

APPENDIX -5

PERHITUNGAN BIAYA DAN MANFAAT

- 5-1 KAPAL MODEL TANGKAP IKAN**
- 5-2 KOMPLEX PERIKANAN**
- 5-3 TRUK TRANSPORT IKAN**
- 5-4 KAPAL MULTIPURPOSE**

APPENDIX 5-1. COST & BENEFITS CALCULATION ON MODEL FISHING BOATS

Table 5-1-1 BIMA

3 days per trip
8 trips/month
10 persons including Captain & Chief engineer

			Per one trip	In one month	In one year
Direct expenses for fishing operation					
Fuel oil	450 liter	1,500 Rp/liter	675,000 Rp	5,400,000	
Lubricant oil	30 (liter/month)	12,000 Rp/liter	45,000	360,000	
Ice	1,500 kg	300 Rp/kg	450,000	3,600,000	
Kerosin oil for lamps	0 liter	Rp/liter	0	0	
Water	300 liter	15 Rp/liter	4,500	36,000	
Cigarette	3,000 Rp/p/day	3 days	90,000	720,000	
Foods	3,500 Rp/p/day	3 days	105,000	840,000	
sub-total			1,369,500 Rp	10,956,000	120,516,000
Salary for Capt. & C/Eng'er	1,000,000 Rp/month		125,000	1,000,000	12,000,000
Salary for Chief engineer	800,000 Rp/month		100,000	800,000	9,600,000
Total operation cost (A)			1,594,500 Rp	12,756,000	142,116,000
Quantity of Catch				Catch/month(kg)	Catch/year(kg)
1,200 kg/Trip				9,600	105,600
Sales of catch					
Layang	200 kg	1,000 Rp/kg	200,000 Rp		
Tongkol	900 kg	2,000 Rp/kg	1,800,000 Rp		
Cakalang	100 kg	3,000 Rp/kg	300,000 Rp		
Sales amount (B)			2,300,000 Rp	18,400,000	202,400,000
Gross profit (B) - (A)			705,500 Rp	5,644,000	60,284,000
Share of Gross profit					
Share for Owner			352,750	2,822,000	30,142,000
Share for crew in total =			352,750	2,822,000	30,142,000
Average per person			35,275	282,200	3,014,200
(Fishermen group and Capt. & C/Eng'er)					
Expenses for Repair					
Boat	1 %		68,182		6,000,000
Diesef engine	3 %		119,318		10,500,000
Equipment	1 %		17,045		1,500,000
Fishing gears	10 %		90,909		8,000,000
Expenses for Repair in total			295,455 Rp	2,363,636	26,000,000
Balance			57,295 Rp	458,364	4,142,000
Depreciation (Initial cost)					
Boat	600,000,000	20 years	340,909	2,727,273	30,000,000
Diesef engine	350,000,000	10 years	397,727	3,181,818	35,000,000
Equipment	150,000,000	5 years	340,909	2,727,273	30,000,000
Fishing gears	80,000,000	3 years	303,030	2,424,242	26,666,667
1,180,000,000			1,382,576 Rp	11,060,606	121,666,667

Table 5-1-2 DOMPU

3 days per trip
8 trips/month
10 persons including Captain & Chief engineer

			Per one trip	In one month	In one year
Direct expenses for fishing operation					
• Fuel oil	450 liter	1,500 Rp/liter	675,000 Rp	5,400,000	
• Lubricant oil	30 (liter/month)	12,000 Rp/liter	45,000	360,000	
• Ice	1,500 kg	300 Rp/kg	450,000	3,600,000	
• Kerosin oil for lamps	20 liter	1,000 Rp/liter	20,000	160,000	
• Water	300 liter	15 Rp/liter	4,500	36,000	
• Cigarette	3,000 Rp/p/day	3 days	90,000	720,000	
• Foods	3,500 Rp/p/day	3 days	105,000	840,000	
• • sub-total			1,389,500 Rp	11,116,000	122,276,000
Salary for Capt.& C/Eng'er	1,000,000 Rp/month		125,000	1,000,000	12,000,000
Salary for Chief engineer	800,000 Rp/month		100,000	800,000	9,600,000
Total operation cost (A)			1,614,500 Rp	12,916,000	143,876,000

Quantity of Catch			1,200 kg/Trip		Catch/month(kg)	Catch/year(kg)
Sales of catch					9,600	105,600
• Layang	300 kg	1,000 Rp/kg	300,000 Rp			
• Tongkol	700 kg	2,000 Rp/kg	1,400,000 Rp			
• Cakalang	200 kg	3,000 Rp/kg	600,000 Rp			
• Bales amount (B)			2,300,000 Rp		18,400,000	202,400,000

Gross profit (B) - (A)			685,500 Rp	5,484,000	58,524,000
Share of Gross profit					
• Share for Owner	50 %		342,750	2,742,000	29,262,000
• Share for crew in total*	50 %		342,750	2,742,000	29,262,000
• Average per person	10 person		34,275	274,200	2,926,200
• *Capt. & C/Eng'er and Crew* •					
Expenses for Repair					
• Boat	1 %		68,182		6,000,000
• Diesel engine	3 %		119,318		10,500,000
• • quipment	1 %		17,045		1,500,000
• Fishing gears	10 %		90,909		8,000,000
Expenses for Repair in total			295,455 Rp	2,363,636	26,000,000
Balance			47,295 Rp	378,364	3,262,000

Depreciation	(Initial cost)				
• Boat	600,000,000	20 years	340,909	2,727,273	30,000,000
• Diesel engine	350,000,000	10 years	397,727	3,181,818	35,000,000
• Equipment	150,000,000	5 years	340,909	2,727,273	30,000,000
• Fishing gears	80,000,000	3 years	303,030	2,424,242	26,666,667
	1,180,000,000		1,382,576 Rp	11,060,606	121,666,667

Table 5-1-3 FLORES TIMUR & LEMBATA

3 days per trip
8 trips/month
10 persons including Captain & Chief engineer

			Per one trip	In one month	In one year
Direct expenses for fishing operation					
• Fuel oil	450 liter	1,500 Rp/liter	675,000 Rp	5,400,000	
• Lubricant oil	30 (liter/month)	12,000 Rp/liter	45,000	360,000	
• Ice	1,500 kg	300 Rp/kg	450,000	3,600,000	
• Kerosin oil for lamps	20 liter	1,000 Rp/liter	20,000	160,000	
• Water	300 liter	15 Rp/liter	4,500	36,000	
• Cigarette	3,000 Rp/p/day	3 days	90,000	720,000	
• Foods	3,500 Rp/p/day	3 days	105,000	840,000	
• sub-total			1,389,500 Rp	11,116,000	122,276,000
Salary for Capt. & C/Eng'cr	1,000,000 Rp/month		125,000	1,000,000	12,000,000
Salary for Chief engineer	800,000 Rp/month		100,000	800,000	9,600,000
Total operation cost (A)			1,614,500 Rp	12,916,000	143,876,000
Quantity of Catch 1,200 kg/Trip					
Sales of catch				Catch/month(kg)	Catch/year(kg)
Layang	500 kg	1,670 Rp/kg	835,000 Rp	9,600	105,600
Tongkol	600 kg	2,000 Rp/kg	1,200,000 Rp		
Cakalang	100 kg	2,000 Rp/kg	200,000 Rp		
• Sales amount (B)			2,235,000 Rp	17,880,000	196,680,000
Gross profit (B) - (A)			620,500 Rp	4,964,000	52,804,000
Share of Gross profit					
Share for Owner	50 %		310,250	2,482,000	26,402,000
Share for crew in total	50 %		310,250	2,482,000	26,402,000
Average per person	10 person	* Capt. & C/Eng'cr and Crew *	31,025	248,200	2,640,200
Expenses for Repair					
• Boat	1 %		68,182		6,000,000
• Diesel engine	3 %		119,318		10,500,000
• Equipment	1 %		17,045		1,500,000
• Fishing gears	10 %		90,909		8,000,000
Expenses for Repair in total			295,455 Rp	2,363,636	26,000,000
Balance			14,795 Rp	118,364	402,000
Depreciation (Initial cost)					
• Boat	600,000,000	20 years	340,909	2,727,273	30,000,000
• Diesel engine	350,000,000	10 years	397,727	3,181,818	35,000,000
• Equipment	150,000,000	5 years	340,909	2,727,273	30,000,000
• Fishing gears	80,000,000	3 years	303,030	2,424,242	26,666,667
	1,180,000,000		1,382,576 Rp	11,060,606	121,666,667

Table 5-1-4 SIKKA AND ENDE

3 days per trip
8 trips/month
10 persons including Captain & Chief engineer

			Per one trip	In one month	In one year
Direct expenses for fishing operation					
• Fuel oil	450 liter	1,500 Rp/liter	675,000 Rp	5,400,000	
• Lubricant oil	30 (liter/month)	12,000 Rp/liter	45,000	360,000	
• Ice	1,500 kg	300 Rp/kg	450,000	3,600,000	
• Kerosin oil for lamps	20 liter	1,000 Rp/liter	20,000	160,000	
• Water	300 liter	15 Rp/liter	4,500	36,000	
• Cigarette	3,000 Rp/p/day	3 days	90,000	720,000	
• Foods	3,500 Rp/p/day	3 days	105,000	840,000	
• • sub-total			1,389,500 Rp	11,116,000	122,276,000
Salary for Capt. & C/Eng'er	1,000,000 Rp/month		125,000	1,000,000	12,000,000
Salary for Chief engineer	800,000 Rp/month		100,000	800,000	9,600,000
Total operation cost (A)			1,614,500 Rp	12,916,000	143,876,000

