

# ASPEK EKONOMI DALAM PENGOPERASIAN ALAT TANGKAP



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# FAKTOR MODAL



FactorCapital

- Kapal (Perahu)
- Mesin
- Alat Tangkap
- Peralatan Pendukung Lainnya



# FAKTOR BIAYA



## 1. BIAYA VARIABEL

- Biaya Tenaga Kerja
- Biaya Operasi



## 2. BIAYA TETAP

- Biaya Kapal
- Biaya Penyusutan
- Biaya Perijinan
- Biaya Pelabuhan
- Biaya Eksternal (Keamanan, dll)

# BIAYA TENAGA KERJA



- Sistem Bagi Hasil
- Sistem Upah
- Asuransi
- Dana Pensiun

# BIAYA OPERASI



- Bahan Bakar Minyak
- Oli Mesin
- Biaya Penjualan Ikan
- Logistik Tenaga Kerja (Makan, Minum, Rokok, dll)
- Es, Garam, dll

# BIAYA KAPAL/PERAHU



- Biaya Perbaikan Kapal dan Alat Tangkap
- Biaya Perawatan Kapal
- Asuransi Kapal

# FAKTOR PENERIMAAN



- Jenis (spesies) ikan
- Kuantitas (jumlah) ikan
- Kualitas Ikan dan Harga
- Pasar dan Saluran Pemasaran
- Musim
- Faktor lainnya



# KERAGAAN USAHA PENANGKAPAN IKAN

- Biaya Tetap (*fix cost/FC*)
- Biaya Variabel per trip (*variable cost/VC*)
- Hasil Tangkapan (*catch/C*)
- Harga (*price/P*)
- Penerimaan kotor per trip (*Revenue/R*) =  $C \times P$
- Keuntungan bersih per trip =  $R - (FC + VC)$





# ANALISIS BIAYA

**Rentabilitas** : Keuntungan dan biaya investasi dibandingkan dengan biaya operasional.

**B/C Ratio** : Ratio antara Penerimaan dan Total Biaya

**Payback Period** : Investasi dan Biaya Operasional dibandingkan dengan Keuntungan dan Investasi dalam periode 1 tahun.

**Break Even Point** : Penyusutan Modal dibandingkan dengan satu dikurangi dengan perbandingan biaya operasional dan penerimaan.



# KERAGAAN UNIT PENANGKAPAN IKAN DI PULAU JAWA - INDONESIA

Technical and operational characteristics of Indonesian fishing units

	Central Java purse seiner	Central Java purse seiner	East Java purse seiners	Pole and liner	Pole and liner	Tuna longliner	Gillnetter
Ownership	private	private	private	private	private	private	private
Material of hull	wood	wood	wood	wood	wood	wood	wood
Length of vessel (m)	15.5	27.6	19	13	25	26	17
Gross tonnage	30 - 40	100 - 120	29	10 - 15	40 - 50	67	26
Engine (HP)	120	310	2 x 30 OB	82	346	343	108
Fish hold							
Capacity (tons)	18	82	28	9	29	29	24
Preservation material	ice, salt	ice, salt		ice	ice	ice	ice
No of crew							
Skipper	1	1	1	1	1	1	1
Engineer	1	1	2	1	1	1	1
Master	1	1	2				
Cook	1	1	39	1	1	1	
Crew	23	35		13	29	9	6

# LANJUTAN

Technical and operational characteristics of Indonesian fishing units

	Central Java purse seiner	Central Java purse seiner	East Java purse seiners	Pole and liner	Pole and liner	Tuna longliner	Gillnetter
Dimensions of fishing gear	300 m long, 40 m deep	400 - 600 m long, 60 m deep	300 m long, 40 m deep				
Peak season (months)	5	5	3	4	4	5	3
Fishing trips	4	4	60	12	10	3	3
Days per trip	7 - 10	10 - 20	1	2	2	60 - 70	30
Mid season (months)	4	4	3	5	5	4	5
Fishing trips	5	3	45	7	6	2	3
Days per trip	10 - 15	20 - 30	1	3	4	40 - 50	40
Low season (month)	3	3	6	3	3	3	4
Fishing trips	3	2	102	5	3	1	2
Days per trip	15 - 20	30 - 40	1	4	5	20 - 30	35

Sumber : FAO, 2010

# LANJUTAN

## Economic and financial performance of Indonesian fishing vessels (in US\$)

### Investment cost (in US\$)<sup>15</sup>

	Central Java purse seiner, 30 - 40 GT		Central Java purse seiner, 100 - 120 GT		East Java purse seiners, 29 GT		Pole and liner 10 - 15 GT		Pole and liner 40 - 50 GT		Tuna longliner		Gillnetter	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Hull, fishhold	11	15 260	11	28 128	11	18 516	11	1 719	11	14 844	11	63 125	10	7 396
Deck equipment							6	52	6	526				
Engine	7	12 708	7	12 241	7	7 578	7	5 761	7	20 925	7	8 713	7	5 031
Propulsion	7		7		3	781	7		7		7		7	
Fishing gear	4	6 573	4	13 126	4	9 082	4	57	4	148	7	6 473	10	4 554
Other equipment							7	313	7	5 104	5	7 753	5	1 177
Total		34 531		53 494		35 957		7 902		36 953		86 064		18 159

<sup>15</sup> A = life time (yrs), B = cost.

Sumber : FAO, 2010

# LANJUTAN

## Economic and financial performance (in US\$)

	Central Java purse seiner, 30 - 40 GT	Central Java purse seiner, 100 - 120 GT	East Java purse seiners, 29 GT	Pole and liner 10 - 15 GT	Pole and liner 40 - 50 GT	Tuna longliner	Gillnetter
Total earnings	31 158	62 955	32 657	23 825	45 372	88 882	18 484
Fuel	2 841	9 282	3 154	2 604	4 993	12 450	2 521
Lubricant	294	1 263	802	276	427	603	319
Harbour dues	5	5				147	113
Food	2 235	3 891		3 458	5 339	48 265	1 090
Labour share, wages, social insurance	8 901	22 731	12 627	10 557	15 461	11 330	3 024
Gear repair and maintenance	285	563	661	50	81	170	232
Vessel repair and maintenance	735	1 755	1 383	1 729	3 406	39 375	2 703
Ice and salt	1 128	1 818	650	721	1 130	3 359	940
Licence fees	8	9		6	14	142	104
General expenses	309	422		128	172	2 080	123
Total operational expenses	17 426	43 561	19 434	20 274	32 756	67 086	11 799
Gross cash flow	13 732	19 394	13 223	3 551	12 612	21 796	6 685
Depreciation	4 901	7 843	3 190	1 218	5 085	9 878	2 149
Interest	863	1 337	899	198	924	2 152	454
Net profit before taxes	7 968	10 214	9 134	2 135	6 607	9 766	4 082

Sumber : FAO, 2010

SEKIAN  
TERIMA KASIH