated Net Profit	683	1,103	1,523	1,943	2,363	387	-20,086	-12,721	-20,584	-28,181	-26,568	-13,986	13,390

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Income	114,529	114,529	114,529	114,529	114,529	114,529	114,529	114,529	114,529	114,529	114,529	114,529	114,529
Expenditure	19,910	19,910	19,910	19,910	19,910	19,910	19,910	19,910	19,910	19,910	19,910	19,910	19,910
Interest	9,794	5,790	1,993	1,846	1,768	1,610	1,481	1,373	1,254	1,135	1,015	896	774
Profit before Depreciation	84,825	88,839	92,536	92,773	92,881	93,009	93,128	93,246	93,365	93,484	93,604	93,723	93,845
Depreciation	41,213	41,213	41,213	41,213	41,213	41,213	41,213	41,213	41,213	41,213	41,213	41,213	41,213
Profit after Depreciation	43,612	47,676	51,443	51,560	51,678	51,796	51,915	52,033	52,152	52,271	52,391	52,510	52,632
Income Tax	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Profit after Income Tax	43,612	47,676	51,443	51,560	51,678	51,796	51,915	52,033	52,152	52,271	52,391	52,510	52,632
Accumulated Net Profit	57,002	104,678	156,121	207,681	259,359	311,155	363,070	415,103	467,255	519,526	571,917	624,427	677,059

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Income	114,529	114,529	114,529	114,529	114,529	114,529	114,529	114,529	114,529	114,529
Expenditure	19,910	19,910	19,910	19,910	19,910	19,910	19,910	19,910	19,910	19,910
Interest	655	534	413	290	169	58	19			
Profit before Depreciation	83,964	84,085	84,206	84,329	84,450	84,561	84,600	84,619	84,619	84,619
Depreciation	41,032	40,426	40,426	40,426	40,426	40,426	40,426	40,426	40,426	40,426
Profit after Depreciation	42,932	43,659	43,780	43,903	44,024	44,135	44,174	44,193	44,193	44,193
Income Tax	0	0	0	0	0	0	0	0	0	0
Net Profit after Income Tax	42,932	43,659	43,780	43,903	44,024	44,135	44,174	44,193	44,193	44,193
Accumulated Net Profit	729,971	783,630	827,410	891,313	945,337	989,472	1,053,646	1,107,839	1,162,032	1,216,225

表 10.9.2 ブーケット漁港のStatement of Cash Flow

(Unit: 000千円)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2007
Source of funds	4,470	1,207	1,207	1,207	1,207	78,687	466,013	173,464	161,749	33,566	39,825	56,766
Profit before Depreciation	1,470	1,207	1,207	1,207	1,207	-1,189	-16,945	30,720	26,210	33,566	39,825	56,766
Long-term Loans	0	0	0	0	0	78,876	502,558	142,744	135,539	0	0	0
Application of Funds	0	0	0	0	0	150,911	753,040	465,640	247,456	0	0	4,344
Acquisition Cost of New Facilities	0	0	0	0	0	150,911	753,040	465,640	247,456	0	0	0
Repayment	0	0	0	0	0	0	0	0	0	0	0	4,344
Income Tax	0	0	0	0	0	0	0	0	0	0	0	0
Increase/Decrease of Net Current Assets	1,470	1,207	1,207	1,207	1,207	-72,224	-267,027	-292,176	-83,707	33,566	39,826	56,795
Current Assets at End of Year	0	1,207	2,414	3,621	4,828	-57,396	-334,423	-626,599	-712,306	-678,740	-638,914	-582,119
2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Source of funds	84,825	88,889	82,556	82,773	82,891	83,009	83,128	83,246	83,365	83,484	83,604	83,722
Profit before Depreciation	84,825	88,889	82,556	82,773	82,891	83,009	83,128	83,246	83,365	83,484	83,604	83,722
Long-term Loans	0	0	0	0	0	0	0	0	0	0	0	0
Application of Funds	31,703	39,545	47,015	47,133	47,250	47,368	47,487	47,605	47,724	47,844	47,963	48,083
Acquisition Cost of New Facilities	0	0	0	0	0	0	0	0	0	0	0	0
Repayment	31,703	39,545	47,015	47,133	47,250	47,368	47,487	47,606	47,724	47,844	47,963	48,083
Income Tax	0	0	0	0	0	0	0	0	0	0	0	0
Increase/Decrease of Net Current Assets	53,122	49,344	35,541	35,640	35,641	35,640	35,641	35,640	35,641	35,640	35,641	35,640
Current Assets at End of Year	-164,732	-115,406	-366,767	-324,127	-276,486	-232,646	-187,205	-141,565	-95,924	-50,294	-4,643	40,937
2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Source of funds	80,964	84,085	84,206	84,328	84,450	84,571	84,690	84,810	84,929	85,049	85,169	85,289
Profit before Depreciation	80,964	84,085	84,206	84,328	84,450	84,571	84,690	84,810	84,929	85,049	85,169	85,289
Long-term Loans	0	0	0	0	0	0	0	0	0	0	0	0
Application of Funds	48,324	48,444	48,565	48,683	48,801	48,919	49,037	49,155	49,273	49,391	49,509	49,627
Acquisition Cost of New Facilities	0	0	0	0	0	0	0	0	0	0	0	0
Repayment	48,324	48,444	48,565	48,683	48,801	48,919	49,037	49,155	49,273	49,391	49,509	49,627
Income Tax	0	0	0	0	0	0	0	0	0	0	0	0
Increase/Decrease of Net Current Assets	32,640	35,641	35,641	35,640	35,640	35,640	35,640	35,640	35,640	35,640	35,640	35,640
Current Assets at End of Year	132,279	177,920	223,561	269,202	314,843	360,484	406,125	451,766	497,407	543,048	588,689	634,330

表 10.9.3 ブレーケット漁港のBalance Sheet

	Unit: (Million Yen)												
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Assets</b>													
Fixed Assets	20,301	19,514	18,727	17,940	17,153	130,409	915,063	1,318,853	1,531,194	1,448,768	1,407,555		
Work in Progress	0	0	0	0	0	36,858	1,616	40,141					
Net Current Assets	0	1,207	2,414	3,621	4,828	-87,386	-334,423	-626,599	-712,306	-678,749	-582,119	-517,874	
<b>Total</b>	<b>20,301</b>	<b>20,721</b>	<b>21,141</b>	<b>21,561</b>	<b>21,981</b>	<b>99,881</b>	<b>582,256</b>	<b>732,375</b>	<b>860,101</b>	<b>852,454</b>	<b>866,649</b>	<b>869,681</b>	
<b>Capital Employed</b>													
Capital Fund	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618
Long-Term Loans	0	0	0	0	0	78,876	582,734	725,478	861,017	861,017	861,017	861,017	861,017
Other Reserve and Provision	883	1,103	1,523	1,943	2,363	387	-20,096	-12,721	-20,534	-28,181	-29,588	-13,986	13,380
<b>Total</b>	<b>20,501</b>	<b>20,721</b>	<b>21,141</b>	<b>21,561</b>	<b>21,981</b>	<b>99,881</b>	<b>582,256</b>	<b>732,375</b>	<b>860,101</b>	<b>852,454</b>	<b>866,649</b>	<b>869,681</b>	
<b>Assets</b>													
Fixed Assets	1,386,342	1,325,129	1,283,916	1,242,703	1,201,490	1,160,277	1,119,064	1,077,851	1,036,638	995,425	954,212	912,999	871,795
Net Current Assets	-464,752	-415,408	-366,767	-324,127	-278,486	-232,846	-187,203	-141,563	-95,924	-50,284	-4,863	40,997	86,639
<b>Total</b>	<b>901,590</b>	<b>909,721</b>	<b>917,149</b>	<b>918,576</b>	<b>923,004</b>	<b>927,431</b>	<b>931,861</b>	<b>936,288</b>	<b>940,714</b>	<b>945,141</b>	<b>949,349</b>	<b>953,996</b>	<b>958,434</b>
<b>Capital Employed</b>													
Capital Fund	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618
Long-Term Loans	824,970	765,425	706,410	647,277	588,027	528,638	469,171	409,565	349,941	289,987	229,934	169,981	109,748
Other Reserve and Provision	57,002	104,678	156,121	207,681	259,359	311,155	363,070	415,103	467,255	519,526	571,917	624,427	677,059
<b>Total</b>	<b>901,590</b>	<b>909,721</b>	<b>917,149</b>	<b>918,576</b>	<b>923,004</b>	<b>927,431</b>	<b>931,861</b>	<b>936,288</b>	<b>940,714</b>	<b>945,141</b>	<b>949,349</b>	<b>953,996</b>	<b>958,434</b>
<b>Assets</b>													
Fixed Assets	500,754	790,308	749,882	709,456	669,030	628,604	588,176	547,752	507,326	466,900	426,474		
Net Current Assets	132,279	177,920	223,561	269,207	314,386	368,177	415,086	461,705	508,324	554,943	602,562		
<b>Total</b>	<b>633,033</b>	<b>968,228</b>	<b>973,443</b>	<b>978,663</b>	<b>983,416</b>	<b>996,781</b>	<b>1,003,262</b>	<b>1,009,457</b>	<b>1,015,650</b>	<b>1,021,843</b>	<b>1,029,036</b>		
<b>Capital Employed</b>													
Capital Fund	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618	19,618
Long-Term Loans	213,424	164,980	116,415	67,732	23,465	7,691	0	0	0	0	0	0	0
Other Reserve and Provision	728,971	763,630	837,410	891,313	945,337	996,472	1,053,646	1,107,539	1,162,032	1,216,225	1,270,418		
<b>Total</b>	<b>653,013</b>	<b>958,228</b>	<b>973,443</b>	<b>978,663</b>	<b>983,416</b>	<b>996,781</b>	<b>1,003,262</b>	<b>1,009,457</b>	<b>1,015,650</b>	<b>1,021,843</b>	<b>1,029,036</b>		

表 10.9.4 水産加工団地のIncome Statement

(Unit: 000Bht)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Income	0	0	0	0	6,328	12,656	20,495	20,495	20,495	20,495	20,495	20,495	20,495
Expenditure	828	0	828	828	2,196	2,196	3,707	3,707	3,707	3,707	3,707	3,707	3,707
Interest	3,595	3,595	5,441	5,441	5,441	5,441	5,441	2,146	2,129	421	396	371	367
Profit before Depreciation	-4,423	-5,595	-6,269	-6,269	-1,409	5,019	11,347	14,642	14,659	16,367	16,392	16,417	16,441
Depreciation	0	0	0	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556
Profit after Depreciation	-4,423	-5,595	-6,269	-13,825	-8,865	-2,537	3,791	7,086	7,103	8,811	8,836	8,861	8,885
Income Tax	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Profit after Income Tax	-4,423	-5,595	-6,269	-13,825	-8,865	-2,537	3,791	7,086	7,103	8,811	8,836	8,861	8,885
Accumulated Net Profit	-4,423	-8,018	-14,287	-28,112	-36,977	-39,514	-35,720	-28,637	-21,534	-12,723	-4,887	4,974	13,859

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Income	20,495	20,495	20,495	20,495	20,495	20,495	20,495	20,495	20,495	20,495	20,495	20,495	20,495
Expenditure	3,707	3,707	3,707	3,707	3,707	3,707	3,707	3,707	3,707	3,707	3,707	3,707	3,707
Interest	321	297	271	246	221	196	170	146	120	94	69	42	17
Profit before Depreciation	16,467	16,491	16,517	16,542	16,567	16,592	16,618	16,642	16,668	16,694	16,719	16,746	16,771
Depreciation	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556	7,556
Profit after Depreciation	8,911	8,935	8,961	8,986	9,011	9,036	9,062	9,086	9,112	9,138	9,163	9,190	9,215
Income Tax	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Profit after Income Tax	8,911	8,935	8,961	8,986	9,011	9,036	9,062	9,086	9,112	9,138	9,163	9,190	9,215
Accumulated Net Profit	22,770	31,705	40,666	49,652	58,663	67,699	76,761	85,847	94,959	104,097	113,260	122,450	131,665

	2027	2028	2029	2030	2031	2032
Income	20,495	20,495	20,495	20,495	20,495	20,495
Expenditure	3,707	3,707	3,707	3,707	3,707	3,707
Interest	9	0	0	0	0	0
Profit before Depreciation	16,779	16,788	16,788	16,788	16,788	16,788
Depreciation	7,556	7,556	7,556	7,556	7,556	7,556
Profit after Depreciation	9,223	9,232	9,232	9,232	9,232	9,232
Income Tax	0	0	0	0	0	0
Net Profit after Income Tax	9,223	9,232	9,232	9,232	9,232	9,232
Accumulated Net Profit	140,888	150,120	159,352	168,584	177,816	187,048

表 10.9.5 水産加工団地のStatement of Cash Flow

(Unit: '000Baht)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Source of Funds	115,399	-3,595	55,248	-6,268	-1,309	5,019	11,347	14,642	14,639	16,367	16,362	16,417	16,441
Profit before Depreciation	-4,423	-4,589	-6,269	-6,269	-1,309	5,019	11,347	14,642	14,639	16,367	16,362	16,417	16,441
Long-term Loans	119,822	0	61,517	0	0	0	0	0	0	0	0	0	0
Application of Funds	196,704	0	102,526	0	0	0	0	6,516	6,533	9,895	9,919	9,844	9,869
Acquisition Cost of New Facilities	196,704	0	102,526	0	0	0	0	6,516	6,533	9,895	9,919	9,844	9,869
Repayment	0	0	0	0	0	0	0	0	0	0	0	0	0
Income Tax	0	0	0	0	0	0	0	0	0	0	0	0	0
Increase/Decrease of Net Current Assets	-84,305	-3,595	-47,280	-6,269	-1,309	5,019	11,347	8,126	8,126	6,472	6,473	6,473	6,472
Current Assets at End of Year	0	-5,595	-58,875	-57,144	-58,453	-53,434	-42,087	-33,961	-25,835	-19,363	-12,890	-6,417	55