Quantity of Catch				Catch/month(kg)	Catch/year(kg)
	1,200 kg/Trip			9,600	105,600
Sales of catch					
Layang	400 kg	2,000 Rp/kg	800,000 Rp		
Tongkol	700 kg	2,000 Rp/kg	1,400,000 Rp		
Cakarang	100 kg	2,500 Rp/kg	250,000 Rp		
• Sales amount (B)			2,450,000 Rp	19,600,000	215,600,000

Gross profit (B) - (A)			835,500 Rp	6,684,000	71,724,000
Share of Gross profit					
Share for Owner	50 %		417,750	3,342,000	35,862,000
Share for crew in total* •	50 %		417,750	3,342,000	35,862,000
Average per person	10 person		41,775	334,200	3,586,200
* Fishermen group and Capt. & C/Eng'er* •					
Expenses for Repair					
• Boat	1 %		68,182		6,000,000
• Diesel engine	3 %		119,318		10,500,000
• • quipment	1 %		17,045		1,500,000
• Fishing gears	10 %		90,909		8,000,000
Expenses for Repair in total			295,455 Rp	2,363,636	26,000,000
Balance			122,295 Rp	978,364	9,862,000

Depreciation		(Initial cost)			
• Boat	600,000,000	20 years	340,909	2,727,273	30,000,000
• Diesel engine	350,000,000	10 years	397,727	3,181,818	35,000,000
• Equipment	150,000,000	5 years	340,909	2,727,273	30,000,000
• Fishing gears	80,000,000	3 years	303,030	2,424,242	26,666,667
	1,180,000,000		1,382,576 Rp	11,060,606	121,666,667

ANNEX 5-2. COST & BENEFIT CALCULATION ON FISHERY COMPLEX

Table 5-2-1. WAWORADA FISHERY COMPLEX

Annual Fish Landing Volume		4847 ton/yr.		No. of boats entry		17663 boats/yr.	
For sales in fresh fish	2573 ton/yr.			Purse seine	8319 boats/yr.		
For processed fish (local)	1981 ton/yr.			Gill-net/hand-line	3044 boats/yr.		
For processed fish (outside)	293 ton/yr.			Collecting boats	6300 boats/yr.		

REVENUE		Capacity (ton/day)	Sales ratio	Operating days (days/yr)	Sales volume (ton/yr)	Unit Price (Rp/kg)	First 2 years	Annual Revenue (million Rp.)	3 - 5 years	6 - 15 years	Yearly average	
Sales of ice	Sale by 5kg bag	6	0.9	270	467	340	158.63	158.63	158.63	158.63	158.63	
	Sale by 25kg block				991	320	317.26		317.26	317.26	317.26	
Service charge	Boat mooring	Kpl. motor			No. of boats	(Rp/lims)	17663	1000	9.71	14.13	17.66	15.90
		exist box (kg)	cool box (kg)	Ratio of user	No. of boxes	(Rp./box/day)	27445	500	7.55	10.98	13.32	12.35
	Handling area (For fresh fish)	15	30	32%	11321	1000	6.23	9.06	11.32	10.19		
		45	80	46%	14794	1500	12.21	17.75	22.19	19.97		
		Vol.(kg/psn)			No. of psn.	(Rp./psn/day)	45480	500	12.51	18.19	22.74	20.47
		Quantity			No. of days	(Rp./unit/day)						
Rental fee	Cool box	300L	19		300	1000	3.14	4.56	5.70	5.13		
	Kiln for boiling/roasting		10		300	500	0.83	1.20	1.50	1.35		
	Smoking kiln		2		300	500	0.17	0.24	0.30	0.27		
Total Revenue								528.22	552.00	571.03	561.51	

EXPENSES		Capacity (kw)	Power ratio	Operating hrs (hrs/day)	Operating days (days/yr)	Unit Cost (Rp/kwh)	First 2 years	Annual Cost (million Rp.)	3 - 5 years	6 - 15 years	Yearly average
Electricity	Ice plant	54	0.8	24	270	500	139.97	139.97	139.97	139.97	139.97
	Ice storage	6	0.5	24	270	500	9.72	9.72	9.72	9.72	
	Pump	3	0.8	6	300	500	2.16	2.16	2.16	2.16	
	Lighting, etc.	3	0.3	8	300	500	1.08	1.08	1.08	1.08	
		(m ³ /day)				(Rp/m ³)					
Water	Ice plant	7.2			270	5000	9.72	9.72	9.72	9.72	
	General	13.2			300	5000	19.80	19.80	19.80	19.80	
		(No. of psn)			(month/yr)	(Rp/month)					
Manpower	Manager	1			12	1500000	18.00	18.00	18.00	18.00	
	Asst. Manager	1			12	750000	9.00	9.00	9.00	9.00	
	Mechanics	1			12	1200000	14.40	14.40	14.40	14.40	
	Asst. mechanics	1			12	600000	7.20	7.20	7.20	7.20	
	Market control	5			12	500000	30.00	30.00	30.00	30.00	
	Accountant	2			12	500000	12.00	12.00	12.00	12.00	
	Workers	7			12	400000	33.60	33.60	33.60	33.60	
Guardian	2			12	350000	8.40	8.40	8.40	8.40		
					(month/yr)	(Rp/month)					
Consumables	Office materials				12	300000	3.60	3.60	3.60	3.60	
	Plastic bag for ice	(kg/bag)			(No. of bag)	(Rp/bc)					
		5			94000	20	1.88	1.88	1.88	1.88	
Maintenance	Equipment	Ice plant					7.98	15.93	31.90	25.52	
		Ice storage					1.00	2.01	4.01	3.21	
		Processing eq.					0.18	0.18	0.18	0.18	
		Workshop eq.					0.17	0.17	0.17	0.17	
	Facilities	Civil					18.92	18.92	18.92	18.92	
	Building					60.41	60.41	60.41	60.41		
Depreciation	Ice plant						79.76	79.76	79.76	79.76	
	Ice storage						10.03	10.03	10.03	10.03	
	Cool Box						5.02	5.02	5.02	5.02	
	Fish containers						1.58	1.58	1.58	1.58	
	Scale						0.66	0.66	0.66	0.66	
	Processing eq.						5.42	5.42	5.42	5.42	
Workshop eq.						3.30	3.30	3.30	3.30		
Total Cost								514.94	523.92	541.88	534.70
Balance (Net Profit before Tax)								13.27	28.08	29.15	26.82

Table 5-2-2. KEMPO FISHERY COMPLEX

Annual Fish Landing Volume	3483 ton/yr.	No. of boats entry	24858 boats/yr.
For sales in fresh fish	1989 ton/yr.	Bagan	8017 boats/yr.
For processed fish (local)	1286 ton/yr.	Purse seine	2613 boats/yr.
For processed fish (outside)	208 ton/yr.	Gill-net/hand-line	3235 boats/yr.
		Collecting boats	10993 boats/yr.

REVENUE		Capacity (ton/day)	Sales ratio	Operating days (days/yr)	Sales volume (ton/yr)	Unit Price (Rp./kg)	Annual Revenue (million Rp.)			
							First 2 years	3 - 5 years	6 - 15 years	Yearly average
Sales of ice	Sale by 5kg bag	3.5	0.9	225	489	380	185.83	185.83	185.83	185.83
	Sale by 25kg block				220	360	79.10	79.10	79.10	79.10
Service charge	Boat mooring	Gill-net/Hand-line & Collect boat			14228	1000	7.83	11.38	14.23	12.81
	(For kpl. motor)	Bagan & Purse seine			10630	500	2.92	4.25	5.32	4.78
	Handling area	exist box (kg)	cool box (kg)	Ratio of user	No. of boxes	(Rp./box/day)				
	(For fresh fish)	15	30	68%	45747	500	12.58	18.30	22.87	20.59
		30	50	19%	7558	1000	4.16	6.05	7.56	6.80
		45	80	12%	2983	1500	2.46	3.58	4.47	4.03
	(For processing)		Vol. (kg/psn)		No. of psn.	(Rp./psn/day)				
			30		29880	500	8.22	11.95	14.94	13.45
Rental fee	Cool box	300L		Quantity	No. of days	(Rp./box/day)				
	Kiln for boiling/roasting		0		300	1000	0.00	0.00	0.00	0.00
	Smoking kiln		3		300	500	0.25	0.36	0.45	0.41
			0		300	500	0.00	0.00	0.00	0.00
Total Revenue							303.34	320.80	334.77	327.79

