

Table A-9.10 ESTIMATED PROJECT COST OF MACHINING

(UNIT: US\$1,000)			
Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	3,586.9	-	3,586.9
(2) Spare parts	71.7	-	71.7
(3) Ocean freight,	57.5	-	57.5
Insurance	68.1	-	68.1
Inland transportation	-	23.0	23.0
(4) Civil & erection	26.0	856.7	882.7
(5) Office accommodation & facilities	-	71.7	71.7
(6) Engineering & Supervising	225.5	-	225.5
(7) Over head expense (10%)	403.6	95.1	498.7
Sub-total	4,439.3	1,046.5	5,485.8
2. Tax and duty			
(1) Import tax (CIFx10%)	-	378.4	378.4
(2) Import sales tax (CIFx10%)	-	378.4	378.4
(3) Value added tax (Localx10%)	-	104.7	104.7
Sub-total	-	861.5	861.5
3. Working capital (3 months of variable cost)	-	403.7	403.7
4. Contingency & other (20%)	887.8	462.3	1,350.1
Grand-total	5,327.1	2,774.0	8,101.1
Production capacity (T/Y)			639
Investment cost per ton of product (\$/T)			12,700

Table A-9.11 ESTIMATED PROJECT COST OF SHEET WORKING

(SHEET WORK & WELDING)

(Unit: US\$1,000)			
Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment & material	420.1	-	420.1
(2) Spare parts	8.4	-	8.4
(3) Ocean freight	7.5	-	7.5
Insurance	13.2	-	13.2
Inland transport	-	3.0	3.0
(4) Civil & erection	15.0	392.0	407.0
(5) Office accommodation facilities	-	8.4	8.4
(6) Engineering & supervising	40.4	-	40.4
(7) Over head	50.5	40.3	90.8
Sub-total	555.1	443.7	998.8
2. Tax & duty			
(1) Import tax (CIF x 10%)	-	44.9	44.9
(2) Import sales tax (CIF x 10%)	-	44.9	44.9
(3) Value added tax Local	-	44.4	44.4
Sub-total	-	134.2	134.2
3. Working capital (3 months of variable cost)	-	290.9	290.9
4. Contingency & other (20%)	111.0	173.8	284.8
Total	666.1	1,042.6	1,708.7

Production capacity (T/Y)

1,500

Investment cost per ton of product (\$/T)

1,140

Table A-9.12 ESTIMATED PROJECT COST OF PRESS WORK (SMALL PARTS)

(UNIT: US\$1,000)			
Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	468.2	-	468.2
(2) Spare parts	17.0	-	17.0
(3) Ocean freight,	9.3	-	9.3
Insurance	11.7	-	11.7
Inland transportation	-	3.7	3.7
(4) Civil & erection	10.0	277.9	287.9
(5) Office accommodation & facilities	-	9.5	9.5
(6) Engineering & Supervising	17.8	-	17.8
(7) Over head expense (10%)	53.4	29.1	82.5
Sub-total	587.4	320.2	907.6
2. Tax and duty			
(1) Import tax (CIFx10%)	-	48.8	48.8
(2) Import sales tax (CIFx10%)	-	48.8	48.8
(3) Value added tax (Localx10%)	-	32.0	32.0
Sub-total	-	129.6	129.6
3. Working capital (3 months of variable cost)	-	366.0	366.0
4. Contingency & other (20%)	117.5	163.1	280.6
Grand-total	704.9	978.9	1,683.8
Production capacity (T/Y)			1,380
Investment cost per ton of product (\$/T)			1,220

Table A-9.13 ESTIMATED PROJECT COST OF STEEL FABRICATION

(UNIT: US\$1,000)			
Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	679.1	-	679.1
(2) Spare parts	25.5	-	25.5
(3) Ocean freight,	26.3	-	26.3
Insurance	42.5	-	42.5
Inland transportation	-	10.5	10.5
(4) Civil & erection	75.1	2,054.5	2,129.6
(5) Office accommodation & facilities	-	13.6	13.6
(6) Engineering & supervising	74.5	-	74.5
(7) Over head expense (10%)	92.3	207.9	300.2
Sub-total	1,015.3	2,286.5	3,301.8
2. Tax and duty			
(1) Import tax (CIFx10%)	-	77.3	77.3
(2) Import sales tax (CIFx10%)	-	77.3	77.3
(3) Value added tax (Localx10%)	-	228.7	228.7
Sub-total	-	383.3	383.3
3. Working capital (3 months of variable cost)	-	325.8	325.8
4. Contingency & other (20%)	203.1	595.1	798.2
Grand-total	1,218.4	3,590.7	4,809.1
Production capacity (T/Y)			1,500
Investment cost per ton of product (\$/T)			3,210

Table A-9.14 EQUIPMENT & MACHINERY LIST OF SMALL SCALE CASTING

Section	Name	Quantity	Specification
Melting	High Frequency Furnace	1	0.5T Reserves Furnace Body
	CE Meter	1	
	Imersion Pyrometer	1	1700°C
	Ladle	2	0.5T, Top pouring
Sand Preparation & Molding	Sand Preparation Unit	1 set	3T/H Max
	Platform Scale (1)	1	50kg Max
	Platform Scale (2)	1	250kg Max
Trimming	Shot Blast	1 set	150kg/Batch
	Double Head Grinder	1	Wheel 405ø x 50 1960 r.p.m.
	Air Grinder (1)	1	Wheel 100ø 9000 r.p.m.
	Air Grinder (2)	1	Wheel 150ø 7200 r.p.m.
Inspection	Movable Compressor	1	5.5 - 7kg/cm ²
Handling	Hoist (1)	1	2T
	Hoist (2)	1	1T
	Forklift	1	1T
Utilities	Sub-station	1	3000V + 220V (600kVA)

Table A-9.15 ESTIMATED PROJECT COST OF SMALL SCALE CASTING

(Unit: US\$ 1,000)

Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	424	-	424
(2) Spare parts	15	-	15
(3) Ocean freight,	8	-	8
Insurance	6	-	6
Inland transportation	-	3	3
(4) Civil & erection	21	418	439
(5) Office accommodation & facilities	-	8	8
(6) Engineering & supervising	32	-	32
(7) Over head expense (10%)	<u>51</u>	<u>43</u>	<u>94</u>
Sub-total	557	472	1,029
2. Tax and duty			
(1) Import tax (CIFx10%)	-	45	45
(2) Import sales tax (CIFx10%)	-	45	45
(3) Value added tax (Localx10%)	<u>-</u>	<u>47.2</u>	<u>47.2</u>
Sub-total	-	137.2	137.2
3. Working capital (3 months of variable cost)	-	47	47
4. Contingency & other (20%)	111	131.2	242.2
Grand-total	668	787.4	1,455.4

Table A-9.16 EQUIPMENT & MACHINERY LIST OF SCREW & RIVET SHOP

Name	Q'ty	Specification
1. Cold header	1	6 x 60 Double stroke cold header (3.7kW + 0.75kW)
2. Tumbling machine	1	0.4m ³ x 15 - 20rpm (0.75kW)
3. Rolling machine	1	6 x 35 Inclined type motor drive (0.75kW)
4. Die	5	For M6, M5, M4, M3 & M2.6
5. Measuring tools & inspection tools	1 set	Screw gauge, Dial gauge, Measuring microscope, etc
6. Electric receiving unit	1	(10kVA)

Table A-9.17 ESTIMATED PROJECT COST OF SCREW/RIVET

(Unit: US\$ 1,000)

Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	60.0	-	60.0
(2) Spare parts	1.2	-	1.2
(3) Ocean freight,	0.5	-	0.5
Insurance	0.9	-	0.9
Inland transportation	-	0.2	0.2
(4) Civil & erection	3.0	49.9	52.9
(5) Office accommodation & facilities	-	1.2	1.2
(6) Engineering & supervising	6.5	-	6.5
(7) Over head expense (10%)	<u>7.2</u>	<u>5.1</u>	<u>12.3</u>
Sub-total	79.3	56.4	135.7
2. Tax and duty			
(1) Import tax (CIFx10%)	-	6.3	6.3
(2) Import sales tax (CIFx10%)	-	6.3	6.3
(3) Value added tax (Localx10%)	<u>-</u>	<u>5.6</u>	<u>5.6</u>
Sub-total	-	18.2	18.2
3. Working capital (3 months of variable cost)	-	9.9	9.9
4. Contingency & other (20%)	15.9	16.9	32.8
Grand-total	95.2	101.4	196.6

Table A-9.18 EQUIPMENT & MACHINERY LIST OF PRESS WORK SHOP

Name	Q'ty	Specification
1. Press brake machine	2	80 ton Hydrostatic press (18.5kW)
2. Shearing machine	1	6 x 2.5 Mechanical shearing machine (5.5kW)
3. Bench type drilling machine	1	Bit dia = 20ø (0.75kW)
4. Welding machine	2	Arc. spot welder (100V-10A)
5. Welding machine	1	Arc. welder (24.5kVA)
6. Die	10	
7. Measuring tools	1	
8. Electric receiving unit	1	(100kVA)

Table A-9.19 ESTIMATED PROJECT COST OF PRESS (SMALL ITEMS BY THIN PLATE)

(Unit: US\$ 1,000)

Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	110.0	-	110.0
(2) Spare parts	2.0	-	2.0
(3) Ocean freight,	3.2	-	3.2
Insurance	1.7	-	1.7
Inland transportation	-	1.3	1.3
(4) Civil & erection	5.6	77.2	82.8
(5) Office accommodation & facilities	-	2.2	2.2
(6) Engineering & supervising	8.5	-	8.5
(7) Over head expense (10%)	<u>13.1</u>	<u>8.1</u>	<u>21.2</u>
Sub-total	144.1	88.8	232.9
2. Tax and duty			
(1) Import tax (CIFx10%)	-	11.7	11.7
(2) Import sales tax (CIFx10%)	-	11.7	11.7
(3) Value added tax (Localx10%)	<u>-</u>	<u>8.9</u>	<u>8.9</u>
Sub-total	-	32.3	32.3
3. Working capital (3 months of variable cost)	-	28.5	28.5
4. Contingency & other (20%)	28.8	29.9	58.7
Grand-total	172.9	179.5	352.4

Table A-9.20 EQUIPMENT & MACHINERY LIST OF PLATING SHOP

(1/2)

Section	Name	Q'ty	Specification
Plating	Bath for Alkali Decreasing	1	1200 x 900 x 600H, SS + PVC
	Bath for Rinsing	19	600 x 600 x 600H, PVC
	Bath for Pickling	1	900 x 600 x 600H, PVC
	Bath for Electrolytic Decreasing	1	900 x 600 x 600H, SS + PVC
	Bath for Cyanide Zinc Plating	1	1200 x 1200 x 800H, SS + PVC
	Bath for Rinsing	1	600 x 1200 x 800H, SS + PVC
	Bath for Hot Rinsing	1	600 x 600 x 600H, SUS304
	Barrel for Cyanide Zinc Plating	3	ø400 x 650L, PVC
	Cage	40	ø300 x 200H, SUS304
	Carrier (Hand Movable)	1	
	Driving Device of Barrel Rotation	1	0.25kW
	Rectifier for Electrolytic Decreasing	1	10V x 300A
	Rectifier for Cyanide Zinc Plating	1	12V x 600A
	Filter for Electrolytic Decreasing	1	700 l/Hr, 0.18kW
	Filter for Cyanide Zinc Plating	1	3500 l/Hr, 0.265kW
	Heater for Alkali Decreasing	2	3kW x 2
	Heater for Electrolytic Decreasing	1	3kW
	Heater for Hot Rinsing	1	3kW
	Cooler for Cyanide Zinc Plating	1	Air Cooling Type 1.5kW
	Centrifugal Dehydrator	1	Motor: 2.2kW Heater: 5kW
	Cage for Centrifugal Dehydrator	2	ø550 x 300H, SUS304
	Showering Tower for Electrolytic Decreasing and Pickling	1	Pump: 0.2kW Fan: 0.75kW
	Showering Tower for Cyanide Zinc Plating	1	Pump: 0.2kW, Fan: 0.75kW
	Water Tank	1	3m ³ Pannel Tank, 1m x 3m x 1mH
	Cubicle	1	70kVA
	Pannel Board	1	

Table A-9.20 (Continued)

(2/2)

Section	Name	Q'ty	Specification
Drainage	Primary and Third Reacting Tank	2	550 x 550 x 700H, PVC
	Secondary Reacting Tank, Primary pH Tank and Coagulating Tank	3	750 x 750 x 900H, PVC
	Secondary pH Regulating Tank	1	1000 x 1000 x 900H, PVC
	Reducing Tank	1	400 x 400 x 600H, PVC
	Chemicals Tank	6	N-100, 100 l Poly-tank
	Pump for Water	8	0.2kW x 8
	Pump for Chemicals	14	0.065kW x 14
	Plunging Pump of Calcium Hydrate Dehydrator	1	0.2kW
		1	Pump: 3.7kW
			Oil Pressure 1.5kW
	Agitator	10	0.1kW x 10
	Agitator for Secondary pH Tank	1	0.2kW
	pH Meter	7	0 - 14pH
	ORP Meter	4	+700 micro V
	pH Recorder	1	0 - 14 pH
	Flow Meter	7	PVC/PVC
	Level Switch	10	PVC Float
	Control Pannel Board	1	Outdoors Self-Standing Double Door Type
Common facilities for plating and drainage	Valve	1 lot	15A - 40A, PVC
	Materials for Piping	1 lot	15A - 50A, PVC
	Framwork	1 lot	SS + Tar Epoxy Paint, PVC
	Copper Bus-bar	1 lot	5T x 50W
	Copper Cable	1 lot	

Table A-9.21 ESTIMATED PROJECT COST OF ELECTROPLATING

(Unit: US\$ 1,000)

Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	97.0	-	97.0
(2) Spare parts	2.9	-	2.9
(3) Ocean freight,	3.4	-	3.4
Insurance	1.5	-	1.5
Inland transportation	-	1.3	1.3
(4) Civil & erection	28.9	37.4	66.3
(5) Office accommodation & facilities	-	1.9	1.9
(6) Engineering & supervising	34.5	-	34.5
(7) Over head expense (10%)	<u>16.8</u>	<u>4.1</u>	<u>20.9</u>
Sub-total	185.0	44.7	229.7
2. Tax and duty			
(1) Import tax (CIFx10%)	-	10.5	10.5
(2) Import sales tax (CIFx10%)	-	10.5	10.5
(3) Value added tax (Localx10%)	<u>-</u>	<u>4.5</u>	<u>4.5</u>
Sub-total	-	25.5	25.5
3. Working capital (3 months of variable cost)	-	2.7	2.7
4. Contingency & other (20%)	37.0	14.6	51.6
Grand-total	222.0	87.5	309.5

Table A-9.22 MACHINERY LIST OF FILTER MANUFACTURING FACTORY

Existing machinery

1. Press machine 35T	1
2. Press machine 16T	2
3. Press machine 10T	1
4. Press machine 6.3T	2
5. Lathe	1
6. Folding machine	1
7. Drilling machine	1
8. Spot welder	2
9. Transformer for welding	1
10. Hand press	6

Additional machinery

1. Power press machine, 70T x 165 strokes	2
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Table A-9.23 ESTIMATED EXPANSION COST OF FILTER MANUFACTURING FACTORY

(Unit: US\$ 1,000)

Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	23.5	-	23.5
(2) Spare parts	1.5	-	1.5
(3) Ocean freight,	0.5	-	0.5
Insurance	0.5	-	0.5
Inland transportation	-	0.1	0.1
(4) Civil & erection	-	20.0	20.0
(5) Office accommodation & facilities	-	0.5	0.5
(6) Engineering & supervising	2.4	-	2.4
(7) Over head expense (10%)	2.8	2.1	4.9
Sub-total	31.1	22.7	53.8
2. Tax and duty			
(1) Import tax (CIF x 10%)	-	2.6	2.6
(2) Import sales tax (CIF x 10%)	-	2.6	2.6
(3) Value added tax (Local x 10%)	-	2.3	2.3
Sub-total	-	7.5	7.5
3. Working capital additional	-	45.0	45.0
4. Contingency & other (20%)	6.2	15.0	21.2
Grand-total	37.3	90.2	127.5

Table A-9.24 MACHINERY LIST OF PUMP MANUFACTURING FACTORY

(Foundry Equipment)

Item	Q'ty	Description
1.	2	High frequency induction furnace 350 kW, 2 x 500 kg complete set
2.	1	High frequency induction furnace 500 kW, 2 x 1,500 kg complete set
3.		Laboratory equipment 1 spectrometer 1 current pulse generator 1 micro processor 1 printer 1 visual display
4.	1	CE temperature meter
5.	1	Induction holding unit
6.	1	Moulding system
7.		Core making 1 sand mixing machine 3 table 1 core shelf 1 core drying furnace
8.		Sand treatment plant 1 sand mixing machine 1 pneumatic sand transport
9.		Surface cleaning and fettling 5 small shot blast machine 1 grinding machine 1 vise 1 stationary grinding machine 1 shot blast machine 10 hand grinding machine 1 HF installation
10.	1	Gust-apparatus 1,000 Amp. 1 ventilator
11.	1	Rolling conveyor
12.	3	Overhead crane
13.	1	Wall crane
14.		Other equipment
15.	1	Compressor with piping
16.	3	Pouring ladle
17.		Cope and drag

Table A-9.25 MACHINERY LIST OF PUMP MANUFACTURING FACTORY

(Machine Shop and Assembly Shop Plant and Equipment)

Item	Q'ty	Description
1.	6	Lathe, Centre height 255 mm, Centre distance 1,000 mm, Motor power 10 HP
2.	1	Lathe, Centre height 255 mm, Centre distance 3,000 mm, Motor power 10 HP
3.	1	Lathe, Centre height 300 mm, Centre distance 6,000 mm, Motor power 15 HP
4.	2	Lathe, Centre height 420 mm, Centre distance 1,500 mm, Motor power 20 HP
5.	1	Lathe, Centre height 500 mm, Centre distance 4,000 mm, Motor power 40 HP
6.	1	Lathe, Centre height 800 mm, Centre distance 4,000 mm, Motor power 75 HP

Table A-9.26 ESTIMATED COST OF PUMP MANUFACTURING FACTORY

(Unit: US\$ 1,000)

Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	1,945.0	-	1,945
(2) Spare parts	82.7	-	82.7
(3) Ocean freight,	50.0	-	50.0
Insurance	60.0	-	60.0
Inland transportation	-	40.0	40.0
(4) Civil & erection	-	1,350.0	1,350.0
(5) Office accommodation & facilities	-	15.0	15.0
(6) Engineering & supervising	300.0	-	300.0
(7) Over head expense (10%)	243.8	140.5	384.3
Sub-total	2,681.5	1,545.5	4,227.0
2. Tax and duty			
(1) Import tax (CIF x 10%)	-	213.8	213.8
(2) Import sales tax (CIF x 10%)	-	213.8	213.8
(3) Value added tax (Local x 10%)	-	154.6	154.6
Sub-total	-	582.2	582.2
3. Working capital additional	-	900.0	900.0
4. Contingency & other (20%)	536.3	605.5	1,141.8
Grand-total	3,217.8	3,633.2	6,851.0

Table A-9.27 MACHINERY LIST OF SWITCHGEAR MANUFACTURING FACTORY

FABRICATION AND PAINTING SHOP (EXISTING EQUIPMENT) (1/2)

No.	Q'ty	Name
1.	2 sets	20 Ton Power Press
2.	3 sets	15 Ton Power Press
3.	1 set	Cutting Machine
4.	2 sets	Spot Welder
5.	1 pce	Cutting Machine
6.	1 pce	Bending Machine
7.	2 pcs	Painting Oven
8.	1 pce	Cutting Machine
9.	1 pce	Bending Machine
10.	1 pce	Testing Equipment
11.	1 pce	M/C Derset GM
12.	1 pce	Spot Welder Merk Aro
13.	1 pce	Spot Welder Merk Moller
14.	1 pce	Compressor Hitachi
15.	1 pce	Hydrolic Machine
16.	1 set	LVD Hydrolic Press Prizo 70/30
17.	1 set	LVD Hydrolic Quiletine MPB 2500
18.	1 set	LVD Trump Nibling
19.	1 pce	Compressor
20.	1 pce	Novo Press Machine
21.	1 pce	Spot Welder
22.	1 pce	Bending Machine for Acrilic
23.	1 pce	Cutting Machine
24.	2 pcs	Hand Pallet Opel
25.	1 pce	Screw Compressor
26.	4 pcs	AC ARC Welder
27.	3 pcs	Spot Welder
28.	1 pce	Spot Welder
29.	1 pce	Spot Welder
30.	1 pce	Cutting Machine For
31.	2 pcs	Grindstone Machine
32.	1 pcs	Sawing Machine
33.	2 pcs	Drilling Machine
34.	1 pce	Power Press Machine
35.	1 set	Auto Shear
36.	1 set	Auto Bender
37.	3 pcs	25 Ton Power Press
38.	1 pce	16 Ton Power Press
39.	1 pce	6.3 Ton Power Press

Table A-9.27 (Continued)

(2/2)

No.	Q'ty	Name
40.	3 pcs	3.15 Ton Power Press
41.	1 pce	Spot Welding Toa Seiki
42.	2 pcs	CO ₂ Welding TS ARC
43.	1 pce	Cutting Machine for Equal Angel Bor

Note: Equipment and machineries in perolatan work shop and laboratory were deleted.

FABRICATION AND PAINTING SHOP (NEW EQUIPMENT)

No.	Q'ty	Name
1.	2 sets	Equipment for Press Brake (Amada Meteres)
2.	1 set	Painting Equipment, Drying Furnase and Power Coating Equipment

Table A-9.28 ESTIMATED EXPANSION COST OF SWITCHGEAR FACTORY

(Unit: US\$ 1,000)

Item	Foreign	Local	Total
1. Plant direct cost			
(1) Equipment, materials	167.0	-	167.0
(2) Spare parts	8.5	-	8.5
(3) Ocean freight,	0.3	-	0.3
Insurance	2.6	-	2.6
Inland transportation	-	0.1	0.1
(4) Civil & erection	50.0	950.0	1,000.0
(5) Office accommodation & facilities	-	19.0	19.0
(6) Engineering & supervising	16.7	-	16.7
(7) Over head expense (10%)	24.5	96.9	121.4
Sub-total	269.6	1,066.0	1,335.6
2. Tax and duty			
(1) Import tax (CIF x 10%)	-	17.8	17.8
(2) Import sales tax (CIF x 10%)	-	17.8	17.8
(3) Value added tax (Local x 10%)	-	106.6	106.6
Sub-total	-	142.2	142.2
3. Working capital additional	-	630.0	630.0
4. Contingency & other (20%)	53.9	367.6	421.5
Grand-total	323.5	2,205.8	2,529.3

Part IV ANNEX

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PART IV ANNEX

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MEMBER LIST OF JICA TEAM

1. Coordination group

M. SAKANASHI (Team Leader/Project Management)
S. INAKAZU (Sub-leader of the Team/Senior Project Engineer)
H. TANAKA (Residential Coordinator/Economist)
T. USHIJIMA (Technical Group Leader/Electrical Engineer)

2. Financial group

J. KUWABARA (Economist)
S. ISHII (Economist)

3. Technical group 1

M. IMOTO (Metalworking Senior Engineer)
S. KOHARA (Mechanical Engineer)

4. Technical group 2

M. HAGINO (Senior Project Engineer)
M. NAGATOMO (Transportation Machine Engineer)

5. Technical group 3

H. ENDO (Metalworking Engineer)
T. SETO (Metalworking Engineer)

MEMBER LIST OF STEERING COMMITTEE
of
THE STUDY ON THE DEVELOPMENT OF LINKAGE-TYPE INDUSTRIES

- | | | |
|--------------------------------|---|---|
| Chairman | : | Mr. Tuk Setyohadi
Secretary General
Ministry of Industry (MOI) |
| Vice Chairman | : | Mr. Bachrum S. Harahap
Special Assistant to Minister, MOI |
| Committee Secretary | : | Mr. A.S. Siagian
Head, Bureau of International
Cooperation, MOI |
| Committee Members | : | |
| 1. Mr. Tata C. Syarief,
SE | | Director of Programme Development,
Directorate General of Machinery and
Basic Metal Industry, MOI |
| 2. Ir. Soesanto Sahardjo | | Director of Programme Development,
Directorate General of Multifarious
Industries, MOI |
| 3. Ir. Soenaryo | | Director of Programme Development
Directorate General of Basic Chemical
Industry, MOI |
| 4. Mr. Djoko Mulyanto | | Director of Programme Development,
Directorate General of Small Scale
Industry, MOI |
| 5. Drs. Muchlis Tahar | | Head of Industrial Research Center,
Agency for Industrial Research and
Development, MOI |
| 6. Mr. Ilchaidi Elias S.E. | | Head, Bureau of Planning, MOI |
| 7. Mrs. Buli O.
Surjaatmaja | | Director for External Fund Foreign
Monetary Fund, Ministry of Finance |
| 8. Dr. Ir. Bambang Purnomo | | Head, Bureau of Industry, Mining and
Electric Energy, BAPPENAS |
| 9. Ir. Mansjurdin Nurdin | | Deputy General manager and of General
Credit Department, Bank Indonesia |
| 10. Drs. Wahid Salim | | Head of the Inter-Governments
Department, Cabinet Secretariat of
R.I. |

LIST OF GOVERNMENT ORGANIZATION

VISITED BY THE TEAM

MINISTRY OF INDUSTRY

Jl. Gatot Subroto Kav. 52

Secretary General

Bureau of International Cooperation

Bureau of Planning

Agency for Industrial Research and Development

Directorate General of Machine and Basic Metal Industry

Directorate of Programming

Directorate of Machine Industries

Directorate of Electrical Equipment and Electronic
Industries

Directorate of Land and Air Transportation Industry

Directorate of Ship Building Industries

Directorate General of Multifarious Industry

Directorate of Programming

Directorate of Electrical Equipment and Metal Industries

Directorate General of Small-scale Industry

Directorate of Programming

Directorate of Metal-working Industries

REGIONAL OFFICE OF DEPARTMENT OF INDUSTRY (KANWIL)

KANWIL DKI JAKARTA	JAKARTA
KANWIL WEST JAVA	BANDUNG
KANWIL CENTRAL JAVA	SEMARANG
KANWIL EAST JAVA	SURABAYA
KANWIL YOGYAKARTA	YOGYAKARTA
KANWIL NORTH SUMATERA	MEDAN
KANWIL EAST KALIMANTAN	BALIKPAPAN
KANWIL SOUTH SULAWESI	UJUNG PANDANG

MINISTRY OF FINANCE

Jl. Lapangan Banteng Timur 2-4

Directorate General of Foreign Monetary Fund

Directorate of External Fund

Directorate General of Domestic Monetary Fund

Directorate of Financial Institution

Directorate of Investment

BKPM (Investment Coordination Board)

Bureau of Promotion

LIST OF FINANCING ORGANIZATION
VISITED BY THE TEAM

No.	Name of Organization	Address
1.	Bank Indonesia	Jl. M.H. Thamrin 2 Jakarta
2.	Bank Indonesia, Surabaya Office	Jl. Pablewan No.105 Surabaya
3.	Bank Negara Indonesia 1946 Surabaya Branch and Surabaya Resional Office	Jl. Pemuda No.36
4.	Bank Dagang Negara Surabaya Branch	Jl. Kemban Jepur 168
5.	Bank Pembangunan Daerah of East Jawa Office	Jl. Garuda No.1 Surabaya
6.	Bank of Tokyo	Nusantara Building Jl. M.H. Thamrin No.59, Jakarta
7.	OECE	Nusantara Building Jl. M.H. Thamrin No.59, Jakarta
8.	Bank Bumi Daya Central Office	Jl. Imam Bonjol No.61 Jakarta
9.	Bank Pembangunan Indonesia Central Office	Jl. Gondangdia Lama 2-4, Jakarta
10.	World Bank Jakarta Office	Jl. H.R. Rasuna Said (Lippo Bldg.)
11.	Bank Expor Impor Indonesia Central Office	Jl. Lapangan Setasiun 1, Jakarta-Kota
12.	Bank Rakyat Office Central Office	Jl. Veteran No.8, Jakarta Pusat

No.	Name of Organization	Address
13.	P.T. Asuransi Kredit Indonesia	Jl. Cikini Raya No.99 Jakarta Pusat
14.	Bank Duta Ekonomi Head Office	Jl. Kebon Sirih 12, Jakarta
15.	Overseas Express Bank	Jl. Pecenongan No.84 Jakarta
16.	Bank Indonesia, Bandung Office and RPMUs - Jabar	Jl. Braga, Bandung
17.	Bank Negara Indonesia Bandung Regional Office and Bandung Branch	Jl. Braga No.133, Bandung
18.	Bank Dagang Negara Bandung Branch	Jl. Asia Afrika 119, Bandung
19.	Bank Pembangunan Daerah of Jabar - Head Office	Jl. Kejaksaan No.8, Bandung
20.	Bank Indonesia Medan	Jl. Palang Merah 112A, Medan

LIST OF LARGE SCALE INDUSTRIES
INTERVIEWED BY CONSULTANTS AND
LOCAL INTERVIEWERS

(Employee over 100 persons)

1. AUTOMOTIVE AND AUTOMOTIVE PARTS

1. P.T. Karama Yudha Tiga Berlian Motors
Jl. Jen. A. Yani Proyek Pulomas
Jakarta
2. P.T. Toyota-Astra Motor
Jl. Jenderal Sudirman 5
Jakarta
3. P.T. Toyota Engine Indonesia
Jl. Yos Sudarso Sunter I
Jakarta
4. P.T. Toyota Mobilindo
Jl. Yos Sudarso Sunter II
Jakarta Utara
5. P.T. Multi Astra
Jl. Yos Sudarso Sunter
Jakarta
6. P.T. Kramayudha Ratu Motor
Jl. Raya Bekasi Km. 22-23
Jakarta
7. P.T. Sanoh Indonesia
Jl. Rawagelam IV/K. II-3
Kawasan Industri
Pulogadung Jakarta
8. P.T. Nippondenso Indonesia
Jl. Yos Sudarso, Sungai Bambu
Jakarta Utara