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Source of Funds	16,467	16,491	16,517	16,542	16,567	16,592	16,616	16,642	16,668	16,694	16,719	16,746	16,771
Profit before Depreciation	16,467	16,491	16,517	16,542	16,567	16,592	16,616	16,642	16,668	16,694	16,719	16,746	16,771
Long-term Loans	0	0	0	0	0	0	0	0	0	0	0	0	0
Application of Funds	9,994	10,019	10,044	10,070	10,094	10,120	10,145	10,170	10,195	10,221	10,247	10,273	10,298
Acquisition Cost of New Facilities	9,994	10,019	10,044	10,070	10,094	10,120	10,145	10,170	10,195	10,221	10,247	10,273	10,298
Repayment	0	0	0	0	0	0	0	0	0	0	0	0	0
Income Tax	0	0	0	0	0	0	0	0	0	0	0	0	0
Increase/Decrease of Net Current Assets	6,473	6,472	6,473	6,472	6,473	6,472	6,473	6,472	6,473	6,473	6,473	6,473	6,473
Current Assets at End of Year	6,473	13,000	19,473	25,945	32,418	38,890	45,363	51,835	58,308	64,781	71,253	77,726	84,200

	2027	2028	2029	2030	2031
Source of Funds	16,776	16,788	16,788	16,788	16,788
Profit before Depreciation	16,776	16,788	16,788	16,788	16,788
Long-term Loans	0	0	0	0	0
Application of Funds	3,489	0	0	0	0
Acquisition Cost of New Facilities	3,489	0	0	0	0
Repayment	0	0	0	0	0
Income Tax	0	0	0	0	0
Increase/Decrease of Net Current Assets	13,287	16,788	16,788	16,788	16,788
Current Assets at End of Year	104,305	121,093	137,881	154,669	171,457



表 10.9.6 水産加工団地のBalance Sheet

(Unit: 000Yen)

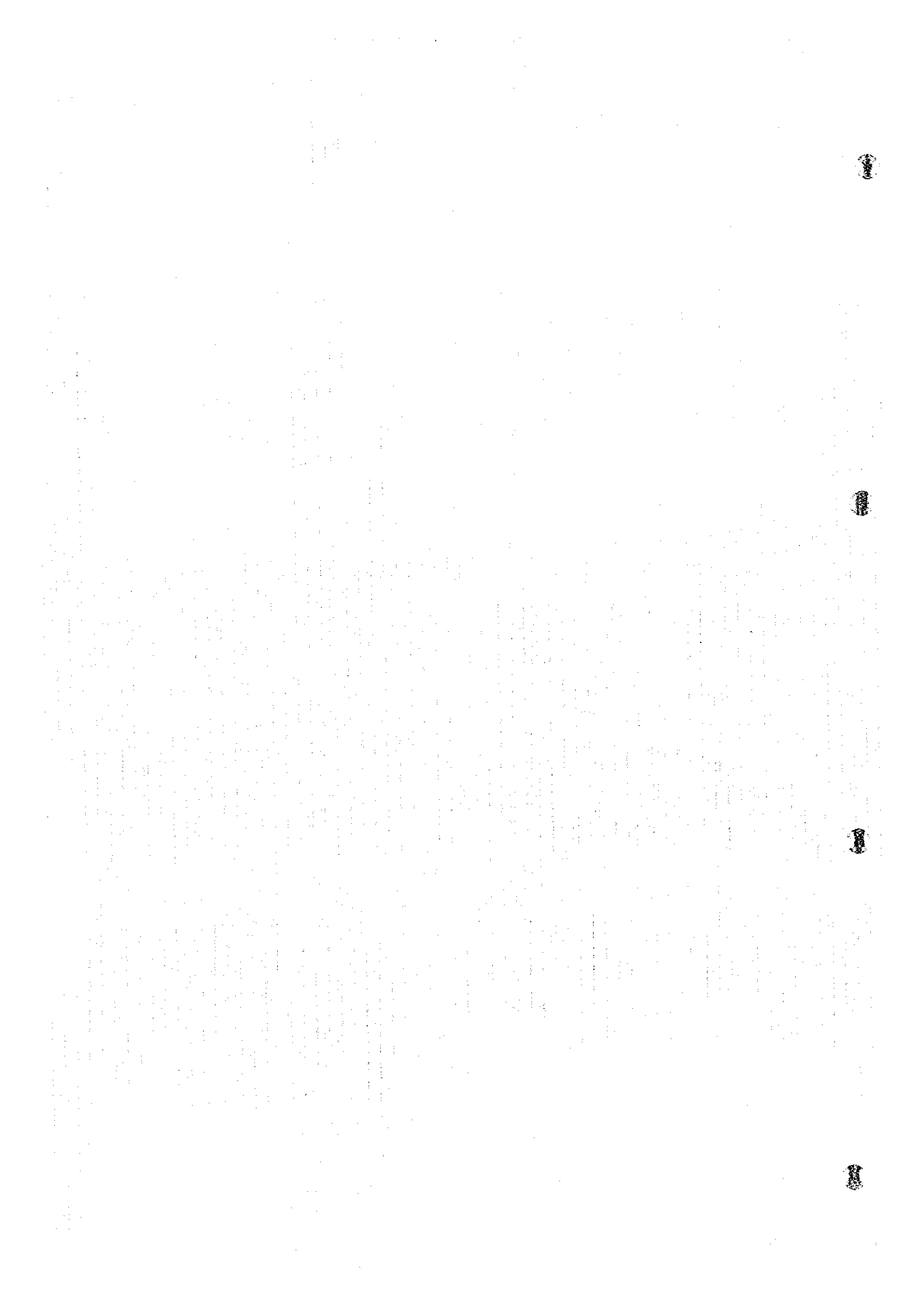
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Assets</b>													
Fixed Assets	0	0	302,232	284,676	287,120	279,554	272,000	264,452	256,886	249,340	241,784	234,228	226,672
Wor. in Progress	199,704	199,704											
Net Current Assets	0	-3,585	-30,875	-57,144	-38,453	-53,434	-42,087	-33,961	-25,835	-19,363	-12,890	-6,417	55
<b>Total</b>	199,704	196,109	251,357	237,532	228,667	226,130	226,921	230,491	231,051	228,977	228,894	227,811	226,727
<b>Capital Employed</b>													
Capital Fund	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305
Long-Term Loans	119,822	119,822	181,339	181,339	181,339	181,339	181,339	174,823	168,280	158,993	148,476	138,532	128,563
Other Reserve and Provision	-4,423	-8,018	-14,287	-28,112	-36,977	-39,514	-35,723	-28,637	-21,534	-12,723	-3,887	4,974	13,359
<b>Total</b>	199,704	196,109	251,357	237,532	228,667	226,130	226,921	230,491	231,051	228,977	228,894	227,811	226,727
<b>Assets</b>													
Fixed Assets	219,116	211,560	204,004	196,448	188,892	181,336	173,780	166,224	158,668	151,112	143,556	136,000	128,444
Net Current Assets	6,528	13,000	16,473	25,945	32,418	38,990	45,363	51,835	58,308	64,781	71,253	77,726	84,195
<b>Total</b>	225,644	224,560	220,477	222,393	221,310	220,326	219,143	218,059	216,976	215,893	214,809	213,726	213,459
<b>Capital Employed</b>													
Capital Fund	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305	84,305
Long-Term Loans	118,569	108,550	96,506	86,436	76,342	68,222	58,077	47,907	37,712	27,481	17,244	6,971	1,489
Other Reserve and Provision	22,770	31,705	40,666	49,652	58,663	67,699	76,761	85,847	94,959	104,097	113,260	122,450	131,565
<b>Total</b>	225,644	224,560	223,477	222,393	221,310	220,226	219,143	218,059	216,976	215,893	214,809	213,726	213,459
<b>Assets</b>													
Fixed Assets	120,888	113,332	105,776	98,220	90,664								
Net Current Assets	104,305	121,093	137,881	154,669	171,457								
<b>Total</b>	225,193	234,425	243,657	252,889	262,121								
<b>Capital Employed</b>													
Capital Fund	84,305	84,305	84,305	84,305	84,305								
Long-Term Loans	0	0	0	0	0								
Other Reserve and Provision	140,888	150,120	159,352	168,584	177,816								
<b>Total</b>	225,193	234,425	243,657	252,889	262,121								

表10.9.7 ブーケット漁港の財務比率

ブーケット漁港		財務比率																		
年度	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
収支率 (純利益率)	3	2	2	2	2	2	2	1	0	0	-1	1	2	2	3	4	4	4	4	4
目標：借入金利息以上																				
運営収入	3	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3
純利益率	3	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3
100	6	7	7	8	8	9	9	10	11	12	13	14	15	16	17	18	19	20	21	22
借入金返済能力 (全債務返済比率)	-	-	-	-	-	-0.5	-1.0	-1.4	-1.0	-1.3	-1.5	-2.2	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3	-2.3
目標：1以上																				
返済総額	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
返済総額	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
100	1.9	1.9	1.9	1.9	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
純資産収支状況 (運営純利益)	86	91	91	91	91	91	91	88	88	88	88	88	88	88	88	88	88	88	88	88
目標：70-75%以下																				
運営総費用	62	58	55	55	55	55	55	55	54	54	54	54	54	54	54	54	54	54	54	54
運営総収入	51	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
100	18	18	18	18	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17
(設備投資前運営純利益率) (%)																				
目標：50-60%以下																				
運営総費用	59	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
運営総収入	20	22	19	19	19	19	19	19	18	18	18	18	18	18	18	18	18	18	18	18
100	18	18	18	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	17	17

表10.9.8 水産加工団地の財務比率

水産加工団地		財務比率																		
年度	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
収支率 (純利益率)	-1	-1	-1	-1	-0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
目標：借入金利息以上																				
運営収入	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
純利益率	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
100	8	8	8	8	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
借入金返済能力 (全債務返済比率)	-1	-1	-1	-1	-0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
目標：1以上																				
返済総額	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
返済総額	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
100	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
(設備投資前運営純利益率) (%)																				
目標：50-60%以下																				
運営総費用	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
運営総収入	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53
100	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
(設備投資前運営純利益率) (%)																				
目標：50-60%以下																				
運営総費用	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
運営総収入	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
100	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18



## 11 結論と提言

### 11.1 結論

- (1) アンダマン海におけるタイ国領海を漁場とする従来型の漁業は、漁業努力の増加にかかわらず、総漁獲量は減少傾向にある。その状況を背景に、アンダマン海およびインド洋におけるタイ国の漁業開発のためには、資源の保護と新たな漁場における漁業の振興を志向していく必要がある。前者の手段としては、資源管理型漁業へ移行する必要があり、後者ではカツオ・マグロ漁業の振興が必要である。本水産複合施設計画では、そのような漁業開発の基地としてプーケット漁港を整備し、アンダマン海とインド洋における今後の漁業のモデル漁港としての性格を有するものである。
- (2) 本水産複合施設計画では水産加工工場をバンコク周辺から誘致するが、加工工場は計画漁業基地から原材料を比較的安定的に供給されたため、水産複合施設内や近隣の加工場ともその輸送コストの削減が図られるものと考えられる。そして、そこから生み出される製品は国内消費とともに、海外の市場へと輸出されることとなる。
- (3) 上記の施設の機能を念頭に全計画加工工場の操業開始を配慮して、短期整備計画の目標年次を2007年とした。
- (4) 漁港施設の整備ではプーケットの既存漁港施設を最大限に利用するものとし、計画の方針に沿って既存漁業に関する投資は最小限に抑える。さらに、陸揚、休憩等の機能別、漁船の漁法別に岸壁の利用を明確に分離する。
- (5) 本計画の一環として、バンコック及びその周辺地域の水産物加工工場の計画地への移転が取り上げられている。これは、環境保全と都市部と地方の地域格差の是正という国家計画に沿うものであり、移転工場は税制上の優遇措置が受けられることになっている。本計画の実施に当たっては、移転工場の受入れ地の整備、移転資金の低金利融資、労働力確保、原料購入価格の低減等が工場誘致の誘因として上げられる。したがって、関係各機関及び企業間の意見調整と情報の交換を密にし、官民一致協力して計画の実現を促進するため“プーケット水産複合施設運営協議会”を設置すべきである。協議会は、水産局、水産物流通公社、タイ工業団地公社、タイ産業金融公社、地方自治体等の公共機関と水産物加工業者、原料輸入業者代表者からなる。
- (6) 本短期計画の総事業費は2,860百万バーツと積算され、建設工事期間は土木・建築・設備に4年、加工工場建設に3年を予定する。