EXPENSES	Item	Capacity (kw)	Power ratio	Operating hrs (hrs/day)	Operating days (days/yr)	Unit Cost (Rp./kw)	Annual Cost (million Rp.)			
							First 2 years	3 - 5 years	6 - 15 years	Yearly average
Electricity	Ice plant	31.5	0.8	24	225	500	68.04	68.04	68.04	68.04
	Ice storage	2.5	0.5	24	225	500	3.38	3.38	3.38	3.38
	Pump	3	0.8	6	300	500	2.16	2.16	2.16	2.16
	Lighting, etc.	3	0.3	8	300	500	1.08	1.08	1.08	1.08
		(m3/day)				(Rp/m3)				
Water	Ice plant	4.2			225	5000	4.73	4.73	4.73	4.73
	General	11.9			300	5000	17.85	17.85	17.85	17.85
Manpower		(No. of psn)		(days/yr)	(month/yr)	(Rp/month)				
	Manager	1		30	0	50000	1.50	1.50	1.50	1.50
	Asst. Manager	1			12	500000	6.00	6.00	6.00	6.00
	Mechanics	1		30	0	50000	1.50	1.50	1.50	1.50
	Asst. mechanics	1			12	500000	6.00	6.00	6.00	6.00
	Market control	3			12	500000	18.00	18.00	18.00	18.00
	Accountant	1			12	400000	4.80	4.80	4.80	4.80
	Workers	4			12	300000	14.40	14.40	14.40	14.40
Guardman	2			12	200000	4.80	4.80	4.80	4.80	
Consumables	Office materials				(month/yr)	(Rp/month)				
	Plastic bag for ice	(kg/bag)			(No. of bag)	(Rp/bc)				
					12	175000	2.10	2.10	2.10	2.10
					98000	20	1.96	1.96	1.96	1.96
Maintenance	Equipment	Ice plant					5.82	11.63	23.26	18.61
		Ice storage					0.82	1.63	3.27	2.61
		Processing eq.					0.18	0.18	0.18	0.18
		Workshop eq.					0.17	0.17	0.17	0.17
	Facilities	Civil					12.49	12.49	12.49	12.49
		Building					48.65	48.65	48.65	48.65
Depreciation	Ice plant						58.15	58.15	58.15	58.15
	Ice storage						8.17	8.17	8.17	8.17
	Cool Box						0.00	0.00	0.00	0.00
	Fish containers						1.14	1.14	1.14	1.14
	Scale						0.66	0.66	0.66	0.66
	Processing eq. Workshop eq.						5.78 3.30	5.78 3.30	5.78 3.30	5.78 3.30
Total							303.60	310.23	323.49	318.19
Balance (Net Profit before Tax)								10.57	11.28	9.60

Table 5-2-2. HUU FISHERY COMPLEX

Annual Fish Landing Volume		1310 ton/yr.		No. of boats entry		5756 boats/yr.	
For sales in fresh fish		689 ton/yr.		Purse seine		2911 boats/yr.	
For processed fish (local)		424 ton/yr.		Gill-net		765 boats/yr.	
For processed fish (outside)		197 ton/yr.		Hand-line		2080 boats/yr.	

REVENUE		Capacity	Sales ratio	Operating days	Sales volume	Unit Price	Annual Revenue (million Rp.)			
		(ton/day)		(days/yr)	(ton/yr)	(Rp./kg)	First 2 years	3 - 5 years	6 - 15 years	Yearly average
Sales of ice	Sale by 1.5kg bag	1	0.9	245	220.5	420	92.61	92.61	92.61	92.61
Service charge	Boat mooring	Kpl. motor			No. of boats	(Rp./time)		1.58	2.30	2.88
		exist box (kg)	cool box (kg)	Ratio of user	No. of boxes	(Rp./box/day)				
	Handling area	15	30	100%	22968	500	6.32	9.19	11.48	10.33
	(For fresh fish)	30	50	0%	0	1000	0.00	0.00	0.00	0.00
		45	80	0%	0	1500	0.00	0.00	0.00	0.00
			Vol.(kg/psn)		No. of psn.	(Rp./psn/day)				
	(For processing)		50		12420	500	3.42	4.97	6.21	5.59
Rental fee	Cool box	300L	Quantity		No. of days	(Rp./box/day)				
	Kiln for boiling/roasting		4		300	1000	0.66	0.96	1.20	1.08
	Smoking kiln		6		300	500	0.50	0.72	0.90	0.81
			3		300	500	0.25	0.36	0.45	0.41
Total Revenue							105.33	111.11	115.73	113.42

EXPENSES		Capacity	Power ratio	Operating hrs	Operating days	Unit Cost	Annual Cost (million Rp.)			
Item		(kw)		(hrs/day)	(days/yr)	(Rp./kw)	First 2 years	3 - 5 years	6 - 15 years	Yearly average
Electricity	Small freezer	4	0.8	24	245	500	9.41	9.41	9.41	9.41
	Cool box	0	0.5	24	245	500	0.00	0.00	0.00	0.00
	Pump	1	0.8	6	300	500	0.72	0.72	0.72	0.72
	Lighting, etc.	1	0.3	8	300	500	0.36	0.36	0.36	0.36
Water		(m ³ /day)				(Rp/m ³)				
	Ice making	1.2			245	5000	1.47	1.47	1.47	1.47
	General	2.7			300	5000	4.05	4.05	4.05	4.05
Manpower		(No. of psn)		(days/yr)	(month/yr)	(Rp/month)				
	Manager	1		30	0	50000	1.50	1.50	1.50	1.50
	Asst. Manager	1			12	750000	9.00	9.00	9.00	9.00
	Mechanics	1			0	50000	0.00	0.00	0.00	0.00
	Asst. mechanics	1			1	600000	0.60	0.60	0.60	0.60
	Accountant	1			12	500000	6.00	6.00	6.00	6.00
	Market control	1			12	500000	6.00	6.00	6.00	6.00
	Workers	3			12	400000	14.40	14.40	14.40	14.40
Guardman	1			12	350000	4.20	4.20	4.20	4.20	
Consumables						(Rp/month)				
	Office materials				12	50000	0.60	0.60	0.60	0.60
	Plastic bag for ice	(kg/bag)	(Ratio to use)		(No. of bag)	(Rp./pc)				
		1.5	100%		147000	5	0.74	0.74	0.74	0.74
Maintenance										
	Equipment	Small freezer					0.66	0.66	0.66	0.66
		Ice storage					0.00	0.00	0.00	0.00
		Processing eq.					0.18	0.18	0.18	0.18
	Facilities	Workshop eq.					0.17	0.17	0.17	0.17
		Civil					4.34	4.34	4.34	4.34
		Building					16.21	16.21	16.21	16.21
Depreciation										
	Ice plant						13.20	13.20	13.20	13.20
	Ice storage						5.07	5.07	5.07	5.07
	Cool Box						3.17	3.17	3.17	3.17
	Fish containers						0.00	0.00	0.00	0.00
	Scale						0.22	0.22	0.22	0.22
	Processing eq.						3.80	3.80	3.80	
	Workshop eq.						3.30	3.30	3.30	
Total							109.36	109.36	109.36	109.36
Balance (Net Profit) before Tax							(4.03)	1.75	6.37	4.06

Table 5-2-5. LEWOLEBA FISHERY COMPLEX

Annual Fish Landing Volume	1768 ton/yr.	No. of boats entry	18910 boats/yr.
For fresh fish (local)	886 ton/yr.	Bagan	13545 boats/yr.
For fresh fish (outside)	261 ton/yr.	Purse seine	1326 boats/yr.
For processed fish	621 ton/yr.	Gill-net	3488 boats/yr.
		Hand-line	551 boats/yr.

REVENUE		Capacity (ton/day)	Sales ratio	Operating days (days/yr)	Sales volume (ton/yr)	Unit Price (Rp/kg)	Annual Revenue (million Rp.)			
							First 2 years	3 - 5 years	6 - 15 years	Yearly average
Sales of ice	Sale by 5kg bag	3	0.9	310	544	380	206.74	206.74	206.74	206.74
	Sale by 25kg block				293	360	105.46	105.46	105.46	105.46
Service charge	Boat mooring	Kpl. motor			No. of boats	(Rp/time)	2.95	4.29	5.37	4.83
		cool box (kg)	Ratio of user		No. of boxes	(Rp/box/dsy)				
	(Handling area)	75	30	65%	24851	500	6.83	9.94	12.43	11.18
	(For fresh fish)	30	30	35%	8029	1000	4.42	6.42	8.03	7.23
		45	80	0%	0	1500	0.00	0.00	0.00	0.00
	(For processing)		50		No. of psn.	(Rp/psn/day)				
					12420	500	3.42	4.97	6.21	5.59
Rental fee	Cool box	300L		6	No. of days	(Rp/box/day)	1.02	1.49	1.86	1.67
	KJH for boiling/roasting			1			0.09	0.12	0.16	0.14
	Smoking kiln			1			0.09	0.12	0.16	0.14
Total Revenue							331.01	339.56	346.40	342.98