9. P.T. Meiwa Indonesia
Jl. Raya Bogor Km. 30
Jawa Barat
10. P.T. Kramayudha SBY Majapahit Motor
Jl. Taman Sepanjang
Surabaya
11. P.T. Colt Engine Manufacturing
Jl. Raya Bekasi Km. 21-22
Rawaterate Pulogadung
Jakarta
12. P.T. Mitsubishi Kramayudha & Manufacturing
Jl. Bekasi Timur Km. 22
Jakarta
13. P.T. Kayaba Indonesia
Jl. Rawaterate Raya I/4
Pulogadung Jakarta
14. P.T. Mesin Isuzu Indonesia
Jl. Sudirman H.18 Lt.4
Jakarta
15. P.T. Showa Indonesia
Jl. Laksda Yos Sudarso
Sunter II
Jakarta
16. P.T. Suzuki Indonesia Manufacturing
Jl. Kalibesar Barat 46
Jl. Raya Penggilingan
Cakung, Jakarta

2. HEAVY EQUIPMENT

- 17. P.T. Komatsu Indonesia
Jl. Kramat Raya 43
Jakarta
- 18. P.T. Barata Indonesia
Jl. Ngagel 109
Surabaya
- 19. P.T. Boma Bisma Indera
Jl. Ngagel No. 155-157
Surabaya

3. SHIP BUILDING

- 20. P.T. Pelita Bahari
Jl. Sindang Laut 100 Tg. Priok
Jakarta Utara
- 21. P.T. Dok & Perkapalan Tg. Priok
Jl. Penambangan Pelabuhan I
Tg. Priok, Jakarta
- 22. P.T. Kojai
Jl. R.R. Martadinata I/2
Tanjung Priok
- 23. P.T. Dok dan Perkapalan Surabaya
Jl. Perak Barat 432-435
Surabaya
- 24. P.T. Menumbar
Jl. Batu Panggal Samarinda
East Kalimantan

25. P.T. Industri Kapal Indonesia
Jl. Tinumbu, Ujung Pandang

4. AGRICULTURE MACHINERY

26. P.T. Kubota Indonesia
Jl. Setiabudi 279
Semarang
27. C.V. Karya Hidup Sentosa
Jl. Magelang 144
Yogyakarta
28. P.T. Yamindo
Jl. Ir. H. Juanda
Surabaya
29. P.T. Yanmar Agricultural Machinery Manufacturing
Jl. Ir. H. Juanda 42
Jakarta
30. P.T. Candi Naga
Jl. Jembatan Lima No.43
Jakarta Barat Tel. 346140 - 375651

5. PUMP

31. P.T. Ebara Indonesia
Jl. Raya Jakarta - Bogor Km. 32
Curug Cimanggis - Bogor
32. P.T. Aneka Pompa Bandung
Jl. Kramat Jati 18
Jakarta Timur

6. DIESEL ENGINE & PARTS

33. P.T. Yanmar Diesel Indonesia
Jl. Raya Bogor
Bogor
34. P.T. Yanmar Indonesia
Jl. Raya Bogor Cimanggis
Bogor
35. P.T. Bani Nusa Indonesia
Jl. Industri No.15
Bandung Tel. (022) 614797

7. MACHINE TOOL

36. P.T. Oyama
Jl. Yos Sudarso 56
DKI
37. P.T. Sarana Widya Utama
Glodok Plaza S 84
Jl. Pinangsia
Jakarta Tel. 627727, 627440
38. P.T. Sumber Bahagia
Jl. Mayor Okeng Jaya Atmaja 13
Bogor Tel. (0251) 21633
39. P.T. Sumber Bahagia
Jl. Mayon Oking No.13 Bogor

8. STEEL STRUCTURES & OFFSHORE EQUIPMENT

40. P.T. Musashi Indonesia
Jl. Yos Sudarso, By Pass
Jakarta
41. P.T. Permiko Enginnering and Construction
Ratu Plaza Office Tower, 30th Fl.
Jl. Jen. Sudirman
Jakarta

9. ELECTRICAL EQUIPMENT

42. P.T. Fuji Dharma Electric Co. Ltd.
Jl. Gajah Mada 156
Jakarta
43. P.T. Industira
Jl. Bendungan Hilir II
Jakarta
44. P.T. Toa Galva Industries
Jl. Hayam Wuruk 27,
Jakarta
45. P.T. Metbelosa
Jl. Taruna No.1, Pulogadung
Jakarta Timur
46. P.T. National Gobel
Jl. Raya Jakarta - Bogor
Gandaria Pakayon
Pasar Rebo
Jakarta Timur
47. P.T. Morawa Electric Tranbuana
Jl. Timor No.21F
Medan

10. PLANT EQUIPMENT

48. P.T. Super Andalas Steel (Boiler, Blower)
Jl. K.L. Yos Sudarso Km 9 Medan

11. BASIC METAL

49. P.T. Krakatau Steel
Jl. Cilegon West-Jawa
50. P.T. Gunung Gahapi (Steel Plate)
Jl. Medan Belawan Km 10 Medan
51. P.T. Sermani Steel Corporation (G.I Sheet)
Jl. Urip Sumohardjo Tello Baru
Ujun Pandang

LIST OF MEDIUM AND SMALL SCALE
INDUSTRIES INTERVIEWED BY CONSULTANTS
AND LOCAL INTERVIEWERS

(JAKARTA AREA)

No.	Name of Organization	Address	Business Field
1.	P.T. PRIMA JABAR STEEL	Jl. Rawa Gelam III no. 1 Kawasan Pologadung Jakarta Timur	Tea Screenings
2.	SINAR LOGAM	Jl. Dokter no.41 Kaplik Utara Raya	Spray Container
3.	P.T. ASAFLUX & SOLDER	Jl. Pluit Mas V Block E no.7 A.B	Solder material
4.	RITAFNI	Jl. Kebon Raya (Simpang III) Tomang Barat Baru Jakarta	Fence
5.	SUGENG	Jl. Raya kebon Jeruk no.32 Jakarta Barat	Fence
6.	SUBUR JAYA	Jl. Raya Bogor 107/km 19 Jakarta - Timur 13510	Fence
7.	PEMUDA	Jl. Pemuda No.75 Rawamangun Jakarta Timur	Repair of Industrial Machinery, Pressworks
8.	P.T. SURIA MURNI	Gg. Kongsu no.3 K.H. Mansyur Jakarta Kota	Oil can, Cake can etc. Presswork
9.	C.V. HIDUP BARU	Jl. Mangga Besar 4R/ 47 Jakarta	Printing letter Casting printing
10.	P.T. MATAHARI ALKA	Jl. Rawagelam I no.1 Kawasan Industri Pulogadung. Jkt	Filling Cabinet Drafting stand, Kitchen sink

No.	Name of Organization	Address	Business Field
11.	P.T.PURNA KADERA	Jl. Rawagatel Kav.III S.39 Industrial Estate Pulogadung Jakarta	Seat frame & Cover, bus seat
12.	P.T. BUMI KAYA STEEL INDUSTRIES	Jl. Pulolentut 7, Kawasan Industri Pulogadung-Jkt	Galvanized Steel pipe electric pole
13.	MURNI	Jl. Karet Sawah 300 Jakarta Pusat	Wire net
14.	P.T. MULIA BHAKTI WIBAWA	Jl. Karet Tongsin Raya Jakarta Pusat	Repairing for Auto parts
15.	P.T. SINAR WIRA UTAMA	Jl. Raya Rawa Buaya 6 Cengkareng P.O. Box 953/Jkt. Jakarta Barat	Workshop, Machining
16.	P.T. PRINDA	Jl. Raya Pisangan Lama 79 Jatinegara	Thermos, Coffee Pot (Glass)
17.	P.T. LEDU	Jl. Pisangan Lama Raya no. 77 Jajarta Timur	Rice Cooker (Aluminium)
18.	P.T. SENOPATI MICROFIT SENANATHO		Powder Metallurgy
19.	P.T. WIRA GULFINDO	Jl. Gunung Sahariraya no. 30	Kerosene, Pressure Vessel for Oil
20.	P.T. CAHAYA BINTANG SUASA	Jl. Kapuk Raya Gg. Sama no.7 Jakarta Barat	Container for Paint
21.	MALUKU MUDA	Jl. Teluk Gong No.19 A-C Jakarta Utara	Cast Iron, Machining (Flywheel, Cnoppling)

No.	Name of Organization	Address	Business Field
22.	SUMBER JAYA	Jl. Palmerah Selatan 145 Jakarta Pusat	Aluminium Casting (Flying Pan)
23.	SINAR BAJA SLIPI	Jl. Palmerah Utara IV 203 Jakarta Barat	Filing Cabinet Steel Desk
24.	C.V. MAKMUR JAYA	Jl. Kemandoran 1 No.9A Palmerah Barat	Aluminium Cast Bar for Extrusion
25.	P.T. STAR METAL WARE	Jl. Kemandoran V/11 Palmerah Keb. Lama Jakarta	Lamp, Steam Iron Hair Dryer
26.	SONIC	Jl. Rawa Buaya Raya no.8 Cengkareng Jakarta	
27.	ABADI	Jl. T.S.S. No. 15 Jembatan V Jkt	Container (Tin Plate)
28.	TIGA SAUDARA	Jl. Kerajinan Kebon sayur no.9 Kampun Jawa - Jkt	Machining & Assly (Food Machine)
29.	SETIA	Jl. Mangga Dua abdad No.2 Jkt - Pusat	Liquid Measure
30.	ZUBAIDI DB	Jl. Mangga Dua abdad Rt. 15/11 Jkt - Pusat	Liquid Measure
31.	PT. LLGA RAYA	Jl. Teluk Gong no.9	Cooker (Stain- less Steel)
32.	C.V. CIPTA KARYA	Desa Bibis no.3 Tandes Surabaya	Pump & Machine Tool

No.	Name of Organization	Address	Business Field
33.	C.V. INDOBRAKE	Jl. Buntaran no.3 Desa Manukan Wetan Kecamatan Tandes Surabaya	Brake lining & brake shoe
34.	P.T. MUARA TEWE SPRING	Jl. Pulogadung 30, Pulogadung Industrial Estate Jakarta Timur	Springs for Car
35.	P.T. BENTENG MERARI INDUSTRI	Jl. Raya 78, AESA GILANG TAMAN SIDOARJO	Kerosine Stove and Electric iron
36.	ASYARI & SONS	Jl. Pertukangan 1 Pasuruan	Agriculture Machine
37.	P.T. MAMINDO	Pandaan Kabupaten Pasuruan Jawa Timur	Tractor, Agriculture machine
38.	TANJUNG ALAM	Jl. Aout III 196	Machining and Repare
39.	C.V. PABRIK MESIN "GUNTUR"	Jl. Kol Sugiono 14 Malang	Pump and Machining
40.	SEMERU JAYA	Jl. Mangga 10. Malang	Pump and Agriculture Machine

(CENTRAL JAWA AREA)

No.	Name of Organization	Address	Business Field
1.	LIK/CSF, Tegal	Tegal	Water pump
2.	BAROKAH	Jl. KJ. Muklas I/437 Tegal	Rice mill
3.	UD. MASRURI	Tembok Luwung No.291 Adiwarna Tegal	Muffler, Engine Hook Bolt, PLN Equipment
4.	PERTUKANGAN BESI		Hand Forging
5.	BP. H. ABOESEIRI	Jl. Raya Kajen Talang No. 226 Tegal	Sheet Metal Working/ Machining (Engine parts)
6.	MURBAUT "MAKDUM"	Banjaran Tembok Luwung Rt.04 Rk 01 Aiwerna Tegal	Hand Forging Water pump
7.	GUNANG MAS	Batur, Ceper, Klaten	Iron Casting (for rice mill)
8.	C.V. MUSTIKA KARYA	Batur, Ceper, Klaten	Iron casting (pump)
9.	BD. DAWAN ASYHRI	Jl. Batur, Ceper, Klaten	Al casting (Hopper, Crank case cover)
10.	SLAMET ZAINI	Jl. Kemasan Kalimati Adiwarna Tegal	Cable Clamp Bolt

(BANDUNG AREA)

No.	Name of Organization	Address	Business Field
1.	P.T. TURBINDO	Jl. Baros Pasar 97. Cimahi Bandung	Pump
2.	P.T. TELNIC	Jl. Soekarno-Hatta P.O. Box 582 Bandung	Language Labo. Traffic Signal System
3.	Balai Besar Bahan dan Barang Teknik	Asia Afrika 146, Bandung	Machine Pool pump

(SURABAYA)

No.	Name of Organization	Address	Business Field
1.	P.T. BENIENG MERAPI INDUSTRI	Jl. Raya 78 AESA Gilang Gilang SIDOARJO	Kerosene stone Electric Iron (Presswork, own Die-making)
2.	ASYARI AND SONS	Jl. Pertukangan 1 Pasuruan	Parts of Agri- machine Press for tile Pulley etc. (Casting & Machining)
3.	TANJUNG ALAM		Machining & Repair for sugar and cement plant
4.	P.T. YANMAR AGRI- CULTURAL MACHINERY MANUFACTURING INDONESIA (P.T. YAMINDO)	Pandaan Kabupaten Pasuruan, Jawa Timur	Wheel Tractor Hand Tractor Rice Huller Rice Polisher Paddy Thresher
5.	C.V. PABRIK MESIN "GUNTUR"	Jl. Kol. Sugiono 14 Malang	Agri-Machine (Machining & Machine Assembly)
6.	SEMERU JAYA	Jl. Kol. Sugiono 250 Malang	Agri-Machine (Casting, Machining Machine Assembly Repair of Auto Mobile Car)

No.	Name of Organization	Address	Business Field
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(MEDAN)

- | | | | |
|----|----------------------|-------------------------------------|--|
| 1. | C.V. LOGAM | Jl. K.L. Yos Sudarso
130 Medan | |
| 2. | P.T. GLUGUR | Jl. K.L. Yos Sudarso
NO 9L Medan | |
| 3. | P.T. SENI | Jl. Medan T. Morawa
Km 7½ Medan | |
| 4. | U.D. INDUSTRI BAHARI | Jl. Sisingamangaraja
No 8B Medan | |

(BALIK PAPAN)

- | | | | |
|----|---------------------------|--|--|
| 1. | P.T. KARINDO | Jl. Adilmakmur XIV/
45 Balikpapan | |
| 2. | P.T. SARANA DAYA
UTAMA | Jl. Semoi Rt III
No 49 P.O. Box 437 | |

(UJUNG PANDANG)

- | | | | |
|----|---------------------------------|---|--|
| 1. | C.V. LATIHAN KERJA
TEKNOLOGI | Jl. Mentimun No 30
Ujungpandang | |
| 2. | P.T. SAMATO | Jl. Bandang VII/4
Ujungpandang | |
| 3. | P.T. GARMAS MOTOR | Jl. Urip Sumohandjo
No 83 Ujungpandang | |

NO.	N A M E	ISSUED BY	DATE OF ISSUE
1.	Standard Trade & Industry Directory of Indonesia VI 1985 KOMPASS		1985
2.	Buku PEGANGAN PENGGUNAAN PRODUKSI DALAM NEGERI BUKU I	Team Pengendali Pengadaan Barang/Peralatan Pemerintah Sekretariat Negara Republik Indonesia	November 1984
3.	Buku PEGANGAN PENGGUNAAN PRODUKSI DALAM NEGERI BUKU II	- " -	- " -
4.	INFORMASI POTENSI INDUSTRI PERIODE OCTOBER 1984	Departemen Perindustrian	October 1984
5.	Buku Saku STATISTIK INDONESIA 1983 Statistical Pocketbook of Indonesia	Biro Pusat Statistik, Jakarta Indonesia	1983
6.	INDIKATOR EKONOMI Monthly Statistical Bulletin	- " -	April 1985
7.	HARGA PERDAGANGAN BESAR DI JAKARTA	- " -	February 1985
8.	PENDAPATAN NASIONAL INDONESIA 1973-1983 (TABEL-TABEL POKOK)	- " -	August 1984
9.	STATISTIK INDUSTRI KECIL 1979	- " -	Maret 1982
10.	STATISTIK INDONESIA - Statistical Yearbook	- " -	January 1984
11.	INDONESIA 1984 An Official Hard Book	Department of Information Republic of Indonesia	1984
12.	STATISTIK KEUANGAN Financial Statistics 1981/1982 DAN 1982/1983	Biro Pusat Statistik, Jakarta, Indonesia	August 1983

NO.	N A M E	ISSUED BY	DATE OF ISSUE
13.	DELETION PROGRAM - Industri Logam Dasar	Direktorat Jenderal Industri Logam Dasar Departemen Perindustrian	
14.	INDONESIA POLICIES AND PROSPECTS FOR LONG TERM FINANCIAL DEVELOPMENT	Report by mission comprising para Suriyaarachchi	June 1984
15.	DAFTAR PERUSAHAAN DIT. JEN. IMLD.	Departemen Perindustrian Direktorat Logam Dasar	15 June 1985
16.	DAFTAR PERUSAHAAN INDUSTRI ELEKTRONIK PROFESSIONAL SEMESTER KE-II 1984	Direktorat Jenderal Industri Mesin dan Logam Dasar Direktorat Industri Mesin Listrik dan Elektronika	December 1984
17.	DAFTAR PERUSAHAAN INDUSTRI MESIN LISTRIK DAN PERALATAN LISTRIK TENAGA 1984	- " -	December 1984
18.	DAFTAR ANGGOTA GABUNGAN PENGUSAHA INDUSTRI ELEKTRONIK & ALAT-ALAT LISTRIK RUMAH TANGGA INDONESIA	Departemen Perindustrian	September 1984
19.	WEST JAVA DAFTAR PERUSAHAAN	KANWIL, BANDUNG	1985
20.	STARTING AN INDUSTRIAL ENTERPRISE HOW IPIP/UNIDO CAN HELP YOU	IPIP/UNIDO	November 1984
21.	STANDAR INDUSTRI INDONESIA (SII)	Pusat Standardisasi Industri	August 1984
22.	STANDAR INDUSTRI INDONESIA SUPPLEMENT SII 1984/1985	- " -	
23.	ORGANIZATION CHART OF THE MINISTRY OF INDUSTRY		

NO.	N A M E	ISSUED BY	DATE OF ISSUE
24.	STAFF APPRAISAL REPORT INDONESIA BANK PEMBANGUNAN INDONESIA (BAPINDO) V	The World Bank	April 13, 1983
25.	STAFF APPRAISAL REPORT INDONESIA BANK PEMBANGUNAN INDONESIA (BAPINDO) V	- " -	May 8, 1981
26.	ANNUAL REPORT	BANK INDONESIA	1981/1982, 1982/1983, 1983/1984
27.	MONTHLY REPORT	BANK INDONESIA	1982/3, 1983/3, 1984/3, 1985/3
28.	WEEKLY REPORT	BANK INDONESIA	1985/3
29.	ANNUAL REPORT	BANK NEGARA INDONESIA 1946	1982, 1983
30.	ANNUAL REPORT	BANK DAGANG NEGARA	1982, 1983
31.	ANNUAL REPORT	BANK BUMI DAYA	1982, 1983
32.	ANNUAL REPORT	BANK PEMBANGUNAN INDONESIA	1981, 1982, 1983
33.	ANNUAL REPORT	BANK RAKYAT INDONESIA	1982, 1983
34.	ANNUAL REPORT	BANK EXPOR IMPOR INDONESIA	1981, 1982, 1983
35.	ANNUAL REPORT	BANK DUTA EKONOMI	1983
36.	ANNUAL REPORT	OVERSEAS EXPRESS BANK	1982, 1983

NO.	N A M E	ISSUED BY	DATE OF ISSUE
37.	ANNUAL REPORT	BANK PEMBANGUNAN DAERAH - JABAR (WEST JAVA)	1983
38.	ANNUAL REPORT	BANK PEMBANGUNAN DAERAH - JATIM (EAST JAVA)	1982, 1983
39.	ASSOSIASI PERBENGKELAN 7 PERMESINAN	Assosiasi Perbengkelan & Permesinan	April 1983
40.	ASSOSIASI PRODUSEN PERALATAN LISTRIK INDONESIA	Assosiasi Produsen Peralatan Listrik Indonesia	1984
41.	PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984 - 1987	Departemen Perindustrian	Edisi 1984
42.	THE DEVELOPMENT OF THE DIESEL INDUSTRY	P.T. Data Commilt Inc.	25 July 1983
43.	GABUNGAN INDUSTRI PENGERJA LOGAM DAN MESIN INDONESIA LIST OF MEMBERS AS OF APRIL 25, 1985	G A M M A	25 April 1985
44.	PELIMPAHAN WEWENANG PEMBINAAN INDUSTRI KECIL KEPADA KANTOR DEPARTEMEN PERINDUSTRIAN DI KABUPATEN/KOTAMADYA DAN PENDAFTARAN INDUSTRI KECIL	Departemen Perindustrian	March 1983
45.	SURAT KEPUTUSAN MENTERI PERINDUSTRIAN	Departemen Perindustrian	August 1980
46.	PRE-FEASIBILITY STUDY FOR FOUNDRY AND PUMP PRODUCTS MARKET APPRAISAL - PUMPS IN INDONESIA	P.T. Aneka Pomp Bandung	April 1985
47.	STUDI INVESTASI INDUSTRI REPARASI/DOK KAPAL UNTUK KELAS 30.000 DWT	Proyek Pengembangan Industri Perkapalam Direktorat Jenderal Industri Mesin dan Logam Dasar D.P.	November 1984

NO.	N A M E	ISSUED BY	DATE OF ISSUE
48.	STUDI INVESTASI INDUSTRI PEMBUATAN BANGUNAN BARU KAPAL UNTUK KELAS 10.000 DWT	Proyek Pengembangan Industri Perkapalan Direktorat Jenderal Industri Mesin dan Logam Dasar D.P.	November 1984
49.	ALSINTANI Member List Indonesian Agricultural Machinery Associations Member List	alsintani	-
50.	S I I STANDAR INDUSTRI INDONESIA	Pusat Standardisasi Industri	30 January 1985
51.	DAFTAR PERUSAHAAN (List of Company in Bandung Area)	M O I Bandung	22 July 1985
52.	P.T. KUBOTA INDONESIA LIST OF SUBCONTRACTORS	P.T. Kubota Indonesia	-
53.	L I K "TAKARU" MEMBERS LIST	L I K "TAKARU" Tegal	-
54.	DISTRIBUTION SYSTEM OF STEEL PRODUCT OF THE INDONESIAN	N K K JAKARTA Office	-
55.	PELAKSANAAN PROGRAM KETERKAITAN ANTARA SEKTOR INDUSTRI DENGAN SEKTOR EKONOMI LAINNYA	Departemen Perindustrian (Biro Humas)	March 1985
56.	PROYEK PENGEMBANGAN DUNIA USAHA JAWA TENGAH (Central Java Enterprise Development Project)	Development Alternatives, Inc.	March 31, 1983
57.	INDONESIA POLICIES FOR GROWTH AND EMPLOYMENT (COPY)	World Bank	April 23, 1985
58.	INDONESIA RECENT ECONOMIC DEVELOPMENT	I. M. P.	May 10, 1985

LIST OF INSTITUTIONS VISITED BY THE TEAM
(AS SUPPLEMENTAL LOCAL SURVEY)

(Jakarta Area)

1. The Center for Vocational and Extension Service Training (CEVEST)
2. Laboratory for Strength and Material Component and Structure (LUK),
PUSPIPTEK

(Surabaya Area)

3. Regional Institute for Industries in Surabaya
4. Surabaya Institute of Technology
5. Project for Simple Standard Machine Tool (MPSS)

(Bandung Area)

6. Metal Industries Development Center (MIDC)
7. Institute for Research and Development of Industrial Materials and
Technical Products (BBBT)
8. Bandung Institute of Technology (ITB)

**ANNEX II BASIC DATA FOR ECONOMY AND
INDUSTRY IN INDONESIA**

Table ANX II-1

GROSS DOMESTIC PRODUCT BY INDUSTRIAL ORIGIN AT CURRENT MARKET PRICES, 1969-84

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983/a	1984/b
																(Rp. billion)
Agriculture	1,339	1,575	1,646	1,837	2,710	3,497	4,003	4,812	5,906	6,706	8,996	11,290	13,542	15,668	18,771	22,737
Farm food crops	822	961	961	1,071	1,573	2,095	2,554	3,044	3,660	3,992	4,892	6,357	8,102	9,961	12,381	15,455
Farm nonfood crops	199	214	196	226	323	386	358	481	762	802	1,201	1,305	1,326	1,227	1,496	1,746
Estate crops	69	83	107	118	152	191	184	213	326	404	590	693	904	1,026	1,146	1,277
Livestock products	89	103	124	135	173	223	303	346	305	462	690	991	1,258	1,418	1,521	1,757
Forestry	59	102	142	173	355	423	413	513	525	653	1,048	1,141	1,140	983	1,040	1,122
Fishery	101	112	116	114	134	179	191	215	328	393	575	803	912	1,053	1,188	1,380
Mining & quarrying	129	173	294	491	831	2,374	2,485	2,930	3,600	4,358	6,980	11,673	12,971	11,708	13,824	17,473
Manufacturing	251	312	307	448	650	890	1,124	1,453	1,817	2,420	3,310	5,288	5,822	7,681	8,918	12,531
Electricity, gas & water	13	15	18	20	30	52	70	98	106	118	149	225	288	380	503	622
Construction	75	100	128	174	262	406	530	813	1,023	1,242	1,790	2,524	3,118	3,507	4,434	4,689
Commerce, hotels, etc.	476	619	592	769	1,118	1,775	2,104	2,552	2,959	3,450	4,775	6,391	7,966	8,865	10,874	12,268
Transport & communications	77	96	162	182	257	442	521	663	843	1,032	1,421	1,965	2,353	2,795	3,325	3,887
Banking, etc.	22	33	45	53	83	113	151	207	236	396	655	752	1,404	1,604	1,841	2,108
Ownership of dwelling	53	66	85	103	143	194	258	319	542	671	914	1,200	1,439	1,703	1,962	2,248
Public administration																
& defence	136	183	214	290	405	585	864	1,074	1,394	1,685	2,200	3,142	3,905	4,429	5,225	5,957
Other services	147	168	181	197	264	380	473	546	607	668	835	996	1,119	1,293	1,538	1,743
Gross domestic product	2,718	3,340	3,672	4,564	6,753	10,708	12,643	15,467	19,033	22,746	32,025	45,446	54,027	59,633	71,215	86,261

/a Preliminary.

/b Estimate.

Source: BPS

Table ANN II-2

GROSS DOMESTIC PRODUCT BY INDUSTRIAL ORIGIN AT CONSTANT 1973 MARKET PRICES, 1971-84

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983/a	1984/b
	(Rp. billion)													
Agriculture	2,441	2,479	2,710	2,811	2,811	2,944	2,992	3,135	3,256	3,425	3,594	3,570	3,845	4,040
Farm food crops	1,436	1,415	1,573	1,681	1,696	1,755	1,735	1,835	1,909	2,073	2,261	2,295	2,412	2,560
Farm nonfood crops	302	329	323	307	312	325	385	388	402	417	429	459	484	510
Estate crops	154	160	152	174	183	188	201	210	231	233	244	285	288	290
Livestock products	160	169	173	186	202	216	177	184	202	212	220	230	241	249
Forestry	258	276	355	325	274	310	335	352	338	308	246	197	203	207
Fishery	131	130	134	138	144	150	159	166	174	182	193	204	217	224
Mining & quarrying	551	674	831	859	828	952	1,070	1,049	1,047	1,035	1,069	940	957	1,031
Manufacturing	490	564	650	755	848	930	1,058	1,236	1,395	1,705	1,878	1,901	1,942	2,391
Electricity, gas & water	25	26	30	37	41	46	49	57	69	78	90	106	113	119
Construction	171	222	262	320	365	385	464	529	563	639	720	758	805	747
Commerce, hotels, etc.	924	1,028	1,118	1,224	1,294	1,351	1,438	1,530	1,681	1,852	2,043	2,159	2,240	2,289
Transport & communications	210	229	257	288	303	343	439	514	560	609	677	717	753	790
Banking, etc.	64	75	83	88	102	117	151	165	180	208	231	259	276	291
Ownership of dwelling	93	121	143	174	198	209	252	288	306	336	359	377	401	418
Public administration	326	393	405	443	564	596	689	768	805	972	1,076	1,115	1,176	1,215
and defence	250	256	264	270	277	283	280	296	303	310	319	323	334	339
Other services														
Gross domestic product	5,545	6,067	6,753	7,269	7,631	8,156	8,882	9,567	10,165	11,169	12,055	12,325	12,842	13,670

- GDP deflator	66	75	100	147	166	190	214	238	315	407	448	484	555	631
- GDP growth (%)		9.4	11.3	7.6	5.0	6.9	8.9	7.7	6.3	9.9	7.9	2.2	4.2	6.4
- Growth of manufacturing sector (%)		15.1	15.2	16.2	12.3	9.7	13.8	16.8	12.9	22.2	10.1	1.2	2.2	23.1
- AV. annual growth (%) for the 5 years development plan period:														
REPELITA II (1974-1978)	GDP													
REPELITA III (1979-1983)	6.9%													
	6.0%													

(Note) /a Preliminary. /b Estimate.

Source: BPS, REPELITA III

EXPENDITURES ON GDP AT CURRENT MARKET PRICES, 1971-84

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983/a	1984/b
														(Exp. billion)
Private consumption	2,848	3,309	4,804	7,344	8,732	10,572	12,481	15,184	19,514	27,503	35,560	41,670	49,231	59,182
Government consumption	341	414	716	841	1,254	1,591	2,077	2,659	3,733	4,689	5,788	6,832	7,791	7,606
Gross domestic investment (GDI)	580	857	1,208	1,797	2,572	3,205	3,826	4,671	6,704	9,485	11,553	13,467	17,188	17,759
Export of goods and non-factor services	527	762	1,356	3,044	2,897	3,621	4,513	4,974	9,629	13,849	14,928	13,345	17,733	22,203
Less import of goods and non-factor services	624	778	1,331	2,318	2,812	3,522	3,864	4,742	7,555	10,080	13,802	15,681	20,728	20,489
Gross domestic product (GDP)	3,672	4,564	6,753	10,708	12,643	15,467	19,033	22,746	32,025	45,446	54,027	59,633	71,215	86,261
Net factor income abroad	-68	-144	-245	-499	-557	-483	-678	-867	-1,484	-2,011	-1,925	-1,958	-3,036	-4,317
GNP (Gross National Product)	3,604	4,420	6,508	10,209	12,086	14,984	18,355	21,879	30,541	43,435	52,102	57,675	68,179	81,944
GDS (Gross Domestic Saving)	483	841	1,233	2,523	2,657	3,304	4,475	4,903	8,778	13,254	12,679	11,130	14,193	n.a.
GNS (Gross National Saving)	415	697	988	2,024	2,100	2,821	3,797	4,036	7,294	11,243	10,754	9,172	11,157	n.a.
GDI/GDP (%)	15.8	18.8	17.9	16.8	20.3	20.7	20.1	20.5	20.9	20.9	21.4	22.6	24.1	20.6
GDS/GDP (%)	13.2	18.4	18.3	23.6	21.0	21.4	23.5	21.6	27.4	29.2	23.5	18.7	19.9	-
GNS/GNP (%)	11.5	15.8	15.2	19.8	17.4	18.8	20.7	18.4	23.9	25.9	20.6	15.9	16.4	-

/a Preliminary.