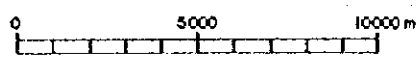
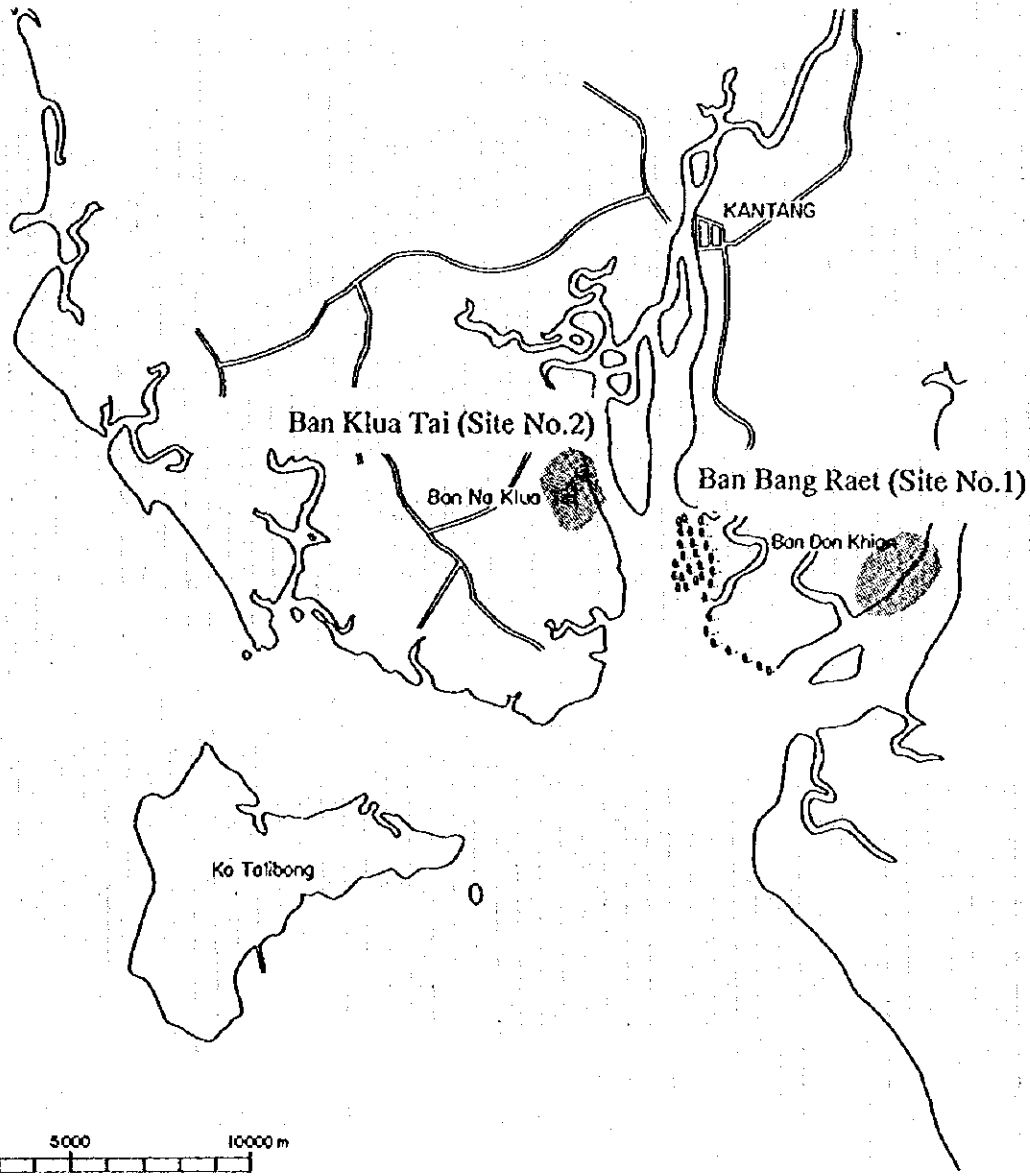
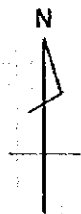
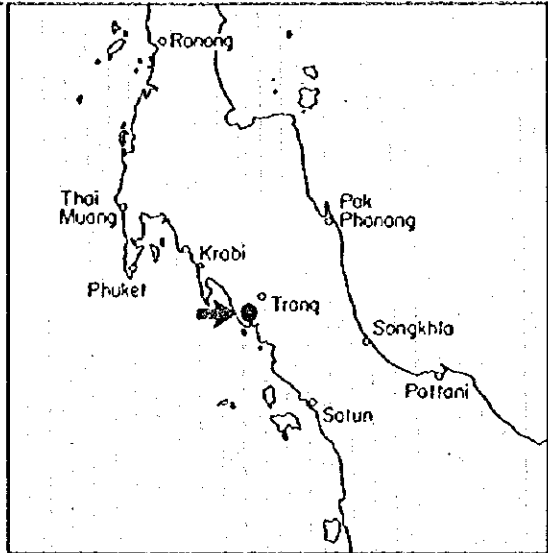
- (7) 経済内部収益率は12.02%であり、国民経済的観点から実施可能であると評価される。また、財務的内部収益率は借入金利を上回り、計画自体の収益性が妥当である。同時に、事業主体の財務の健全性を維持できるので計画の実施は可能である。

## 11.2 提言

- (1) 本調査で提案した短期整備計画を早急に実施することを提言する。
- (2) プーケットのみならず、アングマン海沿岸域の全漁港においても資源管理型漁業への移行が求められる。
- (3) 休業漁船の有効利用と漁獲量水準の確保のため、既存漁船の改造により延縄漁、一本釣り漁への転換が望まれる。水産局及び政府関連部局にはそのための財政的な支援が望まれる。
- (4) 資源管理のため漁獲データを確実に入手することが必要である。それを確実に実効する方法として、プーケット漁港で水揚げする漁船を FMO の一括管理下に置くものとする。そのため、漁港全体の管理業務に関する強力な権限を漁港管理者に与えることが望ましい。
- (5) 漁港管理者には、漁港内における施設使用に関するすべての指導権限が与えられることが強く求められる。
- (6) 漁港区域内では汚染水や油の投棄を禁止し、その取り締まり権限を漁港管理者に付与するべきである。本計画の実施を契機として、既存漁港の環境改善を図るよう提言する。
- (7) 魚の品質管理と衛生的な取り扱いを徹底指導監督することが求められる。
- (8) 漁港管理に関する上記の事項を法律や政府布告により、明文化することが望まれる。
- (9) 魚の公正な価格決定のため、早急に卸売り市場の開設と卸売り会社の設立が望まれる。
- (10) 円滑な水産複合施設運営・管理を行なうため、プーケット漁港施設の管理部門と工業団地管理部門からなる運営・管理組織を設立するとともに、FMO、水産局、卸売会社、フィッシュエージェント、漁業協同組合で構成される水産複合施設運営・管理調整協議会（仮称）の設立を提案する。
- (11) 移転水産加工工場の受け皿として、工業団地が輸出加工区として整備されなければならない。本計画の工業団地は水産物流通公社と、多くの工業団地開発と管理・運営の実績のあるタイ工業団地公社とによる共同開発及び共同管理・運営が望ましい。

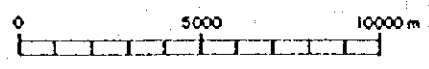
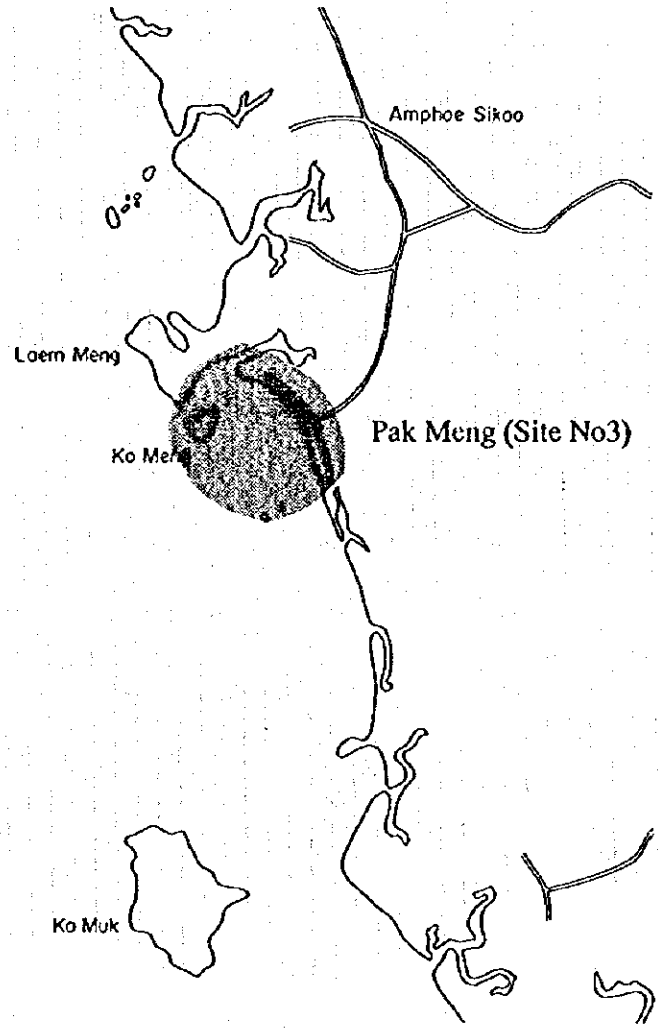
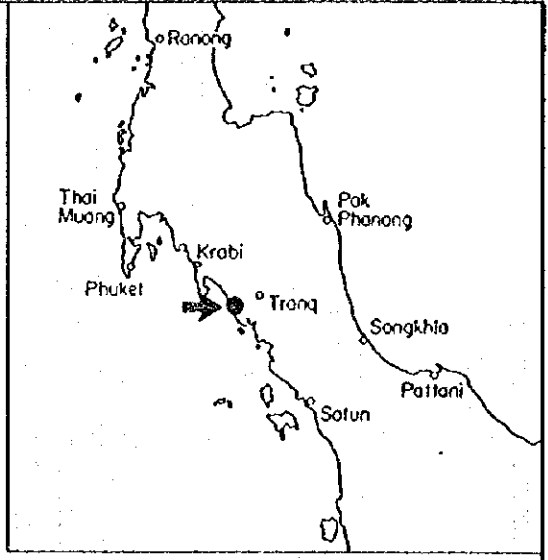
付 属 資 料

付属資料 3.3 計画サイト候補地の位置図

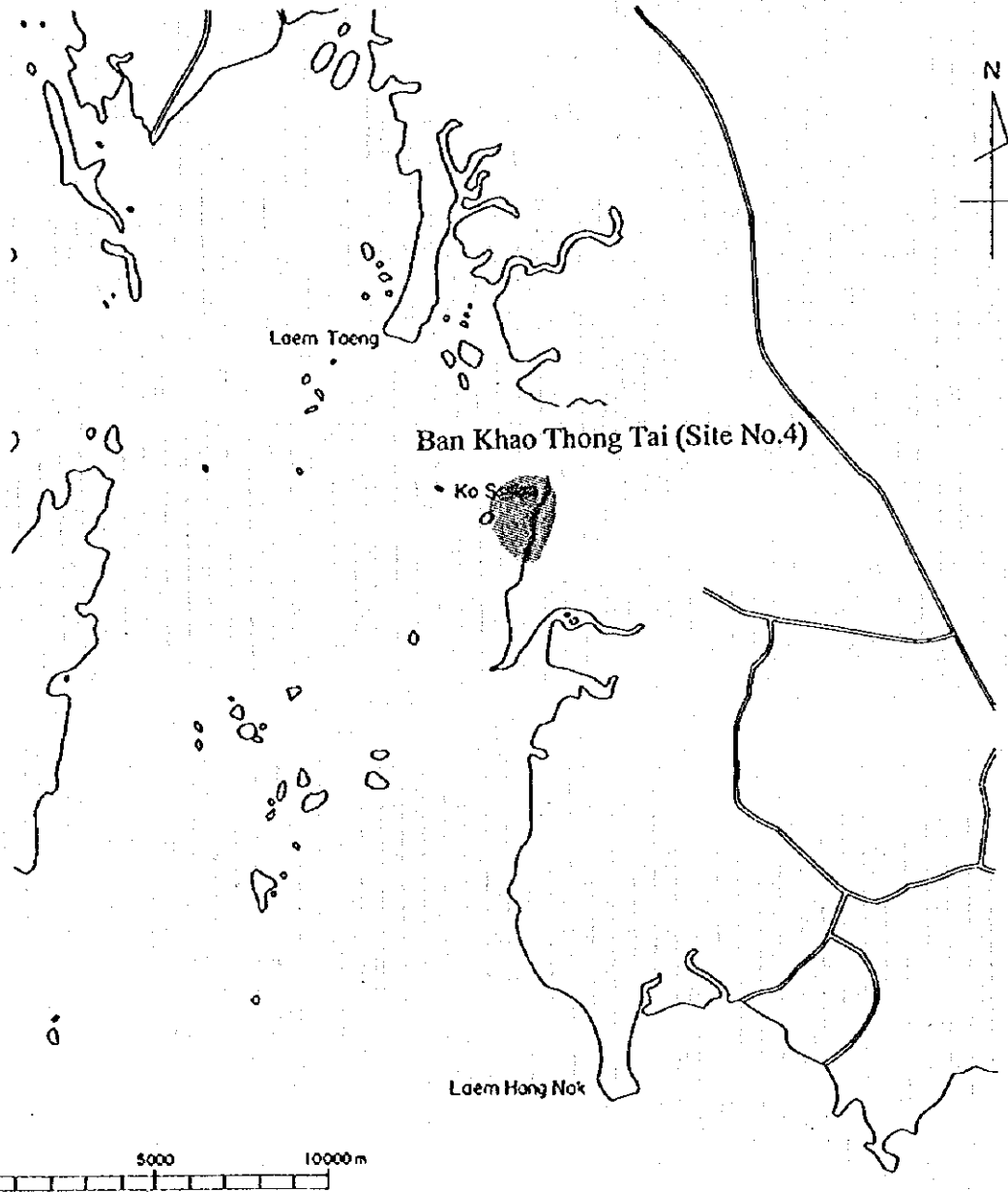
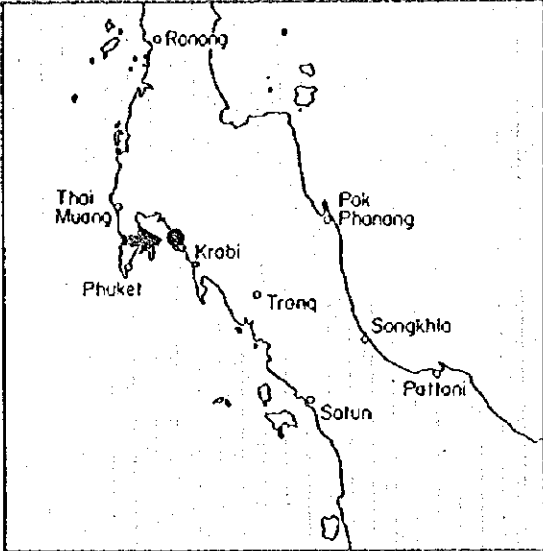