EXPENSES		Capacity (kw)	Power ratio	Operating hrs (hrs/day)	Operating days (days/yr)	Unit Cost (Rp/kw)	Annual Cost (million Rp.)				
Item							First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Electricity	Ice plant	27	0.8	24	310	500	80.35	80.35	80.35	80.35	
	Ice storage	2	0.5	24	310	500	3.72	3.72	3.72	3.72	
	Pump	2	0.8	6	310	500	1.49	1.49	1.49	1.49	
	Lighting, etc.	3	0.3	8	310	500	1.12	1.12	1.12	1.12	
Water	Ice plant	(m ³ /day)				(Rp/m ³)					
	General	3.6			310	5000	5.58	5.58	5.58	5.58	
Manpower	Manager	(No. of psn)			(month/yr)	(Rp/month)					
	Asst. Manager	1			12	1500000	18.00	18.00	18.00	18.00	
	Mechanics	1			12	750000	9.00	9.00	9.00	9.00	
	Asst. mechanics	1			12	1200000	14.40	14.40	14.40	14.40	
	Market control	1			12	600000	7.20	7.20	7.20	7.20	
	Accountant	2			12	500000	12.00	12.00	12.00	12.00	
	Workers	4			12	400000	19.20	19.20	19.20	19.20	
	Guardman	2			12	350000	8.40	8.40	8.40	8.40	
	Consumables	Office materials				(month/yr)	(Rp/month)	2.40	2.40	2.40	2.40
		Plastic bag for ice	(kg/bag)			(No. of bag)	(Rp/pc)				
		5			109000	20	2.18	2.18	2.18	2.18	
Maintenance	Equipment	Ice plant					5.33	10.67	21.34	18.14	
		Ice storage					0.78	1.56	3.13	2.66	
		Processing eq.					0.18	0.18	0.18	0.18	
		Workshop eq.					0.17	0.17	0.17	0.17	
	Facilities	Civil					10.51	10.51	10.51	10.51	
	Building					30.50	30.50	30.50	30.50		
Depreciation	Ice plant						53.34	53.34	53.34	53.34	
	Ice storage						7.82	7.82	7.82	7.82	
	Cool Box						1.58	1.58	1.58	1.58	
	Fish containers						1.36	1.36	1.36	1.36	
	Scale						0.44	0.44	0.44	0.44	
	Processing eq.						3.98	3.98	3.98	3.98	
Workshop eq.						3.30	3.30	3.30	3.30		
Total							326.26	332.37	344.61	340.94	
Balance (Net Profit before Tax)							4.75	7.19	1.79	2.04	

Table 5-2-6. MAUMERE FISHERY COMPLEX

Annual Fish Landing Volume	3251 ton/yr.	No. of boats entry	14006 boats/yr.
For fresh fish (local)	2085 ton/yr.	Purse seine	10036 boats/yr.
For fresh fish (outside)	324 ton/yr.	Gill-net	790 boats/yr.
For processed fish	842 ton/yr.	Hand-line	756 boats/yr.
		Collecting boats	2904 boats/yr.

REVENUE		Capacity (ton/day)	Sales ratio	Operating days (days/yr)	Sales volume (ton/yr)	Unit Price (Rp./kg)	Annual Revenue (million Rp.)				
							First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Sales of ice	Sale by 5kg bag	3	0.9	300	316	340	107.41	107.41	107.41	107.41	
	Sale by 25kg block				494	320	158.11	158.11	158.11	158.11	
Service charge	Boat mooring	Kpl. motor			No. of boats	(Rp./time)	7.70	11.20	14.01	12.61	
		cool box (kg)	Ratio of user		No. of boxes	(Rp./box/day)					
	Handling area	15	30	39%	31317	500	8.61	12.53	15.66	14.09	
	(For fresh fish)	30	50	34%	16381	1000	9.01	13.10	16.38	14.74	
		45	80	27%	8130	1500	6.71	9.76	12.20	10.98	
					Vol.(kg/psn)	No. of psn.	(Rp./psn/day)				
	(For processing)		50		0	500	0.00	0.00	0.00	0.00	
	Market area				34500	1000	18.98	27.60	34.50	31.05	
Rental fee	Cool box	300L			No. of days	(Rp./box/day)					
	Kiln for boiling/roasting		0		300	1000	0.00	0.00	0.00	0.00	
	Smoking kiln		0		300	500	0.00	0.00	0.00	0.00	
Total Revenue								316.53	339.71	358.26	348.98

EXPENSES		Capacity (kw)	Power ratio	Operating hrs (hrs/day)	Operating days (days/yr)	Unit Cost (Rp./kw)	Annual Cost (million Rp.)				
Item							First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Electricity	Ice plant	27	0.8	24	300	500	77.76	77.76	77.76	77.76	
	Ice storage	2	0.5	24	300	500	3.60	3.60	3.60	3.60	
	Pump	2	0.8	6	300	500	1.44	1.44	1.44	1.44	
	Lighting, etc.	3	0.3	8	300	500	1.08	1.08	1.08	1.08	
		(m3/day)				(Rp/m3)					
Water	Ice plant	3.6			300	5000	5.40	5.40	5.40	5.40	
	General	4.7			300	5000	7.05	7.05	7.05	7.05	
Manpower		(No. of psn)			(month/yr)	(Rp/month)					
	Manager	1			12	1500000	18.00	18.00	18.00	18.00	
	Asst. Manager	1			12	750000	9.00	9.00	9.00	9.00	
	Mechanics	1			12	1200000	14.40	14.40	14.40	14.40	
	Asst. mechanics	1			12	600000	7.20	7.20	7.20	7.20	
	Market control	5			12	500000	30.00	30.00	30.00	30.00	
	Accountant	2			12	500000	12.00	12.00	12.00	12.00	
	Workers	4			12	400000	19.20	19.20	19.20	19.20	
Guardman	2			12	350000	8.40	8.40	8.40	8.40		
						(Rp/month)					
Consumables	Office materials				12	150000	1.80	1.80	1.80	1.80	
	Plastic bag for ice	(kg/bag)			(No. of bag)	(Rp./pc)					
		5			64000	20	1.28	1.28	1.28	1.28	
Maintenance	Equipment	Ice plant					5.33	10.67	21.34	18.14	
		Ice storage					0.78	1.56	3.13	2.66	
	Facilities	Civil					9.94	9.94	9.94	9.94	
		Building					33.59	33.59	33.59	33.59	
Depreciation	Ice plant						53.34	53.34	53.34	53.34	
	Ice storage						7.82	7.82	7.82	7.82	
	Cool box						0.00	0.00	0.00	0.00	
	Fish containers						1.36	1.36	1.36	1.36	
	Scale						0.44	0.44	0.44	0.44	
Total								330.22	336.33	348.57	344.90
Balance (Net Profit before Tax)								(12.00)	3.38	9.69	4.09

Table 5-2-7. PAGA FISHERY COMPLEX

Annual Fish Landing Volume		1164 ton/yr.		No. of boats entry		6927 boats/yr.	
For fresh fish (local)	654 ton/yr.			Purse seine	4047 boats/yr.		
For fresh fish (outside)	58 ton/yr.			Gill-net	1800 boats/yr.		
For processed fish	452 ton/yr.			Trotting	1080 boats/yr.		

REVENUE		Capacity	Sales ratio	Operating days	Sales volume	Unit Price	Annual Revenue (million Rp.)			
		(ton/day)		(days/yr)	(ton/yr)	(Rp./kg)	First 2 years	3 - 5 years	6 - 15 years	Yearly average
Sales of ice	Sale by 5kg bag	2	0.9	240	423	440	186.28	186.28	186.28	186.28
	Sale by 25kg block				9	420	3.63	3.63	3.63	3.63
Service charge	Boat mooring	Kpl. motor			6927	500	1.90	2.77	3.46	3.12
		exist box (kg)	cool box (kg)	Ratio of user	No. of boxes	(Rp./time)				
		15	30	98%	21258	500	6.40	9.30	11.63	10.47
		30	50	2%	284	1000	0.16	0.23	0.28	0.26
		45	80	0%	0	1500	0.00	0.00	0.00	0.00
		Vol.(kg/psn)		No. of psn.	(Rp./psn/day)					
	(For processing)	50		9040	500	2.49	3.62	4.52	4.07	
Rental fee	Cool box	300L	Quantity	No. of days	(Rp./box/day)					
	Kiln for boiling/roasting		6	300	1000	0.99	1.44	1.80	1.62	
	Smoking kiln		1	300	500	0.08	0.12	0.15	0.14	
			1	300	500	0.08	0.12	0.15	0.14	
Total Revenue							202.01	207.50	211.00	209.70

EXPENSES		Capacity	Power ratio	Operating hrs	Operating days	Unit Cost	Annual Cost (million Rp.)				
Item		(kw)		(hrs/day)	(days/yr)	(Rp./kw)	First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Electricity	Ice plant	18	0.8	24	240	500	41.47	41.47	41.47	41.47	
	Ice storage	1.5	0.5	24	240	500	2.16	2.16	2.16	2.16	
	Pump	1.5	0.8	6	300	500	1.08	1.08	1.08	1.08	
	Lighting, etc.	1	0.3	8	300	500	0.36	0.36	0.36	0.36	
		(m3/day)				(Rp/m3)					
Water	Ice plant	2.4			240	5000	2.88	2.88	2.88	2.88	
	General	3.2			300	5000	4.80	4.80	4.80	4.80	
Manpower		(No. of psn)		(days/yr)	(month/yr)	(Rp/month)					
	Manager	1		30	0	50000	2.50	2.50	2.50	2.50	
	Asst. Manager	1			12	75000	9.00	9.00	9.00	9.00	
	Mechanics	1		30	0	50000	2.50	2.50	2.50	2.50	
	Asst. mechanics	1			12	60000	7.20	7.20	7.20	7.20	
	Marker control	1			12	50000	6.00	6.00	6.00	6.00	
	Accountant	1			12	50000	6.00	6.00	6.00	6.00	
Workers	3			12	400000	14.40	14.40	14.40	14.40		
Guardman	1			12	350000	4.20	4.20	4.20	4.20		
					(month/yr)	(Rp/month)					
Consumables	Office materials				12	100000	1.20	1.20	1.20	1.20	
	Plastic bag for ice	(kg/bag)			(No. of bag)	(Rp/pc)					
		3			83000	20	1.70	1.70	1.70	1.70	
Maintenance	Equipment	Ice plant					4.85	9.71	19.41	16.50	
		Ice storage					0.67	1.34	2.68	2.28	
		Workshop eq.					0.17	0.17	0.17	0.17	
	Facilities	Civil					1.88	1.88	1.88	1.88	
		Building					14.19	14.19	14.19	14.19	
Depreciation	Ice plant						48.53	48.53	48.53	48.53	
	Ice storage						6.71	6.71	6.71	6.71	
	Cool Box						1.58	1.58	1.58	1.58	
	Fish containers						1.06	1.06	1.06	1.06	
	Scale						0.37	0.37	0.37	0.37	
	Processing eq.						0.36	0.36	0.36	0.36	
Workshop eq.						3.30	3.30	3.30	3.30		
Total							191.14	196.66	207.71	204.40	
Balance (Net Profit before Tax)								10.87	10.84	4.19	5.31