/b Estimate.

Source: BPS

EXPENDITURES ON GDP AT CONSTANT 1973 MARKET PRICES, 1971-84

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983/a	1984/b
	(Rp. billion)													
Private consumption	4,088	4,324	4,804	5,502	5,699	6,154	6,400	6,880	7,866	8,867	10,350	10,698	11,501	12,155
Government consumption	518	561	716	641	836	896	1,044	1,288	1,345	1,490	1,841	1,775	1,759	1,579
Gross domestic investment	867	1,032	1,208	1,440	1,650	1,749	2,027	2,333	2,436	2,896	3,219	3,637	3,921	3,474
Export of goods and non-factor services	943	1,143	1,356	1,445	1,410	1,650	1,806	1,824	1,822	1,719	1,678	1,444	1,535	1,774
Less import of goods and non-factor services	871	993	1,331	1,759	1,964	2,293	2,395	2,698	3,304	3,803	4,833	5,229	5,874	5,312
Gross domestic product	5,545	6,067	6,753	7,269	7,631	8,156	8,882	9,567	10,165	11,169	12,055	12,325	12,842	13,670
Net factor income abroad	-95	-184	-245	-378	-389	-314	-420	-493	-649	-759	-674	-653	-835	-1,453
GNP (Gross National Product)	5,450	5,883	6,508	6,891	7,242	7,842	8,462	9,074	9,516	10,410	11,381	11,672	12,007	12,217
GDS (Gross Domestic Saving)	728	1,012	1,233	1,987	1,712	1,807	2,435	2,461	3,337	4,319	3,606	2,856	3,071	-
GNS (Gross National Saving)	633	828	988	1,609	1,323	1,493	2,015	1,968	2,688	3,560	2,932	2,203	2,236	-
GDI/GDP (%)	15.6	17.0	17.9	19.8	21.6	21.4	22.8	24.4	24.0	25.9	26.7	29.5	30.5	-

/a Preliminary.

/b Estimate.

Source: BPS

DISTRIBUTION OF GDP AT CURRENT MARKET PRICES, 1971-84

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983/a	1984/b
	(In percent)													
Economic sectors														
Agriculture, forestry and fishery	44.8	40.3	40.1	32.7	31.7	31.1	31.0	29.5	28.1	24.8	25.3	26.3	26.4	26.4
Mining	8.0	10.8	12.3	22.2	19.7	18.9	18.9	19.2	21.8	25.7	24.0	19.6	19.4	20.3
Manufacturing	8.4	9.8	9.6	8.3	8.9	9.4	9.5	10.6	10.3	11.6	10.8	12.9	12.5	14.5
Electricity, gas and water	0.5	0.4	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.7	0.7
Construction	3.5	3.8	3.9	3.8	4.7	5.3	5.4	5.5	5.6	5.6	5.8	5.9	6.2	5.4
Transport and communications	4.4	4.0	3.8	4.1	4.1	4.3	4.4	4.5	4.4	4.3	4.3	4.7	4.7	4.5
Other services	30.4	30.9	29.8	28.4	30.4	30.4	30.2	30.2	29.3	27.5	29.3	30.0	30.1	28.2
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Expenditure categories														
Private consumption	77.5	72.5	71.1	68.6	69.1	68.4	65.6	66.8	60.9	60.5	65.8	69.9	69.1	68.6
Government consumption	9.3	9.1	10.6	7.8	9.9	10.3	10.9	11.7	11.7	10.3	10.7	11.4	11.0	8.8
Gross domestic investment	15.8	18.8	17.9	16.8	20.3	20.7	20.1	20.5	20.9	20.9	21.4	22.6	24.1	20.6
Exports, net	-2.6	-0.4	0.4	6.8	0.7	0.6	3.4	1.0	6.5	8.3	2.1	-3.9	-4.2	2.0
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

/a Preliminary.

/b Estimate.

Source: BPS

Table ANX II-6

DISTRIBUTION OF GDP AT CONSTANT 1973 MARKET PRICES, 1971-84

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983/ ^a	1984/ ^b
	(In percent)													
Economic sectors														
Agriculture, forestry and fishing	44.0	40.8	40.0	38.7	36.8	36.1	33.7	32.8	32.0	30.7	29.8	29.8	29.9	29.6
Mining	9.9	11.1	12.3	11.8	10.9	11.7	12.1	11.0	10.3	9.3	8.9	7.6	7.4	7.5
Manufacturing	8.8	9.3	9.6	10.4	11.1	11.4	11.9	12.9	13.7	15.3	15.6	15.4	15.1	17.5
Electricity, gas and water	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.9	0.9	0.9
Construction	3.1	3.7	3.9	4.4	4.8	4.7	5.2	5.5	5.6	5.7	6.0	6.2	6.3	5.5
Transport and communications	3.8	3.8	3.8	4.0	4.0	4.2	4.9	5.4	5.5	5.4	5.6	5.8	5.9	5.8
Other services	29.9	30.9	29.8	30.2	31.9	31.3	31.6	31.8	32.2	32.9	33.4	34.3	34.5	33.2
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Expenditure categories														
Private consumption	73.7	71.3	71.1	75.7	74.7	75.5	72.0	71.9	77.4	79.4	85.9	86.8	89.6	88.9
Government consumption	9.4	9.2	10.6	8.8	11.0	11.0	11.8	12.8	13.2	13.3	13.6	14.4	13.7	11.6
Gross domestic investment	15.6	17.0	17.9	19.8	21.6	21.4	22.8	24.4	24.0	25.9	26.7	29.5	30.5	25.4
Exports, net	1.3	2.5	0.4	-4.3	-7.3	-7.9	-6.6	-9.1	-14.6	-18.6	-26.2	-30.7	-33.8	-25.9
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^a Preliminary.^b Estimate.

Source: BPS

BALANCE OF PAYMENTS, 1973/74 - 1984/85

	(US\$ million)											
	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85 Prel.
1. Net oil /a	641	2,638	3,138	3,710	4,352	3,785	6,308	9,345	8,379	5,788	6,016	5,308
2. Net LNG /a	-	-	-	-	93	225	667	1,256	1,382	1,378	1,355	1,922
3. Non-oil (net)	-1,397	-2,776	-3,992	-4,512	-5,135	-5,165	-4,777	-8,470	-12,551	-14,205	-11,522	-10,171
Exports, FOB	1,905	2,033	1,873	2,863	3,507	3,979	6,171	5,587	4,170	3,928	5,367	5,902
Imports, CIF	-2,938	-4,341	-5,090	-6,167	-7,241	-7,543	-9,028	-11,837	-14,561	-15,824	-14,346	-13,446
Services (non-freight)	-364	-468	-755	-1,208	-1,401	-1,601	-1,920	-2,220	-2,160	2,309	-2,543	-2,627
4. Current account (1+2+3)	-756	-1,338	-854	-802	-690	-1,155	2,198	2,131	-2,790	-7,039	-4,151	-2,941
5. SDRs	-	-	-	-	-	64	65	62	-	-	-	-
6. Official capital	643	660	1,995	1,823	2,106	2,101	2,690	2,684	3,521	5,011	5,793	3,584
IGGI	556	513	945	1,596	1,694	1,567	2,237	2,406	2,415	2,905	4,255	3,263
Program aid	281	180	74	147	157	94	239	118	50	21	84	52
Project aid	275	333	871	1,449	1,537	1,473	1,998	2,288	2,365	2,884	4,171	3,211
ODA	(275)	(333)	(482)	(513)	(661)	(814)	(1,106)	(1,299)	(996)	(1,356)	(1,902)	(1,411)
Non-ODA	(-)	(-)	(389)	(936)	(876)	(659)	(892)	(989)	(1,369)	(1,528)	(2,269)	(1,800)
Non-IGGI	87	147	1,050	227	412	534	453	278	1,106	2,106	1,538	321
7. Official debt repayment (principal)	-81	-89	-77	-166	-761	-632	-692	-615	-809	-926	-1,010	-1,292
8. Miscellaneous capital	549	-131	-1,075	38	176	392	-1,315	-361	1,140	1,795	1,191	401
Direct investment	331	538	454	287	285	271	217	140	142	311	193	245
Others	218	-669	-1,529	-249	-109	121	-1,532	-501	998	1,484	998	156
9. Total (4 through 8)	355	302	-11	893	831	770	2,946	3,901	1,062	-1,159	1,823	-248
10. Errors and omissions	5	-311	-353	108	-180	-62	-1,256	-1,165	-2,050	-2,121	247	915
11. Monetary movements /b	-360	9	364	-1,001	-651	-708	-1,690	-2,736	988	3,280	-2,070	-667

/a Gross exports of products less imports of goods and services of the oil and LNG sectors respectively.

/b Bank Indonesia's net international reserves. Increase in net assets indicated by a minus (-).

Source: Bank Indonesia

Table ANN II-8

EXPORTS BY CATEGORY, 1971/22 - 1984/85

	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85 prel.
	(US\$ million)													
Timber /a	170	275	720	615	527	885	943	1,130	2,166	1,672	752	899	1,123	n.a.
Rubber	215	211	483	425	381	577	608	774	1,101	1,078	770	614	962	n.a.
Coffee	54	83	79	92	112	330	626	508	715	588	343	363	469	n.a.
Other agriculture exports	207	230	371	491	452	555	721	787	1,133	935	866	646	750	n.a.
Subtotal - Agriculture	646	799	1,653	1,623	1,472	2,347	2,898	3,199	5,115	4,273	2,731	2,522	3,304	n.a.
Metals and Minerals (excluding oil)	82	102	175	296	257	320	363	437	609	774	756	676	764	n.a.
Manufactures	56	76	77	114	144	196	245	343	447	540	683	730	1,299	n.a.
plywood	-	-	-	-	-	-	-	-	-	-	199	324	n.a.	n.a.
others	56	76	77	114	144	196	245	343	447	540	484	406	n.a.	n.a.
Total non-oil exports	784	977	1,905	2,033	1,873	2,863	3,506	3,979	6,171	5,587	4,170	3,928	5,367	5,902
Total oil and LNG	n.a.	n.a.	n.a.	4,548	5,410	6,350	7,354	7,374	12,340	17,298	18,824	14,744	14,449	13,869
Oil and products	n.a.	n.a.	n.a.	4,548	5,410	6,350	7,192	6,858	10,995	15,187	16,482	12,283	12,050	10,625
LNG	-	-	-	-	-	-	162	516	1,345	2,111	2,342	2,461	2,399	3,244
Total exports	n.a.	n.a.	n.a.	6,581	7,283	9,213	10,861	11,353	18,510	22,885	22,994	18,672	19,816	19,771

/a Includes plywood up to 1981.

Source: Bank Indonesia

IMPORTS BY CATEGORY, 1975/76 - 1984/85

Categories	(Rp. billion)									
	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85 Prel.
Food	565	693	1,106	946	1,393	1,485	1,637	1,296	n.a.	n.a.
Other consumer goods	200	260	281	344	365	540	743	1,146	n.a.	n.a.
Intermediate goods	1,869	1,867	2,275	2,561	3,501	4,274	4,983	5,192	n.a.	n.a.
Capital goods	2,456	3,347	3,579	3,692	3,769	5,538	7,198	8,190	n.a.	n.a.
Total non-oil imports	<u>5,090</u>	<u>6,167</u>	<u>7,241</u>	<u>7,543</u>	<u>9,028</u>	<u>11,837</u>	<u>14,561</u>	<u>15,824</u>	<u>14,346</u>	<u>13,446</u>
Oil sector	2,262	2,640	2,909	3,364	2,940	4,050	5,407	4,802	3,489	3,210
Non-factor services (net)	345	490	536	586	1,237	1,702	2,604	1,715	2,543	2,627
Total imports and NFS	7,697	9,297	10,686	11,493	13,205	17,589	22,572	22,341	20,378	19,283

Source: Bank Indonesia

Table ANX II-10

DISTRIBUTION OF EXPORT VALUE BY CATEGORY, 1974/75 - 1984/85

	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
	(In percentage)										
Agricultural products	24.7 (79.8)	20.2 (78.6)	25.5 (82.0)	26.7 (82.7)	28.2 (80.4)	27.6 (82.9)	18.7 (76.5)	11.8 (65.5)	13.5 (64.2)	16.7 (61.6)	n.a.
Metals and minerals											
(excluding oil)	4.5 (14.6)	3.5 (13.7)	3.5 (11.2)	3.3 (10.3)	3.8 (11.0)	3.3 (9.9)	3.4 (13.8)	3.3 (18.1)	3.6 (17.2)	3.9 (14.2)	n.a.
Manufactures	1.7 (5.6)	2.0 (7.7)	2.1 (6.8)	2.3 (7.0)	3.0 (8.6)	2.4 (7.2)	2.3 (9.7)	3.0 (16.4)	3.9 (18.6)	6.5 (24.2)	n.a.
Total non-oil exports	30.9 (100.0)	25.7 (100.0)	31.1 (100.0)	32.3 (100.0)	35.0 (100.0)	33.3 (100.0)	24.4 (100.0)	18.1 (100.0)	21.0 (100.0)	27.1 (100.0)	29.9
Oil and LNG	69.1	74.3	68.9	67.7	65.0	66.7	75.6	81.9	79.0	72.9	70.1
Total exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Team's estimate based on the figures shown in Table ANX II-8

DISTRIBUTION OF IMPORT VALUE BY CATEGORY, 1975/76 - 1984/85

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85
	(In Percentage)									
Food	7.3 (11.1)	7.4 (11.2)	10.4 (15.3)	8.2 (12.5)	10.6 (15.4)	8.4 (12.5)	7.2 (11.3)	5.8 (8.2)	n.a.	n.a.
Other consumer goods	2.6 (3.9)	2.8 (4.2)	2.6 (3.9)	3.0 (4.6)	2.8 (4.0)	3.1 (4.6)	3.3 (5.1)	5.1 (7.2)	n.a.	n.a.
Intermediate goods	24.3 (36.7)	20.1 (30.3)	21.3 (31.4)	22.3 (34.0)	26.5 (38.8)	24.3 (36.1)	22.1 (34.2)	23.2 (32.8)	n.a.	n.a.
Capital goods	31.9 (48.3)	36.0 (54.3)	33.5 (49.4)	32.1 (48.9)	28.5 (41.8)	31.5 (46.8)	31.9 (49.4)	36.7 (51.8)	n.a.	n.a.
Total non-oil imports	66.1 (100.0)	66.3 (100.0)	67.8 (100.0)	65.6 (100.0)	68.4 (100.0)	67.3 (100.0)	64.5 (100.0)	70.8 (100.0)	70.4	69.7
Oil sector	29.4	28.4	27.2	29.3	22.2	23.0	24.0	21.5	17.1	16.7
Non-factor services (net)	4.5	5.3	5.0	5.1	9.4	9.7	11.5	7.7	12.5	13.6
Total imports and NFS	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Team's estimate based on the figures shown in Table ANX II-9

ANNUAL CHANGE AND GROWTH OF EXPORTS AND IMPORTS, 1975/76 - 1982/83

	Annual Change Against Previous Year (%)						Average Annual Growth (%)		
	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1975/76 - 1978/79	1975/76 - 1982/83
Exports									
Agricultural produces	+59.4	+23.5	+10.4	+59.9	-16.5	-36.1	-7.7	+29.5	+8.0
Metals and minerals (excluding oil)	+24.5	+13.4	+20.4	+39.4	+27.1	-2.3	-10.6	+19.4	+14.8
Manufactures	+36.1	+25.0	+40.0	+30.3	+20.8	+26.5	+6.9	+33.5	+26.1
Total non-oil exports	+52.9	+22.5	+13.5	+55.1	+90.5	+74.6	-5.8	+28.6	+11.2
Oil and LNG	+17.4	+15.8	+0.3	+67.3	+40.2	+8.8	-21.7	+10.9	+15.4
Total exports	+26.5	+17.9	+4.5	+63.0	+23.6	+24.2	-18.8	+15.9	+14.4
Imports									
Food	+22.7	+59.6	-14.5	+47.3	+6.6	+10.2	-20.8	+18.7	+12.6
Other consumer goods	+30.0	+8.1	+22.4	+6.1	+47.9	+37.6	+54.2	+19.8	+28.3
Intermediate goods	-0.1	+21.9	+12.6	+36.7	+22.1	+16.6	+4.2	+11.1	+15.7
Capital goods	+36.3	+6.9	+3.2	+2.1	+46.9	+30.0	+13.8	+14.6	+18.8
Total non-oil imports	+21.2	+17.4	+4.2	+19.7	+31.1	+23.0	+8.7	+14.0	+17.6
Oil sector	+16.7	+10.2	+15.6	-12.6	+37.8	+33.5	-11.2	+14.1	+11.4
Non-factor services (net)	+42.0	+9.4	+9.4	+111.1	+37.6	+53.0	-34.1	+19.3	+25.7
Total imports and NPS	+20.8	+14.9	+7.6	+14.9	+33.2	+28.3	-1.0	+14.3	+16.4

Source: Team's estimate based on the figures shown in Tables ANX II-8 and ANX II-9

CENTRAL GOVERNMENT BUDGET SUMMARY, 1973/74 - 1983/84

	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
											(Rp. billion)
1. Domestic revenue	967.7	1,753.7	2,241.9	2,906.0	3,534.4	4,266.1	6,696.8	10,227.0	12,212.6	12,418.3	14,432.7
2. Routine expenditures /a	713.3	1,016.1	1,332.6	1,629.8	2,148.9	2,743.7	4,061.8	5,800.0	6,977.6	6,996.3	8,411.8
3. Government saving (1-2)	254.4	737.6	909.3	1,276.2	1,385.5	1,522.4	2,635.0	4,427.0	5,235.0	5,422.0	6,020.9
4. Development expenditures	450.9	961.8	1,397.7	2,054.5	2,156.8	2,555.6	4,014.2	5,916.1	6,940.0	7,359.6	9,899.2
5. Balance (3-4)	-196.5	-224.2	-488.4	-778.3	-771.3	-1,033.2	-1,379.2	-1,489.1	-1,705.0	-1,937.6	-3,878.3
Financed by:											
6. Counterpart funds /b	89.8	36.1	20.2	10.2	35.8	48.2	64.8	64.1	45.1	15.1	14.9
7. Project aid	114.1	195.9	471.4	773.6	737.6	987.3	1,316.3	1,429.7	1,663.9	1,924.9	3,867.5
8. Change in balances (- = increase)	-7.4	-7.8	-3.2	-5.5	-2.1	-2.3	-1.9	-4.7	-4.0	-2.4	-4.1

/a Includes debt service payments.
/b Program aid.

Source: Ministry of Finance

CENTRAL GOVERNMENT RECEIPTS, 1973/74 - 1983/84

	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
(Rp. billion)											
Taxes on income	505.0	1,228.7	1,592.1	2,046.6	2,511.3	2,996.3	5,129.3	8,230.3	10,100.3	10,009.9	11,605.1
Income tax	34.4	43.3	61.7	84.2	104.6	122.2	148.1	184.2	207.2	288.8	398.8
Corporate tax	44.2	91.2	128.2	127.2	169.5	226.5	297.1	447.6	559.1	674.5	757.4
Corporate tax on oil	344.6	973.1/a	1,249.1	1,619.4	1,948.7	2,308.7	4,259.6	7,019.6	8,627.8	8,170.4	9,520.2
Withholding tax	56.8	83.3	97.3	148.4	201.7	232.5	291.3	433.5	513.0	641.9	628.1
IPEDA	19.5	28.0	34.6	42.2	52.5	63.1	71.4	87.2	94.5	105.2	132.4
Other	5.5	9.8	21.2	25.2	34.3	43.3	61.8	78.2	98.7	129.1	168.2
Taxes on domestic consumption	165.4	158.6	231.3	319.6	397.8	491.4	537.2	732.9	888.0	1,137.4	1,392.1
Sales tax	54.6	84.9	119.2	162.3	203.4	221.1	192.2	265.6	310.7	476.6	575.2
Excises	61.7	74.4	97.3	130.7	181.9	252.9	326.4	437.9	544.2	620.1	773.2
Other oil revenues	37.6	-15.9	-1.1	15.9	-/b	-/b	-/b	-/b	-/b	-/b	-/b
Miscellaneous levies	11.5	15.2	15.9	10.7	12.5	17.4	18.6	29.4	33.1	40.7	43.7
Taxes on international trade	247.5	299.8	308.1	421.3	481.7	587.0	843.0	948.1	887.9	835.4	916.0
Import duties	128.2	160.6	174.0	257.4	286.9	295.3	316.7	448.0	536.2	521.9	557.0
Sales tax on imports	50.7	68.9	72.5	102.2	114.6	125.5	137.2	195.1	223.3	231.0	255.0
Export tax	68.6	70.3	61.6	61.7	80.2	166.2	389.1	305.0	128.4	82.5	104.0
Non-tax receipt	49.8	66.6	110.4	118.5	143.6	191.4	187.3	315.7	336.4	435.6	519.5
Domestic revenue	967.7	1,753.7	2,241.9	2,906.0	3,534.0	4,266.1	6,696.8	10,277.0	12,212.6	12,418.3	14,432.7
Development funds	203.9	232.0	451.6	783.8	773.4	1,035.5	1,381.1	1,493.8	1,709.0	1,940.0	3,882.4
Counterpart funds /c	89.8	36.1	20.2	10.2	35.8	48.2	64.8	64.1	45.1	15.1	14.9
Project aid /d	114.1	195.9	471.4	773.6	737.6	987.3	1,316.3	1,429.7	1,663.9	1,924.9	3,867.5
Total revenues	1,171.6	1,985.7	2,733.5	3,689.8	4,307.8	5,301.6	8,077.9	11,720.8	13,921.6	14,358.3	18,315.1

/a Excludes under payment of revenues, estimated at about Rp. 340 billion, due to the Government by PERTAMINA.

/b Oil subsidies shown as government expenditures (see Table 5.3).

/c Program aid.

/d Includes commercial bank and suppliers' credits for development programs/projects.

/e Since 1984/85 withholding tax neglected and combined with income tax.

/f Classification changed to other tax and included in miscellaneous levies.

/g Since 1984/85 classification changed to value-added tax and tax on luxury goods.

Source: Ministry of Finance

DEVELOPMENT EXPENDITURES BY SECTOR, 1975/76 - 1983/84

Sector	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
Agriculture and irrigation (of which fertilizer subsidy)	257 (135)	356 (107)	380 (32)	450 (83)	508 (125)	929 (284)	954 (371)	931 (420)	913 (324)
Industry and mining	124	195	139	205	356	491	827	913	2,153
Electric power	128	218	223	272	376	431	530	758	660
Transportation and tourism	312	429	355	413	466	780	807	875	1,527
Manpower and transmigration	12	27	61	95	162	326	417	436	456
Regional development	173	190	251	275	336	482	616	711	749
Education	114	136	211	251	362	575	726	703	1,032
Health	38	48	71	79	142	218	286	259	279
Housing and water supply	13	30	90	56	117	191	166	151	221
General public services /a	72	114	123	225	473	700	800	785	899
Government capital participation	115	225	190	162	466	389	389	281	234
Others /b	40	87	63	73	250	404	422	556	776
Total development expenditures	1,398	2,055	2,157	2,556	4,014	5,916	6,940	7,360	9,899
Total (excluding Fertilizer subsidies)	1,264	1,948	2,125	2,473	3,929	5,633	6,569	6,940	9,575

/^a Law and order, defense and security, government apparatus./^b Trade and cooperatives, religion, information and science. From 1979/80 includes natural resource development and environment.

Source: Ministry of Finance

Table ANX II-16

PROJECT AID BY SECTOR, 1975/76 - 1983/84

Sector	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84
(Rp. billion)									
Agriculture and irrigation	43.0	106.7	145.5	135.2	154.5	223.0	135.9	101.0	155.0
Industry and mining	76.4	137.3	95.4	199.0	306.8	225.9	580.9	733.8	1,051.0
Electric power	89.7	165.2	163.9	207.8	257.2	264.9	308.2	506.0	1,182.0
Transportation and tourism	226.5	303.8	212.9	249.7	192.4	308.0	263.6	332.1	889.0
Manpower and transmigration	0.6	1.0	9.8	11.6	23.0	31.1	30.5	14.9	45.0
Regional development	0.4	1.5	7.9	7.9	18.2	23.6	16.7	2.6	7.0
Education	7.3	5.3	29.5	35.3	42.8	50.0	36.7	24.2	211.0
Health	6.9	5.9	14.8	21.7	34.4	36.2	33.6	23.7	37.0
Housing and water supply	2.8	2.9	28.1	18.3	28.1	33.0	21.7	21.2	51.0
General public services	-	-	-	54.1	174.9	153.8	180.0	83.2	152.0
Government capital participation	6.7	7.3	23.1	33.1	34.3	35.6	27.9	46.7	45.0
Others /a	11.1	36.7	6.7	13.6	49.7	44.6	28.2	35.5	42.0
Total project aid /b	471.4	773.6	737.6	987.3	1,316.3	1,429.7	1,663.9	1,924.9	3,867.0

/a Since 1979/80 includes natural resource development and environment.

/b Includes commercial credits for development programs/projects.

Source: Ministry of Finance

APPROVED FOREIGN INVESTMENT BY SECTOR, 1967-83 /a

(US\$ million)									
Sector	1967-76	1977	1978	1979	1980	1981	1982	1983/b	Total 1967-83
Agriculture	84.4	21.4	3.1	22.2	50.2	25.0	15.9	-	222.2
Forestry	147.3	28.5	38.6	39.7	38.6	157.6	63.3	-	513.6
Fishery	45.3	2.7	16.6	38.4	2.9	21.6	6.2	-	133.7
Mining & quarrying	1,057.4	0.5	38.1	350.0	3.0	17.0	226.4	19.0	1,711.4
Manufacturing	2,819.6	245.0	280.8	1,516.2	708.9	854.4	1,245.9	1,751.6	9,422.4
Food	175.4	7.3	5.5	63.5	14.2	40.5	6.4	-	312.8
Textiles & leather	842.6	68.9	113.8	91.4	77.4	138.6	46.9	11.9	1,391.5
Wood & wood products	22.3	-	1.0	6.0	11.2	123.6	15.5	12.9	192.5
Paper & paper products	85.7	9.7	0.5	10.4	2.3	48.5	-	628.9	786.0
Chemicals & rubber	308.6	50.3	25.4	380.2	282.2	255.3	351.5	125.2	1,778.7
Nonmetallic minerals	310.9	18.3	19.7	76.7	222.1	20.1	62.5	11.9	742.2
Ferrous metals	820.4	18.4	9.9	843.5	-	84.8	3.6	819.2	2,599.8
Metal products	248.7	72.1	98.1	44.5	98.8	143.0	759.5	141.6	1,606.3
Other	5.0	-	6.9	-	0.7	-	-	-	12.6
Construction	62.4	2.5	5.4	0.5	7.7	48.8	30.9	1.5	159.7
Trade & wholesale	167.8	7.0	9.7	3.0	38.6	-	19.2	25.0	270.3
Wholesale trade	11.7	-	-	-	-	-	2.2	-	13.9
Hotels	156.1	7.0	9.7	3.0	38.6	-	17.0	25.0	256.4
Transport & communication	44.6	-	-	0.2	31.6	-	17.8	-	94.2
Transport	44.6	-	-	0.2	31.6	-	17.8	-	94.2
Communication	-	-	-	-	-	-	-	-	-
Real estate & business services	234.8	20.2	4.4	45.2	-	23.4	204.9	92.6	625.6
Other services	14.7	-	-	-	2.0	-	-	-	-
Total	4,663.6	327.9	396.7	2,015.4	881.5	1,147.8	1,830.5	1,889.7	13,153.1

/a Intended Capital Investment. Amounts represent original approval plus approved expansion minus cancellation.

/b Preliminary estimates.

Source: Investment Board

IMPLEMENTATION OF FOREIGN INVESTMENT BY SECTOR, 1967-83

Sector	(US\$ million)								
	1967-76	1977	1978	1979	1980	1981	1982	1983/a	Total 1967-83
Agriculture	40.2	12.5	10.1	4.3	14.5	13.0	5.8	2.3	102.7
Forestry	260.3	22.1	15.0	19.2	26.2	34.9	11.0	2.6	391.3
Fishery	67.8	2.8	13.5	10.5	7.9	0.4	9.0	-	111.9
Mining & quarrying	299.2	20.1	57.3	47.5	49.4	70.0	32.2	17.7	593.4
Manufacturing	1,726.6	186.2	267.0	192.0	235.4	243.5	378.9	220.3	3,449.9
Food	136.4	11.9	14.9	7.1	7.4	15.8	7.1	1.2	201.8
Textiles & leather	716.9	27.9	31.4	41.7	78.7	102.5	69.7	14.1	1,082.9
Wood & wood products	20.7	1.4	0.4	0.1	2.3	2.2	23.9	8.6	60.6
Paper & paper products	17.9	9.6	11.8	1.4	6.1	2.5	1.6	-	50.9
Chemicals & rubber	237.9	28.0	71.7	44.8	32.0	44.5	164.9	110.5	734.4
Nonmetallic minerals	210.8	42.9	9.0	3.2	30.0	30.9	49.4	15.9	392.1
Ferrous metals	111.8	27.8	37.8	47.5	23.9	7.9	28.5	54.0	339.2
Metal products	263.4	35.4	89.9	36.0	52.0	35.3	33.8	15.8	561.6
Others	10.8	1.3	0.1	10.2	2.0	1.9	-	0.2	26.5
Construction	34.5	3.0	1.4	12.0	0.8	0.6	6.9	-	59.2
Trade & Hotels	79.8	6.2	17.2	4.3	0.4	2.9	-	0.2	111.0
Wholesale trade	10.1	-	0.7	-	-	2.5	-	0.2	13.5
Hotels	69.7	6.2	16.5	4.3	0.4	0.4	-	-	97.5
Transport & Communication	16.3	2.0	4.7	21.9	4.8	1.3	-	-	51.0
Transport	9.7	1.8	1.3	0.1	2.1	0.2	-	-	15.2
Communication	6.6	0.2	3.4	21.8	2.7	1.1	-	-	35.8
Real estate & business services	76.5	3.8	14.0	6.9	7.2	12.4	6.1	3.8	130.7
Others	109.5	0.1	5.0	-	-	-	-	-	114.6
Total	2,710.7	258.8	405.2	318.6	346.6	379.0	449.9	246.9	5,115.7

/a Preliminary estimates.