Proposed Locations of No.1 and No.2 in Trang

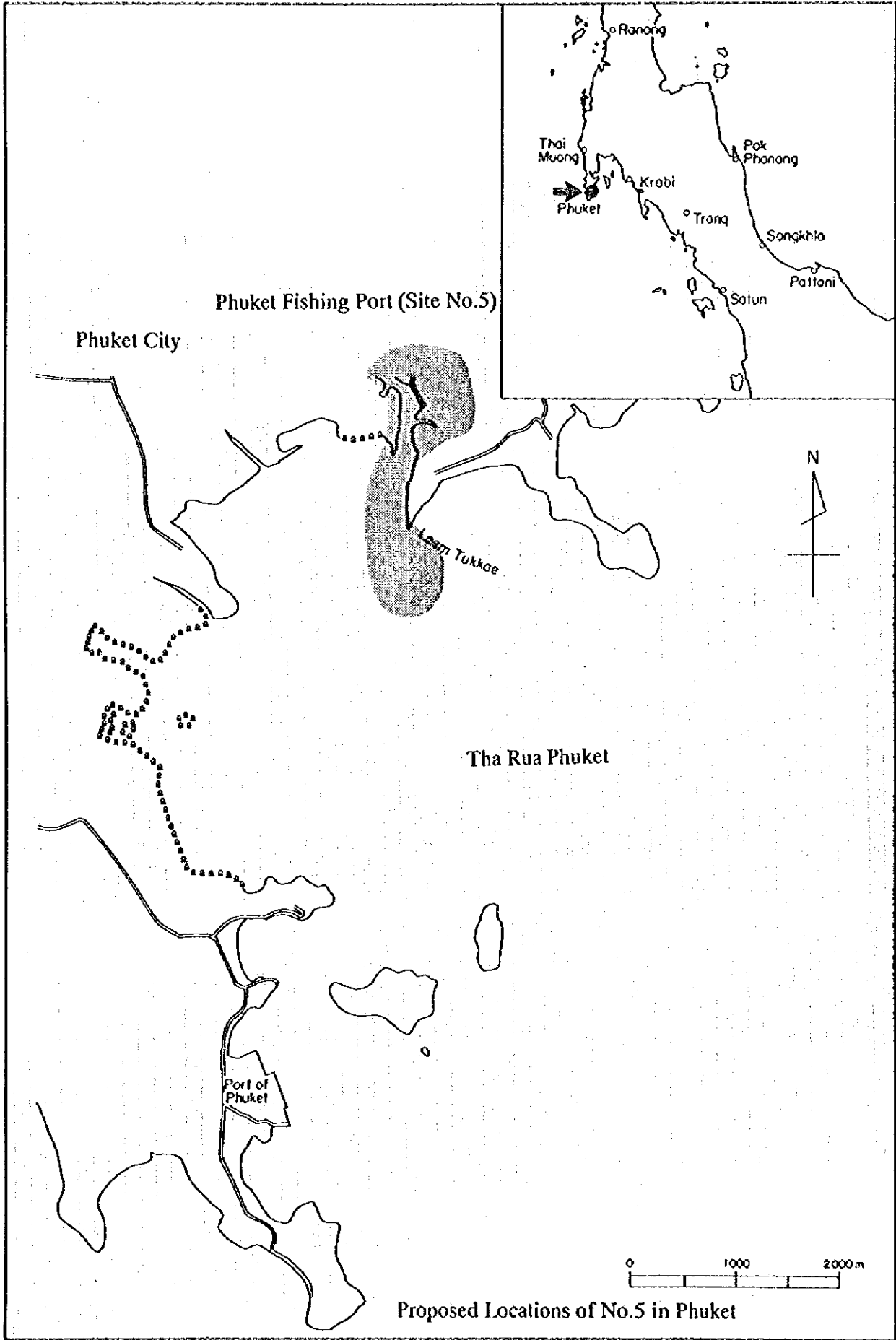




Proposed Locations of No.3 in Trang



Proposed Locations of No.4 in Krabi



Proposed Locations of No.5 in Phuket

付属資料 6.3.4 ソーン1からプーケットへ移転するツナ缶詰工場の採算性の  
検討



After the urgent plan for the Fishery Complex on the Andaman Sea for the target year of 2005 is put into effect, the Phuket fishing port owned by the Fish Market Organization (FMO) will be improved and expanded. Furthermore, the land for fish processing factories will be developed behind the fishing port.

As a result, the fishing port will not only maintain the present landing volume of fish, but will increase their landing volume to about 72,000 tons of tuna and skipjack, due to the use of expanded facilities.

It will become easier for canned tuna factories to procure raw material and consequently, canned tuna factories presently operating in Bangkok, Samut Sakhon, and Samut Prakarn will move to Phuket. The Board of Investment (BOI) has defined the former area as Zone 1 and the latter area as Zone 3. Consequently, factories will be given an incentive to move their factories in the form of favorable treatment by investment laws set up by BOI and the Industrial Estate Authority of Thailand (IEAT).

This study is an analysis on whether the investments made by factories to move to Phuket will be profitable or not, by comparing the profitability of one tuna processing factory which was used as a model case in the event of removal under the project and its profitability under existing conditions (without project implementation).

#### 1. Methodology

This study evaluated the feasibility of investments required to move the factory location, according to the profit arising from the balance of expenditures such as investment cost and operating cost and income with and without the project for the project's 20 year period.

## 2. Given Conditions

The given conditions for the estimation are as follows and the details are shown in Attached Sheet No. 5.

### (1) Exchange rate

US\$1 = Baht 25.33

Baht 1 = US\$0.0395

### (2) Canned tuna factory, model case (one company operated factory)

#### With the Project

The factory will be moved from Zone 1 (Bangkok, Samut Sakhon, and Samut Prakarn) to the export processing zone (EPZ) of Phuket in Zone 3.

#### 1) Facilities

- Land: Owns 30 rai of land in Zone 1. In the event the factory is moved, the land will be sold and utilized as investment for the move. The amount of land allocated for the factory in Phuket is 28 rai.

- Buildings: The total area of the newly constructed buildings will be 14,740m<sup>2</sup> and the facilities will be comprised of a factory (7,200m<sup>2</sup>), office (740 m<sup>2</sup>), service facility (1,300 m<sup>2</sup>), dormitory (4,500 m<sup>2</sup>)

- Utility and infrastructure for buildings: Newly constructed.

- Machinery and equipment for three lines of canned tuna production: To be moved to the new location

- Cold storage: The cold storage with an actual capacity of 600t will be moved to the new location and consists of the panel and equipment. Half of the panel will be removed and other half will be newly purchased.

2) Production capacity

Production capacity: 40/day (raw material base), operating 300 days per year

Working hours per day: 8 hours

These conditions will be constant for 20 years.

3) Volume of raw materials (tuna fish) and purchase price:

- Volume: 12,000 tons/year
- Purchase price: US\$912/ton or Bahts 23,079/ton

Remarks: The transport cost of raw material from the West Indian Ocean to Phuket is cheaper than the transport cost to BKK. Its value is US\$13.0/ton (refer to Appendix 6.2). The purchase price at BKK is US\$925/ton or Bahts 23,408/ton.

4) Export volume of canned tuna and price

- Volume: 7,000 tons/year
  - Price (FOB at Phuket): US\$22.5/case = US\$2,543/ton = Baht 64,380/ton
- 1 case = 307 type cans x 48 cans = 9kg/case

Without the Project

The factory was assumed to be an existing factory operating in Zone 1 with the same conditions as the factory above in "With the Project", i.e. facilities, capacity, operating conditions, export volume, export price of tuna cans, and purchase volume of raw materials, excluding purchase price.

1) Volume of raw materials (tuna fish) and purchase price

- Volume: 12,000 tons per year
- Price: US\$925/ton or Baht 23,408/ton



(3) Investment cost and source of funds

(Unit: Million Bahts)

Investment Cost	Self-financing (40%)	Loans (60%)
157.4	65.4	92.0

Loan Conditions:

With the Project (funded by IFCT)

Loan Period: 20 years

Grace Period: 5 years

Interest: 11%/year

Without the Project (Commercial Bank)

1.3% year of the sales amount

Note: Without the project the interest was estimated to be 1.3% of the sales amount, depending on the income statement of the fish processing companies registered in the Thailand stock market.

(4) Operational Cost: The breakdown is shown in Attached Sheet No. 5.

- Raw material and auxiliary material costs (can, carbon box, label, oil)
- Labor cost, water and electricity costs
- Local transport costs (from wharf to factory, factory to port)
- Maintenance and depreciation costs, interest
- Administrative expenses

(5) Favorable treatment stemming from laws encouraging investment as shown in Attached Sheet No. 1.

### 3. Results of the Study

Relocation of a factory ( with the project ) as a model case is more profitable than no relocation ( without the project ) and the balance of net profit from first year to 20th year between both cases will be million Bahts 147.8.

The details of income statement and cashflow are shown in Attached Sheet No.2 and No.3.

The details of profit are shown in Remarks of Table of Attached Sheet No.2,Page 13.

Attached Sheet No. 1

### Favorable Treatment Stemming From Incentive Investment Laws

(A comparison of: Moving the factory with the Project and keeping the existing factory without the Project)

#### With the Project

1. Incentive investment law by the Board of Investment (BOI) (With the Project)

Phuket is located in Zone 3, a region where investment is being encouraged under the BOI law established in 1993. If a factory moves to Phuket, it is qualified to receive special tax treatment under this law.

(1) Corporate tax: Taxes are exempted for eight years and can be further reduced to 50% for five years after the ninth year.

(2) Special Favorable Treatment: The double cost of transportation, electricity, and water will be deducted from taxable income for ten years.

Up to 25% of equipment installation and infrastructural investment costs may be deducted from taxable income for one year.

(3) Import Tax on Machinery: No tax exemption

(4) Import Tax on Raw Materials: Tax exemption on fish used as raw material for processing and export

2. Favorable treatment by the Industrial Estate of Thailand Act (IEAT) established in 1979

If a company joins an industrial estate, it is eligible to receive and conduct the following after obtaining BOI approval.

- (1) Own land in an industrial estate to engage in industrial activity
- (2) Recruit foreign nationals to Thailand who are (a) skilled workers, (b) experts, (c) spouses or dependents of persons under (a) or (b) in appropriate numbers
- (3) Grant a work permit for foreign nationals
- (4) Take out or remit foreign currency from Thailand, if such currency is (a) capital brought into Thailand by an industrial operator and dividends or other benefits accrued therefrom, (b) foreign loan brought for the purpose of investing in the activities under an agreement approved of by the Board, including the interest thereon and etc.

3. Incentive Law for Export Business

If a company joins the Export Processing Zone (EPZ), it is eligible to receive the following tax exemptions.

- (1) Import tax exemption on construction materials for a factory
- (2) Import tax exemption on production machinery and equipment
- (3) Import tax exemption on raw materials and spare parts for production
- (4) Export tax exemption on exported products and sub-products

4. Remark: Tax System

- (1) Corporate tax: 30% of taxable income
- (2) Added value tax: tax exemption on export stocks

- (3) Business tax on imported goods: 1.5% to 9%
- (4) Export tax: Exempted

Without the Project

1. Most of the factories in Bangkok and Samut Prakarn are presently operating in Zone 1 which has been promoted with incentive investment laws by BOI. Factories are eligible to receive the following special tax exemptions under this law.

- (1) Corporate tax: Taxes are exempted for five years under the following conditions:
  - (a) Over 80% of total sales is generated by exportation
  - (b) Located in an industrial estate or an incentive industrial area recognized by BOI
- (2) Special favored treatment: None
- (3) Import taxes on machinery: Import taxes may be reduced 50% under the following conditions:
  - (a) Over 80% of total sales is generated by exportation
  - (b) Located in an industrial estate or an incentive industrial area recognized by BOI

2. Special treatment under the Industrial Estate of Thailand Act (IEAT) established in 1979

If a factory relocates to the Industrial Estate, it is eligible to receive special treatment same as in the case of with the project.

3. Incentive law for export business: None

**4. Remark: Tax System**

**Same as above (as in the case of with the Project)**

## Revenue and Expenses of Canned Tuna Factory With and Without the Project

Items	Unit: Million Baht			
	With Project (Relocation)		Without Project (No Relocation)	
	1st Year	2 - 6 Years	7 - 20 Years	1 - 20 Years
<b>Revenues</b>	450.7	450.7	450.7	450.7
<b>Expenses</b>				
Raw materials	276.9	276.9	276.9	280.9
Auxillary materials	69.8	69.8	69.8	69.8
Can cost	(52.2)	(52.2)	(52.2)	(52.2)
Label cost	(4.5)	(4.5)	(4.5)	(4.5)
Carton Cost	(3.1)	(3.1)	(3.1)	(3.1)
Oil Cost	(10.0)	(10.0)	(10.0)	(10.0)
Labor cost	36.0	36.0	36.0	40.6
Transportation cost	0.5	0.5	0.5	1.5
Utility Cost	7.2	7.2	7.2	7.2
Removal Cost	10.7	0	0	0
Land Rent	2.1	2.1	2.1	0
Maintenance cost	2.4	2.4	2.4	2.4
General Expenses (Selling & Administrative Expenses)	18.0	18.0	18.0	18.0
Depreciation Cost	10.1	10.1	10.1	10.1
<b>Expenses Before Interest</b>	<b>433.7</b>	<b>423.0</b>	<b>423.0</b>	<b>430.5</b>

Attached Sheet No. 2 (2/3)

