II-7 WAGES, SALARIES, DEPRECIATION RATE, ETC.

Attached Table 2-13 Wages and Salaries

Classes	Type of job	Wages / Salaries
Wages	Labor	Rp.3,000/day
	Foreman	Rp.6,250/day (Rp.1,500,000/year)
	Tractor operator	Rp.10,000/day (Rp.2,400,000/year)
	Assistant operator	Rp.5,000/day (Rp.1,200,000/year)
Salaries	Director	Rp.7,200,000/year
	Division chief	Rp.6,000,000/year
	Unit manager	Rp.6,000,000/year
	Staff of offices	Rp.1,800/year
	Driver	Rp.2,200/year

Attached Table 2-14 Depreciation Rate

Group	Components	Depreciation rate
I	Car Motor cycle Light truck	50%
II	Heavy and portable logging equipment	25%
III	Radio for communication	10%
IV	Buildings, roads, bridges	5%

Note: In preparing this table, the official Indonesian depreciation rates are used.

Attached Table 2-15 Price Index in Indonesia

Fiscal year	Consumer price index (1985=100)	Fiscal year	Wholesale price index (1980=100)
1980	62.9	1980	100.0
1981	70.6	1981	111.1
1982	77.3	1982	119.3
1983	86.5	1983	140.7
1984	95.5	1984	158.0
1985	100.0	1985	163.0
1986	105.8	1986	163.0
1987	115.6	1987	198.0
1988	124.9	1988	-

Source: * Kokusai Hikaku Toukei / Bank of Japan / 1989
** Keizai Toukei Geppo / Bank of Japan

Attached Table 2-16 Price Index in 5 Developed Countries

Consumer Price Index*						Wholesale Price Index**					
Fiscal year	Japan (1985=100)	United States of America (1982-84=100)	United Kingdom (1987=100)	Federal Republic of Germany (1980=100)	French Republic (1980=100)	Fiscal year	Japan (1985=100)	United States of America (1985=100)	United Kingdom (1985=100)	Federal Republic of Germany (1985=100)	French Republic (1985=100)
1981						1981	100.9	95.0	79.1	88.3	72.8
1982						1982	101.4	97.0	85.2	93.5	80.6
1983	95.8	99.6	85.0	115.6	138.6	1983	100.7	98.2	89.8	94.9	87.7
1984	98.0	103.9	89.2	118.4	149.2	1984	100.8	100.5	95.0	97.6	95.8
1985	100.0	107.6	94.6	120.9	157.9	1985	100.0	100.0	100.0	100.0	100.0
1986	100.6	109.6	97.8	120.6	161.9	1986	95.3	97.1	104.3	97.5	97.2
1987	100.7	113.6	101.9	121.0	167.2	1987	92.3	99.7	108.3	95.1	97.7
1988	101.4	118.3	106.9	122.4	171.8	1988	91.9	103.7	113.2	96.3	102.9

Source: * Zaikai Kansoku / Nomura Research Institute Ltd.

** Kokusai Hikaku Toukei / Bank of Japan

II-8 UNIT COST ESTIMATE

(1) Nursery Stock Production Plan
(2) Plantation Plan
(3) Forest Protection Plan
(4) Forest Road Plan
(5) Felling Plan
(6) Skidding and Transportation Plan
(7) Administration and Other General Plan

(1)-1 Unit Cost Estimate for Nursery Plan

Work Component	Materials and Inputs	Specification	Unit Price
Nursery establishment			
Site preparation	Earth Works, Road construction, Water storage reservoir etc.	- Machinery for Forest road construction	
Facility installment/	Store room 680 m^2 (Amount of 3 Units), including Seed Storage		Rp.70,000/m^2
Maintenance	Fertilizer storage room 90 m^2 (Amount of 3 Units)		Rp.70,000/m^2
	Workers' rest house 275 m^2 (Amount of 3 Units)		Rp.50,000/m^2
	Maintenance cost		3rd-10th year: 1% of installment cost each year 11th-30th year: 2% of installment cost each year
	Water storage tank	Depreciation period: 25 years IWATANI NC-5 Storage capacity: 5,000 ℓ Depreciation period: 10 years	US$587.2/tank
	Maintenance cost		3rd-10th year: 1 %
Nursery stock production	Vehicles	- Sand for germination beds will be transported by the seller. - Nursery stocks will be transported to the planting site by the trucks which will be used for transporting workers.	
	Air conditioner (Seed Storage)	MATSUSHITA CS-3A3 Package type, Only cooling Service life: 6 years	US$5,936/Air conditioner
	Mixer	Mixing capacity: 0.5 m^3/mixer 3 m^3/hour/mixer	US$13,571/mixer

(1)-2 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Nursery stock production		Annually mixing volume: $3(m^3) \times 750(h)$ $= 2,250\ m^3$/year Service life: 5 years	
	Water pump	HITACHI JD40x32A-50,75 (Including plastic hose) Auto pumping type Diameter: 40/32 mm Pump capacity: 19 m high 100 ℓ/min./pump Service life: 6 years (Plastic hose US$3/m Diameter: 32 mm)	US$658/pump
	Belt conveyor	TOYO SA-35-MI-10 Motor driving type Belt length: 10 m Running time: 120 days/year Service life: 5 years	US$1,786/conveyor
	Soil heater	Heating capacity: 10 t/hour Fuel consumption: 55 ℓ/hour Service life: 5 years	US$6,429/heater
	Hand sprayer	Tank capacity: 17 ℓ/tank Spraying volume: 1000 m x 3 ℓ/m^2 = 3000 ℓ Spraying capacity: 2 ℓ/min. Running time: 3000 ℓ/2 x 60 = 25 hours Running capacity: 25(h)/6(h) = 4.2 sprayers/day Rounded 5 sprayers/day	US$150/sprayer