Source: Bank Indonesia

APPROVED DOMESTIC INVESTMENT /a BY SECTOR, 1968-82

Sector	(Rp. billion)							
	1968-75	1976	1977	1978	1979	1980	1981	1982/b
Agriculture, fisheries & livestock	89.6	42.3	49.4	100.4	36.4	126.9	192.0	511.0
Forestry	178.7	35.1	64.0	58.5	81.8	397.6	313.0	182.0
Mining	50.0	-	-	18.3	32.9	37.1	13.5	453.0
<u>Manufacturing</u>	<u>1,125.3</u>	<u>174.6</u>	<u>401.4</u>	<u>531.2</u>	<u>502.3</u>	<u>861.5</u>	<u>1,791.0</u>	<u>2,096.0</u>
Textile	405.5	42.5	75.0	167.6	41.8	143.6	96.0	77.0
Chemicals	178.8	-2.2	98.7	103.0	142.0	431.6	893.0	542.0
Electric manufacturing	24.2	-	-	-	-	-	-	-
Other manufacturing	516.8	134.3	227.7	260.6	318.5	286.3	802.0	1,477.0
Construction	14.2	-1.2	-	2.6	2.1	1.5	15.1	16.0
Hotel	79.7	6.8	4.1	11.6	12.4	1.0	52.6	70.0
Real estate	92.4	41.3	35.2	15.0	3.8	24.0	-12.5	71.0
Others	111.7	7.4	19.9	24.2	16.9	53.9	61.0	461.0
Total	1,741.6	276.3	574.5	761.8	688.6	1,503.6	2,426.0	3,860.0

/a Intended capital investment. Figures represent original approvals plus approved expansions minus cancellations.
 /b Preliminary estimate.

Source: Investment Coordinating Board

PROJECTED BALANCE OF PAYMENTS (1984/85 - 1988/89)
(REPLITA IV)

	(US\$ million)				
	1984/85	1985/86	1986/87	1987/88	1988/89
A. Trade and services					
1. Exports (FOB)	19,875	22,433	25,332	28,223	31,116
Non-oil/LNG	6,050	7,009	8,015	9,215	10,753
Oil	10,644	11,873	13,463	14,664	15,766
LNG	3,181	3,551	3,854	4,344	4,597
2. Imports (FOB)	-17,287	-18,979	-20,844	-22,906	-24,799
Non-oil/LNG	-13,190	-14,482	-16,011	-17,636	-19,194
Oil	- 3,885	- 4,260	- 4,573	- 4,979	- 5,304
LNG	- 212	- 237	- 260	- 291	- 301
3. Services (net)	- 7,257	- 8,026	- 8,570	- 9,087	- 9,548
Non-oil/LNG	- 4,283	- 4,736	- 4,931	- 5,021	- 5,166
sector					
Oil sector	- 1,845	- 2,003	- 2,221	- 2,445	- 2,656
LNG	- 1,129	- 1,287	- 1,418	- 1,621	- 1,726
4. Current Account	- 4,669	- 4,572	- 4,082	- 3,770	- 3,231
Non-oil/LNG	-11,423	-12,209	-12,927	-13,442	-13,607
Oil	4,914	5,610	6,669	7,240	7,806
LNG	1,840	2,027	2,176	2,432	2,570
B. Official Capital	5,481	5,079	5,070	5,568	5,713
1. Program aid	67	42	44	48	51
2. Project aid	3,248	4,037	4,352	4,920	5,278
3. Others	2,166	1,000	674	600	384
C. Official debt	- 1,297	- 1,380	- 1,665	- 2,169	- 2,536
prepayments					
D. Private capital	695	1,097	927	821	692
E. Monetary movements	- 210	- 224	- 250	- 450	- 638
F. Error and omissions	-	-	-	-	-

Table ANX II-21

NUMBER OF ESTABLISHMENTS AND PERSONS ENGAGED IN THE MANUFACTURING SECTOR
(LARGE - AND MEDIUM - SCALE ESTABLISHMENTS: 1974/75 -1983)

ISIC	Industry	Number of Establishments						Persons engaged (1,000 persons)					
		1974/75	1979	1980	1981	1982	1983	1974/75	1979	1980	1981	1982	1983
31	Food, beverages, and tobacco	2,367 (33.4)	2,420 (30.4)	2,489 (30.9)	2,341 (29.5)	2,268 (28.3)	2,395 (29.0)	268 (40.5)	295 (33.9)	321 (33.1)	321 (31.7)	324 (30.4)	322 (28.8)
32	Textile, wearing apparel, and leather	2,066 (29.1)	2,147 (27.0)	2,188 (27.2)	2,153 (27.1)	2,088 (26.0)	2,065 (25.0)	174 (26.3)	227 (26.1)	258 (26.6)	265 (26.2)	266 (24.9)	301 (26.9)
33	Wood and wood products; including furniture	407 (5.7)	633 (7.9)	620 (7.7)	647 (8.1)	705 (8.8)	717 (8.7)	22 (3.3)	51 (5.9)	65 (6.7)	71 (7.0)	97 (9.1)	92 (8.2)
34	Paper and paper products; printing and publishing	289 (4.1)	358 (4.5)	363 (4.5)	366 (4.6)	378 (4.7)	384 (4.7)	22 (3.3)	30 (3.4)	32 (3.3)	35 (3.5)	37 (3.5)	36 (3.2)
35	Chemicals; and chemical, <u>/a</u> petroleum, coal, rubber and plastic products	899 (12.7)	823 (10.3)	837 (10.4)	851 (10.7)	920 (11.5)	979 (11.9)	84 (12.7)	104 (12.0)	110 (11.4)	121 (12.0)	132 (12.4)	145 (13.0)
36	Non-metallic mineral products (except petroleum and coal products)	480 (6.8)	675 (8.5)	640 (7.9)	665 (8.4)	704 (8.8)	707 (8.6)	25 (3.8)	43 (4.9)	47 (4.9)	50 (4.9)	53 (5.0)	55 (4.9)
37	Basic metals	18 (0.3)	22 (0.3)	23 (0.3)	22 (0.3)	23 (0.3)	25 (0.3)	2 (0.3)	8 (0.9)	9 (0.9)	10 (1.0)	10 (0.9)	13 (1.2)
38	Fabricated metal products, machinery, and equipment	500 (7.0)	796 (10.0)	811 (10.1)	813 (10.2)	839 (10.4)	880 (10.7)	56 (8.4)	106 (12.2)	121 (12.5)	132 (13.0)	140 (13.1)	147 (13.1)
39	Other manufacturing industries	65 (0.9)	86 (1.1)	83 (1.0)	84 (1.1)	95 (1.2)	93 (1.1)	9 (1.4)	6 (0.7)	6 (0.6)	7 (0.7)	8 (0.7)	8 (0.7)
Manufacturing-total		7,091 (100.0)	7,960 (100.0)	8,054 (100.0)	7,942 (100.0)	8,020 (100.0)	8,245 (100.0)	662 (100.0)	870 (100.0)	969 (100.0)	1,012 (100.0)	1,067 (100.0)	1,119 (100.0)

Note: /a Excluding petroleum refinery.

Source: BPS

SUBSECTORAL VALUE - ADDED IN THE MANUFACTURING SECTOR, 1975 - 1983
(LARGE - AND MEDIUM - SCALE ESTABLISHMENTS: AT FACTOR COST)

ISIC	Industry	Value added at factor cost (Current prices)						Value added at factor cost (Constant 1975 prices) /b					(Rp. billions)	
													Ann growth Rate(%) 1975/80	Ann growth Rate(%) 1975/82
		1975	1979	1980	1981	1982	1983	1979	1980	1981	1982			
31	Food, beverages, and tobacco	197.5 (41.0)	433.2 (33.6)	674.7 (31.7)	854.0 (31.4)	904.2 (31.2)	1,121.2 (31.4)	313.9 (41.2)	365.0 (38.8)	379.8 (37.1)	391.7 (38.1)	13.1	10.3	
32	Textile, wearing apparel, and leather	86.0 (17.8)	198.2 (15.4)	292.4 (13.7)	317.9 (11.7)	391.5 (13.5)	533.5 (14.9)	92.9 (12.2)	98.3 (10.5)	103.6 (10.1)	99.1 (9.6)	2.7	2.0	
33	Wood and wood products; including furniture	18.3 (3.8)	59.9 (4.6)	153.3 (7.2)	204.9 (7.5)	247.1 (8.5)	199.5 (5.6)	37.8 (5.0)	66.5 (7.1)	80.4 (7.9)	72.2 (7.0)	29.4	21.7	
34	Paper and paper products; printing and publishing	17.2 (3.6)	44.7 (3.5)	63.1 (3.0)	56.0 (2.0)	76.0 (2.6)	64.0 (1.8)	24.3 (3.2)	24.4 (2.6)	24.4 (2.4)	23.7 (2.3)	7.2	4.7	
35	Chemicals; and chemical, <u>a</u> petroleum, coal, rubber and plastic products	71.7 (14.9)	224.9 (17.4)	360.8 (16.9)	467.2 (17.2)	476.5 (16.4)	549.9 (15.4)	139.2 (18.3)	175.3 (18.6)	197.5 (19.3)	199.8 (19.5)	22.5	15.8	
36	Non-metallic mineral products (except petroleum and coal products)	25.7 (5.3)	113.3 (8.8)	152.7 (7.2)	201.7 (7.4)	154.8 (5.3)	191.8 (5.4)	70.3 (9.2)	81.7 (8.7)	89.8 (8.8)	92.5 (9.0)	26.0	20.1	
37	Basic metals	1.1 (0.2)	58.8 (4.6)	67.0 (3.1)	79.5 (2.9)	67.7 (2.3)	72.6 (2.0)	4.6 (0.6)	10.6 (1.1)	12.8 (1.3)	10.0 (1.0)	57.3	27.5	
38	Fabricated metal products, machinery, and equipment	63.7 (13.2)	153.2 (11.9)	357.7 (16.8)	533.1 (19.6)	576.8 (19.9)	825.4 (23.2)	77.4 (10.1)	116.8 (12.4)	132.0 (12.9)	136.2 (13.3)	12.9	11.5	
39	Other manufacturing industries	1.1 (0.2)	4.2 (0.2)	8.3 (0.4)	8.1 (0.3)	9.5 (0.3)	10.0 (0.3)	1.6 (0.2)	1.9 (0.2)	2.2 (0.2)	2.1 (0.2)	11.6	9.7	
	Manufacturing-total	482.3 (100.0)	1,290.4 (100.0)	2,130.0 (100.0)	2,722.4 (100.0)	2,904.1 (100.0)	3,568.9 (100.0)	762.0 (100.0)	940.5 (100.0)	1,022.5 (100.0)	1,027.3 (100.0)	14.3	11.4	

Note: ^a Excluding petroleum refinery.

Source: U.N. Industrial Statistics for 1975 and 1979, B.P.S. for 1980 - 1983, and Team's estimates

Table ANX II-23

GROSS OUTPUT VALUE AND VALUE - ADDED AT MARKET PRICE
(LARGE - AND MEDIUM - SCALE ESTABLISHMENTS: 1981 - 1983)

ISIC	Industry	(A) Gross Output Value				(B) Value - Added at Market Price				(C) B/A Ratio (%)				(Rp. billions)
		1981			Average (1981/83)	1982			Average (1981/83)	1981			Average (1981/83)	
		1981	1982	1983		1981	1982	1983		1981	1982	1983		
31	Food, beverages, and tobacco	2,902.1	3,260.7	3,892.8	3,351.9	1,154.4	1,275.0	1,522.7	1,317.4	39.8	39.1	39.1	39.1	39.3
32	Textile, wearing apparel, and leather	1,040.9	1,141.2	1,353.0	1,178.4	327.1	401.8	545.1	424.7	31.4	35.2	40.3	40.3	36.0
33	Wood and wood products; including furniture	513.7	702.0	513.2	576.3	209.7	255.1	207.0	223.9	40.8	36.3	40.3	40.3	38.9
34	Paper and paper products; printing and publishing	205.2	250.4	343.6	266.4	59.6	81.4	69.0	70.0	29.0	32.5	20.1	20.1	26.3
35	Chemicals; and chemical, <u>a</u> petroleum, coal, rubber and plastic products	1,503.8	1,518.7	2,256.1	1,759.5	497.1	505.6	581.5	528.1	33.1	38.3	25.8	25.8	30.0
36	Non-metallic mineral products (except petroleum and coal products)	363.4	409.2	384.3	385.6	211.9	166.7	203.7	194.1	58.3	40.7	53.0	53.0	50.3
37	Basic metals	249.4	275.6	354.9	293.3	81.7	71.0	75.6	76.1	32.8	25.8	21.3	21.3	25.9
38	Fabricated metal products, machinery, and equipment	1,498.9	1,844.7	2,171.4	1,838.3	566.7	627.8	873.0	689.2	37.8	34.0	40.2	40.2	37.5
39	Other manufacturing industries	21.6	28.1	33.9	27.9	8.6	10.4	10.8	9.9	39.8	37.0	31.9	31.9	35.5
Manufacturing-total		8,299.0	9,430.6	11,303.2	9,677.6	3,116.8	3,394.8	4,088.4	3,533.3	37.6	36.0	36.2	36.2	36.5

Note: ^{/a} Excluding petroleum refinery.

Source: BPS

FIXED CAPITAL FORMATION IN MANUFACTURING SECTOR
(LARGE - AND MEDIUM- SCALE ESTABLISHMENTS: 1980 - 1983)

		(Rp. billions)											
ISIC	Industry	Fixed Capital Formation (FCF)				FCF/VAM /b Ratio (%)				FCF/VAF /c Ratio (%)			
		1980	1981	1982	1983	1980	1981	1982	1983	1980	1981	1982	1983
31	Food, beverages, and tobacco	56.2	62.8	136.5	100.4	6.0	5.4	10.7	6.6	8.3	7.4	15.1	9.0
32	Textile, wearing apparel, and leather	110.9	116.2	131.2	142.5	36.9	35.5	32.7	26.1	37.9	36.6	33.5	26.7
33	Wood and wood products; including furniture	43.8	45.6	122.8	89.7	27.6	21.7	48.1	45.0	28.6	22.3	49.7	45.0
34	Paper and paper products; printing and publishing	15.3	63.1	38.5	48.7	23.3	105.9	47.3	70.6	24.2	112.7	50.7	76.1
35	Chemicals; and chemical, /a petroleum, coal, rubber and plastic products	61.6	100.5	182.2	148.2	16.3	20.2	36.0	25.5	17.1	21.5	38.2	27.0
36	Non-metallic mineral products (except petroleum and coal products)	83.1	106.8	197.7	175.1	52.6	50.4	118.6	86.0	54.4	52.9	127.7	91.3
37	Basic metals	8.1	4.8	33.1	22.7	11.8	5.9	46.6	30.0	12.1	6.0	48.9	31.3
38	Fabricated metal products, machinery, and equipment	58.9	76.7	176.3	137.5	15.2	13.5	28.1	15.8	16.5	14.4	30.6	16.6
39	Other manufacturing industries	1.9	0.3	2.4	2.1	21.6	3.5	23.1	19.4	22.9	3.7	25.3	22.1
Manufacturing-total		439.8	576.8	1,020.7	866.9	17.8	18.5	30.1	21.2	20.6	21.2	35.1	24.3

Notes: $\frac{a}{a}$ Excluding petroleum refinery.
 $\frac{b}{b}$ VAM: Value-added at market price.
 $\frac{c}{c}$ VAF: Value-added at factor cost.

Source: BPS

NUMBER OF ESTABLISHMENTS AND NUMBER OF PERSONS ENGAGED OF LARGE/MEDIUM, SMALL AND HOUSEHOLD MANUFACTURING ESTABLISHMENTS 1974/1975

Industry Code	Number of Establishments			Persons Engaged				
	Large/ Medium	Small	Household	Total	Large/ Medium	Small	Household	Total
31	2,367 (33.38)	24,275 (50.38)	434,284 (35.18)	460,926 (35.74)	268,388 (40.56)	151,194 (44.05)	1,401,117 (35.93)	1,820,759 (37.12)
32	2,066 (29.13)	5,792 (12.02)	139,680 (11.31)	147,538 (11.44)	174,246 (26.33)	55,375 (16.13)	435,124 (11.16)	664,745 (13.55)
33	407 (5.74)	5,456 (11.32)	534,862 (43.33)	540,725 (41.92)	22,368 (3.38)	41,680 (12.14)	1,644,004 (42.15)	1,708,052 (34.82)
34	289 (4.08)	867 (1.80)	2,628 (0.21)	3,784 (0.29)	21,982 (3.32)	8,067 (2.35)	9,478 (0.24)	39,527 (0.81)
35	899 (12.68)	1,382 (2.87)	5,317 (0.43)	7,598 (0.59)	83,802 (12.67)	12,422 (3.62)	20,946 (0.54)	117,170 (2.39)
36	480 (6.77)	6,749 (14.00)	80,599 (6.53)	87,828 (6.81)	24,597 (3.72)	46,916 (13.67)	263,203 (6.75)	334,716 (6.83)
37	18 (0.25)	-	-	18 (0.00)	2,060 (0.31)	-	-	2,060 (0.04)
38	500 (7.05)	2,957 (6.14)	15,432 (1.25)	18,889 (1.47)	55,867 (8.44)	22,113 (6.44)	55,773 (1.43)	133,753 (2.73)
39	65 (0.92)	708 (1.47)	21,709 (1.76)	22,482 (1.74)	8,394 (1.27)	5,473 (1.60)	70,151 (1.80)	84,018 (1.71)
Total	7,091 (100.00)	48,186 (100.00)	1,234,511 (100.00)	1,289,788 (100.00)	561,704 (100.00)	343,240 (100.00)	3,899,856 (100.00)	4,904,800 (100.00)

Source: BPS

VALUE OF GROSS OUTPUT AND VALUE ADDED (AT MARKET PRICE) OF LARGE/MEDIUM, SMALL, AND HOUSEHOLD MANUFACTURING ESTABLISHMENTS 1974/1975

Industry Code	Value of Gross Output				Value Added at Market Price			
	Large/ Medium	Small	Household	Total	Large/ Medium	Small	Household	Total
31	543,872 (42.04)	86,019 (54.59)	114,093 (56.81)	743,984 (45.03)	226,754 (47.54)	25,637 (48.35)	37,300 (45.18)	289,691 (47.29)
32	232,881 (18.00)	21,113 (13.40)	18,191 (9.06)	272,185 (16.48)	72,213 (15.14)	6,263 (11.81)	7,133 (8.64)	85,609 (13.98)
33	28,691 (2.22)	16,514 (10.48)	38,872 (19.36)	84,077 (5.09)	12,534 (2.63)	6,992 (13.18)	21,949 (26.58)	41,475 (6.77)
34	30,142 (2.33)	3,728 (2.37)	862 (0.43)	34,732 (2.10)	11,490 (2.41)	1,699 (3.20)	482 (0.58)	13,671 (2.23)
35	214,007 (16.54)	9,579 (6.08)	3,043 (1.51)	226,629 (13.72)	62,494 (13.10)	3,340 (6.30)	1,140 (1.38)	66,974 (10.93)
36	32,245 (2.49)	9,991 (6.34)	15,823 (7.68)	58,059 (3.51)	16,633 (3.49)	4,502 (8.49)	9,535 (11.55)	30,670 (5.01)
37	18,805 (1.45)	-	-	18,805 (1.14)	3,998 (0.84)	-	-	3,998 (0.65)
38	173,780 (13.43)	9,039 (5.74)	5,915 (2.94)	188,734 (11.42)	60,280 (12.64)	3,874 (7.31)	2,960 (3.59)	67,114 (10.96)
39	19,363 (1.50)	1,575 (1.00)	4,028 (2.01)	24,966 (1.51)	10,551 (2.21)	720 (1.36)	2,066 (2.50)	13,337 (2.18)
Total	1,293,786 (100.00)	157,558 (100.00)	200,827 (100.00)	1,652,171 (100.00)	476,947 (100.00)	53,027 (100.00)	82,565 (100.00)	612,539 (100.00)

Source: BPS

NUMBER OF ESTABLISHMENTS AND NUMBER OF PERSONS ENGAGED OF LARGE/MEDIUM, SMALL AND HOUSEHOLD MANUFACTURING ESTABLISHMENTS 1979

Industry Code	Number of Establishments			Total	Persons Engaged			
	Large/ Medium	Small	Household		Large/ Medium	Small	Household	Total
31	2,420 (30.40)	57,280 (50.68)	617,668 (43.56)	677,368 (44.02)	294,441 (33.84)	403,517 (48.79)	1,362,762 (48.76)	2,060,720 (45.88)
32	2,147 (26.97)	9,692 (8.57)	177,246 (12.50)	189,085 (12.29)	227,787 (26.18)	91,402 (11.05)	293,198 (10.49)	612,387 (13.63)
33	633 (7.95)	15,144 (13.40)	434,376 (30.64)	450,153 (29.25)	51,221 (5.89)	110,932 (13.41)	735,816 (26.33)	897,969 (19.99)
34	358 (4.50)	1,263 (1.12)	-	1,621 (0.11)	29,876 (3.43)	11,931 (1.44)	-	41,807 (0.93)
35	823 (10.34)	1,786 (1.58)	-	2,609 (0.17)	103,803 (11.93)	17,363 (2.10)	-	121,166 (2.70)
36	675 (8.48)	19,814 (17.53)	104,997 (7.41)	125,486 (8.16)	43,000 (4.94)	133,687 (16.17)	221,113 (7.91)	397,800 (8.86)
37	22 (0.28)	-	-	22 (0.00)	8,247 (0.95)	-	-	8,247 (0.18)
38	796 (10.00)	6,814 (6.03)	32,009 (2.26)	39,619 (2.57)	105,686 (12.15)	49,527 (5.99)	79,447 (2.84)	234,660 (5.22)
39	86 (1.08)	1,231 (1.09)	51,506 (3.63)	52,823 (3.43)	5,958 (0.69)	8,676 (1.05)	102,497 (3.67)	117,131 (2.61)
Total	7,960 (100.00)	113,024 (100.00)	1,417,802 (100.00)	1,538,786 (100.00)	870,019 (100.00)	827,035 (100.00)	2,794,833 (100.00)	4,491,887 (100.00)

Source: BPS

VALUE OF GROSS OUTPUT AND VALUE ADDED (AT MARKET PRICE) OF LARGE/MEDIUM, SMALL, AND HOUSEHOLD MANUFACTURING ESTABLISHMENTS 1979

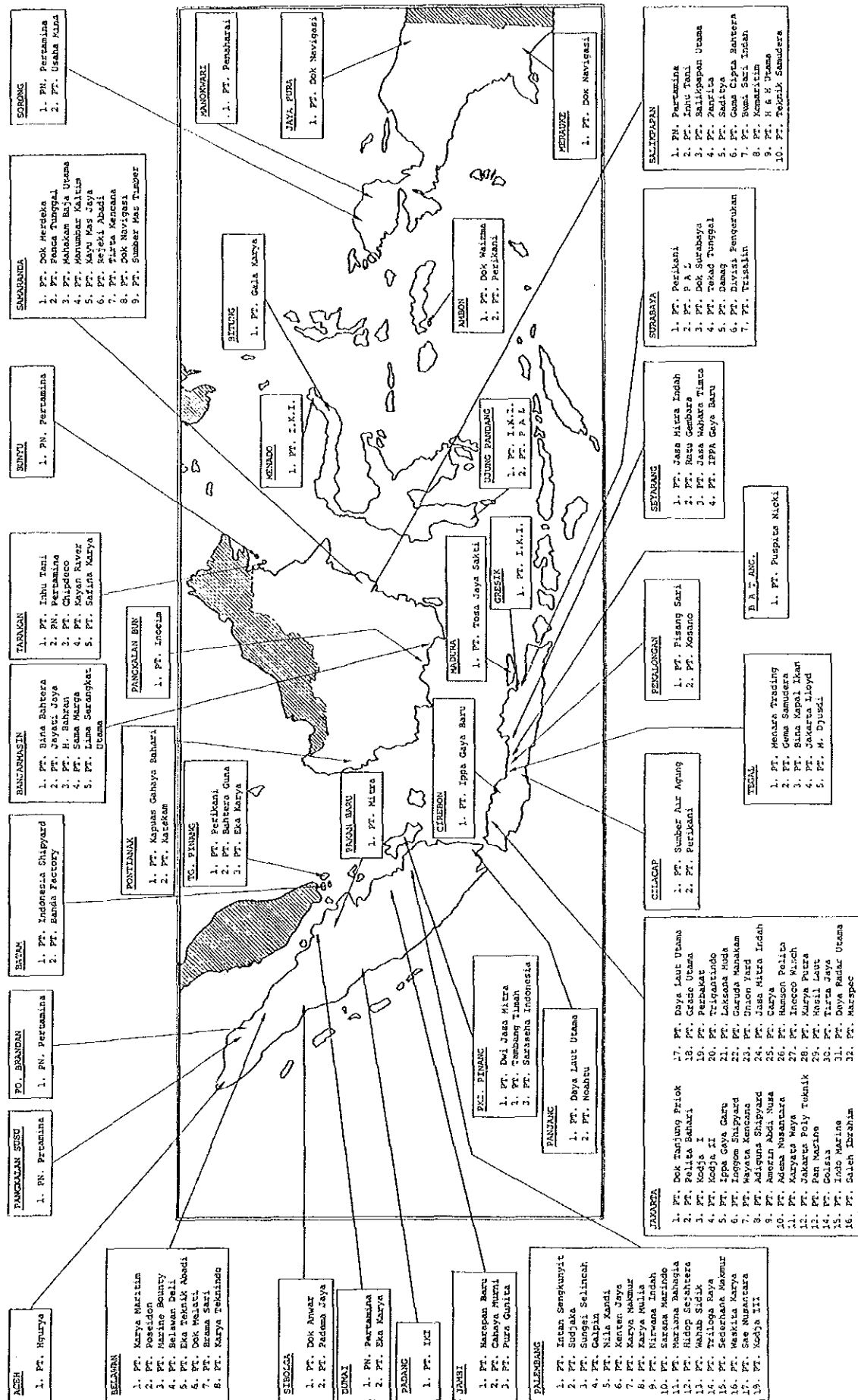
Industry Code	Value of Gross Output				Value Added at Market Price				(Rp. millions)
	Large/ Medium	Small	Household	Total	Large/ Medium	Small	Household	Total	
31	1,614,688 (34.87)	344,684 (57.36)	440,637 (58.94)	2,400,009 (40.14)	674,109 (40.60)	82,489 (44.04)	133,172 (45.69)	889,770 (41.59)	
32	669,277 (14.45)	73,930 (12.30)	50,989 (6.82)	794,196 (13.28)	207,104 (12.47)	27,684 (14.78)	20,623 (7.07)	255,411 (11.94)	
33	189,274 (4.09)	71,395 (11.88)	105,861 (14.16)	366,530 (6.13)	62,704 (3.78)	29,258 (15.62)	58,020 (19.91)	149,982 (7.01)	
34	127,813 (2.76)	11,082 (1.84)	-	138,895 (2.32)	49,277 (2.97)	4,660 (2.49)	-	53,937 (2.52)	
35	890,898 (19.24)	22,864 (3.81)	-	913,762 (15.28)	264,481 (15.93)	8,756 (4.67)	-	273,237 (12.77)	
36	207,536 (4.48)	37,648 (6.27)	44,754 (5.99)	289,938 (4.85)	115,037 (6.93)	18,549 (9.90)	26,948 (9.25)	160,534 (7.50)	
37	215,154 (4.65)	-	-	215,154 (3.60)	59,145 (3.56)	-	-	59,145 (2.77)	
38	696,257 (15.04)	34,918 (5.81)	42,724 (5.72)	773,899 (12.95)	223,688 (13.47)	14,151 (7.55)	23,079 (7.92)	260,918 (12.20)	
39	19,717 (0.42)	4,410 (0.73)	62,577 (8.37)	86,704 (1.45)	4,914 (0.29)	1,776 (0.95)	29,600 (10.16)	36,290 (1.70)	
Total	4,630,614 (100.00)	600,931 (100.00)	747,542 (100.00)	5,979,087 (100.00)	1,660,459 (100.00)	187,323 (100.00)	291,442 (100.00)	2,139,224 (100.00)	

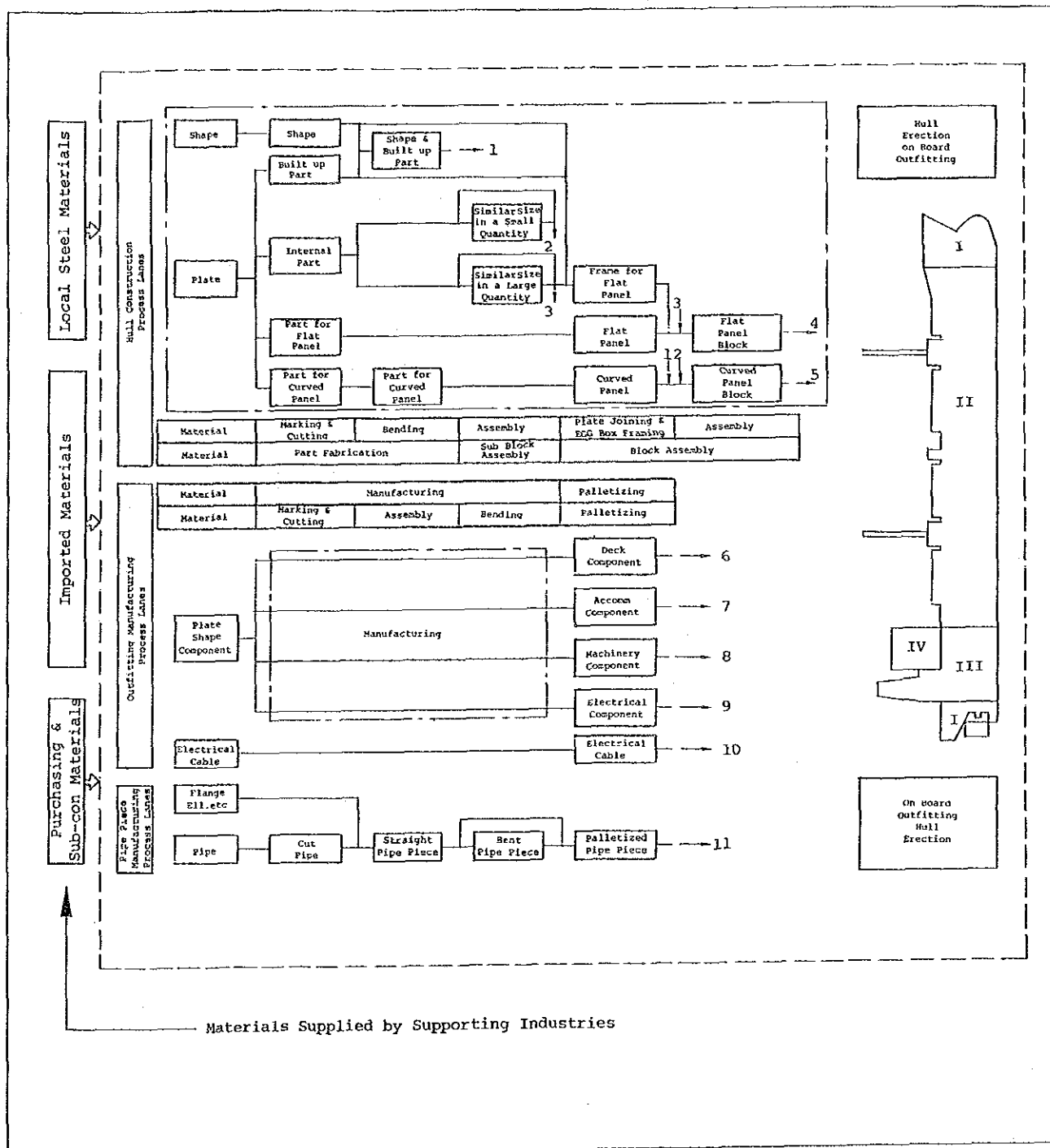
Source: BPS

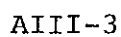
**ANNEX III BASIC DATA FOR CAPACITY,
PRODUCTION AND TRADE OF GOODS
PRODUCED BY ASSEMBLY-TYPE
INDUSTRY**