Income Statement of Canned Tuna Factory With and Without the Project

Items	With the Project											Unit: Million Bahi Without Project	
	1st year	2 to 5 years	6 years	7 years	8 years	9 years	10 years	11 years	1 to 11 years		1 to 11 years		
Revenue	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7
Expenses													
Expenses Before Interest	433.7	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	430.5
Interest	10.1	10.1	10.1	9.5	8.8	8.1	7.4	6.7	6.7	6.7	6.7	6.7	5.9
Existing Interest	0	0	0	0	0	0	0	0	0	0	0	0	(5.9)
New Interest	(10.1)	(10.1)	(10.1)	(9.5)	(8.8)	(8.1)	(7.4)	(6.7)	(6.7)	(6.7)	(6.7)	(6.7)	0
Expenses After Interest	443.8	433.1	433.1	432.5	431.8	431.1	430.4	429.7	429.7	429.7	429.7	429.7	436.4
Income Before Taxes (A)	6.9	17.6	17.6	18.2	18.9	19.6	20.2	21.0	21.0	21.0	21.0	21.0	14.3
Deduction of Income & Profit	19.0	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	0
Transp. x 2 for 10 years	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	0
Utility x 2 for 10 years	(14.4)	(14.4)	(14.4)	(14.4)	(14.4)	(14.4)	(14.4)	(14.4)	(14.4)	(14.4)	(14.4)	(14.4)	0
Instal/Infra x 25%	(3.6)	0	0	0	0	0	0	0	0	0	0	0	0
Taxable Income	-12.1	2.2	2.2	2.8	3.5	4.2	4.8	4.8	4.8	4.8	4.8	4.8	14.3
Corporate Tax													
Corporate Tax 30%	0	0.7	0.7	0.8	1.1	1.3	1.4	1.4	1.4	1.4	1.4	1.4	4.3
Tax Exemption													
100% for eight years	0	0.7	0.7	0.8	1.1	1.1	0.7	0.7	0.7	0.7	0.7	0.7	3.2
50% for five years	0	0	0	0	0	0	0.7	0.7	0.7	0.7	0.7	0.7	3.2
Tax Payment (B)	0	0	0	0	0	0	0.7	0.7	0.7	0.7	0.7	0.7	4.3
Net Profit (A-B)	6.9	17.6	17.6	18.2	18.9	18.9	19.5	17.8	19.5	19.5	19.5	17.8	10.0
Net Profit Margin for Sales (%)	1.5	3.9	3.9	4.0	4.2	4.2	4.3	3.9	4.2	4.2	4.3	3.9	2.2



Attached Sheet No.2 (3/3)

Income Statement of Canned Tuna Factory With and Without the Project

Items	With the Project										Without Project	
	12 years	13 years	14 years	15 years	16 years	17 years	18 years	19 years	20 years	20 years	12 to 20 years	
Revenues	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7	450.7
Expenses												
Expenses Before Interest	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0	430.5
Interest	6.1	5.4	4.7	4.1	3.4	2.7	2.0	1.4	0.7	0.7	0.7	5.9
Existing	0	0	0	0	0	0	0	0	0	0	0	(5.9)
New	(6.1)	(5.4)	(4.7)	(4.1)	(3.4)	(2.7)	(2.0)	(1.4)	(0.7)	(0.7)	(0.7)	0.0
Expenses After Interest	429.1	428.4	427.7	427.7	426.4	425.7	425.0	424.4	423.7	423.7	423.7	436.4
Income Before Tax (A)	21.6	22.3	23.0	23.6	24.3	25.0	25.7	26.3	27.0	27.0	27.0	14.3
Deduction of Income & Profit	0	0	0	0	0	0	0	0	0	0	0	0
Transp. x 2 for 10 years	0	0	0	0	0	0	0	0	0	0	0	0
Utility x 2 for 10 years	0	0	0	0	0	0	0	0	0	0	0	0
Install/Infra x 25%	0	0	0	0	0	0	0	0	0	0	0	0
Taxable Income	21.6	22.3	23.0	23.6	24.3	25.0	25.7	26.3	27.0	27.0	27.0	14.3
Corporate Tax												
Corporate Tax 30%	6.5	6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.1	8.1	4.3
Tax Exemption												
100% for eight years	0	0	0	0	0	0	0	0	0	0	0	0
50% for five years	3.3	3.4	0	0	0	0	0	0	0	0	0	0
Tax Payment (B)	3.3	3.4	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.1	8.1	4.3
Net Profit (A-B)	18.3	18.9	16.1	16.5	17.0	17.5	18.0	18.4	18.9	18.9	18.9	10.0
Net Profit Margin for Sales (%)	4.1	4.2	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.2	4.2	2.2

Remarks: Total Net Profit

With Project: Sum of net profit from first to 20th year = Million Bahts 347.8

Without Project: Million Bahts 10.0/year x 20 years = Million Bahts 200.0

Balance: Million Bahts 147.8

Unit: Million Bahts

Attached Sheet No. 3

CASH FLOW

	Unit: Million Bahts										
Years	0	1	2	3	4	5	6	7	8	9	10
1. Source of Funds	157.4	17.0	27.7	27.7	27.7	27.7	27.7	28.3	29.0	29.0	29.6
(1) Loan	92.0										
(2) Equity	65.4										
(3) Depreciation		10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
(4) Net Income		6.9	17.6	17.6	17.6	17.6	17.6	18.2	18.9	18.9	19.5
2. Uses of Funds	157.4	0	0	0	0	0	6.1	6.1	34.2	6.1	6.1
(1) Construction & Relocation	157.4										
(2) Reinvestment									28.1		
(3) Repayment of Loan							6.1	6.1	6.1	6.1	6.1
3. Net Cash Flow	0	17	27.7	27.7	27.7	27.7	21.6	22.2	-5.2	22.9	23.5

Years	11	12	13	14	15	16	17	18	19	20
1. Source of Funds	27.9	28.4	29.0	26.2	26.6	27.1	27.6	28.1	28.5	29.0
(1) Loan										
(2) Equity										
(3) Depreciation	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
(4) Net Income	17.8	18.3	18.9	16.1	16.5	17.0	17.5	18.0	18.4	18.9
2. Use of Funds	6.1	6.1	6.1	6.1	6.1	11.7	6.1	6.1	6.1	6.6
(1) Construction & Relocation										
(2) Reinvestment						5.6				
(3) Repayment of Loan	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.6
3. Net Cash Flow	21.8	22.3	22.9	20.1	20.5	15.4	21.5	22.0	22.4	22.4

Remarks: Net Income: Actual Profit

Attached Sheet No. 5

Details of Revenue and Expenses

1. Estimation of revenue concerning canned tuna

(1) Export price of canned tuna

Export Price (Chunk)

US\$22.5/carton = US\$2,543/ton = Bahts 64,380/ton

Remarks: (1) 1 carton box = 307 type cans x 48 cans = 9kg/carton. Price is FOB at BKK.

(2) Export price has been estimated based on the information obtained in "Export Statistics" from Jan. to Sept. 1996, Department of Business Economic, Ministry of Commerce in Thailand and DOF.

(2) Export volume

1) Yield ratio

- Conversion factor (weight of meat used for canning/raw material weight)

Skipjack: 40%  
Yellowfin Tuna: 45%

Source: (1) Field survey on the Fishery Complex on the Andaman Seacoast, 1996  
(2) Fish Canning Industry, USA

- Share of canned skipjack and yellowfin produced

Skipjack: 76%  
Yellowfin and others: 24%

Source: DOF, 1993-1996

- Synthetic Conversion Factor (weight of meat used for canning/raw material weight)

$0.4 \times 0.76 + 0.45 \times 0.24 = 0.412$  or 41.2%

- Packing media (brine and oil) ratio

Product weight (meat + packing media)/meat weight = 1.4

Source: (1) Field survey study on the Fishery Complex on the Andaman Seacoast, 1996  
(2) Fish Canning Industry USA

1) Yield ratio (product weight/raw material weight)

$$1.4 \times 0.412 = 0.58 \quad \text{or } 58\%$$

Remarks: Meat weight/product weight =  $1/1.4 = 0.714$  or 71.4%

Packing media weight/product weight =  $(1.4 - 1)/1.4 = 0.286$  or 28.6%

2) Export volume

- Volume of tuna used as raw material for canned tuna

Production capacity: 40 tons/day at a raw material base

Production capacity: 12,000 tons/year (300 operating days/year)

- Export volume: 12,000 tons/year  $\times$  58% = 6,960 = 7,000 tons/year

Meat: 7,000 tons  $\times$  0.714 = 5,000 tons/year

Packing media: 7,000 tons  $\times$  0.286 = 2,000 tons/year

3) Export value: 7,000 tons/year  $\times$  Baht 64,380/ton = Million Bahts 450.66

2. Estimated production expenses

(1) Raw material purchase costs

Assuming that the purchase price of raw material unloaded domestically is the same as that imported,

Without the Project

Skipjack: US\$870/ton

Yellowfin: US\$1,100/ton

Average price:  $870 \times 0.76 + 1,100 \times 0.24 = \text{US\$925/ton} = \text{Baht } 23,408/\text{ton}$

Source: (1) Field survey study on the Fishery Complex on the Andaman Seacoast, 1996  
(2) DOF, 1995-1996

Total purchase cost: 12,000 tons/year  $\times$  Baht 23,408 = Million Bahts 280.9

With the Project

When reefers unload frozen tuna from the West Indian Ocean at Phuket, the transport cost of frozen tuna will be eliminated and the price of imported frozen tuna will be cheaper than tuna unloaded at BKK. That value is US\$13.0/ton (see Appendix 6.2).

Unit price of raw material:  $\text{US\$925/ton} - \text{US\$13/ton} = \text{US\$912/ton} = \text{Baht } 23,079/\text{ton}$

Total purchase cost: 12,000 tons/year  $\times$  Baht 23,079/ton = Million Bahts 276.9

(2) Auxiliary raw material purchase cost

Finished product = meat + packing media

1 ton of finished product: 111 cartons (1 carton = 48 cans, 9kg)

111 cartons x 48 cans/carton = 5,238 cans

1) Cost of Can

Case	Product Quantity (ton)	No. of Cans Per Ton (product)	Unit Price of Can (Baht/can)	Can Cost Million Bahts
With the Project	7,000	5,328	1.4	52.2
Without Project	7,000	5,328	1.4	52.2

2) Label Cost

Case	Product Quantity (ton)	No. of Cans Per Ton (product)	Unit Price of label (Baht/label)	Label Cost Million Bahts
With the Project	7,000	5,328	0.12	4.5
Without Project	7,000	5,328	0.12	4.5

3) Carton Cost

Case	Product Quantity (ton)	No. of Cartons Per Ton (product)	Unit Price of carton (Baht/box)	Carton Cost Million Bahts
With the Project	7,000	111	4	3.1
Without Project	7,000	111	4	3.1

4) Oil Cost

Assuming that oil is used in 25% of the product as a packing media and brine for the remains.

Case	Total Packing Media Weight (ton)	Share of Oil (%)	Unit Price of Oil (Bahts/ton)	Oil Cost Million Bahts
With the Project	2,000	25	20,000	10.0
Without Project	2,000	25	20,000	10.0

5) Total Auxiliary Raw Material Cost With/Without the Project

a + b + c + d = Million Bahts 69.8

### (3) Labor Cost

#### 1) Number of Personnel

Office staff:	50 persons
Laborers:	500 persons
Total	550 persons

#### 2) Labor cost including every allowance

Labor cost at Phuket:

Office staff: Baht 10,000/month, Labor: Baht 5,000/month = Baht 200/day

Labor cost at BKK:

Office staff: Baht 10,000/month, Labor: Baht 5,750/month = Baht 230/day

#### 3) Total Labor Cost

Case	Employee	Number	Unit Price Baht/Month	Labor Cost Million Baht/Month	Labor Cost Million Baht/Year
With Project	Office Staff	50	10,000	0.50	6.0
	Labor	500	5,000	2.50	30.0
	Total	550	-	-	36.0
Without Project	Office Staff	50	10,000	0.50	6.0
	Labor	500	5,750	2.88	34.56
	Total	550	-	-	40.56

### (4) Local Transportation

#### With the Project

Raw Material: New Jetty --> Factory (40 Bahts/ton)

Canned Tuna: Factory --> Phuket commercial port (70 Bahts, including container handling)

#### Without the Project

Raw Material: Bangkok port --> Factory (100 Baht/ton)

Canned Tuna: Factory --> Bangkok port (200 Bahts including container handling)

Case	Item	Transport Volume (tons/year)	Unit Price (Baht/ton)	Total Million Baht/year
With Project	Raw Material	12,000	40	0.04
	Canned Tuna	7,000	70	0.49
	Total	-	-	0.53
Without Project	Raw Material	12,000	100	0.10
	Canned Tuna	7,000	200	1.40
	Total	-	-	1.50

(5) Utility Cost

1) Electricity

a. Installed capacity

Installed capacity of power		
- Canning Plant	128kw	180 KVA
- Cold Storage	134kw	200 KVA
- Office	23kw	30 KVA
- Service Building	46kw	70 KVA
Sub-total	331kw	480 KVA
Installed capacity of light		
- Canning Plant	113kw	
- Cold Storage	10kw	
- Office	37kw	
- Service Building	20kw	
- Dormitory	90kw	
Sub-total	270kw	340 KVA
Total Installed Capacity	601kw	820 KVA

b. Electric Consumption

- Power Consumption	
• Canning Plant	1,052kw hr/day
• Cold Storage	1,660kw hr/day
• Office	162kw hr/day
• Service Building	138kw hr/day
Sub-total	3,012kw hr/day
- Light Consumption	
• Canning Plant	1015kw hr/day
• Cold Storage	0kw hr/day
• Office	259kw hr/day
• Service Building	59kw hr/day
• Dormitory	0kw hr/day
Sub-total	1,333kw hr/day
Total Consumption	4,345kw hr/day

Remarks: Electric consumption of the cold storage is negligible. The electric charge of the dormitory is collected from the boarders.

c. Electric Charge

Basic Charge:  $800\text{kw} \times \text{Baht } 274/\text{month}/\text{kw} = \text{Million Baht } 0.219/\text{month}$

Consumption Charge:  $4,345\text{kw hr} \times 25 \text{ days} \times \text{Baht } 1.07/\text{kw hr} = \text{Million Baht } 0.116/\text{month}$

Total: Million Baht 0.335/month

Million Baht 0.335/month x 12 months = Million Bahts 4.02/year

2) Portable water and wastewater

According to the data from existing canned tuna factories, the water consumption volume is 10 tons per one ton of processed raw material. This volume includes all water consumption, i.e. on the production line of canned tuna and water consumption by employees.

a. Water consumption volume

12,000 tons/year x 10m<sup>3</sup>/ton = 120,000 m<sup>3</sup>/year

b. Water charge

Item	Consumption Volume (m <sup>3</sup> /year)	Unit Price (Baht/m <sup>3</sup> )	Total (Million Bahts)
Potable Water	120,000	9.0	1.08
Wastewater	120,000	5.0	0.60
Total			1.68

3) Fuel for Boiler

a. Fuel consumption: 950kg/day

b. Fuel charge: 950kg/day x B5.39/kg x 300 days = Million Baht 1.5

4) Total Utility Cost

1) + 2) + 3) = Million Baht 7.2

(6) Construction, relocation, repair and maintenance, and depreciation costs

- It is assumed that a canned tuna factory relocating to Phuket is a company which has been operating in Bangkok and Samut Prakan for eight years since its establishment.