Table 5-2-8. ENDE FISHERY COMPLEX

Annual Fish Landing Volume	3144 ton/yr.	No. of boats entry	17643 boats/yr.
For fresh fish (local)	1932 ton/yr.	Purac seine	3836 boats/yr.
For fresh fish (outside)	274 ton/yr.	Lampala	4084 boats/yr.
For processed fish	938 ton/yr.	Gill-net/fund-line	7723 boats/yr.

REVENUE	Capacity (ton/day)	Sales ratio	Operating days (days/yr)	Sales volume (ton/yr)	Unit Price (Rp./kg)	Annual Revenue (million Rp.)				
						First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Sales of ice	Sale by 5kg bag	5	0.9	270	814	320	260.50	260.50	260.50	260.50
	Sale by 25kg block				401	300	320.29	320.29	320.29	320.29
Service charge	Boat mooring	Kpl. motor exist box (kg)	cool box (kg)	Ratio of user	No. of boats	(Rp./time)	9.70	14.11	17.64	15.88
					No. of boxes	(Rp./box/day)				
	Handling area (For fresh fish)	15	30	67%	49267	500	13.55	19.71	24.63	22.17
		30	50	21%	9265	1000	5.10	7.41	9.27	8.34
	(For processing)	45	80	12%	3309	1500	2.73	3.97	4.96	4.47
Vol.(kg/psn)				No. of psn	(Rp./psn/day)					
Rental fee	Cool box	300L	16	300	1000	2.64	3.84	4.80	4.32	
	Klin for boiling/roasting		1	300	500	0.08	0.12	0.15	0.14	
	Smoking klin		1	300	500	0.08	0.12	0.15	0.14	
Total Revenue						419.82	437.57	451.77	444.67	

EXPENSES	Capacity (kw)	Power ratio	Operating hrs (hrs/day)	Operating days (days/yr)	Unit Cost (Rp/kwh)	Annual Cost (million Rp.)				
						First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Electricity	Ice plant	45	0.8	24	270	500	116.64	116.64	116.64	116.64
	Ice storage	4.5	0.5	24	270	500	7.29	7.29	7.29	7.29
	Pump	3	0.8	6	300	500	2.16	2.16	2.16	2.16
	Lighting, etc.	3	0.3	8	300	500	1.08	1.08	1.08	1.08
Water	Ice plant	6			270	5000	8.10	8.10	8.10	8.10
	General	6.3			300	5000	9.45	9.45	9.45	9.45
Manpower	(No. of psn)	Manager	1		12	1500000	18.00	18.00	18.00	18.00
		Asst. Manager	1		12	750000	9.00	9.00	9.00	9.00
		Mechanics	1		12	1200000	14.40	14.40	14.40	14.40
		Asst. mechanics	1		12	600000	7.20	7.20	7.20	7.20
		Market control	3		12	500000	18.00	18.00	18.00	18.00
		Accountant	2		12	500000	12.00	12.00	12.00	12.00
		Workers	6		12	400000	28.80	28.80	28.80	28.80
		Guardman	2		12	350000	8.40	8.40	8.40	8.40
Consumables	(kg/bag)	Office materials			12	300000	3.60	3.60	3.60	3.60
		Plastic bag for ice	5			163000	20	3.26	3.26	3.26
Maintenance	Equipment	Ice plant					7.26	14.51	29.03	24.67
		Ice storage					0.93	1.86	3.71	3.16
		Processing eq.					0.18	0.18	0.18	0.18
		Workshop eq.					0.17	0.17	0.17	0.17
		Facilities					5.16	5.16	5.16	5.16
	Building					31.17	31.17	31.17	31.17	
Depreciation	Equipment	Ice plant					72.57	72.57	72.57	72.57
		Ice storage					9.29	9.29	9.29	9.29
		Cool Box					10.56	10.56	10.56	10.56
		Fish containers					1.36	1.36	1.36	1.36
		Scale					0.44	0.44	0.44	0.44
		Processing eq.					4.16	4.16	4.16	4.16
		Workshop eq.					3.30	3.30	3.30	3.30
Total						413.92	422.10	438.47	433.56	
Balance (Net Profit before Tax)						5.91	15.47	13.29	11.11	

Table 5-2-9 LAMAJALA JAYA STATION (MULTI-PURPOSE FACILITIES, 3 PLACES)

Annual Fish Landing Volume	2164 ton/yr.	No. of boats entry	14408 boats/yr.
For fresh fish (local)	1008 ton/yr.	Bagan	304 boats/yr.
For fresh fish (outside)	252 ton/yr.	Purse seine	12135 boats/yr.
For processed fish	904 ton/yr.	F.Gill-net	1969 boats/yr.

REVENUE		Volume	Sales ratio	No. of trips	Unit Price	Annual Revenue (million Rp.)			
		(kg or L/trip)		(trips/yr)	(Rp/kg or L)	First 2 years	3 - 5 years	6 - 15 years	Yearly average
Sales income	Ice	470	0.8	300	420	47.38	47.38	47.38	47.38
	Fish	840	1	300	2500	630.00	630.00	630.00	630.00
	Fuel (Diesel)	1530	1	300	1700	780.30	780.30	780.30	780.30
Transport charge	For materials	500		300	100	15.00	15.00	15.00	15.00
				No. of boats	(Rp./time)				
Service charge	Boat mooring	Kpl. motor exist box (kg)		14408	500	3.96	5.76	7.20	6.48
	Handling area	13	100%	42000	500	11.55	16.80	21.00	18.90
	(For fresh fish)	30	0%	0	1000	0.00	0.00	0.00	0.00
		45	0%	0	1500	0.00	0.00	0.00	0.00
		Vol.(kg/psn)		No. of psn.	(Rp./psn/day)				
	(For processing)	50		18080	500	4.97	7.23	9.04	8.14
		Quantity		No. of days	(Rp./box/day)				
Rental fee	Cool box	300L	5	300	1000	0.83	1.20	1.50	1.35
	Kiln for boiling/roasting		3	300	500	0.25	0.36	0.45	0.41
	Smoking kiln		3	300	500	0.25	0.36	0.45	0.41
Total Revenue						1,494.48	1,504.39	1,512.32	1,508.36

EXPENSES		Volume	No. of trips	Unit Cost	Annual Cost (million Rp.)			
		(kg or L/trip)	(trips/yr)	(Rp/kg or L)	First 2 years	3 - 5 years	6 - 15 years	Yearly average
Purchase cost	Ice	1100	300	280	92.40	92.40	92.40	92.40
	Fish	840	300	2000	504.00	504.00	504.00	504.00
	Fuel	1530	300	1500	688.50	688.50	688.50	688.50
Water	General	(m3/day)		(days/yr)				
		4.5		300	5000	6.75	6.75	6.75
		(No. of psn)		(month/yr)	(Rp/month)			
Manpower	Manager	3	12	430000	16.20	16.20	16.20	16.20
	Kiosk seller	3	12	350000	12.60	12.60	12.60	12.60
	Market control	3	12	350000	12.60	12.60	12.60	12.60
	Accountant	3	12	350000	12.60	12.60	12.60	12.60
				(month/yr)	(Rp/month)			
Consumables	Office materials		12	60000	0.72	0.72	0.72	0.72
				(days/yr)	(Rp/trip)			
Rental fee	Multi-purpose boat		300	220000	66.00	66.00	66.00	66.00
Maintenance	Workshop eq.				0.50	0.50	0.50	0.50
	Building				15.41	15.41	15.41	15.41
Depreciation	Cool Box	12 pcs.			3.17	3.17	3.17	3.17
	Processing eq.				1.08	1.08	1.08	1.08
	Workshop eq.				9.90	9.90	9.90	9.90
Total					1,442.43	1,442.43	1,442.43	1,442.43
Balance (Net Profit before Tax)					52.05	61.96	69.89	65.93

Table 5-2-10 SAGU STATION (MULTI-PURPOSE FACILITIES)

Annual Fish Landing Volume	551 ton/yr.
For fresh fish (local)	272 ton/yr.
For fresh fish (outside)	83 ton/yr.
For processed fish	196 ton/yr.