Figure ANN. III-1

PETA LOKASI PERUSAHAAN-PERUSAHAAN GALANGAN KAPAL DI INDONESIA







COMPARATIVE SHIPBUILDING SCHEDULE OF INDONEISAN AND JAPANESE SHIPYARDS

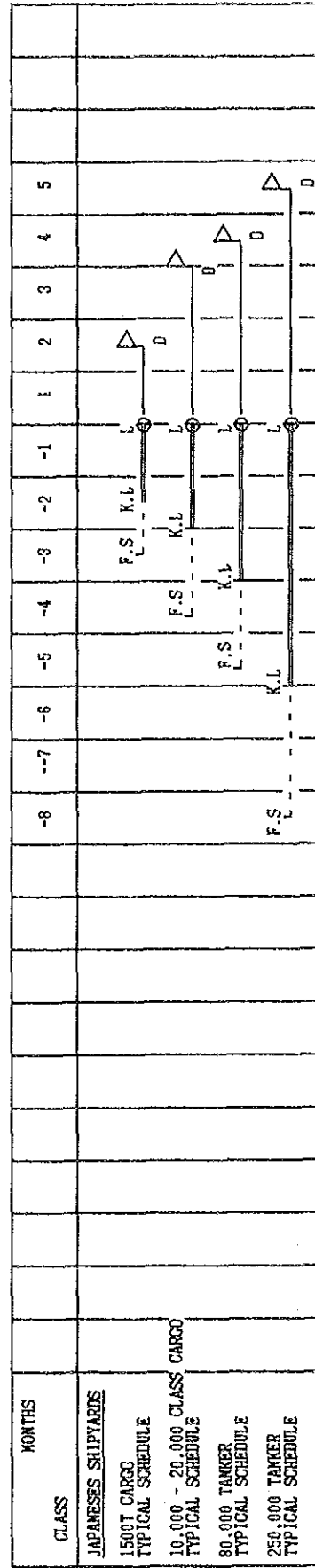
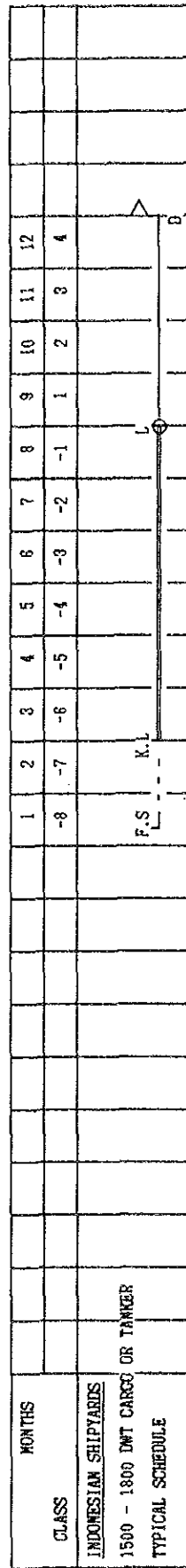


Figure ANX III-5
FLOW CHART OF OUT FITTING MATERIALS IN JAPANESE SHIPYARDS

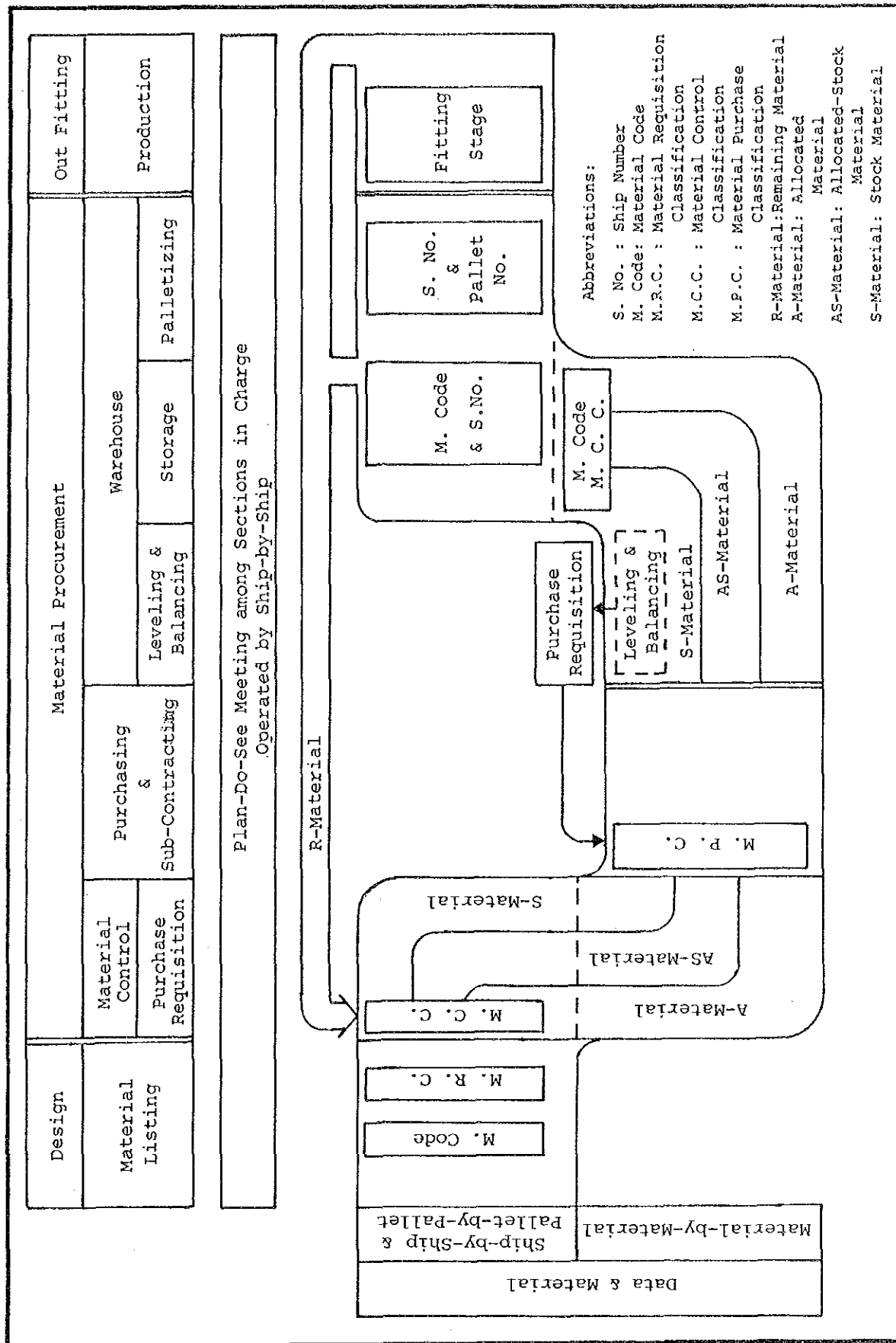
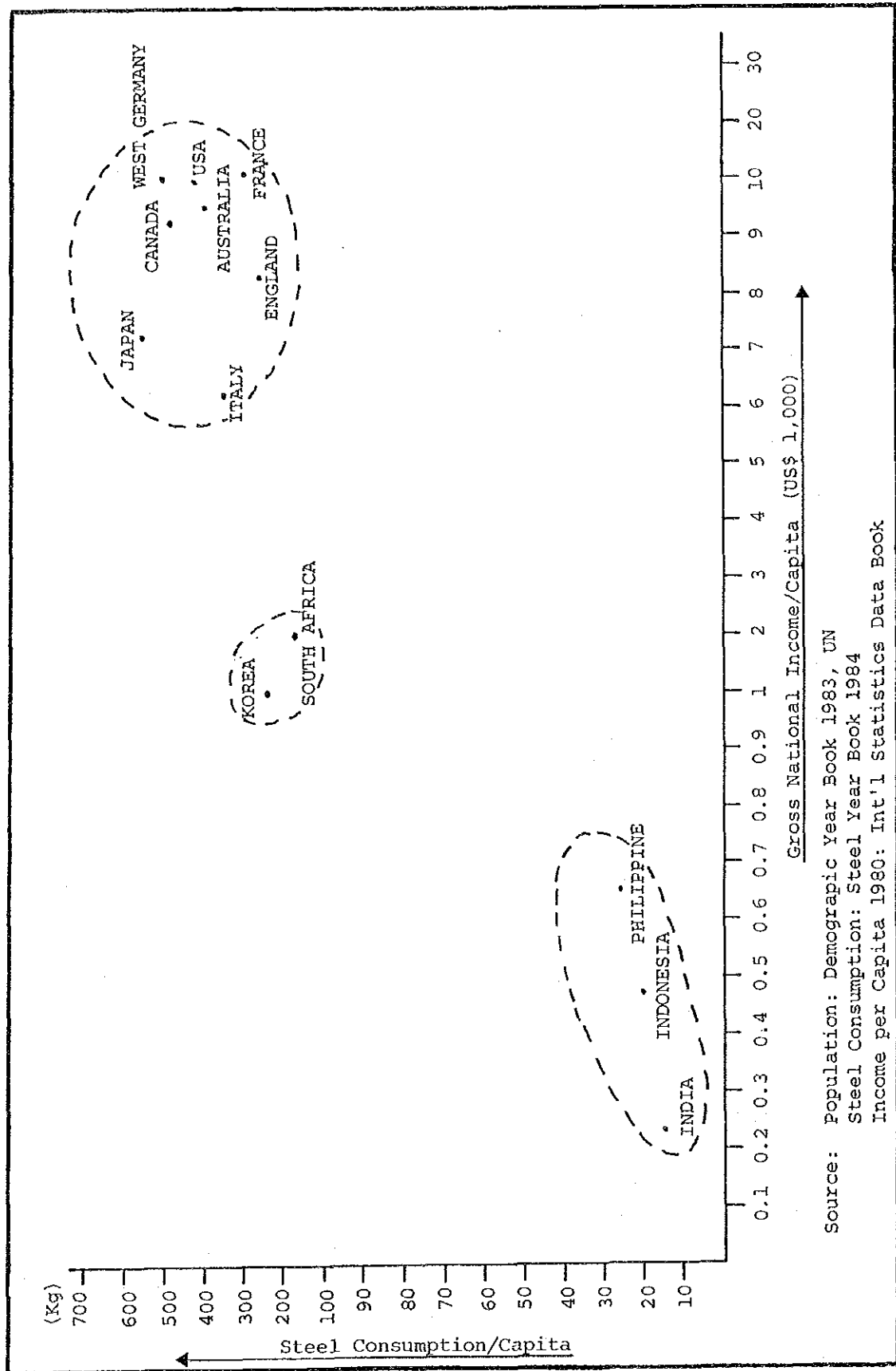


Figure ANX III-6

STEEL CONSUMPTION/GROSS INCOME PER CAPITA



ESTABLISHMENTS, EMPLOYEES, VALUE ADDED AND LOCALIZATION BY INDUSTRY GROUP (1980) 1/

Code No.	Industry Group	Establish- ment (No.)	Employees (Persons)	2/ Emp./Est. (Persons)	Value Added (Million RP)	Fixed Capital Formation (Million RP)	Import 3/ Materials (Million RP)	Total 4/ Materials (Million RP)	5/ Localization (%)
38200	Machineries & repair incl. machineries & sewing machine assembling	132	12,055	91	34,944	3,444	34,128	41,317	17.4
38311	Storage batteries	12	1,029	86	3,650	308	5,398	5,620	4.0
38312	Dry cell battery	11	5,932	539	12,592	2,284	17,767	19,803	10.3
38320	Radio, T.V. cassette and other communication equipment & apparatus	34	14,527	427	53,861	7,599	110,075	125,281	12.1
38330	Electrical apparatus and supplies	53	15,706	296	59,671	5,106	58,018	77,169	24.8
38340	Electricity appliances	3	194	65	199	1	62	340	81.8
38411	Ship building and repairing	42	7,034	167	20,287	2,016	4,514	9,943	54.6
38430	Motor vehicles assembling & mftg.	32	11,424	357	78,499	13,764	89,152	109,844	18.8
38440	Motor cycles and three wheel motor vehicles assembling and manufacturing	15	5,568	371	35,758	1,610	68,522	105,861	35.3
38460	Motor vehicle body and equipment	50	4,284	86	6,917	2,738	7,579	13,186	42.5
38490	Transport equipment not elsewhere classified	4	67	17	47	-	14	24	41.7
Total		388	77,820	201	306,425	38,870	395,229	508,388	22.3

Notes:

1/ The data are for medium & large-scale industries based on BPS classification (20 employees and above).

2/ Averaged employees per establishment.

3/ Imported raw materials, intermediates, components and parts.

4/ Imported materials plus local ones.

5/ (1.0 - Import/Total) x 100

Source: Statistik Industri, BPS

ESTABLISHMENTS, EMPLOYEES, VALUE ADDED AND LOCALIZATION BY INDUSTRY GROUP (1981) 1/

Code No.	Industry Group	Establishment (No.)	Employees (Persons)	2/ Emp./Est. (Persons)	Value Added (Million RP)	Fixed Capital Formation (Million RP)	Import 3/ Materials (Million RP)	Total 4/ Materials (Million RP)	5/ Localization (%)
38200	Machineries & repair incl. machineries & sewing machine assembling	128	12,658	99	44,694	10,107	47,400	60,581	21.8
38311	Storage batteries	13	1,147	88	6,214	810	5,038	6,572	23.3
38312	Dry cell battery	9	6,229	692	12,846	1,697	22,469	25,713	12.6
38320	Radio, T.V. cassette and other communication equipment & apparatus	36	16,142	448	61,129	9,291	130,053	151,786	85.7
38330	Electrical apparatus and supplies	55	15,095	274	62,608	11,845	60,659	81,309	25.4
38340	Electricity appliances	2	165	83	416	1	179	187	4.3
38411	Ship building and repairing	46	7,261	158	26,963	1,742	5,377	10,915	50.7
38430	Motor vehicles assembling & mftg.	38	14,250	375	102,646	8,313	92,549	126,773	27.0
38440	Motor cycles and three wheel motor vehicles assembling and manufacturing	14	6,869	491	143,905	4,457	86,732	135,111	35.8
38460	Motor vehicle body and equipment	55	5,740	104	11,146	9,802	9,499	17,273	45.0
38490	Transport equipment not elsewhere classified	2	34	17	38	-	-	70	100.0
Total		398	85,590	215	472,605	58,065	459,955	616,290	25.4

Notes:

- 1/ The data are for medium & large-scale industries based on BPS classification (20 employees and above).
 2/ Averaged employees per establishment.
 3/ Imported raw materials, intermediates, components and parts.
 4/ Imported materials plus local ones.
 5/ (1.0 - Import/Total) x 100

Source: Statistik Industri, BPS

Table ANX III-3

ESTABLISHMENTS, EMPLOYERS, VALUE ADDED AND LOCALIZATION BY INDUSTRY GROUP (1982) 1/

Code No.	Industry Group	Establish- ment (No.)	Employees (Persons)	2/ Emp./Est. (Persons)	Value Added (Million RP)	Fixed Capital Formation (Million RP)	Import 3/ Materials (Million RP)	Total 4/ Materials (Million RP)	5/ Localization (%)
38200	Machineries & repair incl. machineries & sewing machine assembling	131	13,007	99	54,641	7,197	42,481	63,244	32.8
38311	Storage batteries	15	1,364	91	7,053	2,473	6,338	7,687	17.5
38312	Dry cell battery	9	4,874	542	15,780	1,561	22,735	26,874	15.4
38320	Radio, T.V. cassette and other communication equipment & apparatus	36	15,340	426	73,605	8,696	116,188	135,574	14.3
38330	Electrical apparatus and supplies	56	15,129	270	91,320	16,705	91,665	104,775	12.5
38340	Electricity appliances	2	165	83	308	1	233	576	59.5
38411	Ship building and repairing	54	8,090	150	27,018	9,698	8,057	20,307	60.3
38430	Motor vehicles assembling & mftg.	42	14,354	342	91,546	24,607	120,023	150,340	20.2
38440	Motor cycles and three wheel motor vehicles assembling and manufacturing	13	7,486	576	90,543	16,624	166,584	241,551	31.0
38460	Motor vehicle body and equipment	58	6,257	108	20,175	4,252	8,212	17,762	53.8
38490	Transport equipment not elsewhere classified	4	6,488	1,622	8,500	38,741	28,899	30,866	6.4
Total		420	92,554	220	480,489	130,555	611,415	799,556	23.5

Notes:

- 1/ The data are for medium & large-scale industries based on BPS classification (20 employees and above).
 2/ Averaged employees per establishment.
 3/ Imported raw materials, intermediates, components and parts.
 4/ Imported materials plus local ones.
 5/ (1.0 - Import/Total) x 100

Source: Statistik Industri, BPS

Table ANX III-4

CAPACITY, PRODUCTION DEMAND OF MACHINE TOOLS (1982 - 1987)

		(Unit)						
No.	Kind of machine tools	1982	1983	1984	1985	1986	1987	
		Capacity production demand						
1	Lathe	Unit	300 127 3,000	300 183 3,400	700 250 3,700	700 300 4,200	700 450 4,900	1,200 700 5,250
2	Drilling machine	Unit	550 71 1,200	550 130 1,600	550 225 2,500	550 350 3,600	550 550 4,400	2,000 1,500 5,600
3	Sawing machine	Unit	100 30 8,800	100 30 8,800	100 50 8,950	100 75 9,120	100 100 9,280	100 100 9,440
4	Milling machine	Unit	250 25 500	250 25 600	250 50 650	250 100 700	250 250 800	550 400 800
5	Bending machine	Unit	100 25 200	100 25 400	100 25 700	100 50 1,000	100 75 1,500	100 100 2,000
6	Shaping machine	Unit	- - 75	- - 75	100 20 75	100 40 100	100 60 100	100 75 150
7	Grinding machine	Unit	- - 25	- - 25	25 25 25	25 25 30	50 50 50	50 50 70
8	Rolling machine	Unit	100 10 1,100	100 15 1,400	100 25 1,520	100 35 1,630	100 50 1,740	100 75 1,850
9	Shearing machine	Unit	100 15 300	100 20 300	100 50 360	100 60 430	100 75 490	100 100 750
10	Dies, mold, jigs, & fixtures	Ton	3,000 150 11,500	3,000 150 11,500	11,500 1,000 11,800	11,500 3,000 12,200	11,500 4,500 12,400	11,500 6,500 12,700
11	Special machine tools	Unit	- - 90	- - 90	250 20 124	250 60 132	250 80 160	250 135 200

Source: PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984-1987, MOI, 1984

IMPORT OF MACHINE TOOLS (1982-1984)

Table ANXIII-5

KIND OF MACHINE TOOLS	QUANTITY (UNIT)		NET WEIGHT (TON)
Machine tool operating by electricity, ultrasonic	1	1,942	880
	2	406	473
	3	1,726	327
Gear cutting machine	1	75	69
	2	74	6
	3	12	5
Lathe	1	2,301	2,765
	2	1,512	1,790
	3	1,053	1,032
Reaming or milling machine, metal working	1	358	374
	2	597	299
	3	620	354
Drilling or boring machine	1	4,863	980
	2	4,540	498
	3	3,973	482
Sawing machine	1	4,385	279
	2	454	111
	3	2,807	130
Plating machine	1	126	146
	2	604	70
	3	140	89
Tapping or screw cutting machine	1	196	134
	2	271	39
	3	425	51
Sharpening, trimming, trucing, grinding, polishing	1	-	1,248
	2	-	594
	3	-	720
Other metal working press grinding, polishing	1	-	4,130
	2	-	3,475
	3	-	1,798
Forging machine, strapping machine	1	-	90
	2	-	10
	3	-	54
Bending, forming, folding or flattening	1	-	849
	2	-	909
	3	-	479
Shearing, punching or notching	1	-	619
	2	-	501
	3	-	1,042
Other machine tools for working metal	1	-	5,838
	2	-	5,696
	3	-	4,716

NOTE

1: 1983

2: 1983

3: 1984

SOURCE : IMPORT STATISTICS, IBPS

Table ANX III-6

CAPACITY, PRODUCTION AND DEMAND OF AGRICULTURAL MACHINE AND EQUIPMENT

		(Unit: number)					
Item		1982/83	1983/84	1984/85	1985/86	1986/87	1987/88
1. Hand tractor	. Capacity	2,150	2,150	2,150	2,150	2,150	2,150
	. Production	1,055	1,270	1,500	1,700	1,900	2,150
	. Demand	4,000	5,000	8,000	15,800	20,500	33,000
2. Mini tractor 12-22.5KW	. Capacity	200	200	200	200	200	200
	. Production	116	100	125	150	175	200
	. Demand	1,200	1,500	3,000	3,500	4,000	5,000
3. Tractor over 22.5KW	. Capacity	-	5,250	5,250	5,250	5,250	5,250
	. Production	-	-	10	500	520	550
	. Demand	-	-	2,000	2,200	2,500	2,900
4. Thresher	. Capacity	2,500	2,500	2,500	2,500	2,500	2,500
	. Production	1,279	1,284	1,500	1,700	2,000	2,500
	. Demand	3,000	5,000	10,000	20,000	40,000	78,000
5. Huller	. Capacity	6,100	6,100	6,100	6,100	6,100	6,100
	. Production	1,678	1,559	2,000	3,000	4,000	6,000
	. Demand	32,000	34,000	39,000	46,000	54,000	72,000
6. Polisher	. Capacity	3,500	3,500	3,500	3,500	3,500	3,500
	. Production	388	376	1,000	1,500	2,500	3,500
	. Demand	33,000	34,000	39,000	46,000	54,000	72,000
7. Rice milling	. Capacity	1,570	1,570	1,570	1,570	1,570	1,570
	. Production	372	500	1,000	1,250	1,500	1,570
	. Demand	1,000	2,250	3,500	5,000	7,000	11,500
8. Irrigation pump	. Capacity	7,200	7,200	7,200	7,200	7,200	7,200
	. Production	2,110	3,065	5,000	5,500	6,000	7,200
	. Demand	4,600	5,500	6,000	8,000	9,500	11,000
9. Hand sprayer (1000 unit)	. Capacity	348	497	497	497	497	497
	. Production	159	170	200	225	240	260
	. Demand	160	172	185	200	217	236

Source: PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984-1987, MOI, 1984

Table ANX III-7

IMPORT OF AGRICULTURAL MACHINE AND EQUIPMENT (1981-1984)

		(Unit: number)			
CCCN Code No.	Item	1981	1982	1983	1984
8410200	Reciprocating pump	23,961	61,421	34,589	61,571
8410300	Centrifugal pump	8,032	11,695	23,132	7,239
8410400	Rotary pump	15,167	11,975	14,785	134
8425200	Combined harvester- thresher	(33.8 ton)	(206.6 ton)	(230.2 ton)	(3.3 ton)
8425300	Other harvester- thresher	(20.6 ton)	(233.1 ton)	(1,214.1 ton)	(18.1 ton)
8429111	Rice huller < 50kg	-	-	5	4,184
8429119	Rice huller > 50kg	-	7,315	5,158	5,476
8429190	Grain mill	-	11,186	11,619	6,168
8701111	Track laying tractor for agriculture CKD < 100KW	1	-	46	-
8701112	Track laying tractor for agriculture CKD > 100KW	25	-	1	1
8701121	Tractor for agricul. built up < 100KW	-	4	7	2
8701122	Tractor for agricul. built up > 100KW	-	27	2	15
8701911	4 wheel tractor for agricul. CKD < 20KW	-	71	80	20
8701912	4 wheel tractor for agricul. CKD 20-40KW	15	50	24	12
8701913	4 wheel tractor for agricul. CKD > 45KW	-	-	71	4
8701921	4 wheel tractor for agricul. built up < 20KW	430	66	145	32
8701922	4 wheel tractor for agricul. built up 20-40KW	75	172	59	27
8701923	4 wheel tractor for agricul. built up > 45KW	528	751	636	251
8701941	2 wheel tractor for agricul. CKD	755	808	855	-
8701942	2 wheel tractor for agricul. built up	716	1,633	1,986	1,100
8701992	Other tractor for agricul. CKD, built up	238	212	1	-

Source: Import Statistics, 1981, 1982, 1983 and 1984, BPS

Table ANX III-8

PRODUCTION CAPACITY OF AGRICULTURAL MACHINE AND EQUIPMENT (1982)

Firm	Hand Tractor	Tractor	Thresher	Huller	Rice Mill Polisher	Dryer	Sprayer	Pump. Irrigation or Centrifugal
1. Sumber Sujaka								abt. 5,300
2. Sudono & Co.,								N.A.
3. Growth Sumatera								2,000
4. Fongso Indonesia	200							
5. Wira Sakti		200						
6. Biro Tehmk Djupri			1,500					
7. Aktiva Coy			70					
8. Mutof							1,000	
9. Promotor Indonesia								1,200
10. Roda Tani	1,000							1,000
11. Echo	1,200			2,500	3,300			1,000
12. Glugur				1,160				
13. Suratman			40					80
14. Guntur				1,200				
15. New Ruhak Ind. Ltd.	200					300		axial 2,400
16. Lingga Wastu Jaya	360							
17. Arika	400	600						
18. Bina Pertiwi	1,000	1,000						
19. Indo Tani	1,000	1,000						
20. Yamindo	250	200	260	2,500	750			
21. Fa Teha	100		100					
22. Agrindo	2,500	2,000	500	900	600	150		
23. Buma Sakti	240		240			240		
24. Dwika								120
25. Ind. National Kemajuan			100	700	120 (Rice mill)			
26. Karya Hidup Sentosa	1,500		1,500	2,000	1,000			1,000
Total	9,950	5,000	4,310	10,960	5,770	690	1,000	14,100

Source: DIRECTORY Basic Metal Industry 1982, BKS-ILLMA

Table ANX III-9 (1)

CAPACITY, PRODUCTION AND DEMAND FOR CONSTRUCTION EQUIPMENT

							(unit)
Item	Year	1982/1983	1983/1984	1984/1985	1985/1986	1986/1987	1987/1988
		Capacity Production Demand	Capacity Production Demand	Capacity Production Demand	Capacity Production Demand	Capacity Production Demand	Capacity Production Demand
1. Crawler bulldozer	n.a.		1,065 22 n.a.	1,065 530 650	1,065 643 715	1,065 739 786	1,065 879 982
2. Hydraulic excavator	n.a.		635 10 n.a.	635 160 230	635 176 253	635 194 291	635 232 348
3. Motor grader	n.a.		255 - 138	255 147 150	255 150 165	255 171 190	255 204 226
4. Wheel loader	n.a.		340 1 165	340 120 170	340 168 187	340 193 215	340 230 256
1-4 Sub total	n.a.		2,295 - -	2,295 957 1,200	2,295 1,137 1,320	2,295 1,297 1,482	2,295 1,545 1,812
5. Road/vibro roller	n.a.		1,000 404 500	1,000 424 525	1,000 445 551	1,000 467 579	1,000 491 607
6. Stone crusher	590 18 100	590 18 100	590 18 100	590 20 110	590 125 125	590 135 135	590 150 150
7. Concrete mixer	2,000 1,200 1,300	2,000 1,200 1,500	2,000 1,300 1,650	2,000 1,800 1,800	2,000 1,900 1,900	2,000 2,000 2,100	2,000 2,000 2,100
8. Plate compactor	500 400 450	500 400 500	500 440 500	500 450 600	500 480 650	500 500 700	500 500 700

Note: 1 to 4 are items stipulated by the deletion program.

Source: PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984-1987, MOI, 1984

Table ANX III-9 (2)

LICENSED PRODUCTION CAPACITY OF CONSTRUCTION EQUIPMENT

Construction Equipment Company	(Unit)							
	Crawler Bulldozer	Hydraulic Excavator	Motor Grader	Wheel Loader	Road Roller	Vibro Roller	Stone Crusher	Concrete Mixer
Pt. Komatsu Indonesia	555 (47)	75 (1)	90 (2)	75 (1)				
Pt. Natra Raya	410 (30)		165 (2)	160 (3)				
Pt. Triguna Utama Machinery		350 (23)						
Pt. Barata M & E					300 (300)	300 (7)	300 (8)	
Pt. Sakai Sakti					100 (11)		150 (7)	
Pt. Sydney Metal							30 (8)	1,000 (480)
Pt. Boma Bisma Indra								50 (25)
Others	100	210	-	105		500	135	-
Total	1,065	635	255	340	1,200	615	1,050	

Note: () shows actual production in 1983.

Source: BUKU PEGANGAN PENGGUNAAN PRODUKSI
DALAM NEGERI 1984, MOI, R.I.