- The company will rent 28 rai in the industrial estate developed behind the Phuket Fishing Port by the Fishery Complex Project on the Andaman Sea Coast. The company will construct a factory building, utilities, and infrastructure. Production machinery, equipment, and refrigerating machine will be relocated to the new site and half of the insulation panel will be relocated and the other half will be newly purchased. Equipment relocated to the new site is assumed to have depreciated for eight years.



(1) Land Rental Fee

Industrial estate: Lot price (Baht/year/rai) GIZ 59,000, EPZ 73,750

Type	Land Area	Unit Price (Baht/year/rai)	Rental Amount (Million Baht/year)
EPZ	28	73,750	2.07
GIZ	28	59,000	1.65

Remark: In the case of "Without the Project", the land is owned by the company.

(2) Building Construction Cost

Item	Bldg. Area (m <sup>2</sup> )	Story	Total Floor Area (m <sup>2</sup> )	Unit Cost (Baht/m <sup>2</sup> )	Construction Cost (Million Baht)	Building (Million Baht)	Utility (Million Baht)
Plant	7,200	1	7,200	8,700	62.6 (100%)	47.0 (75%)	15.6 (25%)
Office	740	1	740	11,300	4.5 (100%)	3.1 (70%)	1.4 (30%)
Service	1,300	1	1,300	10,000	13.0 (100%)	7.8 (60%)	5.2 (40%)
Dormitory	2,750	2	4,500	10,000	45.0 (100%)	31.5 (70%)	13.5 (30%)
Others	-	-	-	-	3.7	3.7	-
Total	11,990	-	14,740	-	128.8	93.1	35.7

Remark: In the case of "Without the Project", there will be no investment.

(3) Infrastructural Construction Costs

Item	Quantity	Unit	Unit Price (Baht/m <sup>2</sup> )	Construction Cost (Baht x 10 <sup>3</sup> )
Concrete Pavement	12,000	m <sup>2</sup>	650/m <sup>2</sup>	7,800
Green Belt	14,400	m <sup>2</sup>	60/m <sup>2</sup>	864
Fence	980	m	250/m	245
Gate	1	1 set		245
Drainage	2,260	m	2,000/m	4,520
Catch Basin	40	piece	7,500/piece	300
Total				13,974 ≈ 14,000

Remarks:

(1) Depreciation life is 20 years.

(2) 25% of the installation cost for infrastructure and equipment shown above will be reduced from taxable income for one year under special legal exemptions.

Reduction cost: Million Baht  $14.0 \times 25\% =$  Million Baht 3.5

(3) There will be no investment cost in the case of "Without the Project".

(4) Construction Cost of Cold Storage

Total construction cost of new cold storage facility: Million Baht 18.6, consisting of panel (Million Baht 11.2) and equipment (Million Baht 7.4)

If the factory is relocated, half of the panel will be taken to the new location and the other half will be newly purchased.

(5) Relocation Costs

1) Relocation cost of tuna can production line

The cost is estimated to be 15% of the construction cost.

- Construction cost of new production line: Million Baht 15.1

- Relocation cost: Million Baht  $15.1 \times 15\% =$  Million Baht 2.3

Remark: 25% of the installation cost for infrastructure and equipment shown above will be reduced from taxable income for one year under special legal exemptions.

Reduction cost:

Million Baht  $2.3$  (relocation)  $\times 20\%$  (installation)  $\times 25\% =$  Million Baht 0.1

2) Relocation Cost of Cold Storage

- Half of the insulation panel will be relocated and the other half will be newly purchased.

- The relocation cost is estimated to be 15% of the purchase cost. The breakdown is as follows: Packaging and transportation 9%, Withdrawal 3%, and Installation 3%

(Unit: Million Baht)

Item	Construction Cost	Purchase & Removal Cost		Removal Cost			
		Purchase	Removal	Transport 9%	Withdrawal 3%	Install 3%	Total 15%
Panel	11.2	5.6	5.6	1.1	0.3	0.3	1.7
Equipment	7.4	0	7.4	0.7	0.2	0.2	1.1
Total	18.6	5.6	13.0	0.8	0.5	0.5	2.8

Remark: 25% of the installation cost for infrastructure and equipment shown above will be reduced from taxable income for one year under special legal exemptions.

Reduction Cost: Million Baht 0.5 (Installation) x 25% = Million Baht 0.1

### 3) Total Relocation Costs

Production line equipment: Million Baht 2.3  
 New panel for cold storage: Million Baht 5.6  
 Cold storage equipment: Million Baht 2.8  
 Total: Million Baht 10.7

### (6) Repair and Maintenance Costs

The following rates will applied for the construction cost.

Building, utility, and infrastructure: 1% per year

Machinery and equipment: 3% per year

(Unit: Million Baht)

Item	Construction Cost	Rate (%)	Repair and Maintenance Costs
Building	93.1	1	0.9
Utility	35.7	1	0.4
Infrastructure	14.0	1	0.1
Production Line Equipment	15.1	3	0.5
Cold Storage Panel	11.2	3	0.3
Equipment	7.4	3	0.2
Total	176.5	-	2.4

Remark: Repair and maintenance costs for both "With" and "Without" the Project are the same.

### (7) Depreciation Costs

- Residual depreciation life of relocated equipment is seven years and equipment will be renewed in the eighth year.
- The depreciation life of new equipment is 15 years and equipment will be renewed in the 16th year.
- The building, utilities, and infrastructure will not be renewed.

(Unit: Million Bahts)

Item	Assets			Depreciation	
	New	Relocated	Total	Year	Cost
Building	93.1	0	93.1	20	4.7
Utility	35.7	0	35.7	20	1.9
Infrastructure	14.0	0	14.0	20	0.7
Production Line					
Equipment	0	15.1	15.1	15	1.0
Cold Storage					
Panel	5.6	5.6	11.2	15	0.8
Equipment	0	7.4	7.4	15	0.5
Furniture	3.9	0	3.9	20	0.2
Total	152.3	28.1	180.4	---	10.1

Remarks: The depreciation cost is 10.1 million Bahts every year from the first to the 20th year for both "With" and "Without" the Project.

- The residual value at the end of the 20th year is as follows:

With the Project

Production machinery (relocation):	$15.1 - (1.0 \times 13) = 2.1$
Panel (renewal):	$5.6 - (0.4 \times 5) = 3.6$
Panel (relocation)	$5.6 - (0.4 \times 13) = 0.4$
<u>Equipment (relocation)</u>	<u><math>7.4 - (0.5 \times 13) = 0.9</math></u>
Total	Million Bahts 7.0

Without the Project

Production machinery:	$15.1 - (1.0 \times 13) = 2.1$
Panel:	$11.2 - (0.8 \times 13) = 0.8$
<u>Equipment</u>	<u><math>7.4 - (0.5 \times 13) = 0.9</math></u>
Total:	Million Bahts 3.8

(8) Administrative Expenses

Administrative expenses were estimated to be 4% of the sales amount, depending on the income statement of the fish processing companies registered in the Thailand stock market.

(9) Investment Cost, Loan Interest, and Source of Funds

- The investment cost is shown in the table below.
- Loan conditions: 11% interest rate, 20 year period of repayment, including a five year grace period

Source of funds: Self-financing was assumed, since the land owned by the existing factory will be sold.

Amount of land and its value: 30 rai, Million Bahts 4.0/rai = Million Baht 120

Self-financing is 40% of the investment cost and corresponds to about 50% of the existing land value.

A loan is 60% of the investment cost.

(Unit: Million Bahts)

Item	Investment Cost	Source of Funds	
		Self-financing (40%)	Loan (60%)
Building	93.1	----	----
Utility	35.7	----	----
Infrastructure	14.0	----	----
Relocation			
Production Line	2.3	----	----
Cold Storage	8.4	----	----
Furniture	3.9	----	----
Total	157.4	65.4	92.0

**Appendix 6.2**

**Operational cost saved by reefers carrying skipjack and tuna from the Indian Ocean if the unloading port moves to Phuket from Bangkok.**

## I. Conditions

### (1) Reefer

Capacity: 2,946 G.T.

Main Engine: 4,200 PS

No. of Crew Members: 22 persons

Crew Salary/Wages: US\$31,183/month = US\$1,039.4/day = Bahts 26,298/day

Miscellaneous: US\$84,400/year = US\$234.4/day = Bahts 5,931/day

Fuel Consumption: 12,000 L/day

Fuel Cost: Baht 8.75/L at Phuket and Baht 5.00/L at Singapore

Cargo Load: 2,800 tons

Shipbuilding Cost: US\$16.546 million = Million Bahts 6.977/year

Depreciation Period: 20 years

### (2) Navigation Days

Seychelles---->BKK: 16 days/one way

Seychelles---->Phuket: 12 days/one way

Phuket---->Singapore: 1.5 days/one way

Singapore---->BKK: 2.5 days/one way

Navigation day/trip to BKK including days required for loading and unloading:

$$16 \times 2 + 8 \times 2 = 48 \text{ days}$$

### (3) Exchange Rate

US\$1.00 = Baht 25.3

## 2. Case 1

A reefer unloads and fuels his boat at Phuket.

### (1) Fuel cost saved by eliminating the trip from Phuket to BKK.

12,000 L/day x 4 days x 2 = 96,000 liters

Current practice of refueling at Singapore

Cost saved: Baht 5.0/L x 96,000 L = Baht 480,000 = US\$18,972.3

### (2) Cost of salary/wages saved

Salary/wages: US\$1,039.4/day x 4 days x 2 = US\$8,315.4

Miscellaneous: US\$234.4/day x 4 days x 2 = US\$1,875.5

Subtotal: US\$10,190.9

(3) Increased costs due to fueling at Phuket

Assuming that fuel for a one way trip is supplied at Phuket:

Fuel Consumption: 12,000 L/day x 12 days = 144,000 L

Increased Cost: (Baht 8.75 - Baht 5.0) /L x 144,000 L = Baht 540,000 = US\$21,343.8

(4) Depreciation costs

US\$16.546 million ÷ 20 years ÷ 365 days = US\$2,266.5/day

Cost Saved: US\$2,266.5/day x 4 days x 2 = US\$18,132.0

(5) Repair and maintenance costs

US\$275,800/year ÷ 365 days = US\$755.6/day

Cost Saved: US\$755.6/day x 4 days x 2 = US\$6,044.9

(6) Total costs saved

Fuel cost saved: -US\$18,972.3

Salary/wages & miscellaneous: -US\$10,190.9

Increased fuel cost: + US\$21,343.8

Repair and maintenance: -US\$6,044.9

Subtotal: - US\$13,864.3

Overhead (General Expenses) 15%: - US\$2,079.7

Depreciation: - US\$18,132.0

Total: - US\$34,076.0

Cost saved per ton of skipjack/tuna: - US\$34,0760 ÷ 2800 tons = - US\$12.2/ton

(7) Increased frequency of operations

Assuming that one month is required for docking and 48 days for a round trip, the frequency of operations will be seven times per year. However, the actual frequency of operations at present is five times per year due to dead time or waiting time. In this case, the average number of days for one trip will be 66 days/trip.

If a reefer unloads at Phuket, eight days will be saved off a round trip. Therefore, an average of 58 days will be required for a round trip.



Frequency of operations:  $330 \text{ days} \div 58 \text{ days} = 5.7 \text{ operations/year}$

An increased number of trips:  $5.7 - 5.0 = 0.7 \text{ times}$

### 3. Case 2

A reefer unloads his catch at Phuket and fuels his boat in Singapore.

(1) Fuel costs saved from eliminating the trip to BKK from Singapore.

$1,200 \text{ L/day} \times 2.5 \text{ days} \times 2 = 60,000 \text{ L}$

Costs saved:  $\text{Baht } 5/\text{L} \times 60,000 \text{ L} = \text{Baht } 300,000 = \text{US\$}11,857.7$

(2) Salary/wage cost saved

Salary/wages:  $\text{US\$}1,039.4/\text{day} \times 2.5 \text{ days} \times 2 = \text{US\$}5,197.2$

Miscellaneous:  $\text{US\$}234.4/\text{day} \times 2.5 \text{ days} \times 2 = \text{US\$}1,172.0$

Subtotal:  $\text{US\$}6,369.2$

(3) Depreciation costs

Saved costs:  $\text{US\$}2,266.5/\text{day} \times 2.5 \text{ days} \times 2 = \text{US\$}11,332.5$

(4) Repair and maintenance costs

Costs Saved:  $\text{US\$}755.6/\text{day} \times 2.5 \text{ days} \times 2 = \text{US\$}3,778.0$

(5) Total costs saved

Fuel costs saved:  $-\text{US\$}11,857.7$

Salary/wages and miscellaneous:  $-\text{US\$}6,369.2$

Repair and maintenance costs:  $-\text{US\$}3,778.0$

Subtotal:  $-\text{US\$}22,004.9$

Overhead (general expenses) 15%:  $-\text{US\$}3,300.7$

Depreciation costs:  $-\text{US\$}11,332.5$

Total:  $-\text{US\$}36,638.1$

Cost saved per ton of skipjack/tuna =  $-\text{US\$}38,338 \div 2800 \text{ tons} = -\text{US\$}13.1/\text{ton}$

(6) Increased frequency of operations

One round trip requires 61 days.