No. of boats entry	6686 boats/yr.
Bagan	1004 boats/yr.
Purse seine	1134 boats/yr.
B.Gill-net	2181 boats/yr.
Hand-line/Trolling	2367 boats/yr.

REVENUE		Volume (kg or L/trip)	Sales ratio	No. of trips (trips/yr)	Unit Price (Rp/kg or L)	Annual Revenue (million Rp.)				
						First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Sales income	Ice	1178	0.8	100	530	49.93	49.93	49.93	49.93	
	Fish	830		100	2500	207.50	207.50	207.50	207.50	
	Fuel (Diesel)	590		100	1800	106.20	106.20	106.20	106.20	
Transport charge	For materials	500		100	200	10.00	10.00	10.00	10.00	
	For passengers	10 persons		100	10000	10.00	10.00	10.00	10.00	
Service charge	Boat mooring	Kpl. motor exist box (kg)		No. of boats	(Rp./time)	500	1.84	2.67	3.34	3.01
	Handling area	30	100%	11833	500	3.25	4.73	5.92	5.32	
	(For fresh fish)	30	0%	0	1600	0.00	0.00	0.00	0.00	
		45	0%	0	1500	0.00	0.00	0.00	0.00	
	(For processing)	Vol. (kg/psn)		No. of psn.	(Rp./psn/day)	500	1.08	1.57	1.96	1.76
		Quantity		No. of days	(Rp./box/day)	1000	0.17	0.24	0.30	0.27
Rental fee	Cool box	300L		300	1000	0.17	0.24	0.30	0.27	
	KJIn for boiling/roasting			300	500	0.08	0.12	0.15	0.14	
	Smoking kiln			300	500	0.08	0.12	0.15	0.14	
Total Revenue						390.13	393.08	395.45	394.26	

EXPENSES	Item	Volume (kg or L/trip)	No. of trips (trips/yr)	Unit Cost (Rp/kg or L)	Annual Cost (million Rp.)				
					First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Purchase cost	Ice	1800	100	780	50.40	50.40	50.40	50.40	
	Fish	830	100	2000	166.00	166.00	166.00	166.00	
	Fuel	590	100	1500	88.50	88.50	88.50	88.50	
		(m ³ /day)		(days/yr)	(Rp/m ³)				
Water	General	2.3	300	5000	3.45	3.45	3.45	3.45	
		(No. of psn)		(month/yr)	(Rp/month)				
Manpower	Manager	1	12	450000	5.40	5.40	5.40	5.40	
	Kiosk seller	1	12	350000	4.20	4.20	4.20	4.20	
	Market control	1	12	350000	4.20	4.20	4.20	4.20	
	Accountant	1	12	350000	4.20	4.20	4.20	4.20	
				(month/yr)	(Rp/month)				
Consumables	Office materials		12	20000	0.24	0.24	0.24	0.24	
				(days/yr)	(Rp/trip)				
Rental fee	Multi-purpose boat		100	520000	52.00	52.00	52.00	52.00	
Maintenance	Workshop eq.				0.17	0.17	0.17	0.17	
	Building				5.30	5.30	5.30	5.30	
Depreciation	Cool Box	300L	5		1.32	1.32	1.32	1.32	
	Processing eq.				0.36	0.36	0.36	0.36	
	Workshop eq.				3.30	3.30	3.30	3.30	
Total					389.04	389.04	389.04	389.04	
Balance (Net Profit before Tax)					1.09	4.04	6.41	5.23	

Table 5-2-11 BALAURING STATION (MULTI-PURPOSE FACILITIES)

Annual Fish Landing Volume	361 ton/yr.	No. of boats entry	5612 boats/yr.
For fresh fish (local)	208 ton/yr.	Purse seine	845 boats/yr.
For fresh fish (outside)	41 ton/yr.	Gill-net	1589 boats/yr.
For processed fish	112 ton/yr.	Hand-line/Trolling	3178 boats/yr.

REVENUE		Volume (kg or L/trip)	Sales ratio	No. of trips (trips/yr)	Unit Price (Rp/kg or L)	Annual Revenue (million Rp.)				
						First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Sales income	Ice	2043		0.8	100	630	102.94	102.94	102.94	102.94
	Fish	410		1	100	2500	102.50	102.50	102.50	102.50
	Fuel (Diesel)	350		1	100	1900	66.50	66.50	66.50	66.50
Transport charge	For materials	500		100	300	15.00	15.00	15.00	15.00	15.00
	For passengers	10 persons		100	20000	20.00	20.00	20.00	20.00	20.00
Service charge	Boat mooring	Kpl. motor		No. of boats	5612	500	1.54	2.24	2.81	2.53
		cool box (kg)	Ratio of user	No. of boxes		(Rp./box/day)				
	Handling area	15	30	100%	8300	500	2.28	3.32	4.15	3.74
	(For fresh fish)	30	50	0%	0	1000	0.00	0.00	0.00	0.00
		45	80	0%	0	1500	0.00	0.00	0.00	0.00
			Vol. (kg/psn)	No. of psn.		(Rp./psn/day)				
	(For processing)		50		2240	500	0.62	0.90	1.12	1.01
			Quantity	No. of days		(Rp./box/day)				
Rental fee	Cool box	300L		1	300	1000	0.17	0.24	0.30	0.27
	Kiln for boiling/roasting			1	300	500	0.08	0.12	0.15	0.14
	Smoking kiln			1	300	500	0.08	0.12	0.15	0.14
Total Revenue							311.71	313.88	315.62	314.75

EXPENSES	Item	Volume (kg or L/trip)	No. of trips (trips/yr)	Unit Cost (Rp/kg or L)	Annual Cost (million Rp.)					
					First 2 years	3 - 5 years	6 - 15 years	Yearly average		
Purchase cost	Ice	2330		100	280	65.80	65.80	65.80	65.80	
	Fish	410		100	1500	61.50	61.50	61.50	61.50	
	Fuel	350		100	1500	52.50	52.50	52.50	52.50	
Water	General	(m ³ /day)		(days/yr)	300	5000	2.55	2.55	2.55	2.55
		(No. of psn)		(month/yr)		(Rp/month)				
Manpower	Manager	1		12	450000	5.40	5.40	5.40	5.40	
	Kiosk seller	1		12	350000	4.20	4.20	4.20	4.20	
	Market control	1		12	350000	4.20	4.20	4.20	4.20	
	Accountant	1		12	350000	4.20	4.20	4.20	4.20	
Consumables	Office materials			(month/yr)	12	20000	0.24	0.24	0.24	0.24
				(days/yr)		(Rp/trip)				
Rental fee	Multi-purpose boat			100	800000	80.00	80.00	80.00	80.00	
Maintenance	Workshop eq.					0.17	0.17	0.17	0.17	
	Building					5.08	5.08	5.08	5.08	
Depreciation	Cool Box	300L		4		1.06	1.06	1.06	1.06	
	Processing eq.					0.36	0.36	0.36	0.36	
	Workshop eq.					3.30	3.30	3.30	3.30	
Total						290.55	290.55	290.55	290.55	

Balance (Net Profit before Tax)							21.16	23.33	25.06	24.20
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Table 5-2-12 LAMALERA STATION (MULTI-PURPOSE FACILITIES)

Annual Fish Landing Volume	498 ton/yr.	No. of boats entry	5435 boats/yr.
For fresh fish (local)	93 ton/yr.	Whaler	80 boats/yr.
For fresh fish (outside)	36 ton/yr.	Gill-net	1155 boats/yr.
For processed fish	369 ton/yr.	Hand-line (non-motor)	4200 boats/yr.

REVENUE		Volume (kg or L/trip)	Sales ratio	No. of trips (trips/yr)	Unit Price (Rp/kg or L)	Annual Revenue (million Rp.)			
						First 2 years	3 - 5 years	6 - 15 years	Yearly average
Sales income	Ice	1925	0.8	100	730	112.42	112.42	112.42	112.42
	Fish	180	1	100	2500	45.00	45.00	45.00	45.00
	Fuel (Diesel)	80	1	100	2000	16.00	16.00	16.00	16.00
Transport charge	For materials	500		100	400	20.00	20.00	20.00	20.00
	For passengers	10 persons		100	24000	24.00	24.00	24.00	24.00
Service charge	Boat mooring			No. of boats	(Rp./time)				
				5435	500	1.49	2.17	2.72	2.45
	Handling area (For fresh fish)	exist box (kg)	cool box (kg)	Ratio of user	No. of boxes	(Rp./box/day)			
		15	30	100%	4300	500	1.18	1.72	2.15
		30	50	0%	0	1000	0.00	0.00	0.00
		45	80	0%	0	1500	0.00	0.00	0.00
	(For processing)		Vol.(kg/psn)		No. of psn.	(Rp./psn/day)			
			50		7380	500	2.03	2.95	3.69
			Quantity		No. of days	(Rp./box/day)			
Rental fee	Cool box	300L	1	300	1000	0.17	0.24	0.30	0.27
	Kiln for boiling/roasting		1	300	500	0.08	0.12	0.15	0.14
	Smoking kiln		1	300	500	0.08	0.12	0.15	0.14
Total Revenue						222.46	224.75	226.58	225.66