Table ANX III-10

IMPORT OF CONSTRUCTION EQUIPMENT

Products	Quantity (unit)	Net weight (KG)	Value CIF (US \$)
	1982	1982	1982
	1983	1983	1983
	1984	1984	1984
Mechanically propelled	39	231,895	772,430
road rollers in C-K-D	13	65,083	262,931
	4	15,592	38,530
Mechanically propelled	611	2,567,751	9,851,476
road rollers in built-up	458	2,208,367	6,669,732
	178	1,081,498	3,935,841
Parts of mechanically	-	161,604	706,022
propelled road rollers	-	65,448	221,297
	-	114,865	1,159,166
Bulldozers, angle dozers	1,488	21,764,527	80,875,876
and levellers self	957	11,644,019	43,866,070
propelled	623	8,721,248	38,982,183
Mechanical shovels and	-	10,926,355	32,093,198
excavators self propelled	-	8,295,477	19,243,332
	-	5,592,821	24,275,609
Other machines self	-	2,697,658	15,807,392
propelled	-	3,426,574	14,655,399
	-	1,903,653	11,072,786

(BUREAU OF STATISTICS)

Table ANX III-11

PRODUCTION CAPACITY OF AUTOMOTIVE

(NBR)

Assembler	Capacity	Brand
P.T. Alun indah	1,500	Citroen, Berliet
P.T. Garmak motor	20,000	Chevrolet, Opel
P.T. Gaya motor	45,000	Daihatsu, Peugeot, Renault
P.T. German motor mfg	8,000	Mercedes Benz
P.T. Indonesia service co.	10,000	Dodge, Ford, Fiat, VW, BMW AMC, Nissan
P.T. Imer motor	10,000	Nissan
P.T. Indo mobil utama	20,000	Suzuki
P.T. Ismac	3,500	Volvo, Nissan
P.T. Krama yudha ratu motor	60,000	Mitsubishi
p.T. krama yudha surabaya	50,000	Mitsubishi
P.T. Krama yudha kusuma	6,000	Mitsubishi
P.T. Multi astra	80,000	Toyota
P.T. National assembler	15,000	Mazda, Suzuki, Hino, Landrover
P.T. Pantja motor	7,500	Isuzu
P.T. Prospect motor	10,000	Honda
P.T. Permorin	10,000	Mitsubishi
P.T. Udatin	12,000	Holden
Total	368,500	

Source: POTENSI INDUSTRI, 1984, MOI

Item	Capacity
Passenger car	55,275
Commercial car	313,225

Source: BUKU PEGANGAN PENGGUNAAN PROPUKSI DALAM NEGERI, 1984

Table ANX III-12

ACTUAL DELIVERY OF AUTOMOTIVE (1984)

				(NBR)
Brand	Commercial Car	Passenger Car	General Purpose Car	Total
Daihatsu	33,637	3,270	1,827	38,734
Mitsubishi	32,693	1,681	-	34,374
Toyota	23,226	5,595	849	29,670
Suzuki	18,774	-	5,238	24,012
Honda	-	8,231	-	8,231
Isuzu	1,669	-	-	1,669
Mazda	360	956	-	1,316
Hino	1,068	-	-	1,068
Nissan	-	357	133	490
UD nissan	176	-	-	176
Chevrolet	4,455	-	405	4,860
Mercedes benz	1,753	758	75	2,586
Peugeot	-	1,067	-	1,067
Citroen	667	11	-	678
Jeep	-	-	625	625
Ford	26	575	-	601
Holden	-	444	-	444
Renault	-	406	-	406
Volkswagen	391	-	-	391
Volvo	181	87	-	268
Opel	180	-	-	180
BMW	-	174	-	174
Fiat	-	107	-	107
Landrover	-	-	94	94
Berliet	58	-	-	58
Dodge	37	-	-	37
Simca	-	10	-	10
Tata	5	-	-	5
Total	119,356	23,729	9,246	152,331

Source: P.T. KRAMA YUDHA TIGA BERLIAN MOTORS

Table ANX III-13

ACTUAL DELIVERY OF AUTOMOTIVE (1985)

(From January to May)

(NBR)

Brand	Commercial Car	Passenger Car	General Purpose Car	Total
Daihatsu	13,663	967	1,205	15,835
Suzuki	12,154	120	1,500	13,774
Mitsubishi	11,300	995	-	12,295
Toyota	10,555	1,170	172	11,897
Honda	-	3,405	-	3,405
Mazda	376	676	-	1,052
Isuzu	663	-	-	663
Nissan	-	234	13	247
Hino	227	-	-	227
Chevrolet	1,382	-	952	2,334
Mercedes benz	895	302	101	1,298
Ford	8	607	-	615
Opel	327	168	-	495
Peugeot	-	418	-	418
Citroen	314	3	-	317
Jeep	-	-	196	196
Volvo	20	153	-	173
Renault	-	164	-	164
Volkswagen	114	-	-	114
Berliet	112	-	-	112
BMW	-	61	-	61
Landrover	-	-	35	35
Holden	-	34	-	34
Fiat	-	31	-	31
Total	52,110	9,508	4,174	65,792

Source: P.T. KRAMA YUDHA TIGA BERLIAN MOTORS

Table ANX III-14

PRODUCTION AND DELIVERY OF AUTOMOTIVE

Year	(Production)		(NBR)
	Passenger	Commercial	Total
1975	29,814	54,296	84,110
1976	31,258	51,093	82,351
1977	12,070	78,126	90,196
1978	15,174	91,733	106,907
1979	14,174	86,604	100,778
1980	22,468	151,267	173,735
1981	27,156	182,740	209,896
1982	29,680	159,965	189,645
1983	24,183	131,655	155,838
1984	23,368	130,302	153,670

Source: MOI, 1985

Year	(Delivery)			(NBR)
	Grand Total	Commercial Car	Passenger Car	General Purpose Car
1981	207,804	157,745	25,813	24,246
1982	188,780	133,634	30,096	25,050
1983	151,858	117,247	23,050	11,561
1984	152,331	119,356	23,729	9,246

Source: P.T. KRAMA YUDHA TIGA BERLIAN MOTORS

PRODUCTION CAPACITY OF MOTOR CYCLE

		(NBR)
Assembler	Capacity	Brand
P.T. Harapan motor sakti	200,000	Yamaha
P.T. Federal motor	300,000	Honda
P.T. Indohero steel & eng. co.	200,000	Suzuki
P.T. Tunas bekasi motor co.	60,000	Kawasaki
P.T. Dan motor vespa indonesia	90,000	Vespa
P.T. Tunas bekasi motor	200,000	Binter
P.T. Tunas bekasi motor	60,000	Scooter
Total	1,110,000	

Source: POTENSI INDUSTRI, 1984

Table ANX III-16

PRODUCTION AND DELIVERY OF MOTORCYCLE AND SCOOTER

	(NBR)	
	Delivery	Production
1974	233,000	n.a.
1975	254,176	300,700
1976	194,214	270,000
1977	239,289	302,000
1978	235,658	320,000
1979	190,744	212,572
1980	366,047	409,985
1981	515,682	503,273
1982	550,228	557,439
1983	361,777	362,300
1984	248,000	247,600

Source: PASUMI

Table ANX III-17

CAPACITY, PRODUCTION AND DEMAND OF ELECTRICAL
MACHINE & APPLIANCES

			(unit 1,000)					
Products	Item	Unit	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88
1 Radio/radio cassette	(1)	1,000	4,950	5,768	5,768	5,768	5,768	5,768
	(2)		1,589	1,503	1,587	1,699	1,818	1,946
	(3)		1,305	1,414	1,511	1,618	1,732	1,863
2 TV colour	(1)	1,000	700	965	965	965	966	965
	(2)		232	189	279	298	320	342
	(3)		229	189	266	284	306	326
3 TV B/W	(1)	1,000	1,400	1,314	1,314	1,314	1,314	1,314
	(2)		421	433	512	549	587	629
	(3)		412	433	488	522	599	599
4 Cassette recorder	(1)	1,000	781	1,424	1,424	1,424	1,424	1,424
	(2)		366	288	466	499	534	572
	(3)		366	288	414	444	476	509
5 Room fan	(1)	1,000	878	1,356	1,356	1,356	1,356	1,356
	(2)		756	801	1,056	1,131	1,210	1,296
	(3)		756	801	960	1,028	1,100	1,178
6 Air condition	(1)	1,000	142	317	317	317	317	317
	(2)		55	69	79	84	90	97
	(3)		55	69	76	80	85	92
7 Refrigerator	(1)	1,000	340	450	450	450	450	450
	(2)		152	139	176	190	206	227
	(3)		152	139	160	173	187	206
8 Electric iron	(1)	1,000	130	130	130	130	130	130
	(2)		33.7	35.7	40	42.5	44.8	47.4
	(3)		35.5	38.0	40	42.5	44.8	47.4
9 Rice cooker	(1)	1,000	53.2	233	233	233	233	233
	(2)		49.0	52	58	61.5	65	68.5
	(3)		51.5	56	58	61.5	65	68.5
10 Storage battery	(1)	1,000	4,059	4,557	6,500	7,000	7,500	8,000
	(2)		3,521	4,080	6,405	6,869	7,343	7,862
	(3)		4,700	4,985	5,337	5,716	6,119	6,562
11 Dry battery	(1)	1,000	682,420	1,006,536	1,000,536	1,058,466	1,147,378	1,245,000
	(2)		576,600	633,600	861,566	922,603	987,599	1,057,409
	(3)		632,345	670,617	717,963	768,835	822,999	881,174
12 Lamp filament	(1)	1,000	100,400	101,480	101,480	101,480	101,480	101,480
	(2)		30,400	45,439	63,675	68,192	73,482	78,682
	(3)		45,563	49,239	53,066	56,826	61,235	65,568
13 Lamp fluorescent	(1)	1,000	21,000	22,200	22,200	22,200	22,200	22,200
	(2)		5,300	9,650	17,476	18,715	20,032	21,446
	(3)		13,639	14,743	15,888	17,013	18,211	19,497
14 Blower	(1)	1,000	0.5	0.5	0.5	0.5	0.5	0.5
	(2)		0.1	0.1	0.2	0.25	0.35	0.5
	(3)		1.8	1.8	2.3	2.5	3.0	3.4
15 Generator set	(1)	1,000	62.0	62.0	62.0	62.0	76.0	76.0
	(2)		26.4	33.8	37.4	41.1	45.4	50.0
	(3)		50.4	37.6	41.7	45.8	50.5	55.5
16 Electric motor	(1)	1,000	-	16.0	72	92	120	160
	(2)		-	-	36	65	98	133
	(3)		-	297.2	333	337	410	450
17 Distribution transformer	(1)	1,000	9.4	20.2	20,150	20,150	25,150	25,150
	(2)		5.0	5.7	10,300	12,500	13,500	15,000
	(3)		5.7	6.6	11,430	12,340	13,300	14,400
18 Power transformer	(1)	1,000	-	20.0	40	40	60	60
	(2)		-	7.0	20	24	30	40
	(3)		-	-	102	28	35	22
19 Low & medium voltage panel	(1)	1,000	15.6	19.4	27,000	27,000	42,000	42,000
	(2)		10.6	14.0	18,800	22,000	26,100	30,000
	(3)		64.2	17.6	20,900	24,500	29,000	33,000
20 High voltage panel	(1)	1,000	-	0.6	0.6	0.6	0.6	0.6
	(2)		-	0.1	0.17	0.25	0.31	0.36
	(3)		-	-	0.83	0.18	360	0.14
21 Electric welding machine	(1)	1,000	-	9.0	9.0	9.0	9.0	9.0
	(2)		-	1.8	4.0	5.0	6.0	8.0
	(3)		-	8.2	9.2	10.0	11.0	12.0
22 Kwh meter	(1)	1,000	-	920	1,120	1,120	1,550	1,550
	(2)		-	500	700	900	1,160	1,160
	(3)		-	800	1,160	1,160	1,160	1,160

Note: (1) Capacity (2) Production (3) Demand

Source: PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984-1987 MOI 1986

MANUFACTURER OF ELECTRICAL MACHINE AND APPLIANCES

(1/3)

Radio Cassette Recorder	Listrik Panels	Generator Set	Air-Conditioner
Noble Star Ele'	Mega Eltra	Denyo Indonesia	National Govel
Acma Nusantara	Simens Indonesia	Cahaya Adi Alama	Pandda Raya
Besuki Indah Ele'	Sinar Angkasa Rungkat	P.M. Guntur	Indo Air-Con
Elbiru	Mega Daya	New Age Eng'	Sanyo
National Gabal	Mesindo Agun Eng'	Bina Pertini	Tjiparai
Telesonic Ele' & Dev	Sinar Elec' S.E.B.	Imora Makmur	Benua First
Sinar National	Otees Per Kasa	Adiasa Sakti	Nippon Denso
Sanyo	Fox Bord Per Kind Indonesia	Echo	Daikin
Yasonta	Mata Ram Indah	Impala Indah	Yansuli
Indo Machine	First Pura Jaya	B.B.I.	Natrik
Jaya Pura Permai	Teknika	Wira Mustika Indah	Sehat Gembira Jaya Industri
United Roxi Crown Gemini Elec'	Abtolite Indah	Indo Coco Ltd.	Soli Tron
Gemita Work	Elemen	Sinar Jakarta Indah	Pias Copac
Pembina Galindra	Twink Indonesia	Ahli Teknik	Great Ancol
Multi Polor	Sidsan	Indra Makmur	Glor Seni
Scrotarius Jaya Ele'	Gim Megah	Poreindo Diesel	Hartono Istana Elec'
Sumber Harapan Asia Kaya	Allco Industri	Pabrik Mesin Guntur	Gumpita Work
Arta Pal Elec' Industri	Industri	Avk Indonesia	Jaya Ital Indo
Tjiparai	Tata Komponik	Generator Indo	
Ratu Irama Intanasional	Hazemeyen Holvee Indonesia		
Xumata Sari Indah	Icesa Eng'		
Echo	Panel Nusantara		
Hartono Istana Elec'	Metrika		
Mega Elec'	Sinar Elenika Baru		
Panggung Elec'	Chaya Pelang Eng'		
Segoro Waru Madu	Viva Elec' Corp'		
Fore Front	Jaya Kencana		
	Jaya Teknik Indonesia		
	Aeg Bina		
	Guna Electro		

Table ANX III-18 (Continued)

(2/3)

Ballast for L.T.		Refrigerator	Glow Lump - Lump Pijian	T.V.	Transformator Distribusi
Daya Elec'		National Gobel	Hikari	Besuki Indah	Unindo
Nikatsu Electric		Sanyo	Philips	National Gobel	Trafindo Perkasa
Brocomutlira Elec'		Tjiparai	Sarana Agatra Utama	Wheel Antarkisa	Morawa Elec' Transbuana
Sinar Semp Urna Abadi Elec'		Gempita Work	Sibalec	Yasontha	Rawa Buaya
Asata Utama Ele' Industry		Yansuli	Perindra	Elbiru	First Pura Jaya Teknika
Bumi Kencana Kusuma		Mataric Jaya	Perlana	Gemini Elec'	Asata Utama
Veltama Vista Megah Elec Ind'		Indo Air-Con	Sinas Purnama Sakti	Hartono Intana Ele'	Bambang Jaya
Raw Buaya		Solitron	Bintang Terang	Indo Machine	National Gobel
Sinar Massaakti		Plas Copac	Sinar Ang Kasa Rungkut	Solitron Elec'	
Indo Tri Saya Industries		Ster Cosmos	Puji Chaya	Ster Cosmos	
Textron		Great Ancol		Nusantara Polar Ele'	
Sinar Ele'		Jaya Intal Indo'		Multipular Corp'	
		Glor Seni			
		Hartono Istana Elec			
		Sehat Gembira Jaya			
KWH Meter		Storage Battery	Lump T.L	M.C.B.	Radio Kominikasi
Sigma Tirta		Yuasa Battery	Sinar Angkasa Rungkut	Alisindo Perkasa	Radio Fraqu Communication
Metbelosa		G.S. Battery	Philips	Dharmas Sadhana	Centronic
Fuji Dmaruma		Sinar Stupa electro	Ratin Ele'	Sigma Tirta	Inti
Melcoinda		Asia Storage Battery	Hikari	Mega Eltra	Chatu Listiwa
Meco Indo		Nippers Battery	Sarana Gatrautama	Asean Power Elec'	Dharma Switungal Utama
Kahi Utama		Andalasa Jaya	Perinda	Mega Daya	Indisi
Len		Indonesia Battery	Sinar Purnama Sakti		
			Sinar Baru Elect'		

Table ANX III-18 (Continued)

Battery Kering		Motor	Radio Broad Cast	Isolator	Current Transformer
Chemical Intes' Industry		Eltab Indonesia	Centronics		
Union Carbide Indonesia		Ahli Teknik Ind'	Inti	Chaya Inaba Elec'	Aeg Bina
Padi Tractor		Wira Mustika	Radio Freq' Communication	Indonesia Keramik	Siri Seg
Hadi Terang		Tecomulti	Len-Lipi	Twink Indonesia	Sinar Elec' Seb
Ever Bright		Indo Bangna Prima		Sinar Angkasa Rungkat	Nikkatsu Electric Works
Transformotor		Lumpu Dekorasi	Telephone	Transmitter Brodcast for T.V. & Radio	Lumpu Kendaran Bermotor
Erka		Sinar Angkasa Rungkat	Inti	Radio Freq' Communication	Sinar Angkasa Rungkut
Sabatih		Hikari	Erindo Utama	Elektronika Nusantara	Tiger Head Bulbs
Moraw Elec' Transeuana		Puji Cahaya	Indi raya	Inti	
Sinar National					
Terminal Box		Kipas Angin	Stap Up/Down Transformer	Condenser	Trans Rectifier
Reychem Perkasa		Ster Cosmos	Sinar Elec' Seb	Diamond Sardra Elec'	CV Erka
Nasionesia Nusanlara		Indo Machine	Nikatsu Elec' Work		Sinar Electronica Seb
-Telekindo		National Gobel			
Trans Tanaga		Trans Tinggo	Transceiver	Broadcast transmitter	Lump Senter
Unind		Cahaya Inaba Ele'	Hausma	Inti	Tiger Head Bulbs
Sidohita		Indonesia Keramik	Ketabang Kali	Radio Freq' Communication	
Semi Conductory		Radio Mobil	T.V. Antena	Radio Mobil Tele	Mesin Cuci
Fairclid Semi-Con		Inti	Pers Profesional	Inti	Yasunli
National Semi-Con					
A/C Mobile					
Nippon Denso					

Source: 1) "Potensi Industri 1984", MOI
 2) BUKU PEGANGAN PENGGUNAAN PRODUKSI DALAM NEGERI BUKU.1. BARANG PRODUKSI DALAM NEGERI 1984
 3) MOI DIRECTORAT INDUSTRI MESIN LISTRIK DAN ELECTRONIKA "DAFTAR PERUSAHAAN INDUSTRI MESIN LISTRIK DAN PERALATAN LISTRIK TENAGA" 1984

Table ANX III-19

IMPORT OF ELECTRICAL MACHINE AND APPLIANCES

CCCN No.	Item	(Unit: US\$ million)			
		1981	1982	1983	1984
850111 - 6	D.C. motor & generator	4.5	22.0	4.0	4.7
8501121 & 29	AC, DC, motor	23.7	38.9	31.7	35.1
8501132 - 34	AC generator < 5kg	22.7	8.0	11.0	5.1
8501211 - 215	Ac generator > 5kg	77.9	112.4	103.8	68.0
8501410 & 490	Parts for motor	14.9	21.4	17.0	19.2
8515211,19,21,29	TV	44.5	34.6	27.1	20.5
8515311,19,21,29, 8515311,91 & 99	Radio, radio cassette	10.8	7.5	4.2	3.1
8515600	Radio for navigation	6.4	7.1	17.0	9.0
8515910	Parts TV	17.1	12.1	12.7	16.4
8501510 & 90	Transformer	56.9	113.9	32.5	70.1
8519140	Switch board & panel	19.6	26.9	42.9	30.7
8521900	Parts for TV apparatus	15.9	29.0	102.0	102.5
8521300 & 400	Transistor, micro circuit	19.1	8.6	81.9	7.0
8515920	Parts for radio broad cast	11.8	9.8	7.4	15.3
8515990	Parts for other radio	22.2	38.5	18.6	29.5
8519132	Junction box	1.5	1.1	1.9	2.5

Source: BIRD PUSAT STATISTIK (1981-1984)

Table ANX III-20

EXPORT OF ELECTRICAL MACHINE AND APPLIANCES

		(Unit: US\$ 1,000)			
CCCN No.	Item	1981	1982	1983	1984
8501129	AC/DC motor	138.6	-	-	-
8501134	AC generator > 5kg Built-up	16.0	86.4	-	147.9
8503110	Dry battery 60mm ^H x 33mm ^Ø	794.2	635.2	-	1,159.3
8504199	Storage Battery	-	39.6	20.8	41.7
8503199	Primary battery	200.0	-	-	-
8514120	Loud speaker	-	-	876.0	1,385.5
8515219	TV Colour Built-up	-	-	1,192.0	-
8515221	T.V. B/W	44.4	-	-	175.7
8515319	Radio for mobile	-	-	-	120.0
8515321	Portable type radio CKD	-	50.6	80.9	7.3
8515329	Portable type radio Built-up	-	359.6	311.0	18.2
8515399	Other Radio	-	90.0	609.8	-
8515910	Part T.V. & Receiver	340.2	79.4	550.1	1.9
851592	Part Radio	1,978.4	700.6	135.7	511.7
8521300	Semi conductor	52,250.7	75,592.1	114,941.3	133,164.2
8521900	Part T.V. & Apparatus	678.5	1,452.4	1,682.1	1,098.5

Source: Exports by Commodity Country of Distination and Part of Export 1981-1984
BIRO PUSAT STATISTIK

Table ANX III-21

EXISTING SHIPBUILDING AND REPAIRING CAPACITY

1. NUMBER OF SHIPBUILDING AND REPAIRING ENTERPRISES

Kinds of Shipyards	Number of Enterprises
Steel shipbuilder, large size (over 500 DWT)	14
medium size (200 - 500 DWT)	26
small size including small repair yards (up to 200 BRT)	73
	(10 state - owned)
FRP boat yard	15
Ferrocement shipyard	3
Wooden boat shipyard and traditional shipyard	ABT 1,500

Source: Country Report of Indonesia by Mr Sutito, March 1984
Development pattern of Indonesia's Shipbuilding Industry 1983

2. EXISTING CAPACITY FOR NEW SHIPBUILDING

Class (GT)	100 & Below	101 - 500	501 - 1,000	1,001 - 5,000	Total
Total (GT)	6,355	5,350	22,550	11,100	45,355
No. of Berths	65	11	24	4	104

Notes: 1. New shipbuilding total capacity installed About 45,000 GT/year
2. Average annual new ship production (Total) About 20,000 GT/year
3. Biggest new shipbuilding berth capacity 8,000 GT
4. Biggest ship ever built: Floating dock 2,500 TLC
Passenger cargo coaster 1,000 DWT

Source: Country report of Indonesia by Mr Sutito, March 1984

3. EXISTING SHIP REPAIRING CAPACITY

Class (GT)	100 & Below	101 - 500	501 - 1,000	1,001 - 5,000	5,001 - 20,000	Total
Total (GT)	7,840	11,050	8,940	27,180	35,680	90,690
No. of docks/ slipways	86	27	9	11	3	136

Notes: 1. Docking total capacity installed About 90,000 GT or
About 1,200,000 GT/year
2. Average annual docking production (Total) About 700,000 GT/year
3. Biggest floating dock capacity 20,000 GT
4. Biggest slipway capacity 1,200 GT

Source: Country report of Indonesia by Mr Sutito, March 1984

4. EXISTING SHIP REPAIRING FACILITIES

Facilities	Unit	Total Capacity (DWT)
Floating docks	14	84,000
Graving docks	12	18,500
Slipways	106	26,300
Side-Tracks	2	7,600
Repair basin	2	600
Total	136	137,000 DWT

Source: Country report of Indonesia by Mr Sutito, March 1984

Table ANX III-22

CAPACITY, PRODUCTION AND DEMAND OF NEW SHIPBUILDING

Class		(Unit: BRT)					
		1982/83	1983/84	1984/85	1985/86	1986/87	1987/88
Up to 500 BRT	Capacity	27,660	30,955	30,955	33,741	36,440	39,173
	Production	4,014	4,460	4,953	18,355	20,406	22,720
	Demand	18,237	20,263	22,514	30,598	60,018	64,915
501 - 2,000 BRT	Capacity	23,940	26,600	27,400	28,994	31,314	36,662
	Production	3,771	4,190	4,656	15,773	17,536	19,524
	Demand	17,167	19,075	21,194	27,288	51,576	55,983
2,001 - 5,000 BRT	Capacity	39,150	43,500	43,500	47,415	51,208	55,019
	Production	8,069	8,965	9,951	25,804	28,677	31,928
	Demand	25,629	28,477	31,641	44,007	84,344	92,623
5,001 - 10,000 BRT	Capacity	30,150	33,500	33,500	36,515	39,436	42,394
	Production	5,360	5,360	5,360	19,864	22,084	24,585
	Demand	19,735	21,928	24,364	33,107	64,953	70,852
Total	Capacity	120,870	134,555	135,355	146,665	158,398	173,248
	Production	21,214	22,974	24,920	79,796	88,703	98,757
	Demand	80,768	89,743	99,713	135,000	260,891	284,373

Source: PENGEMBANGAN KADASTAS NASIONAL SEKTOR INDUSTRI 1984 - 1987
DEPARTEMEN PERINDUSTRIAN EDISI 1984

Table ANX III-23

CAPACITY, REPAIR AND DEMAND OF SHIP REPAIR

		(Unit: BRT)					
Class		1982/83	1983/84	1984/85	1985/86	1986/87	1987/88
Up to 500 BRT	Capacity	175,773	195,303	195,303	292,462	385,051	477,276
	Repair	149,382	165,980	184,422	248,763	319,592	372,509
	Demand	489,893	544,266	604,740	609,739	639,184	677,289
501 - 2,000 BRT	Capacity	156,547	173,941	173,941	253,611	330,004	417,082
	Repair	131,030	145,589	161,765	218,374	274,557	326,884
	Demand	412,510	458,344	509,217	539,620	549,134	594,335
2,001 - 5,000 BRT	Capacity	155,464	172,738	172,738	243,144	317,430	390,561
	Repair	130,123	144,581	160,646	206,672	263,467	304,561
	Demand	344,644	382,938	425,487	449,078	526,934	553,747
5,001 - 10,000 BRT	Capacity	102,236	113,595	113,595	173,553	222,470	275,147
	Repair	85,166	94,629	105,643	147,520	181,650	215,473
	Demand	188,036	208,929	232,143	410,805	369,300	391,769
10,001 - 30,000 BRT	Capacity	445,805	495,339	495,339	735,235	942,972	1,174,226
	Repair	374,646	416,273	462,525	626,650	782,667	925,568
	Demand	1,029,166	1,143,518	1,441,750	1,429,415	1,565,334	1,682,851
Total	Capacity	1,035,825	1,150,916	1,150,916	1,698,005	2,197,927	2,734,292
	Repair	870,347	967,012	1,075,001	1,447,979	1,821,933	2,144,995
	Demand	2,464,249	2,737,995	3,213,337	3,438,657	3,649,886	3,899,991

Source: PENGEMBANGAN KADASTAS NASIONAL SEKTOR INDUSTRI 1984 - 1987
DEPARTEMEN PERINDUSTRIAN EDISI 1984

Table ANX III-24

PROTECTED DEMAND FOR DOMESTIC NEW VESSELS

(Unit: 1,000 BRT)

Year	Kind of Vessels	BRT 0 - 500	BRT 501 - 2,000	BRT 2,001 - 5,000	BRT 5,001 - 10,000	Total
1981	R.L.S	2.65	14.20	7.22	-	24.07
	L.S.	7.00	-	-	-	7.00
	P.S.	-	0.98	-	-	0.98
	N.O.	5.87	19.08	8.07	3.67	36.69
	T	-	2.00	12.00	11.00	25.00
	Sub-total	15.52	36.26	27.29	14.67	93.74
1982	R.L.S	2.81	15.05	7.65	-	25.51
	L.S.	7.20	-	-	-	7.20
	P.S.	0.45	-	-	-	0.45
	N.O.	6.35	20.65	8.74	3.97	39.71
	T	-	2.00	12.00	11.00	25.00
	Sub-total	16.81	37.70	28.39	14.97	97.87
1983	R.L.S	3.02	16.17	8.22	-	27.41
	L.S.	8.70	-	-	-	8.70
	P.S.	0.44	-	-	-	0.44
	N.O.	6.88	22.36	9.46	4.30	43.00
	T	-	2.00	12.00	11.00	25.00
	Sub-total	10.04	40.53	29.68	15.30	104.55
1984	R.L.S	3.30	17.70	9.00	-	30.00
	L.S.	10.10	-	-	-	10.10
	P.S.	-	0.54	-	-	0.54
	N.O.	7.45	24.21	10.24	4.65	46.55
	T	-	2.00	12.00	11.00	25.00
	Sub-total	20.85	44.45	31.24	15.65	112.19
1985	R.L.S	3.52	18.88	9.60	-	32.00
	L.S.	8.90	-	-	-	8.90
	P.S.	-	0.69	-	-	0.69
	N.O.	8.07	26.22	11.00	5.04	50.42
	T	-	2.00	12.00	11.00	25.00
	Sub-total	20.49	47.79	32.69	16.04	117.01
1986	R.L.S	4.00	20.24	13.02	-	37.26
	L.S.	17.40	-	-	-	17.40
	P.S.	-	0.91	-	-	0.91
	N.O.	8.74	28.41	12.02	5.46	54.63
	T	-	3.00	19.00	16.00	38.00
	Sub-total	30.14	52.56	44.04	21.46	148.20

Table ANX III-24 (Continued)