Frequency of operations:  $330 \text{ days} \div 61 \text{ days} = 5.4 \text{ times/year}$

Increased number of trips:  $5.4 - 5.0 = 0.4 \text{ times/year}$

Reference

(1) Operation costs per day

Fuel: Baht 5/L x 12,000 L/day = Baht 60,000 = US\$2,372/day

Salary/wages: US\$1,039.4/day

Repair and maintenance: US\$755.6/day

Subtotal: US\$4167.0/day

Overhead (general expenses) 15%: US\$625.1

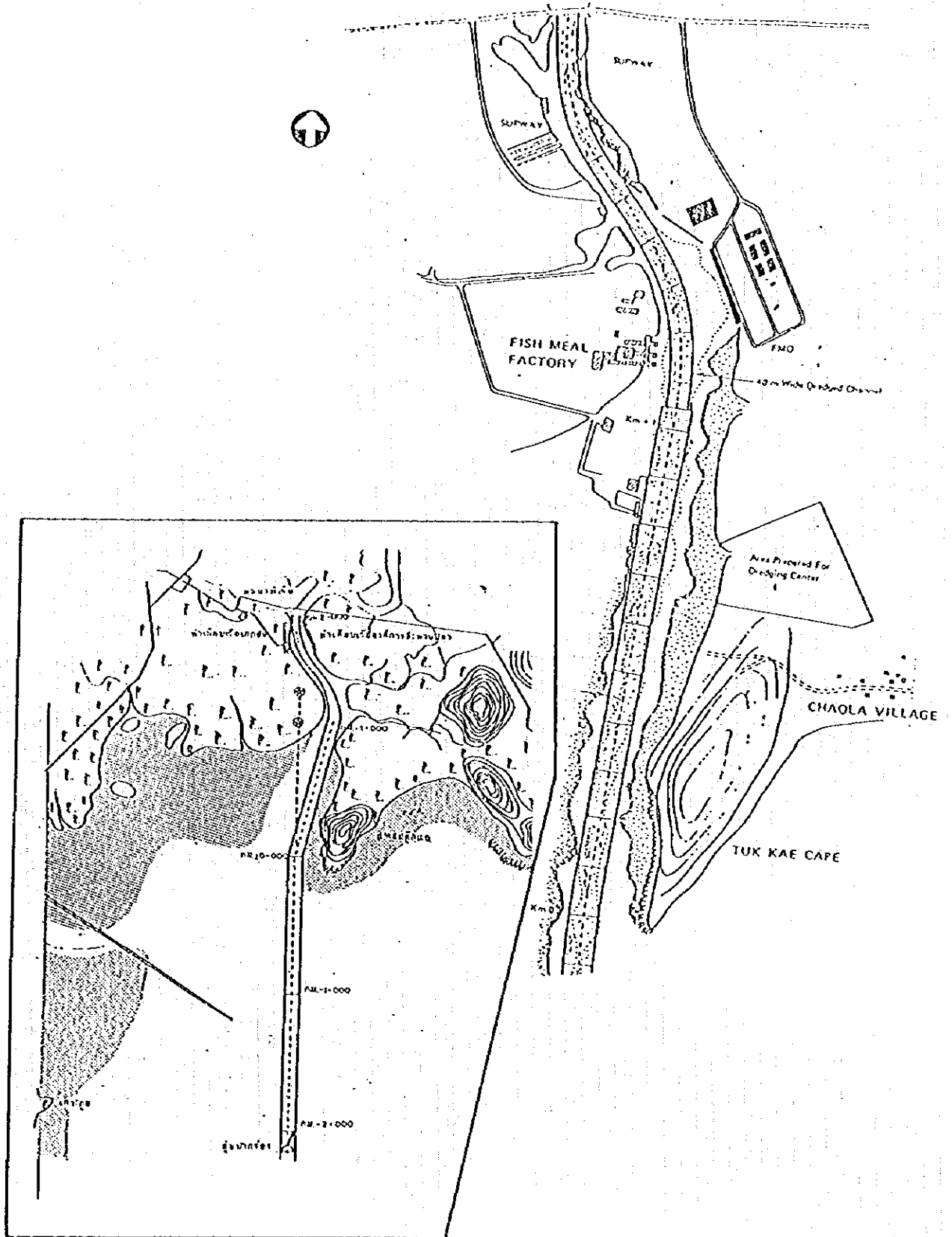
Depreciation: US\$2,266.5/day

Total: US\$7,058.6/day

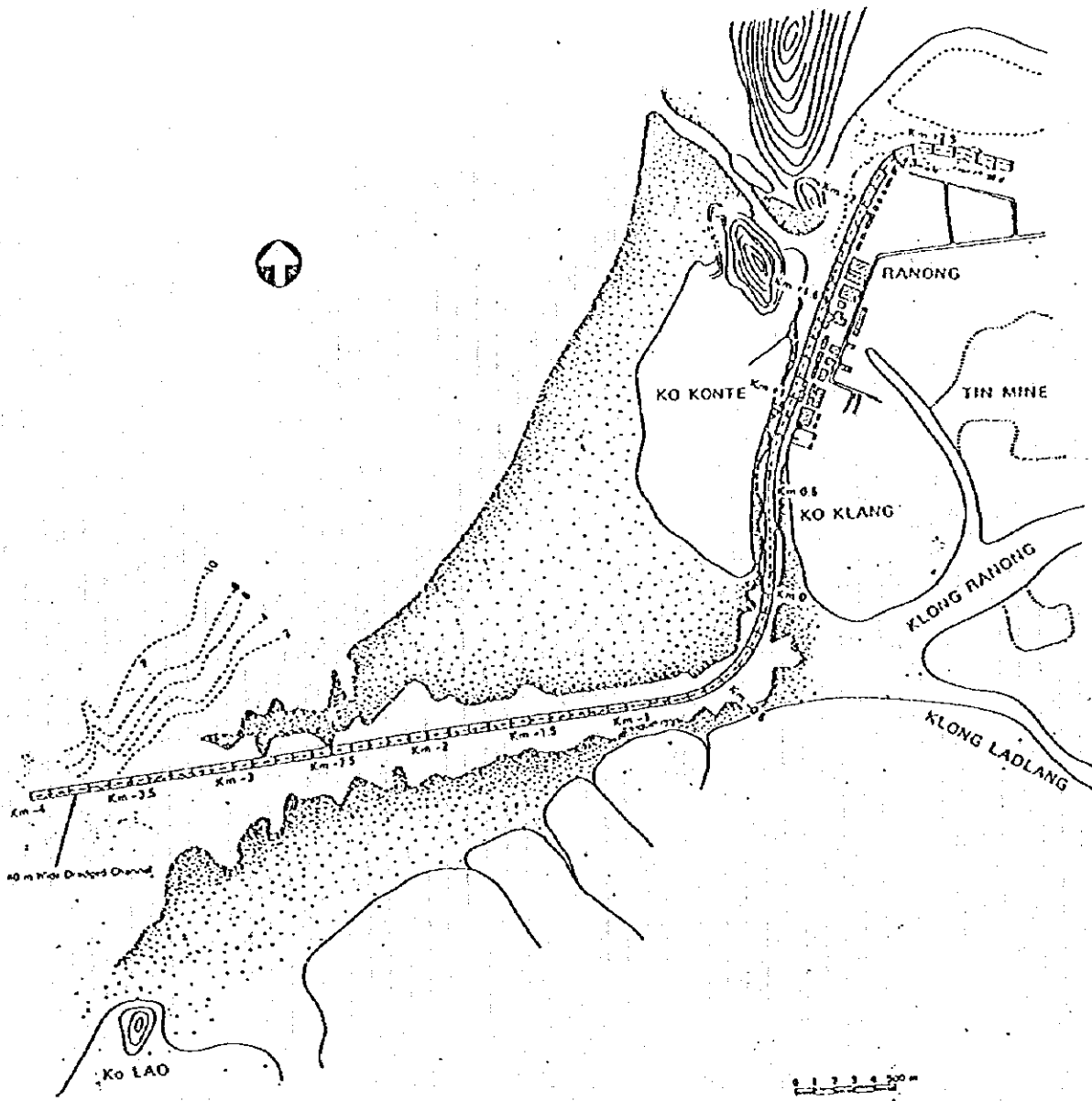
(2) Cost of anchoring at the port: US\$4330.8/day

付属資料 7.3 アンダマン海沿岸漁港の航路





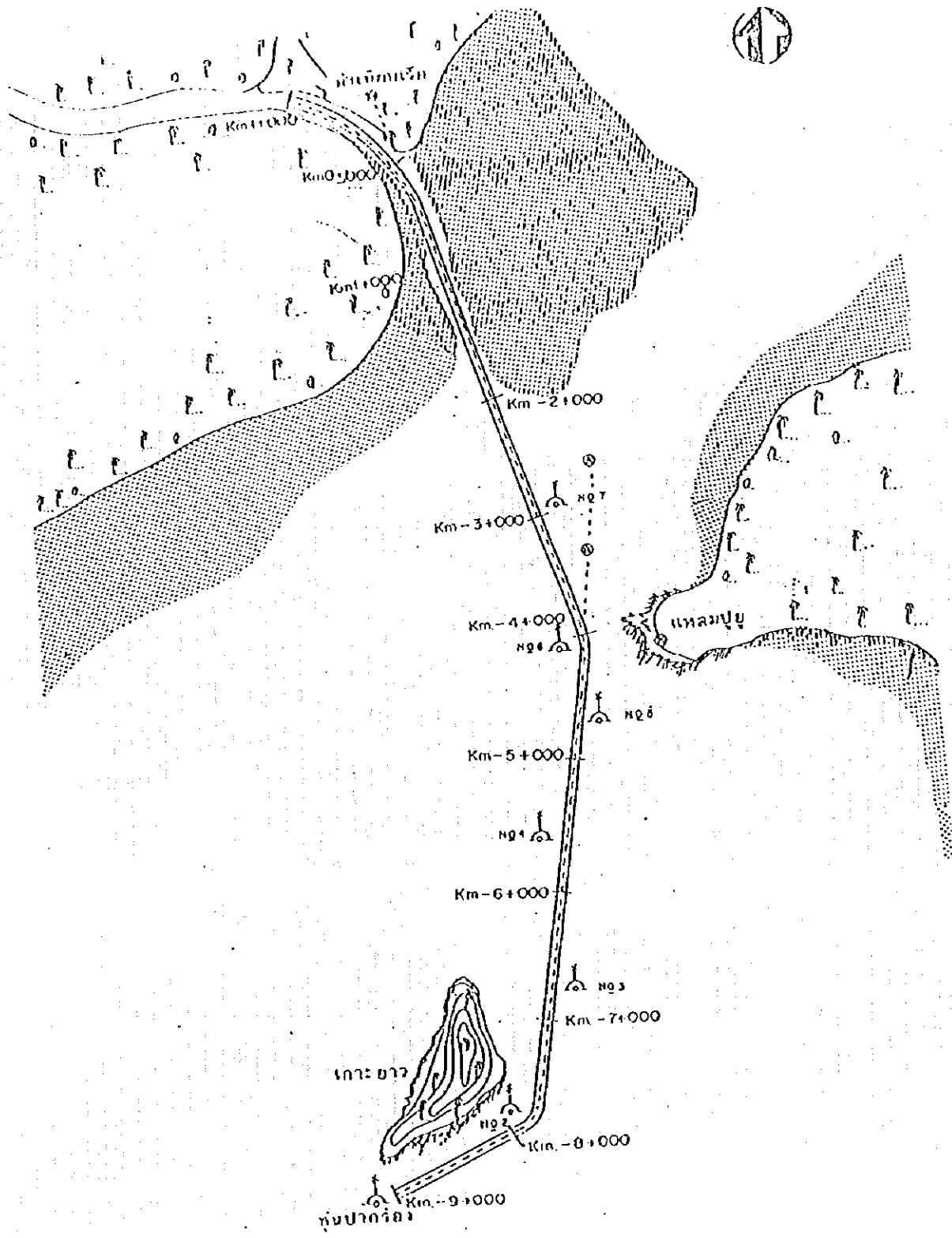
General Plan of Channel at Phuket



General Plan of Channel at Ranong







General Plan of Channel at Salun

付属資料 9.5.1 建設工事費 (経済価格)



付屬資料 9.5.1(1) 建設工費 (油港基本施設) (經濟價格)

(Unit: '000 Baht)

Item	Cost of Investment in Market Prices	Foreign Portion (CIF)	Local Portion				Investment Costs in Economic Prices	Local Conversion Factor	
			Total	Material (SCF)	Labour				Equipment (SCF)
					Skilled (SCF)	Unskilled (CFL)			
Landing Wharf for Existing Boats and Long Liners	83,750	40,200	38,510	18,014	4,004	4,883	11,610	78,710	0.88
Law-by Wharf	90,250	42,417	40,945	7,266	11,353	7,477	14,850	83,362	0.86
Deep-sea Wharf	111,563	78,094	28,080	3,513	13,928	6,122	4,517	106,174	0.84
Access Trestle	113,750	45,500	61,167	28,023	15,894	6,376	10,875	106,667	0.90
Dredging	450,000	360,000	81,844	10,755	10,755	6,559	53,775	441,844	0.91
In-port Road	27,000	0	25,066	16,252	2,486	1,166	5,162	25,066	0.93
Bridge to City Road	3,375	0	3,191	2,151	179	55	807	3,191	0.95
Aids to Navigation	20,740	18,715	1,906	0	0	46	1,860	20,621	0.94
Temporary Jetty	4,800	0	4,547	3,442	122	65	918	4,547	0.95
Mobilization/demobilization	31,250	29,688	1,450	0	337	68	1,045	31,138	0.93
Total	956,478	614,614	286,706	89,416	59,056	32,816	105,418	901,320	
Detailed Design and Engineering	93,648	60,871	31,090	1,567	25,068	382	4,074	91,961	0.95
Investigation									
Contingency	83,916	48,932	31,114	9,594	6,539	3,643	11,338	80,046	0.89
Total	177,564	109,803	62,205	11,161	31,607	4,024	15,412	172,008	0.92
Grand Total	1,114,042	724,417	348,911	100,577	90,663	36,841	120,830	1,073,328	0.90

付屬資料 9.5.1(2) 建設工事費 (油蔴地基本施設) (經濟價格)