EXPENSES	Item	Volume (kg or L/trip)	No. of trips (trips/yr)	Unit Cost (Rp/kg or L)	Annual Cost (million Rp.)				
					First 2 years	3 - 5 years	6 - 15 years	Yearly average	
Purchase cost	Ice	2060	100	280	57.68	57.68	57.68	57.68	
	Fish	180	100	1500	27.00	27.00	27.00	27.00	
	Fuel	80	100	1500	12.00	12.00	12.00	12.00	
Water	General	(m ³ /day)	2.9	(days/yr)	300	5000	4.35	4.35	4.35
Manpower	Manager	(No. of psn)	1	(month/yr)	12	(Rp/month)	450000	5.40	5.40
	Kiosk seller		1	12	350000	4.20	4.20	4.20	4.20
	Market control		1	12	350000	4.20	4.20	4.20	4.20
	Accountant		1	12	350000	4.20	4.20	4.20	4.20
Consumables	Office materials		12	(month/yr)	12	(Rp/month)	20000	0.24	0.24
Rental fee	Multi-purpose boat		100	(days/yr)	100	(Rp/trip)	850000	85.00	85.00
Maintenance	Workshop eq.						0.17	0.17	0.17
	Building						5.08	5.08	5.08
Depreciation	Cool Box	300L	4	Quantity			1.06	1.06	1.06
	Processing eq.						0.36	0.36	0.36
	Workshop eq.						3.30	3.30	3.30
Total							214.23	214.23	214.23

Balance (Net Profit before Tax)						8.22	10.51	12.34	11.43
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Table 5.2-13 WURING STATION (MINI-FISHERY COMPLEX)

Annual Fish Landing Volume	965 ton/yr.	No. of boats	144 boats
For fresh fish (local)	123 ton/yr.	Purse seine	34 boats
For processed fish	842 ton/yr.	Gill-net	24 boats
		Hand-line	47 boats
		Collecting boats	19 boats

REVENUE			No. of boats	Unit Price (Rp./year)	Annual Revenue (million Rp.)			
					First 2 years	3 - 5 years	6 - 15 years	Yearly average
Facilities charge	Boat mooring	Purse seine	54	180000	9.72	9.72	9.72	9.72
		Others	90	90000	8.10	8.10	8.10	8.10
			No. of persons	(Rp./year)				
	Handling area	Village women for fresh fish selling	50	120000	6.00	6.00	6.00	6.00
	Processing area	Village women for processing & selling	50	120000	6.00	6.00	6.00	6.00
Membership fee	Fishing households		150	60000	9.00	9.00	9.00	9.00
Total Revenue					38.82	38.82	38.82	38.82

EXPENSES		Capacity	Power ratio	Operating hrs	Operating days	Unit Cost	Annual Cost (million Rp.)			
Item		(kw)		(hrs/day)	(days/yr)	(Rp/kwh)	First 2 years	3 - 5 years	6 - 15 years	Yearly average
Electricity	Pump	1.5	0.8	6	300	500	1.08	1.08	1.08	1.08
	Lighting, etc.	1	0.3	8	300	500	0.36	0.36	0.36	0.36
		(m3/day)			(days/yr)	(Rp/m3)				
Water	General	4.4			300	5000	6.60	6.60	6.60	6.60
Maintenance	Processing eq.						0.18	0.18	0.18	0.18
	Workshop eq.						0.17	0.17	0.17	0.17
	Civil						4.95	4.95	4.95	4.95
	Building						14.99	14.99	14.99	14.99
Depreciation	Processing eq.						4.34	4.34	4.34	4.34
	Workshop eq.						3.30	3.30	3.30	3.30
Total							35.96	35.96	35.96	35.96
Balance (Net Profit before Tax)							2.86	2.86	2.86	2.86

ANNEX 5.3. COST & BENEFITS CALCULATION ON FISH TRANSPORT TRUCKS

Table 5-3-1. 3-ton Payload Truck (Waworada)

Item	First 2 years	3 - 5 years	6 - 10 years	Yearly average	Remarks
Drivers	6.00	6.00	6.00	6.00	Rp.500,000/month
Fuel cost	24.00	24.00	24.00	24.00	120km/trip, 3km/l, 300 trips/yr, Rp2,000/l
Maintenance	1.60	3.20	6.39	4.47	
Depreciation	31.96	31.96	31.96	31.96	
Total Cost	63.55	65.15	68.35	66.43	
No. of trips/yr	300	300	300	300	
Rental fee/trip	0.21	0.22	0.23	0.22	To be paid to the Organization
No. of passenger	15	15	15	15	
Fish/passenger	110	110	110	110	kg/person
Total weight	2,978	2,978	2,978	2,978	kg
Fare per person	14,123	14,478	15,188	14,762	Rp/round trip

Table 5-3-2. 3-ton Payload Insulated Truck (Larantuka, Maumere and Ende)

Item	First 2 years	3 - 5 years	6 - 10 years	Yearly average	Remarks
Drivers	6.00	6.00	6.00	6.00	Rp.500,000/month
Maintenance	2.04	4.08	8.15	3.26	
Depreciation	81.54	81.54	81.54	81.54	
Total Cost	89.58	91.62	95.70	90.80	
No. of trips/yr	100	100	100	100	
Rental fee/trip	0.90	0.92	0.96	0.91	Pay to organization
Fuel cost/trip	0.5	0.5	0.5	0.5	Borne by borrower, 1,000km/trip, 3km/l
Cost/trip	1.40	1.42	1.46	1.41	
Fish transport/trip	1.5	1.5	1.5	1.5	ton
Cost per kg fish	931	944	971	939	

Table 5-3-3. 3-ton Payload Truck (Lamahala Jaya, Lamalera)

Item	First 2 years	3 - 5 years	6 - 10 years	Yearly average	Remarks
Drivers	6.00	6.00	6.00	6.00	Rp.500,000/month
Fuel cost	16.00	16.00	16.00	16.00	80km/trip, 3km/l, 300 trips/yr, Rp2,000/l
Maintenance	1.60	3.20	6.39	4.47	
Depreciation	31.96	31.96	31.96	31.96	
Total Cost	55.55	57.15	60.35	58.43	
No. of trips/yr	300	300	300	300	
Rental fee/trip	0.19	0.19	0.20	0.19	To be paid to the Organization
No. of passenger	25	25	25	25	
Fish/passenger	50	50	50	50	kg/person
Total weight	2,938	2,938	2,938	2,938	kg
Fare per person	7,407	7,620	8,046	7,790	Rp/round trip

Table 5-3-4. Pickup Truck (Balsauring)

Item	First 2 years	3 - 5 years	6 - 10 years	Yearly average	Remarks
Drivers	4.80	4.80	4.80	4.80	Rp.400,000/month
Fuel cost	5.00	5.00	5.00	5.00	To inland villages, 50km/trip, 5km/l, 200 trips, Rp.2,500/l
Maintenance	5.00	5.00	5.00	5.00	To Lewoleba, 200km/trip, 5km/l, 50 trips, Rp.2,500/l
Depreciation	0.80	1.60	3.20	2.56	
Total Cost	10.65	10.65	10.65	10.65	
Total Cost	26.25	27.05	28.65	28.01	
No. of trips/yr	200	200	200	200	To inland villages
No. of passenger	50	50	50	50	To Lewoleba
Rental fee/trip	0.08	0.08	0.09	0.08	To inland villages
(million Rp)	0.21	0.22	0.23	0.22	To Lewoleba
No. of passenger	8	8	8	8	
Fish/passenger	50	50	50	50	kg/person
Total weight	940	940	940	940	kg
Fare per person	9,844	10,144	10,743	10,503	Rp/round trip (to inland villages)
	26,251	27,049	28,647	28,008	Rp/round trip (to Lewoleba)

ANNEX 5.4. COST & BENEFITS CALCULATION ON MULTI-PURPOSE BOATS

Table 5-4-1. Lamahala Jaya

Item	First 2 years	3 - 5 years	6 - 20 years	Yearly average
Operators	11.40	11.40	11.40	11.40
Fuel cost	16.20	16.20	16.20	16.20
Maintenance	2.79	5.59	11.18	9.50
Depreciation	27.94	27.94	27.94	27.94
Total Cost	58.33	61.13	66.72	65.04
No. of trips/yr	300	300	300	300
Rental fee/trip	0.19	0.20	0.22	0.22
No. of passenger	10	10	10	10
Fare per person	19,445	20,376	22,239	21,680

Captain Rp600,000/month, Assistant Rp.350,000/month
40hp x 0.31hp/hr x 3 hrs/trip x 300 trips/yr x Rp.1,500/L
220,000 Rp/trip
22,000 Rp/person

Commodity	Volume (kg or L / trip)	Transport Cost (Rp/trip)	Buying Cost (Rp/trip)	Total Cost (Rp/trip)	Unit Cost (Rp/kg or L)	Selling Price	Sales Income	Profit (Rp/trip)
Ice for sales	470	26,045	131,600	157,645	335	420	157,920	275
Ice for fish	630	34,912	176,400	211,312	335	2,500	1,575,000	1,363,688
Fish	840	46,549	1,680,000	1,937,861	2,307	2,500	2,100,000	162,139
Fuel	1,530	84,786	2,295,000	2,379,786	1,555	1,700	2,601,000	221,214
Materials	500	27,708	0	27,708	55	100	50,000	22,292
Total	3,970	220,000	4,283,000	4,503,000	1,134		4,908,920	405,920