(Unit: 1,000 BRT)						
Year	Kind of Vessels	BRT 0 - 500	BRT 501 - 2,000	BRT 2,001 - 5,000	BRT 5,001 - 10,000	Total
1987	R.L.S	4.13	21.43	13.76	-	39.32
	L.S.	18.40	-	-	-	18.40
	P.S.	0.53	0.53	-	-	1.06
	N.O.	9.47	30.78	13.02	5.92	59.19
	T	-	3.00	19.00	16.00	38.00
	Sub-Total	32.53	55.74	45.78	21.92	155.97
1988	R.L.S	4.64	24.10	15.48	-	44.22
	L.S.	19.80	-	-	-	19.80
	P.S.	0.53	0.53	-	-	1.06
	N.O.	10.26	33.36	14.11	6.41	64.14
	T	-	3.00	19.00	16.00	38.00
	Sub-Total	35.23	60.99	48.59	22.41	167.22
1989	R.L.S	5.00	25.44	16.34	-	46.78
	L.S.	21.40	-	-	-	21.40
	P.S.	0.61	0.61	-	-	1.22
	N.O.	11.12	36.16	15.30	6.95	69.53
	T	-	3.00	19.00	16.00	38.00
	Sub-Total	38.13	65.21	50.64	22.95	176.93
1990	R.L.S	5.28	27.41	17.61	-	50.30
	L.S.	23.20	-	-	-	23.20
	P.S.	0.61	0.61	-	-	1.22
	N.O.	12.06	39.21	16.59	7.54	75.40
	T	-	3.00	19.00	16.00	38.00
	Sub-Total	41.15	70.23	53.20	23.54	188.12
1991	R.L.S	5.82	29.11	23.28	-	58.21
	L.S.	25.00	-	-	-	25.00
	P.S.	0.70	0.70	-	-	1.40
	N.O.	13.08	42.52	17.99	8.17	81.76
	T	-	4.00	20.00	19.00	43.00
	Sub-Total	44.60	76.33	61.27	27.17	209.37
1992	R.L.S	6.31	31.54	25.23	-	63.08
	L.S.	27.80	-	-	-	27.80
	P.S.	0.76	0.76	-	-	1.52
	N.O.	14.19	46.12	19.51	8.86	88.68
	T	-	4.00	20.00	19.00	43.00
	Sub-Total	49.06	82.42	64.74	27.86	224.08

Table ANX III-24 (Continued)

(Unit: 1,000 BRT)

Year	Kind of Vessels	BRT 0 - 500	BRT 501 - 2,000	BRT 2,001 - 5,000	BRT 5,001 - 10,000	Total
1993	R.L.S	6.84	34.20	27.36	-	68.40
	L.S.	28.60	-	-	-	28.60
	P.S.	0.77	0.77	-	-	1.54
	N.O.	15.39	50.03	21.16	9.62	96.20
	T	-	4.00	20.00	19.00	43.00
	Sub-Total	51.60	89.00	68.52	28.62	237.74
1994	R.L.S	7.33	36.66	29.32	-	73.31
	L.S.	31.80	-	-	-	31.80
	P.S.	0.87	0.87	-	-	1.74
	N.O.	17.40	56.55	23.92	10.87	108.74
	T	-	4.00	20.00	10.00	43.00
	Sub-Total	57.40	98.08	73.24	29.87	258.59
1995	R.L.S	8.12	40.62	32.50	-	81.24
	L.S.	34.40	-	-	-	34.40
	P.S.	-	0.88	-	-	0.88
	N.O.	18.20	59.18	25.03	11.38	113.79
	T	-	4.00	20.00	19.00	43.00
	Sub-Total	60.72	104.68	77.53	30.38	273.31

Notes: R.L.S. = Regular Liner Service
 L.S. = Local Shipping
 P.S. = Pioneer Service
 N.O. = Non-Oil Use
 T = Tanker

Source: Development pattern of Indonesia's Shipbuilding Industry 1983

Table ANX III-25

PROTECTED DEMAND OF SHIP REPAIR UP TO 30,000 BRT

Year	(Unit: BRT)					Total
	0-500 BRT	510-2,000 BRT	2,001-5,000 BRT	5,001-10,000 BRT	10,000-30,000 BRT	
1981	207.99	338.87	230.98	235.58	1,108.65	2,122.09
1982	214.23	360.55	247.03	255.11	1,180.80	2,257.75
1983	221.99	384.09	264.02	275.56	1,254.59	2,400.27
1984	232.37	409.97	288.91	296.97	1,330.09	2,558.32
1985	241.36	437.92	312.01	316.07	1,399.27	2,706.65
1986	258.64	454.87	354.56	344.41	1,492.75	2,905.25
1987	278.15	488.21	381.85	374.98	1,594.00	3,117.22
1988	299.53	525.23	411.17	405.90	1,685.67	3,327.52
1989	322.65	564.62	441.63	448.37	1,786.17	3,563.46
1990	347.58	607.33	474.09	466.40	1,877.77	3,773.18
1991	372.51	631.82	533.68	502.79	2,014.05	4,054.86
1992	402.69	686.13	561.47	535.32	2,153.64	4,339.25
1993	434.96	741.59	603.46	575.02	2,296.86	4,651.90
1994	464.12	803.48	648.65	623.85	2,444.02	4,984.15
1995	508.09	869.01	694.46	668.67	2,595.48	5,337.43

Source: Development pattern of Indonesia's Shipbuilding Industry 1983

Table ANX III-26

CAPACITY, PRODUCTION AND DEMAND OF PLANT EQUIPMENT AND MACHINERY

	1982/1983	1983/1984	1984/1985	1985/1986	1986/1987	1987/1988
Copra processing plant <u>1/</u> -unit-						
Capacity	75	140	140	140	140	140
Production	30	30	32	100	127	127
Demand	50	50	100	100	122	130
Sugar plant <u>2/</u> -unit-						
Capacity	334	336	346	372	372	372
Production	250	251	337	362	362	364
Demand	253	255	341	362	362	364
Coffee processing plant <u>3/</u> -unit-						
Capacity	260	260	260	260	260	260
Production	108	130	130	180	225	260
Demand	108	105	160	210	260	300
Tee processing plant <u>4/</u> -unit-						
Capacity	240	250	250	250	250	250
Production	115	125	158	180	230	250
Demand	115	125	158	180	270	300
Water treatment plant -unit-						
Capacity	130	130	130	130	130	130
Production	11	50	80	110	120	130
Demand	80	80	140	210	230	250

Notes: 1/ Sterilizer, screw press, and effluent treatment plant.2/ Cane table, cane cutter/shredder, mills (3 Roll), diffuser, sulphitator, juice clarifier, juice heaters, vacuum filters, vacuum pan, evaporator, crystallizer, condenser and centrifugal3/ Coffee pump, huller, pulper and dryer4/ Withering through, rotary roll breaker humidifier, dryer and rotary shifter

Source: PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984-1987, MOI, 1984

Table ANX III-27

CAPACITY, PRODUCTION AND DEMAND OF COMPONENTS OF PROCESS PLANT

	1982/1983	1983/1984	1984/1985	1985/1986	1986/1987	1987/1988
Structural steel -ton-						
Capacity	52,850	52,850	52,850	52,850	52,850	52,850 1/
Production	11,299	25,000	32,000	40,000	50,000	50,000 2/
Demand	70,000	70,550	77,000	85,000	94,000	103,000 2/
Steel tank -ton-						
Capacity	16,000	16,000	16,000	16,000	16,000	16,000 1/
Production	10,000	10,000	11,300	13,600	16,000	16,000 1/
Demand	34,000	42,800	46,000	51,000	56,000	60,000
Boiler (below 20t/h) -unit- 3/						
Capacity	30	30	30	30	30	30
Production	5	20	23	30	30	30
Demand	150	165	180	200	220	250
Boiler (above 20t/h) -unit-						
Capacity	10	10	10	10	10	10
Production	5	4	6	8	10	10
Demand	8	6	8	10	14	16
Heat exchanger -ton-						
Capacity	-	-	-	- 1/	- 1/	- 1/
Production	-	-	-	-	-	-
Demand	8,000	9,000	10,000	11,000	13,000	15,000

Notes: 1/ Expected capacity increase in the future is deducted from the original figure.

2/ Revised by JICA team because original figure is unreasonably stated.

3/ There are number of boilers, capacity of which is below 5 ton/h.

Source: PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984-1987, MOI, 1984

Table ANX III-28

CAPACITY AND PRODUCTION OF DIESEL ENGINE (1982)

(Unit: Set)		
Firm	Capacity	Production
1. Mesin Dan Paralan		
Less 35HP	87,050	59,300
31HP - 500HP	35,200	5,760
2. Bahan Dan Barang Logan		
Less 31HP	N.A	3,000
3. P.T. Mesindo Agung Engineering		
31HP - 500HP	3,900	94
4. P.T. Yammur Diesel		
Less 31HP	35,000	15,400
5. P.T. Kubota		
Less 31HP	28,000	10,669
6. P.T. Boma Bisma Indra		
HP: n.a.	11,000	380
7. P.T. Tri Ratna Diesel		
Less 31HP	18,000	1,000
8. Cv. Wira Mustica Indah		
HP: n.a.	9,600	550
Total	227,750	96,153
Less 31HP	177,650	89,369
31HP-500HP	39,100	5,854
Not specified	20,600	930

Source: Directory Basic Metal Industry 1982, Published by: BKS-ILLMA

Table ANX III-29

CAPACITY, PRODUCTION AND DEMAND OF DIESEL ENGINES

Item	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88
Diesel engine less 34HP						
Capacity	93,400	93,400	93,400	93,400	93,400	93,400
Production	57,235	51,575	63,200	72,000	83,000	93,000
Demand	120,000	150,000	164,000	170,000	184,000	191,000
Diesel engine 31-5000HP						
Capacity	6,500	6,500	6,500	6,500	6,500	6,500
Production	947	1,200	1,500	2,500	4,000	6,500
Demand	10,000	10,000	14,000	18,000	25,000	27,000
Diesel engine over 500Kw						
Capacity	-	-	-	-	150	150
Production	-	-	-	-	125	125
Demand	-	-	200	200	200	200

Source: PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984-1987, MOI, 1984

Table ANX III-30

IMPORT OF ENGINES (1981 - 1984)

(Unit)

CCCN Code No.	Item	1981	1982	1983	1984
8406311	Engine for tractor - CKD	40,829	11,123	3,986	2
8406312	Engine for tractor - Built up	174	229	73	29
8406321	Engine for motor vehicle - CKD	2	217	-	888
8406322	Engine for motor vehicle - Built up	2,692	1,056	1,528	1,480
8406391	Engine for other - CKD	(1,404ton)	(1,495ton)	(3,152ton)	(3,823ton)
8406392	Engine for other - Built up	(1,115ton)	(735ton)	(756ton)	(507ton)
8406410	Outboard marine engine - CKD	42	5	829	501
8406420	Outboard marine engine - Built up	37,208	12,007	8,924	7,012
8406500	Marine propulsion engine	7,534	5,440	3,376	5,614
8406610	Engine for locomotive and train way	3	19	44	12
8406691	Other engine - CKD	40,969	18,015	16,212	1,164
8406692	Other engine - Built up	33,073	27,053	29,011	33,239
Total		1981	1982	1983	1984
Import total		194,186	99,824	100,113	85,571
No. of CKD		91,202	39,320	42,037	28,045
No. of Built up		102,984	60,504	58,076	57,526
Gasoline engine <u>1</u> /		108,572	58,081	57,468	51,486
Diesel engine <u>1</u> /		85,614	41,743	42,645	34,085
Less 34HP		70,170	32,656	35,303	25,614
31 - 400HP		15,444	9,087	7,342	8,471

Note: 1/ Diesel/Gasoline ratio is assumed as 30/70 for built up and 60/40 for CKD.

Source: IMPORT STATISTICS, BPS

Table ANX III-31

ESTIMATION OF CAPACITY AND DEMAND 1983/1984 - 1987/1988
IRRIGATION, INDUSTRIAL AND TURBINE PUMPS

Type of Pump	1983/84	1984/85	1985/86	1986/87	1987/88
	(unit)	(unit)	(unit)	(unit)	(unit)
Irrigation Pump					
Capacity	7,200	7,200	7,200	7,200	7,200
Production	3,065	5,000	5,500	6,000	7,200
Demand	3,500	6,000	8,000	9,500	11,000
Turbine Pump					
Capacity	-	400	400	400	400
Production	-	40	80	114	180
Demand	30	30	50	60	300
Industrial Pump					
Capacity	-	3,000	3,000	3,000	3,000
Production	-	1,000	1,500	2,500	3,000
Demand	8,500	9,600	10,000	12,000	13,000
Water Treatment Pump					
Capacity	130	130	130	130	130
Production	50	80	110	120	130
Demand	80	140	210	230	250
Total					
Capacity	7,330	10,730	10,730	10,730	10,730
Production	3,115	6,120	7,190	8,737	10,510
Demand	12,110	15,770	18,260	21,790	24,550

Source: PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984-1987,
MOI, 1984

Table ANX III-32

PRODUCTION CAPACITY/PRODUCTION/DEMAND OF METAL MATERIALS (1)

(1,000ton)

Item	1982/1983 Capacity Production Demand	1983/1984 Capacity Production Demand	1984/1985 Capacity Production Demand	1985/1986 Capacity Production Demand	1986/1987 Capacity Production Demand	1987/1988 Capacity Production Demand
Pellet	- - 430	- - 770	- - 924	- - 1,320	- - 1,540	- - 1,760
Sponge iron	2,200 391 350.5	2,200 541 652	2,200 912 812	2,200 1,200 1,000	2,200 1,400 1,200	2,200 1,600 1,400
Steel slab	1,100 - -	1,100 108 135	1,100 342 292	1,100 460 400	1,100 550 460	1,100 620 529
Ingot/billet	1,175 693.5 950	1,175 882.6 1,026	1,175 1,014 1,130	1,175 1,170 1,360	2,000 1,340 1,560	2,000 1,800 1,800
Hot coil	1,100 10 10	1,100 127 127	1,100 326 355	1,100 407 407	1,100 470 470	1,100 815 815
Cold rolled sheet	- - 450	- - 840	- - 972	- - 1,060	850 225 1,157	850 425 1,248
Tin plate	- - 146.2	- - 174	- - 192	130 - 210	130 78 225	130 85.8 247.5
Bar/shape	1,200 745 743.8	1,200 724.3 575	1,200 832.9 832.9	1,200 958 958	2,000 1,200 1,200	2,000 1,350 1,350

Table ANX III-32 (Continued)

PRODUCTION CAPACITY/PRODUCTION/DEMAND OF METAL MATERIALS (2)

(1,000ton)

Item	1982/1983 Capacity Production Demand	1983/1984 Capacity Production Demand	1984/1985 Capacity Production Demand	1985/1986 Capacity Production Demand	1986/1987 Capacity Production Demand	1987/1988 Capacity Production Demand
Wire rod	416 257.4 257.4	416 300 311	416 340 363	416 384 384	416 416 434	600 450 477.4
G I Sheet	490.8 329.5 329.5	490.8 419 419	490.8 474 474	490.8 490.8 535	650 530 604	650 560 654.4
Copper rod	33 33 20	33 33 26	51 33 30	51 40 35	51 47 39	51 51 42
Aluminium sheet/plate	34.3 9.6 28	34.3 8 30	34.3 17 32.3	34.3 21 34	36 36 36	36.2 38.2 38.2
Aluminium rod	- - -	34.8 34.8 7.9	34.8 8.6 8.6	34.8 11 9.2	34.8 17 17	34.8 21 21
Metal wire	38 7.6 42	38 9 50	38 14 50	38 25 70	40 37 70	40 38 84
Welded pipe	407 237.5 325.9	407 180.4 192.3	407 216 216	407 260 260	407 311 311	407 360 360
Spiral pipe	60 46.1 46.1	60 50 50	60 60 85	60 60 115	100 90 140	120 120 154
Seamless pipe	- - 113.75	- - 130	- - 150	- - 175	160 50 200	160 160 299

Source: PENGEMBANGAN KAPASITAS NASIONAL SEKTOR INDUSTRI 1984-1987, MOI, 1984

Table ANX III-33

PRODUCTION CAPACITY OF STEEL PRODUCTS

Genre of Maker	Number of Establish- ment	Name of Company /(Kind of Products)	Production Capacity (1,000ton/y)								
			Sponge Iron	Slab	Billet/ Ingot	Hot Coil	Plate	Bar/ Shape	Wire rod /Mtl Wire Sheet	G I Sheet Pipe	Welded Pipe
Iron/steel maker	1	PT Krakatau Steel	2,000	1,000	500	1,000		230	220		50
Steel maker (Elec. Furnace)	11	(Bar/shape/wire rod)			870			390	150		
Mill/MFG	22	(Bar/shape)						750			
	1	PT. Jaya Pari Steel						70			
	14	(G I)							400		
	21	(Welded pipe)								530	
Total of production capacity			2,000	1,000	1,370	1,000	70	1,370	370	400	530
											50

Source: JICA Team Survey

STEEL IMPORT, 1983

Products	Weight (MT)	Remarks
Wire rod	29,028	
Round bar	65,449	
Shape	147,196	
Plate	207,322	Thickness \geq 3 mm
Sheet	766,004	Thickness < 3 mm
Tin plate	119,107	
G.I. Sheet	16,191	
Electrical sheet	3,052	
Other coated sheet	35,875	
Pipe	222,861	
Metal wire	11,551	
Secondary products	29,177	Wire mesh, nail, pin, etc.
Pipe fittings	14,111	
Total	1,666,924	(Steel product)

Source: IMPORT STATISTICS, 1984, BPS

**ANNEX IV RESULTS OF QUESTIONNAIRE TO
LARGE-SCALE INDUSTRY AND MEDIUM-
AND SMALL-SCALE INDUSTRY**

Province :

Number :

QUESTIONNAIRE SHEET
SURVEY FOR LINKAGE-TYPE INDUSTRIES DEVELOPMENT

PART I
(FOR LARGE INDUSTRIES)

JUNE - AUGUST, 1985

PREPARED BY:

DEPARTMENT OF INDUSTRY R.I.

IN COOPERATION WITH

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

The data collected here will be kept confidential and not be used for any other purposes than planning development strategies, creating better environment for and establishing technical and financial aid program for linkage-type industries.

AIV-2

I. GENERAL

1. Name of Company : _____

2. Address of head office: _____

Factory : _____

3. Established in : _____ (year)

4. Background of Establishment :

- Initiated by :

☐ Government ☐ Local Company

☐ Foreign Company

- Previous Job of Local Entrepreneur :

5. (1) Paid-in Equity Capital Amount

Rp. _____ (million)

Local :- Government _____%

- Private _____%

Foreign : _____%

(2) Fixed Asset Amount (excluding land & building)

Rp. _____ (million)

6. Number of Employees : Total _____

- Engineer : _____

- Technician : _____

(please attach an organization chart and number of
staffs assigned)

7. Category of Industry

☐ Machinery in general

☐ Electrical Machinery

☐ Transportation Machinery

☐ Others specify :

II. PRODUCTS

1.

No.	Major Products	Quantity			Sales (million Rp) 1984
		Capacity (1984)	Actual Amount in 1984	Unit	

2. Total Annual Sales Amount (1984) :

Rp. _____ million

3. Over-all Capacity Utilization Rate : _____ %

4. Major Client : _____

III. COMPONENTS & RAW MATERIAL

* Please check (✓) on

I : Import

S : Self-Production

L : Local Manufacturer

Major Component & Raw Material	Supplied by *			Monthly Average Amount (mill. Rp)
	I	S	L	

IV. OUTLINE OF SUB-CONTRACTING COMPANIES BEING USED

If your company is using local subcontractors, local manufacturers or local maintenance service companies mainly in the field of metal-working industries, please give their outlines on the attached sheets (one form for one company).

(Outline of Subcontracting Companies) number 1

1. Name of Company : _____
2. Address : _____

- Factory : _____
3. Number of Employees : _____ persons in total,
Number of engineers: _____
4. Amount of Capital : Rp. _____ million

5.

Supplied Component or Services	Quantity	Unit	Total Value (Rp/m)

6. Procurement : ☐ By order ☐ Constant procurement
7. Payment : ☐ By cash ☐ By credit ☐ month
8. Do you supply raw materials? ☐ Yes
☐ No

(Attachment number 1)

9. Kinds of Assistant your company provides :

- (1) Financial: ☐ Equity ☐ Loan
(share)
- (2) Technical: ☐ Training ☐ Advisory ☐ Inspection
☐ Managerial

10. Major problems and obstacles for User :

- (1) Quality: ☐ Good ☐ Fair ☐ Poor
- (2) Quantity: ☐ Enough ☐ Short
- (3) Delivery: ☐ Punctual ☐ Sometimes late ☐ Always late
- (4) Technical Level: ☐ High ☐ Middle ☐ Low
of staff
- (5) Management: ☐ Good ☐ Fair ☐ Poor
- (6) Entrepreneurship: ☐ Good ☐ Fair ☐ Poor

(Outline of Subcontracting Companies) number 2

1. Name of Company : _____

2. Address : _____

Factory : _____

3. Number of Employees : _____ persons in total,

Number of engineers: _____

4. Amount of Capital : Rp. _____ million

5.

Supplied Component or Services	Quantity	Unit	Total Value (Rp/m)

6. Procurement : ☐ By order ☐ Constant procurement

7. Payment : ☐ By cash ☐ By credit ☐ month

8. Do you supply raw materials? ☐ Yes

☐ No

(Attachment number 2)

9. Kinds of Assistant your company provides :

- (1) Financial: ☐ Equity ☐ Loan
(share)
- (2) Technical: ☐ Training ☐ Advisory ☐ Inspection
☐ Managerial

10. Major problems and obstacles for User :

- (1) Quality: ☐ Good ☐ Fair ☐ Poor
- (2) Quantity: ☐ Enough ☐ Short
- (3) Delivery: ☐ Punctual ☐ Sometimes late ☐ Always late
- (4) Technical Level: ☐ High ☐ Middle ☐ Low
of staff
- (5) Management: ☐ Good ☐ Fair ☐ Poor
- (6) Entrepreneurship: ☐ Good ☐ Fair ☐ Poor

(Outline of Subcontracting Companies) number 3

1. Name of Company : _____
2. Address : _____

- Factory : _____
3. Number of Employees : _____ persons in total,
Number of engineers: _____
4. Amount of Capital : Rp. _____ million
- 5.

Supplied Component or Services	Quantity	Unit	Total Value (Rp/m)

6. Procurement : ☐ By order ☐ Constant procurement
7. Payment : ☐ By cash ☐ By credit ☐ month
8. Do you supply raw materials? ☐ Yes
☐ No

9. Kinds of Assistant your company provides :

- (1) Financial: ☐ Equity ☐ Loan
(share)
- (2) Technical: ☐ Training ☐ Advisory ☐ Inspection
☐ Managerial

10. Major problems and obstacles for User :

- (1) Quality: ☐ Good ☐ Fair ☐ Poor
- (2) Quantity: ☐ Enough ☐ Short
- (3) Delivery: ☐ Punctual ☐ Sometimes late ☐ Always late
- (4) Technical Level: ☐ High ☐ Middle ☐ Low
of staff
- (5) Management: ☐ Good ☐ Fair ☐ Poor
- (6) Entrepreneurship: ☐ Good ☐ Fair ☐ Poor

(Outline of Subcontracting Companies) number 4

1. Name of Company : _____

2. Address : _____

Factory : _____

3. Number of Employees : _____ persons in total,

Number of engineers: _____

4. Amount of Capital : Rp. _____ million

5.

Supplied Component or Services	Quantity	Unit	Total Value (Rp/m)

6. Procurement : ☐ By order ☐ Constant procurement

7. Payment : ☐ By cash ☐ By credit ☐ month

8. Do you supply raw materials? ☐ Yes

☐ No

9. Kinds of Assistant your company provides :

- (1) Financial: ☐ Equity ☐ Loan
(share)
- (2) Technical: ☐ Training ☐ Advisory ☐ Inspection
☐ Managerial

10. Major problems and obstacles for User :

- (1) Quality: ☐ Good ☐ Fair ☐ Poor
- (2) Quantity: ☐ Enough ☐ Short
- (3) Delivery: ☐ Punctual ☐ Sometimes late ☐ Always late
- (4) Technical Level: ☐ High ☐ Middle ☐ Low
of staff
- (5) Management: ☐ Good ☐ Fair ☐ Poor
- (6) Entrepreneurship: ☐ Good ☐ Fair ☐ Poor

(Outline of Subcontracting Companies) number 5

1. Name of Company : _____

2. Address : _____

Factory : _____

3. Number of Employees : _____ persons in total,

Number of engineers: _____

4. Amount of Capital : Rp. _____ million

5.

Supplied Component or Services	Quantity	Unit	Total Value (Rp/m)

6. Procurement : ☐ By order ☐ Constant procurement

7. Payment : ☐ By cash ☐ By credit ☐ month

8. Do you supply raw materials? ☐ Yes

☐ No

(Attachment number 5)

9. Kinds of Assistant your company provides :

- (1) Financial: ☐ Equity ☐ Loan
(share)
- (2) Technical: ☐ Training ☐ Advisory ☐ Inspection
☐ Managerial

10. Major problems and obstacles for User :

- (1) Quality: ☐ Good ☐ Fair ☐ Poor
- (2) Quantity: ☐ Enough ☐ Short
- (3) Delivery: ☐ Punctual ☐ Sometimes late ☐ Always late
- (4) Technical Level: ☐ High ☐ Middle ☐ Low
of staff
- (5) Management: ☐ Good ☐ Fair ☐ Poor
- (6) Entrepreneurship: ☐ Good ☐ Fair ☐ Poor

V. INCREASE OF DOMESTIC-MANUFACTURED COMPONENT

1. Please list those items currently imported but being planned or considered desirable to be procured from domestic manufacturers or suppliers.

No.	Name of Component Material & Services	Manufacturing Process	Number of Years Required for Domestic Procurement

VI. FUTURE PLAN

1. What is your future prospect of your company's product?
What annual percentage your product's demand will be
expected to be increased?

In 5 years, _____ %

In 10 years, _____ %

2. Do you have any plant expansion plan in the near future?
If so, please explain :

Product : _____

Market : Domestic _____ %

Export _____ %

Investment : _____, in 19____.

3. What do you think you can help to develop sub-contracting
or other linkage-type industries?

Technical Assistance: ☐ Training ☐ Advisory

☐ Inspection ☐ Unable to
help

4. Or do you have any request to the government for
supporting program for linkage-type industries, which
ultimately brings benefit? : ☐ Yes

☐ No

If yes, which aspect?

☐ Technical ☐ Management ☐ Financial

☐ Marketing ☐ Others, specify:

5. If the government provides low-interest loan attached with technical, marketing and managerial assistance for linkage-type industries, do you think it will be effective for them and for your procurement?

☐ Effective

☐ Not effective

☐ It depends on the conditions of _____

6. What do you expect from financial & technical aid from Japanese government?

Thank you for your cooperation. These data you provided will form a valuable basis to plan industrialization program of the Republic of Indonesia.

Province :

Number :

QUESTIONNAIRE SHEET
SURVEY FOR LINKAGE-TYPE INDUSTRIES

PART II
FOR MEDIUM AND SMALL LINKAGE-TYPE INDUSTRIES

JUNE - AUGUST, 1985

DEPARTMENT OF INDUSTRY R.I.
IN COOPERATION WITH
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

This questionnaire sheet is addressed to small and medium scale industries or subcontractors who are currently or will be taking sub-contracting works from large or parent companies.

The data collected here will be kept confidential and not be used for any other purposes than planning development strategies, creating better environment for and establishing technical and financial aid program for linkage-type industries.

Name of Interviewer : _____
(name)

(position)

Name of Interviewer : _____
(name)

(position)

Place and date of interview, _____, 1985

I. GENERAL

1. Name of Company : _____
2. Address Head Office: _____
- Factory : _____
3. Established in : _____
4. Previous Job of Entrepreneur (please check)
- ☐ Government Official ☐ State-owned company
- ☐ Foreign joint venture company
- ☐ Medium or small industry of other products
- ☐ Trader ☐ Technical Training Institution
- ☐ University ☐ Others, specify:
- _____
- _____
- _____

5. Capital

- (1) Fixed asset amount (excluding land & building)
Rp. _____
- (2) Working Capital amount: Rp. _____
- (3) Ownership: Entrepreneur and family _____ %
Parent company _____ %
Others _____ %

6. Number of Employees

Total : _____ Engineers: _____

Technician: _____ Accountant _____

Bookkeeping : _____

7. Major Process: (Please)

- ☐ Casting ☐ Plating ☐ Heat Treatment
☐ Presswork ☐ Forging ☐ Machine Assembly
☐ Precision Machining ☐ Sheetwork & Welding
☐ Machining
☐ Others, specify

8. Total Annual Sales in 1984: Rp. _____ million

II. PRODUCTS

1. Products made by order of Large/Parent Companies
and government :

(in the year 1984)

No.	Name of Buyer	Kinds of Products	Unit	Quantity/ year	Unit Price (Rp)	Sales/y (Rp)
Total						

2. Products made for general market & others :

No.	Market *	Name of Products	Unit	Quantity/ year	Unit Price (Rp)	Sales/y (Rp)
Total						

- * - Local
- Domestic
- Foreign (export)

3. Average capacity utilization rate (1984) : _____ %

III. MATERIAL AND FACILITY

1. Components and Raw Material

Name of Components and Raw Material	Amount (Rp/month)		Name of Country (I) or Company (L)
	I*	L*	

* I = Import

L = Local

2. Major Machinery/Equipment

Name of Machinery/Equipment	Quantity	Purchase Price (Rp)	Its Age (Old)

IV. PROBLEMS AND CONDITIONS WITH PARENT COMPANY

1. Quality : ☐ Too complicated ☐ Not Complicated ☐ Easy
2. Quantity : ☐ Too much ☐ Not much ☐ Too little
3. Delivery schedule: ☐ Very strict ☐ Not strict
4. Payment Condition: ☐ Delay ☐ No delay
5. Financial Support: ☐ Yes ☐ No
6. Technical Support: ☐ Yes ☐ No

V. PROBLEMS FACED BY YOUR COMPANY

1. Production Aspect

- (1) Is production capacity enough ?

☐ Yes ☐ No

If no, how much do you need to invest?

Rp. _____ (million)

- (2) Is raw material easily obtained?

☐ Yes ☐ No

From where do you get?

- ☐ General market
☐ Company making orders
☐ Special supplier
☐ Others, specify:

- (3) Do you make enough surplus fund to be invested in the future?
- _____

2. Technical Aspect

- (1) How is your workers' technical level?

☐ High ☐ Middle ☐ Low

(2) What kind of technical improving support from government or parent company?

From Government ☐ Advisory ☐ Training ☐ Inspection
☐ Others _____

From Company ☐ Advisory ☐ Training ☐ Inspection
☐ Others _____

3. Financial Aspect

(1) Please list your sources of loan at present and in the past 5 years.

☐ State and Private Banks:

☐ State and Private Financial Institution:

☐ Other sources:

No.	Type of Loan	* Lender	I **	W **	Total Rp	Period		Annual Interest Rate	*** Type of Collateral
						From	To		
	<u>K.I.K.</u>								
	<u>K.M.K.P.</u>								
1.	<u>KIB I (Kelayakan)</u>								
2.									
1.	<u>KIB II</u>								
2.									
1.	<u>KIB III</u>								
2.									
1.	<u>KIB IV</u>								
2.									
1.	<u>Others</u>								
2.									

* Name of Banks, financial institution and other informal financiers.