Item	Cost of Investment in Market Prices	Foreign Portion		Local Portion		2000			2001			2002			2003						
		(F/P)	(L/P)	(F/P)	(L/P)	Total	(F/P)	(L/P)	Total	(F/P)	(L/P)	Total	(F/P)	(L/P)	Total	(F/P)	(L/P)				
																		Total	(F/P)	(L/P)	Total
Landing Wharf for Existing Boats and Long Liners	78,710	40,200	38,510			78,710	40,200	38,510													
Lay-by Wharf	83,362	42,417	40,945			25,008	12,725	12,283	58,353	29,692	28,661										
Deep-sea Wharf	106,174	78,094	28,080																		
Access Trestle	106,667	45,500	61,167																		
Dredging	441,844	360,000	81,844						441,844	360,000	81,844										
Import Road	25,066	0	25,066																		
Bridge to City Road	3,191	0	3,191						1,277	0	1,277										
Aids to Navigation	20,621	18,715	1,906						20,621	18,715	1,906										
Temporary Jetty	4,547	0	4,547						4,547	0	4,547										
Mobilization/demobilization	31,138	29,688	1,450					725													
Total	901,320	614,614	286,706			119,287	67,769	51,518	526,642	408,407	118,235				58,853	23,443	35,410	15,569	14,844	725	
Detailed Design and Engineering Investigation																					
Contingency																					
Total	172,008	109,803	62,205			23,448	12,107	11,341	98,408	72,963	25,445				11,739	4,188	7,551	38,412	20,544	17,868	
Grand Total	1,073,328	724,417	348,911			142,735	79,876	62,859	625,050	481,370	143,680				70,592	27,631	42,961	234,950	135,539	99,411	

(Unit: 000 Baht)

竹篙洲料 9.5.1(3) 建造工程表 (按港幣估值) (單位:1000港幣)

Facilities	Lot	Cost of Investment in Market	Foreign Portion		Local Portion		Equip (SCF)	Investment Costs in Economic Prices	Local Conversion Factor	2001		2002	
			CUD	Total	Material (SCF)	Labor (SCF)				Unskilled (CPL)	Total (C/F)	Total (P/P)	Total (P/P)
F-1 Marketing Hall-Entrance works	Lot 1	37,985	0	33,765	25,037	1,633	3,112	33,765	0.89	33,765	0	33,765	0
F-2 DOF Office	Lot 1	23,941	16,560	6,375	4,415	436	460	22,935	0.86	22,935	16,560	6,375	0
F-3 FMO Office	Lot 1	11,638	2,530	8,033	5,930	421	1,053	10,563	0.88	10,563	2,530	8,033	0
F-4 Ice Plant/Ice Storage	Lot 1	122,004	75,739	36,313	16,827	5,073	12,574	112,052	0.78	112,052	75,739	36,313	0
F-5 Ice Crusher Tower	Lot 1	1,002	889	889	657	44	107	889	0.89	889	0	889	0
F-6 Cold Storage	Lot 1	45,014	19,550	21,249	12,885	1,984	4,837	40,799	0.83	40,799	19,550	21,249	0
F-7 Workshop	Lot 1	10,837	8,947	1,581	981	144	353	10,328	0.84	10,328	8,947	1,581	0
F-9 Electric Power Station on Si Roe Island site	Lot 1	2,218	0	1,973	1,499	95	190	1,973	0.89	1,973	0	1,973	0
F-10 City Water Reservoir/Elevated Water Tank for FMO	Lot 1	8,963	0	7,916	6,073	337	870	7,916	0.89	7,916	0	7,916	0
F-11 Waste Water Treatment on Si Roe Island site (for FMO)	Lot 1	11,995	0	10,781	9,186	440	1,073	10,781	0.90	10,781	0	10,781	0
F-12 Fishnet Gear Storage	Lot 1	2,703	0	2,405	1,764	116	283	2,405	0.89	2,405	0	2,405	0
F-13 Fishing Gear Repairment Area	Lot 1	4,600	0	4,091	2,982	196	479	4,091	0.89	4,091	0	4,091	0
F-14 Fish Box Storing Area	Lot 1	12,076	0	10,838	8,311	433	1,103	10,838	0.90	10,838	0	10,838	0
F-15 Canteen/Restaurant/Shop	Lot 4	4,866	0	4,335	3,364	203	496	4,335	0.89	4,335	0	4,335	0
F-16 Public W.C.	Lot 1	271	0	241	177	11	29	241	0.89	241	0	241	0
F-17 Rubbish Disposal	Lot 1	136	0	122	99	5	12	122	0.90	122	0	122	0
F-18 Guard box	Lot 2	206	0	185	142	8	19	185	0.90	185	0	185	0
F-19 Jetty Walkway Box	Lot 3	328	0	296	241	11	28	296	0.90	296	0	296	0
F-20 Auction Watchman Box	Lot 1	5,043	0	4,499	3,403	206	503	4,499	0.89	4,499	0	4,499	0
F-21 Service Building for Wharf Workers	Lot 1	1,758	368	1,216	883	72	176	1,584	0.87	1,584	368	1,216	0
F-22 Sewerage Pump House/Reservoir Tank	Lot 1	1,083	0	965	731	45	110	965	0.89	965	0	965	0
F-24 Truck Scale	Lot 1	308,569	123,694	158,069	103,733	11,961	29,183	158,069	0.86	158,069	123,694	103,733	0
Sub-Total		13,416		12,907	16,390			12,907		12,907		12,907	
Detailed design and Engineering Overhead and Profit		18,782		16,390	16,390			16,390	0.86	16,390		16,390	
Sub-Total		32,198		29,297	32,780			29,297	0.86	29,297		29,297	
Total		340,767	156,601	238,660	174,660			174,660	0.86	174,660	156,601	128,367	0



付属資料 9.5.1(5) 建設工事費 (工業団地施設) (経済価格)

(Unit: 1000 Baht)

Facilities	Cost of Investment Prices	Foreign Portion	Local Portion				Investment Cost Economic Prices	Local Conversion Factor	2003		
			Total	Material (SCF)	Labor				Equip (SCF)	Total	(L.P.)
					Skilled (SCF)	Unskilled (CFL)					
P-10 City Water Reservoir/Elevated Water Tank	16,057	0	14,341	11,001	646	1,578	1,117	14,341	0	14,341	
F-11 Waste Water Treatment	70,380	0	62,852	49,016	2,839	6,926	4,071	62,852	0	62,852	
F-25 Industrial Estate Office	6,403	0	5,732	4,414	230	509	460	5,732	0	5,732	
Sub-Total	92,840	0	82,925	64,431	3,735	9,112	5,647	82,925	0	82,925	
Detailed design and Engineering	4,037										
Overhead and Profit	5,651										
Sub-Total	9,688	0	8,622					8,622	0	8,622	
Total	102,528	0	91,547					91,547	0	91,547	



付属資料 3.5.1(6) 建設工事費 (工業団地外排水施設) (基準価格)

Facilities	Unit Qty	Cost of Investment in Market	Foreign Portion (CF)	Local Portion				Investment Economic Prices	Local Conversion Factor	2001		
				Total	Material (SCF)	Labor				Equip (SCF)	Total	(JP)
						Skilled (SCF)	Unskilled (CFL)					
1. External Works			1,000									
1-1 Concrete Pavement	Lot 1	74,520	0	47,731	3,135	7,647	7,836	66,349	0.89	66,349		
1-2 Crushed Stone Pavement	Lot 1	738	0	467	31	75	76	648	0.89	648		
1-3 Land Adjustment	Lot 1	18,216	0	0	1,916	4,673	7,836	14,425	0.79	14,425		
1-4 Tree Planting	Lot 1	8,971	0	5,746	378	921	944	7,987	0.89	7,987		
1-5 Rain Water Drainage Ditch/Catch Basin	Lot 1	24,351	0	15,597	1,024	2,499	2,561	21,681	0.89	21,681		
1-6 Net Fence and Gate	Lot 1	2,783	0	1,783	117	286	293	2,478	0.89	2,478		
1-7 Street Lights	Lot 1	672	0	430	29	69	71	598	0.89	598		
2. Main Line of Electricity and telephone	Lot 1	43,125	0	26,798	2,061	5,028	4,123	38,010	0.88	38,010		
3. Main Line of City Water and Sea Water	Lot 1	1,164	0	807	39	95	111	1,052	0.90	1,052		
4. Main Line of Drainage	Lot 1	6,305	0	4,370	211	515	602	5,698	0.90	5,698		
Sub-Total		180,835	0	103,728	8,940	21,806	24,454	158,927	0.88	158,927		
Detailed design and Engineering Overhead and Profit		7,862										
		11,007										
Sub-Total		18,869	0	16,605				16,605	0.88	16,605		
Total		199,704	0	175,532				175,532	0.88	175,532		

(Unit:1000Baht)

付諸資料 9.5.1(7) 新設工場 (工業団地工場) (価格準備)

(Unit: 1000 Yen)

Processing Plants	Facilities	Cost of Investment Price	Foreign Fund (100)	Local Portion				Investment Cost at Economic Price	Local Conversion Factor	2004			2005			2006				
				Total	Material (SCP)	Labor (SCP)	Unskilled Labor (CPL)			Equip (SCP)	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
F-23	Yura Gamma Plant	493,335	31,071	406,031	394,151	22,085	53,799	36,226	438,602	0.88	146,201	10,557	135,644	146,201	10,557	135,644	146,201	10,557	135,644	
F-23(1)	Plant building	64,020	0	57,089	43,059	7,654	6,474	4,879	57,067	0.89	19,022	0	19,022	19,022	0	19,022	19,022	0	19,022	
F-23(2)	Administration building	84,945	0	75,222	54,133	7,440	8,885	6,865	75,523	0.89	25,174	0	25,174	25,174	0	25,174	25,174	0	25,174	
F-23(3)	Service building	158,451	0	132,622	74,149	14,131	34,469	27,051	132,722	0.86	106,997	0	106,997	106,997	0	106,997	106,997	0	106,997	
F-23(4)	Domestic	100,000	31,071	68,929	65,718	5,405	10,603	10,913	68,913	0.86	59,304	10,557	69,861	59,304	10,557	69,861	59,304	10,557	69,861	
	Sub-Total	433,315		392,455	623,162	57,483	103,666	130,921	392,455	1.00	311,081	11,114	300,000	311,081	11,114	300,000	311,081	11,114	300,000	
	Detail design and Engineering	60,922							60,922	0.89	31,104	1,102	29,993	31,104	1,102	29,993	31,104	1,102	29,993	
	Overhead and Profit	174,071		95,726					95,726	0.89	58,406	1,659	56,747	58,406	1,659	56,747	58,406	1,659	56,747	
	Total	1,105,308	31,071	1,074,237	1,646,880	62,888	114,275	141,837	1,074,237	0.89	828,496	11,659	816,837	828,496	11,659	816,837	828,496	11,659	816,837	

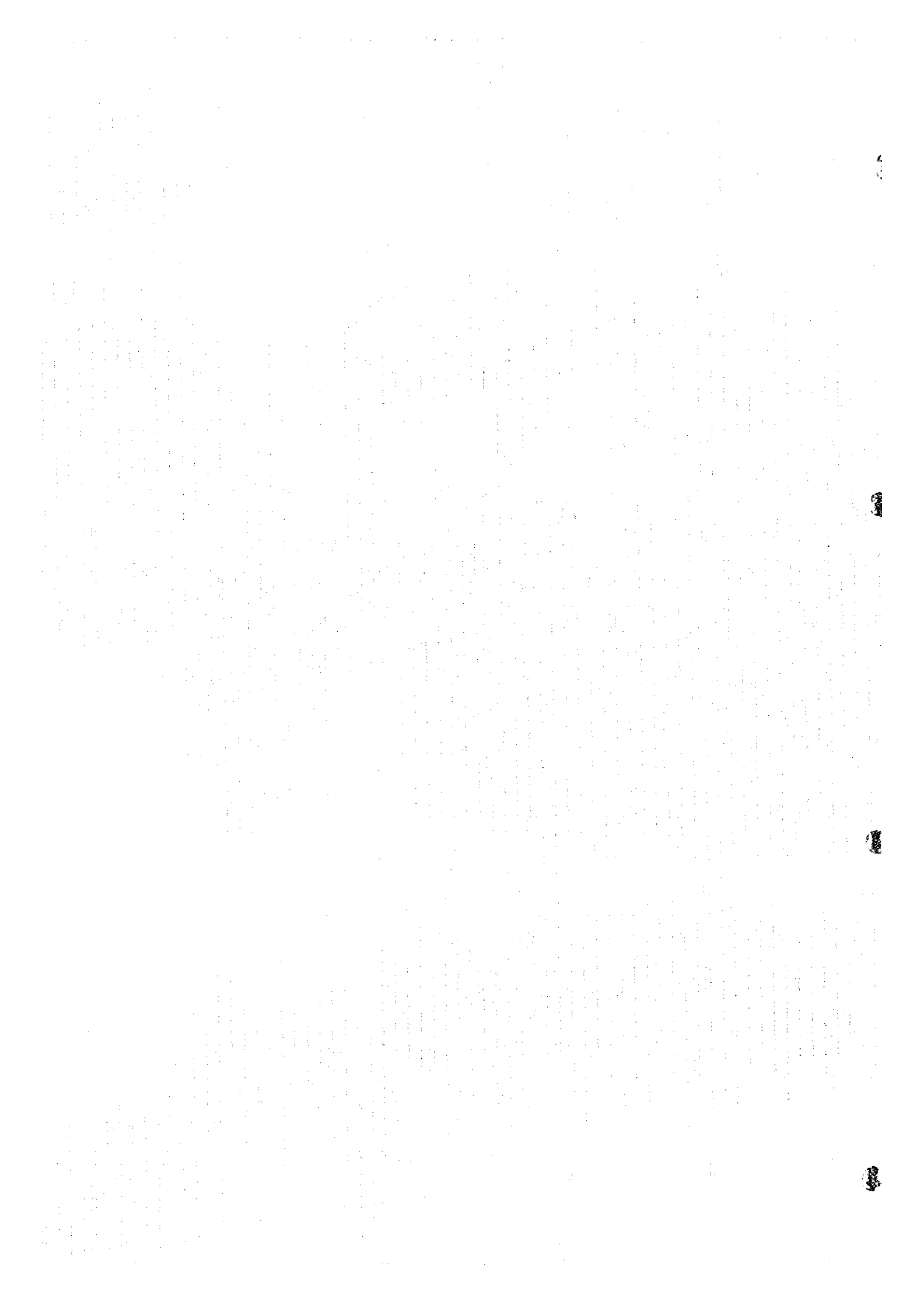
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