Note: Buying Price: Ice @Rp.280/kg; Fish @Rp.2,000/kg, Fuel (diesel) Rp.1,500/L Ice for fish: 75% of fish in volume
Transport Cost (Lamahala Jaya - Lantuka): @Rp.55/kg or L Sales Ratio of Ice: 80%

Table 5-4-2. Sagu

Item	First 2 years	3 - 5 years	6 - 20 years	Yearly average
Operators	11.40	11.40	11.40	11.40
Fuel cost	7.20	7.20	7.20	7.20
Maintenance	1.40	2.79	5.59	4.75
Depreciation	27.94	27.94	27.94	27.94
Total Cost	47.94	49.33	52.13	51.29
No. of trips/yr	100	100	100	100
Rental fee/trip	0.48	0.49	0.52	0.51
No. of passenger	10	10	10	10
Fare per person	47,937	49,334	52,128	51,290

Captain Rp600,000/month, Assistant Rp.350,000/month
40hp x 0.31hp/hr x 4 hrs/trip x 100 trips/yr x Rp.1,500/L
520,000 Rp/trip
52,000 Rp/person

Commodity	Volume (kg or L / trip)	Transport Cost (Rp/trip)	Buying Cost (Rp/trip)	Total Cost (Rp/trip)	Unit Cost (Rp/kg or L)	Selling Price	Sales Income	Profit (Rp/trip)
Ice for sales	1,178	164,597	329,700	494,297	420	530	499,260	4,963
Ice for own use	623	87,016	174,300	261,316	420	2,500	1,557,500	1,296,184
Fish	830	116,022	1,660,000	2,037,338	2,455	2,500	2,075,000	37,662
Fuel	590	82,473	885,000	967,473	1,640	1,800	1,062,000	94,527
Materials	500	69,892	0	69,892	140	200	100,000	30,108
Total	3,720	520,000	3,049,000	3,569,000	959		3,736,260	167,260

Note: Buying Price: Ice @Rp.280/kg; Fish @Rp.2,000/kg, Fuel (diesel) Rp.1,500/L Ice for fish: 75% of fish in volume
Transport Cost (Sagu - Lantuka): @Rp.140/kg or L Sales Ratio of Ice: 80%

Table 5-4-3. Lewoleba

Item	First 2 years	3 - 5 years	6 - 20 years	Yearly average
Operators	11.40	11.40	11.40	11.40
Fuel cost	28.80	28.80	28.80	28.80
Maintenance	2.79	5.59	11.18	9.50
Depreciation	27.94	27.94	27.94	27.94
Total Cost	70.93	73.73	79.32	77.64
No. of trips/yr	200	200	200	200
Rental fee/trip	0.35	0.37	0.40	0.39
No. of passenger	10	10	10	10
Fare per person	35,467	36,864	39,658	38,820

Captain Rp600,000/month, Assistant Rp.350,000/month
40hp x 0.31hp/hr x 8 hrs/trip x 200 trips/yr x Rp.1,500/L
400,000 Rp/trip
40,000 Rp/person

Commodity	Volume (kg or L / trip)	Transport Cost (Rp/trip)	Buying Cost (Rp/trip)	Total Cost (Rp/trip)	Unit Cost (Rp/kg or L)	Selling Price	Sales Income	Profit (Rp/trip)
Ice for sales	0	0	0	0	0	0	0	0
Ice for own use	580	78,378	162,400	240,778	415	2,500	1,450,000	1,209,222
Fish	1,080	145,946	2,160,000	2,546,724	2,358	1,800	1,944,000	392,724
Fuel	800	108,108	1,200,000	1,308,108	1,635	1,800	1,440,000	131,892
Materials	500	67,568	0	67,568	135	200	100,000	32,432
Total	2,960	400,000	3,522,400	3,922,400	1,325		4,240,000	317,600

Note: Buying Price: Ice @Rp.280/kg; Fish @Rp.2,000/kg, Fuel (diesel) Rp.1,500/L Ice for fish: 75% of fish in volume
Transport Cost (Lewoleba - Lantuka): @Rp.135/kg or L Sales Ratio of Ice: 80%

Table 5-4-4. Balauring

Item	First 2 years	3 - 5 years	6 - 20 years	Yearly average
Operators	11.40	11.40	11.40	11.40
Fuel cost	21.60	21.60	21.60	21.60
Maintenance	5.59	11.18	22.35	19.00
Depreciation	27.94	27.94	27.94	27.94
Total Cost	66.53	72.12	83.29	79.94
No. of trips/yr	100	100	100	100
Rental fee/trip	0.67	0.72	0.83	0.80
No. of passenger	10	10	10	10
Fare per person	66,528	72,116	83,292	79,939

Captain Rp600,000/month, Assistant Rp.350,000/month
40hp x 0.31/hp/hr x 12 hrs/trip x 100 trips/yr x Rp.1,500/L
800000 Rp/trip
80000 Rp/person

Commodity	Volume (kg or L / trip)	Transport Cost (Rp/trip)	Buying Cost (Rp/trip)	Total Cost (Rp/trip)	Unit Cost (Rp/kg or L)	Selling Price	Sales Income	Profit (Rp/trip)
Ice for sales	2,043	452,632	571,900	1,024,532	502	630	1,029,420	4,888
Ice for own use	308	68,144	86,100	860,103	2,098	2,500	1,025,000	164,897
Fish	410	90,859	615,000					
Fuel	350	77,562	525,000	602,562	1,722	1,900	665,000	62,438
Materials	500	110,803	0	110,803	222	300	150,000	39,197
Total	3,610	800,000	1,798,000	2,598,000	720		2,869,420	271,420

Note: Buying Price: Ice @Rp.280/kg; Fish @Rp.1,500/kg, Fuel (diesel) Rp.1,500/L Ice for fish: 75% of fish in volume
Transport Cost (Balauring - Lantuka): @Rp.222/kg or L Sales Ratio of Ice: 80%

Table 5-4-5. Lamalera

Item	First 2 years	3 - 5 years	6 - 20 years	Yearly average
Operators	11.40	11.40	11.40	11.40
Fuel cost	25.20	25.20	25.20	25.20
Maintenance	5.59	11.18	22.35	19.00
Depreciation	27.94	27.94	27.94	27.94
Total Cost	70.13	75.72	86.89	83.54
No. of trips/yr	100	100	100	100
Rental fee/trip	0.70	0.76	0.87	0.84
No. of passenger	10	10	10	10
Fare per person	70,128	75,716	86,892	83,539

Captain Rp600,000/month, Assistant Rp.350,000/month
40hp x 0.31/hp/hr x 14 hrs/trip x 100 trips/yr x Rp.1,500/L
850000 Rp/trip
85000 Rp/person

Commodity	Volume (kg or L / trip)	Transport Cost (Rp/trip)	Buying Cost (Rp/trip)	Total Cost (Rp/trip)	Unit Cost (Rp/kg or L)	Selling Price	Sales Income	Profit (Rp/trip)
Ice for sales	1,925	580,230	539,000	1,119,230	581	730	1,124,200	4,970
Ice for own use	135	40,691	37,800	402,747	2,237	2,500	450,000	47,253
Fish	180	54,255	270,000					
Fuel	80	24,113	120,000	144,113	1,801	2,000	160,000	15,887
Materials	500	150,709	0	150,709	301	400	200,000	49,291
Total	2,820	850,000	966,800	1,816,800	644		1,934,200	117,400

Note: Buying Price: Ice @Rp.280/kg; Fish @Rp.1,500/kg, Fuel (diesel) Rp.1,500/L Ice for fish: 75% of fish in volume
Transport Cost (Lamalera - Lantuka): @Rp.301/kg or L Sales Ratio of Ice: 80%

Table 5-4-6. Pulau Ende

Item	First 2 years	3 - 5 years	6 - 20 years	Yearly average
Operators	11.40	11.40	11.40	11.40
Fuel cost	16.20	16.20	16.20	16.20
Maintenance	5.59	11.18	22.35	19.00
Depreciation	55.88	55.88	55.88	55.88
Total Cost	89.07	94.66	105.83	102.48
No. of trips/yr	300	300	300	300
Rental fee/trip	0.30	0.32	0.35	0.34
No. of passenger	10	10	10	10
Fare per person	29,689	31,552	35,277	34,160

Captain Rp600,000/month, Assistant Rp.350,000/month
40hp x 0.31/hp/hr x 3 hrs/trip x 300 trips/yr x Rp.1,500/L
220,000 Rp/trip
22,000 Rp/person

Commodity	Volume (kg or L / trip)	Transport Cost (Rp/trip)	Buying Cost (Rp/trip)	Total Cost (Rp/trip)	Unit Cost (Rp/kg or L)	Selling Price	Sales Income	Profit (Rp/trip)
Water	3,000	125,714	15,000	140,714	47	50	150,000	9,286
Ice	1,200	50,286	360,000	3,687,524	5,673	6,000	3,900,000	212,476
Fish	650	27,238	3,250,000					
Light Oil	400	16,762	400,000	416,762	1,042	1,100	440,000	23,238
Total	5,250	220,000	4,025,000	4,245,000			4,490,000	245,000

Note: Buying Price: Ice @Rp.280/kg; Fish @Rp.5,000/kg, Fuel (light oil) Rp.1,000/L Ice for fish: 75% of fish in volume
Transport Cost (Pulau Ende - Paupanda): @Rp.42/kg or L Sales Ratio of Ice: 80%