** I = Investment capital

W = Working capital

*** Type of collateral (1. Land
(2. Building
(3. Machinery
(4. Others

(2) Please give your opinions to the present financial system.

A. State Banks

a. Interest: ☐ Acceptable ☐ Too high.... If so,

What is your desirable rate?

- For investment capital _____ % per year

- For working capital _____ % per year

b. Period: ☐ Acceptable ☐ Too short.... If so,

What is your desirable period?

- For investment capital _____ years

- For working capital _____ years

c. Amount: ☐ Enough ☐ Too small If so,

What is your desirable amount?

- For investment capital: Rp. _____

- For working capital : Rp. _____

d. Collateral:

☐ Acceptable ☐ Too severe If so,

What is your desirable collateral amount?

_____ % of loan amount.

B. Other Financial Institution

a. Interest rate: ☐ Acceptable ☐ Too high

b. Period : ☐ Acceptable ☐ Too short

c. Amount : ☐ Enough ☐ Too small

d. Collateral : ☐ Acceptable ☐ Too severe

C. Informal Lending

- a. Interest rate: ☐ Acceptable ☐ Too high
- b. Period : ☐ Acceptable ☐ Too short
- c. Amount : ☐ Enough ☐ Too small
- d. Collateral : ☐ Acceptable ☐ Too severe

VII. FUTURE PLAN

1. How much of demand-increase is expected for your product in :

5 years, _____ % each year

10 years, _____ % each year

2. Do you have a specific plan to expand your production?

☐ Yes ☐ No

If "yes", please give details

Total investment amount : Rp. _____ million

of which self financing : Rp. _____ million

Loan : Rp. _____ million

When will it be implemented? in _____ years

3. List name of machinery required

Name of Machinery/Facility	Quantity	Approx. Price (Rp)

3. What do you request to large industries or parent company for improving inter-linkage with your company?

☐ Technical Support ☐ Financial Support

☐ Others, specify: _____

4. In order to increase contracts with large or parent companies, what do you request to the government to assist you?

☐ Financial support by "loan"
☐ Other financial support, specify : _____
☐ Technical training
☐ Managerial training
☐ Marketing support
☐ Others, specify: _____

Thank you for your cooperation. These data and comments you provided will be kept confidential and not be used other objects than planning industrialization program particularly for linkage-type industries in the Republic of Indonesia.

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
10000	BASIC INFORMATION			
10100	NOS. OF ANSWERS			55
	1 DKI JAKARTA	23	41.8	
	2 WEST JAWA	11	20.0	
	3 CENTRAL JAWA	2	3.6	
	4 EAST JAWA	10	18.2	
	5 SUMATRA	4	7.3	
	6 KALIMANTAN	2	3.6	
	7 SULAWESI	3	5.5	
	TOTAL	55	100.0	
10200	NOS. OF EMPLOYEES/COMPANY			55
10201	ENGINEERS	8.6	1.8	
10202	TECHNICIANS	120.2	25.6	
10203	WORKERS & OTHERS	341.2	72.6	
	TOTAL	470.0	100.0	
10300	OWNERSHIP & OTHERS			
10301	PAID-UP SHARE CAPITAL -MMRP-	4792.7		53
10302	FIXED CAPITAL -MMRP-	7892.0		51

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
10303	STATUS OF THE COMPANY			54
	1 GOVERNMENTAL	15	27.8	
	2 LOCAL	39	72.2	
	3 JOINT VENTURE	17	31.5	
	TOTAL	71	131.5	
10304	ESTABLISHED IN -AVERAGE-	1969.9		54
10400	ANNUAL SALES/COMPANY	10817.0		44
10500	ANNUAL MATERIAL COST/COMPANY -MMRP-			32
10501	IMPORT (COMPONENT)	2477.0	47.5	
10502	IMPORT (MATERIAL)	1106.1	21.2	
10503	DOMESTIC (COMPONENT)	827.7	15.9	
10504	DOMESTIC (MATERIAL)	806.4	15.5	
	TOTAL	5217.2	100.0	

CASE LMES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTOR -

P- 3

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
20000	PRODUCTION & RATIOS			
20100	CAPACITY UTILIZATION -%-	59.6		40
20200	VALUE ADDED			31
20201	PER COMPANY -MMRP-	3681.2		
20202	PER EMPLOYEE -MRP-	6788.9		
20300	FIXED ASSETS/EMPLOYEE -MRP-	9972.2		51

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
30000 SIZE OF ENTERPRISES				
30100	NOS OF EMPLOYEES -COMPANIES-			55
1	BELOW 50	5	9.1	
2	50 TO 99	8	14.5	
3	100 TO 199	8	14.5	
4	200 TO 299	13	23.6	
5	300 TO 499	9	16.4	
6	500 TO 999	4	7.3	
7	1000 AND ABOVE	8	14.5	
TOTAL		55	100.0	
30200	PAID-UP SHARE CAPITAL-COMPANIES(MMRP)-			53
1	BELOW 100	6	11.3	
2	100 TO 500	11	20.8	
3	500 TO 1000	8	15.1	
4	1000 TO 2000	2	3.8	
5	2000 TO 5000	12	22.6	
6	5000 TO 10000	7	13.2	
7	10000 ABOVE	7	13.2	
TOTAL		53	100.0	
30300	FIXED ASSETS/COMPANY -COMPANIES-			51
1	BELOW 70 MMRP	1	2.0	
2	70 TO 100 MMRP	2	3.9	
3	100 TO 500 MMRP	12	23.5	
4	500 TO 1000 MMRP	6	11.8	
5	ABOVE 1000	30	58.8	
TOTAL		51	100.0	

CASE LINES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTOR -

P- 5

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
30400	FIXED ASSETS/EMPLOYEE-COMPANIES(MMRP)-			51
1	BELOW 0.64	1	2.0	
2	0.64 TO 1.00	2	3.9	
3	1.00 TO 10.00	32	62.7	
4	10.00 TO 50.00	14	27.5	
5	ABOVE 50.00	2	3.9	
TOTAL		51	100.0	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
40000	PRODUCTS & MARKET			
40100	INDUSTRIAL CATEGORY -COMPANIES-			54
1	MACHINE TOOL	5	9.3	
2	AGRICULTURE M/C	7	13.0	
3	HEAVY.CONST. M/C	3	5.6	
4	PROCESS EQUIP	3	5.6	
5	ELECTRICAL M/C	9	16.7	
6	SHIP,BUDG M/C	9	16.7	
7	AUTOMOTIVE	17	31.5	
8	MOTORCYCLE	4	7.4	
9	OTHERS	16	29.6	
TOTAL		73	135.2	
40200	MAJOR CLIENT			36
1	PUBLIC SECTOR	13	36.1	
2	SOLE AGENT/DEALR	16	44.4	
3	ASSEMBLER	7	19.4	
4	CONSUMER/RETAILR	13	36.1	
5	EXPORT	0	0.0	
TOTAL		49	136.1	
40300	NOS. OF SUB-CONTRACTORS/COMPANY	4.9		37

CASE LMES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTOR -

P- 7

CODE	DESCRIPTION			QUANTITY	%	VALIDITY
50000	FUTURE PLAN					
50100	EXPANSION PLAN					25
	1	YES		23	92.0	
	2	NO		2	8.0	
TOTAL				25	100.0	
50200	EXPECTED YEAR			1986.1		20
50300	ESTIMATED INVESTMENT -MMRS-			13725.4		19
50400	TARGET MARKET -COMPANIES-					22
	1	DOMESTIC		22	100.0	
	2	EXPORT		6	27.3	
TOTAL				28	127.3	
50500	EXPECTED MARKET GROWTH					
50501	FIVE YEAR	*AVERAGE*	-%-	74.1		23
	1	BELOW 10%		0	0.0	
	2	10% TO 20%		3	13.0	
	3	20% TO 30%		7	30.4	
	4	30% TO 40%		0	0.0	
	5	40% ABOVE		13	56.5	
TOTAL				23	100.0	
50502	TEN YEAR	*AVERAGE*	-%-	132.1		19
	1	BELOW 20%		0	0.0	
	2	20% TO 40%		3	15.8	
	3	40% TO 60%		4	21.1	
	4	60% TO 80%		3	15.8	
	5	80% ABOVE		9	47.4	
TOTAL				19	100.0	

CASE LMES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTOR -

P- 8

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
50600	ASSISTANCE TO SUB-CON BY COMPANY			40
	1 TRAINING	22	55.0	
	2 ADVISORY	32	80.0	
	3 INSPECTION	25	62.5	
	4 UNABLE	2	5.0	
	TOTAL	81	202.5	
50700	ASSISTANCE TO SUB-CON BY GOVERNMENT			34
	1 TECHNICAL	20	58.8	
	2 MANAGEMENT	16	47.1	
	3 FINANCIAL	29	85.3	
	4 MARKET	26	76.5	
	5 OTHERS	10	29.4	
	TOTAL	101	297.1	
50800	INSTITUTIONAL LOAN TO SUB-CON			39
	1 EFFECTIVE	37	94.9	
	2 NOT EFFECTIVE	1	2.6	
	3 WITH CONDITION	3	7.7	
	TOTAL	41	105.1	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
60000	SUB-CON FROM PARENT COMPANY'S VIEW			
60100	NOS OF SUB-CONTRACTORS	181		
60200	NOS OF EMPLOYEES *AVERAGE*	135.3		91
60300	NOS OF EMPLOYEES *DISTRIBUTION*			91
	1 BELOW 5	1	1.1	
	2 5 TO 19	24	26.4	
	3 20 TO 49	22	24.2	
	4 50 TO 99	12	13.2	
	5 100 TO 199	8	8.8	
	6 200 AND ABOVE	24	26.4	
	TOTAL	91	100.0	
60400	SIZE OF CAPITAL *AVERAGE* -MMRP-	879.8		57
60401	SIZE OF CAPITAL -DISTRIBUTION(MMRP)-			57
	1 BELOW 70	28	49.1	
	2 70 TO 100	2	3.5	
	3 100 TO 500	16	28.1	
	4 500 TO 1000	2	3.5	
	5 ABOVE 1000	9	15.8	
	TOTAL	57	100.0	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
60500	LINKAGE			
60501	FIELD OF LINKAGE -COMPANIES-			163
	1 CASTING	30	18.4	
	2 FORGING/HEAT TR.	12	7.4	
	3 SHEETWORK/WELD	63	38.7	
	4 PLATING	13	8.0	
	5 MACHINING	38	23.3	
	6 PRESS WORK	46	28.2	
	7 NON-METAL	43	26.4	
	8 SERVICES	17	10.4	
	TOTAL	262	160.7	
60502	TYPE OF PROCUREMENT -COMPANIES-			166
	1 BY-ORDER	100	60.2	
	2 CONSTANT	66	39.8	
	TOTAL	166	100.0	
60503	PAYMENT METHOD -COMPANIES-			167
	1 CASH	78	46.7	
	2 CREDIT	90	53.9	
	TOTAL	168	100.6	
60504	RAW MATERIAL SUPPLY FROM P.COMPANY			165
	1 YES	40	24.2	
	2 NO	125	75.8	
	TOTAL	165	100.0	
60505	FINANCIAL ASSISTANT TO SUB-CON			32
	1 EQUITY	5	15.6	
	2 CREDIT	27	84.4	
	TOTAL	32	100.0	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
60506	TECHNICAL ASSISTANT TO SUB-CON			139
	1 TRAINING	32	23.0	
	2 ADVISORY	113	81.3	
	3 INSPECTION	88	63.3	
	4 MANAGEMENT	23	16.5	
	TOTAL	256	184.2	
60600	MAJOR PROBLEMS & OBSTACLES IN SUB-CON			
60601	QUALITY OF PRODUCTS			167
	1 GOOD	67	40.1	
	2 FAIR	97	58.1	
	3 POOR	3	1.8	
	TOTAL	167	100.0	
60602	PRODUCTION CAPABILITY (QUANTITY)			164
	1 ENOUGH	158	96.3	
	2 SHORT	6	3.7	
	TOTAL	164	100.0	
60603	DELIVERY OF PRODUCTS			163
	1 PUNCTUAL	89	54.6	
	2 SOMETIMES LATE	71	43.6	
	3 ALWAYS LATE	3	1.8	
	TOTAL	163	100.0	
60604	TECHNICAL LEVEL			154
	1 HIGH	59	38.3	
	2 MIDDLE	93	60.4	
	3 LOW	2	1.3	
	TOTAL	154	100.0	

CASE LINES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTOR -

P- 12

CODE	DESCRIPTION		QUANTITY	%	VALIDITY
60605	MANAGEMENT CAPABILITY				149
	1	GOOD	46	30.9	
	2	FAIR	85	57.0	
	3	POOR	18	12.1	
TOTAL			149	100.0	
60606	ENTREPRENEURSHIP				141
	1	GOOD	51	36.2	
	2	FAIR	80	56.7	
	3	POOR	10	7.1	
TOTAL			141	100.0	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
10000 BASIC INFORMATION				
10100	NOS. OF ANSWERS			219
	1 DKI JAKARTA	48	21.9	
	2 WEST JAWA	61	27.9	
	3 CENTRAL JAWA	31	14.2	
	4 EAST JAWA	72	32.9	
	5 SUMATRA	3	1.4	
	6 KALIMANTAN	2	0.9	
	7 SULAWESI	2	0.9	
TOTAL		219	100.0	
10200	NOS. OF EMPLOYEES/COMPANY			217
10201	ENGINEERS	0.9	1.3	
10202	TECHNICIANS	7.2	10.1	
10203	WORKERS & OTHERS	63.1	88.6	
TOTAL		71.2	100.0	
10300	ASSETS/COMPANY -MMRP-			201
10301	FIXED ASSETS	329.7	54.5	
10302	WORKING CAPITAL	275.7	45.5	
TOTAL		605.3	100.0	

CASE SMES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTORS -

P- 2

CODE	D E S C R I P T I O N	QUANTITY	%	VALIDITY
10400	ANNUAL SALES/COMPANY -MMRP-	803.8		210
10500	ANNUAL MATERIAL COST/COMPANY -MMRP-			149
10501	IMPORT (COMPONENT)	114.6	27.4	
10502	IMPORT (MATERIAL)	85.5	20.4	
10503	DOMESTIC (COMPONENT)	3.2	0.8	
10504	DOMESTIC (MATERIAL)	215.6	51.5	
TOTAL		418.8	100.0	
10600	ESTABLISHED IN -AVERAGE-	1973.9		213

CASE SMES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTORS -

P- 3

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
20000	PRODUCTION & RATIOS			
20100	CAPACITY UTILIZATION -%-	68.8		205
20200	VALUE ADDED			164
20201	PER COMPANY -MMRP-	414.8		
20202	PER EMPLOYEE -MRP -	3193.6		
20300	FIXED ASSETS/EMPLOYEE -MRP-			206
20301	FIXED ASSETS -MRP-	3415.4		
20302	TOTAL ASSETS -MRP-	6128.8		

CASE SMES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTORS -

P- 4

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
30000 SIZE OF ENTERPRISES				
30100	NOS. OF EMPLOYEES -COMPANIES-			217
1	BELOW 5	6	2.8	
2	5 TO 19	69	31.8	
3	20 TO 49	59	27.2	
4	50 TO 99	40	18.4	
5	100 TO 199	24	11.1	
6	200 AND ABOVE	19	8.8	
TOTAL		217	100.0	
30200	FIXED ASSETS/COMPANY -COMPANIES(MMRP)-			206
1	BELOW 70	120	58.3	
2	70 TO 100	20	9.7	
3	100 TO 500	51	24.8	
4	500 TO 1000	3	1.5	
5	ABOVE 1000	12	5.8	
TOTAL		206	100.0	
30300	FIXED ASSETS/EMPLOYEE COMPANIES(MMRP)			206
1	BELOW 0.64	69	33.5	
2	0.64 TO 1.00	23	11.2	
3	1.00 TO 10.00	105	51.0	
4	10.00 TO 50.00	8	3.9	
5	ABOVE 50.00	1	0.5	
TOTAL		206	100.0	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
40000	ENTREPRENEUR			
40100	BACKGROUND OF OWNER -COMPANIES-			216
1	GOVERNMENT	7	3.2	
2	STATE COMPANY	7	3.2	
3	FOREIGN J/V	7	3.2	
4	S & M SCALE IND.	51	23.6	
5	TRADER	106	49.1	
6	TECH. INSTITUTE	5	2.3	
7	UNIVERSITY	18	8.3	
8	OTHERS	39	18.1	
TOTAL		240	111.1	
40200	OWNERSHIP -COMPANIES-			206
1	ENTREPREN, FAMILY	198	96.1	
2	PARENT COMPANY	3	1.5	
3	OTHERS	40	19.4	
TOTAL		241	117.0	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
50000 LINKAGE				
50100	MAJOR PROCESS USED -COMPANIES-			219
	1 CASTING	61	27.9	
	2 FORGING/HEAD TR.	52	23.7	
	3 SHEETWORK/WELD.	102	46.6	
	4 PLATING	68	31.1	
	5 MACHINING	163	74.4	
	6 PRESS WORK	89	40.6	
	7 NON-METAL	0	0.0	
	8 SERVICES	2	0.9	
TOTAL		537	245.2	
50200	MARKET FOR THE COMPANY -MMRP/YR-			210
50201	DIRECT SALES TO LINKAGED COMPANY	271.7	33.8	
50202	SALES TO GENERAL MARKET	532.1	66.2	
TOTAL		803.8	100.0	
50300	INDUSTRIAL CATEGORY FOR (50201)			76
	1 MACHINE TOOL	2	2.6	
	2 AGRICULTURE M/C	17	22.4	
	3 HEAVY, CONST. M/C	7	9.2	
	4 PROCESS EQUIP.	10	13.2	
	5 ELECTRIC M/C	18	23.7	
	6 SHIP, BLDG M/C	5	6.6	
	7 AUTOMOTIVE	19	25.0	
	8 MOTORCYCLE	7	9.2	
	9 OTHERS	22	28.9	
TOTAL		107	140.8	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
50400	INDUSTRIAL CATEGORY FOR (50202)			179
1	MACHINE TOOL	5	2.8	
2	AGRICULTURE M/C	23	12.8	
3	HEAVY, CONST. M/C	7	3.9	
4	PROCESS EQUIP.	11	6.1	
5	ELECTRIC M/C	39	21.8	
6	SHIP, BLDG M/C	4	2.2	
7	AUTOMOTIVE	40	22.3	
8	MOTORCYCLE	20	11.2	
9	OTHERS	85	47.5	
TOTAL		234	130.7	
50500	SEVERITY REQUIRED BY PARENT COMPANY			
50501	QUALITY -COMPANIES-			90
1	SEVERE	7	7.8	
2	ORDINARY	69	76.7	
3	EASY	14	15.6	
TOTAL		90	100.0	
50502	QUANTITY -COMPANIES-			87
1	TOO MUCH	2	2.3	
2	NOT MUCH	64	73.6	
3	LITTLE	21	24.1	
TOTAL		87	100.0	
50503	DELIVERY -COMPANIES-			86
1	STRICT	24	27.9	
2	ORDINARY	62	72.1	
TOTAL		86	100.0	

CASE SMES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTORS -

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CODE	DESCRIPTION		QUANTITY	%	VALIDITY
50504	PAYMENT	-COMPANIES-			87
	1	DELAY	31	35.6	
	2	PUNCTUAL	56	64.4	
TOTAL			87	100.0	
50600	ASSISTANCE PROVIDED BY PARENT COMPANY				
50601	FINANCIAL SUPPORT				87
	1	YES	28	32.2	
	2	NO	59	67.8	
TOTAL			87	100.0	
50602	TECHNICAL ASSISTANCE				87
	1	YES	22	25.3	
	2	NO	65	74.7	
TOTAL			87	100.0	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
60000	OPERATION OF THE COMPANY			
60100	FACILITIES			
60101	LAND AREA (SQ.M)	4023.9		153
60102	FACTORY BLDG. AREA (SQ.M)	1298.5		169
60103	MACHINERY & EQUIPMENT -COMPANIES-			213
	1 WELL EQUIPPED	41	19.2	
	2 FAIR	115	54.0	
	3 POOR	57	26.8	
	TOTAL	213	100.0	
60104	PRODUCTION CAPACITY *ENOUGH*			211
	1 YES	116	55.0	
	2 NO	95	45.0	
	TOTAL	211	100.0	
60200	EXPECTED TECH.ASSISTANCE BY GOVERNMENT			177
	1 ADVISORY	136	76.8	
	2 TRAINING	49	27.7	
	3 INSPECTION	69	39.0	
	4 OTHERS	5	2.8	
	TOTAL	259	146.3	
60300	EXPECTED TECH.ASSISTANCE BY PARENT CO.			85
	1 ADVISORY	44	51.8	
	2 TRAINING	12	14.1	
	3 INSPECTION	58	68.2	
	4 OTHERS	5	5.9	
	TOTAL	119	140.0	

CODE	DESCRIPTION		QUANTITY	%	VALIDITY
60400	SKILL OF WORKERS -COMPANIES-				215
	1	HIGH	73	34.0	
	2	MIDIUM	129	60.0	
	3	LOW	13	6.0	
TOTAL			215	100.0	
60500	OTHERS -COMPANIES-				
60501	BOOKKEEPING				206
	1	YES	155	75.2	
	2	NO	51	24.8	
TOTAL			206	100.0	
60502	MATERIALS *AVAILABLE*				211
	1	YES	189	89.6	
	2	NO	22	10.4	
TOTAL			211	100.0	
60503	OWN FUND *AVAILABLE*				193
	1	YES	72	37.3	
	2	NO	121	62.7	
TOTAL			193	100.0	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
70000	FUTURE PLAN			
70100	EXPANSION PLAN			219
	1 YES	159	72.6	
	2 NO	60	27.4	
	TOTAL	219	100.0	
70200	EXPECTED YEAR	1987.4		112
70300	CAPITAL REQUIREMENT (TOTAL) -MMRP-			
70301	EXPECTED INVESTMENT	84038.9		121
70302	EXPECTED SELF FINANCE	8627.9	29.5	108
70303	EXPECTED LOAN	20585.5	70.5	111
70400	CAPITAL REQUIREMENT (AVERAGE) -MMRP-			
70401	EXPECTED INVESTMENT	694.5		121
70402	EXPECTED SELF FINANCE	79.9	30.1	108
70403	EXPECTED LOAN	185.5	69.9	111

CODE	DESCRIPTION			QUANTITY	%	VALIDITY
70500	EXPECTED MARKET GROWTH					
70501	FIVE YEAR	*AVERAGE*	-%-	51.5		165
	1	BELOW 10%		1	0.6	
	2	10% TO 20%		11	6.7	
	3	20% TO 30%		46	27.9	
	4	30% TO 40%		9	5.5	
	5	40% ABOVE		98	59.4	
TOTAL				165	100.0	
70502	TEN YEAR	*AVERAGE*	-%-	119.3		133
	1	BELOW 20%		0	0.0	
	2	20% TO 40%		0	0.0	
	3	40% TO 60%		31	23.3	
	4	60% TO 80%		21	15.8	
	5	80% ABOVE		81	60.9	
TOTAL				133	100.0	
70600	ASSISTANCE EXPECTED BY COMPANY					
70601	FROM PARENT COMPANY					163
	1	TECHNICAL		94	57.7	
	2	FINANCIAL		81	49.7	
	3	OTHERS		71	43.6	
TOTAL				246	150.9	
70602	FROM GOVERNMENT					192
	1	SUPPORT BY LOAN		124	64.6	
	2	ETC FIN. SUPPORT		32	16.7	
	3	TECH. TRAINING		95	49.5	
	4	MANAGE TRAINING		76	39.6	
	5	MARKET SUPPORT		163	84.9	
	6	OTHERS		20	10.4	
TOTAL				510	265.6	

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTORS -

CASE SMES

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CODE	D E S C R I P T I O N	KIK. (INVEST)	KMKP (W / C)	KIB (INVEST)	OTHER (INVEST)	(W / C)	TOTAL
80000 FINANCIAL ASPECT							
80100	PRESENT BORROWINGS						
80101	NOS. OF BORROWERS	37	53	17	7	21	135
80102	BORROWINGS -MMRP-	443.5	777.0	9062.0	18108.0	9902.6	38293.1
	PERCENTAGE	1.2	2.0	23.7	47.3	25.9	100.0
80103	AVERAGED BORROWING -MMRP-	12.0	14.7	533.1	2586.9	471.6	3618.1
	PERCENTAGE	0.3	0.4	14.7	71.5	13.0	100.0
80104	INTEREST RATE -%-	12.0	12.0	12.0	19.5	33.3	
80105	COLLATERAL -COMPANIES-						
	1 LAND	25	41	9	2	8	85
	2 BUILDING	4	3	8	2	5	22
	3 MACHINERY	6	5	0	1	3	15
	4 OTHERS	2	4	4	2	6	18
	TOTAL	37	53	21	7	22	140
80106	BANK -NOS. OF BORROWERS-						
	1 BK. NEGARA INDO	23	42	3	4	2	74
	2 BK. DAGAN NEGARA	1	2	2	0	0	5
	3 BK. BUMI DAYA	2	2	5	0	4	13
	4 BK. RAKYAT INDO	2	3	2	0	0	7
	5 BK. EXIM INDO	0	0	0	0	0	0
	6 BK. PENGANG. INDO	1	0	0	0	0	1
	7 BK. PENGANG. DAERA	1	0	0	0	0	1
	8 PRIVATE BANK	6	5	5	7	14	37
	9 OTHERS	0	0	0	0	5	5
	TOTAL	36	54	17	11	25	143

CODE	DESCRIPTION		QUANTITY	%	VALIDITY
80200	ACCEPTABILITY OF PRESENT CODITIONS				
80201	STATE BANK (INTEREST RATE)				178
	1	YES	128	71.9	
	2	NO	50	28.1	
TOTAL			178	100.0	
80202	STATE BANK (REPAYMENT PERIOD)				173
	1	YES	121	69.9	
	2	NO	52	30.1	
TOTAL			173	100.0	
80203	STATE BANK (LENDING AMOUNT)				152
	1	YES	85	55.9	
	2	NO	67	44.1	
TOTAL			152	100.0	
80204	STATE BANK (COLLATERAL)				173
	1	YES	132	76.3	
	2	NO	41	23.7	
TOTAL			173	100.0	
80205	OTHER FINANCIAL (INTEREST RATE)				83
	1	YES	30	36.1	
	2	NO	53	63.9	
TOTAL			83	100.0	
80206	OTHER FINANCIAL (REPAYMENT PERIOD)				78
	1	YES	36	46.2	
	2	NO	42	53.8	
TOTAL			78	100.0	

CODE	DESCRIPTION		QUANTITY	%	VALIDITY
80207	OTHER FINANCIAL (LENDING AMOUNT)				73
	1	YES	46	63.0	
	2	NO	27	37.0	
	TOTAL		73	100.0	
80208	OTHER FINANCIAL (COLLATERAL)				79
	1	YES	34	43.0	
	2	NO	45	57.0	
	TOTAL		79	100.0	
80209	INFORMAL LENDING (INTEREST RATE)				80
	1	YES	11	13.7	
	2	NO	69	86.2	
	TOTAL		80	100.0	
80210	INFORMAL LENDING (REPAYMENT PERIOD)				80
	1	YES	23	28.7	
	2	NO	57	71.2	
	TOTAL		80	100.0	
80211	INFORMAL LENDING (LENDING AMOUNT)				78
	1	YES	43	55.1	
	2	NO	35	44.9	
	TOTAL		78	100.0	
80212	INFORMAL LENDING (COLLATERAL)				87
	1	YES	23	26.4	
	2	NO	64	73.6	
	TOTAL		87	100.0	

CODE	DESCRIPTION	QUANTITY	%	VALIDITY
80301	INTEREST RATE (INVEST.) -%-	9.2		39
80302	INTEREST RATE (W / C) -%-	11.3		45
80303	REPAYMENT PERIOD (INVEST.) -YEARS-	6.9		44
80304	REPAYMENT PERIOD (W / C) -YEARS-	5.0		52
80305	LENDING AMOUNT (INVEST.) -MMRP-	162.9		47
80306	LENDING AMOUNT (M / C) -MMRP-	234.4		53
80307	COLLATERAL (INVEST.) % OF AMOUNT	62.8		36
80308	COLLATERAL (W / C) % OF AMOUNT	0.0		0
80400	DESIRABLE CONDITION (INVESTMENT)			
80401	INTEREST RATE			39
	1 BELOW 5%	4	10.3	
	2 5% TO 10%	16	41.0	
	3 10% TO 15%	16	41.0	
	4 15% ABOVE	3	7.7	
TOTAL		39	100.0	
80402	REPAYMENT PERIOD			44
	1 BELOW 3YRS	0	0.0	
	2 3 TO 5YRS	1	2.3	
	3 5YRS ABOVE	43	97.7	
TOTAL		44	100.0	

CODE	DESCRIPTION		QUANTITY	%	VALIDITY
BD403	LENDING AMOUNT -MMRP-				47
	1	BELOW 50	21	44.7	
	2	50 TO 100	5	10.6	
	3	100 TO 150	3	6.4	
	4	150 TO 200	1	2.1	
	5	200 ABOVE	17	36.2	
TOTAL			47	100.0	
BD404	COLLATERAL				36
	1	BELOW 30%	14	38.9	
	2	30% TO 50%	1	2.8	
	3	50% TO 70%	6	16.7	
	4	70% ABOVE	15	41.7	
TOTAL			36	100.0	
BD500	DESIRABLE CONDITION(WORING CAPITAL)				
BD501	INTEREST RATE				45
	1	BELOW 5%	2	4.4	
	2	5% TO 10%	11	24.4	
	3	10% TO 15%	21	46.7	
	4	15% ABOVE	11	24.4	
TOTAL			45	100.0	
BD502	REPAYMENT PERIOD				52
	1	BELOW 3YRS	5	9.6	
	2	3 TO 5YRS	14	26.9	
	3	5YRS ABOVE	33	63.5	
TOTAL			52	100.0	

CASE SMES

SUMMARY OF QUESTIONNAIRE
- ALL SUB-SECTORS -

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CODE	DESCRIPTION		QUANTITY	%	VALIDITY
80503	LENDING AMOUNT -MMRP-				53
	1	BELOW 50	27	50.9	
	2	50 TO 100	10	18.9	
	3	100 TO 150	3	5.7	
	4	150 TO 200	1	1.9	
	5	200 ABOVE	12	22.6	
TOTAL			53	100.0	
80504	COLLATERAL				0
	1	BELOW 30%	0	0.0	
	2	30% TO 50%	0	0.0	
	3	50% TO 70%	0	0.0	
	4	70% ABOVE	0	0.0	
TOTAL			0	0.0	