(1)-3 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Nursery stock production	Germination box	Including material cost (Wooden) Dimension: 487mmx330mmx151.5mm Service life: 1 year Will be prepared in each nursery.	Rp.600/box
	Fungicide	Hymexazol (3-hydroxy-5-methyl-isoxazole) solution (1000 times) Fungicide consumption: 3 ℓ/m^2 1000 ≒ 0.003 ℓ/m^2	US$52/ℓ
	Fertilizer	Purchasing price in Benakat	Rp.812/kg
	Sand	Purchasing price in Benakat	Rp.24,000/m^3
	Plastic pot	Purchasing price in Benakat	Rp.5/sheet
	Seed	Acacia auricuriformis Albizzia falcataria Swietenia macrophylla	Rp.12,000/kg Rp.2,500/kg Rp.6,000/kg
	Shading net	Dimension: 1.2 m x 100 m (Victoria lawn) Service life: 3 years	US$179/sheet

(2)-1 Unit Cost Estimate for Plantation Plan

Work Component	Materials and Inputs		Specification	Unit Price
Land preparation	Farm tractor	Base machine	KOMATSU D50F 136HP Productive machine capacity: Land clearing: 0.45 ha/hour First time plowing: 0.63 ha/hour Second time plowing: 0.63 ha/hour Productive machine hour: 6 hours/day 1,440 hours/year Service life: 11,520 hours Depreciation period: 8 years	US$84,100/tractor 26th-30th years: Price/Service life x Number of productive machines
		Attachment	Land clearning In the purchasing year	Base machine: US$11,000 Attachment Parts: 10% of Base machine Price
			Plowing In the purchasing year	Base machine: US$7,400 Attachment Parts: 10% of Base machine Price 30th year: Price ÷ 2 x Number of productive machines
		Parts	Including under carriage	US$3.76/PMH
		Fuel	Fuel consumption: 21 ℓ/hour	Rp.200/ℓ
		Lubricant	Lubricant consumption: 0.19 ℓ/hour	Rp.700/ℓ
		Operator	1 person/tractor	Rp.2,400,000/year
		Assistant	1 person/tractor	Rp.1,200,000/year

(2)-2 Continue

Work Component	Materials and Inputs		Specification	Unit Price
Land preparation		Lease cost		Base machine price/8 years x 110%
Weeding	Bushcutter	Base machine	SHINGU SHOKO K-236EDH Productive machine capacity: 2,500 m^2/day Productive machine hour: 6 hours/day 1,440 hours/year Service life: 2,880 hours Depreciation period: 2 years - Purchasing one spare machine/5-10 productive machines	US$465/unit 30th year: Base machine price ÷ 2 x Number of productive machines
		Parts	In the purchasing year - Spare parts will not be purchased for spare machines	50% of Base machine price
		Fuel	Fuel consumption: 0.67 ℓ/hour	Rp.385/ℓ
		Lubricant	Lubricant consumption: 0.03 ℓ/hour	Rp.700/ℓ
		Operator	1 person/unit	Rp.1,800,000/year

(3)-1 Unit Cost Estimate for Forest Protection Plan

Work Component	Materials and Inputs		Specification	Unit Price
Forest fire control	Look-out tower			
		Construction cost	Including material cost	Rp.5,064,000
		Maintenance cost	Service life: 8 year	3rd-10th year: 1% 11th-30th year: 2%
	Vehicle for patrol (Jeep)			
		Base machine	DAIHATSU TAFT GT Patrol: 20 km/hour Productive machine hour: 6 hours/day 1,440 hours/year Service life: 10,080 hours	US$15,244/unit
		Parts		10% of Base machine price
		Fuel	Fuel consumption: 4 ℓ/hour	Rp.200/ℓ
		Lubricant	Lubricant consumption: 0.07 ℓ/hour	Rp.700/ℓ
		Driver	1 person/unit	Rp.1,920,000/year
		Assistant	1 person/unit	Rp.840,000/year
	Tank truck	Base machine	MATSUDA T3500 3 t truck loading tank - Including 2 ton tank for water - Standing by in the centre. Productive machine hour: 10 hours/year/unit 10 km/one-way x 2 x 10 fires/year ÷ 20 km/hour = 10 hours Service life: 7,200 hours	US$18,500/truck

(3)-2 Continue

Work Component	Materials and Inputs		Specification	Unit Price
Forest fire control		Parts		US$2/hour
		Water tank	IWATANI F-2 Dimension: 1300mmx1300mmx1400mm Service life: 7,200 hours	US$6,300/tank
		Fuel	Fuel consumption: 10 ℓ/hour	Rp.200/ℓ
		Lubricant	Lubricant consumption: 0.17 ℓ/hour	Rp.700/ℓ
		Driver	1 person/unit	Rp.1,920,000/year
		Assistant	1 person/unit	Rp.840,000/year
	Farm tractor	Base machine	KOMATSU DF 800 80 HD Productive machine capacity: 1.59 ha/hour 2 times/year Productive machine hour: 6 hours/day 1,440 hours/year Service life: 11,520 hours	US$59,200/unit
		Attachment	KOMATSU DOZAR Service life: 11,520 hours	US$22,222/unit
		Parts		US$3.15/hour
		Fuel	Fuel consumption: 16 ℓ/hour	Rp.200/ℓ
		Lubricant	Lubricant consumption: 0.11 ℓ/hour	Rp.700/ℓ
		Driver	1 person/unit	Rp.2,400,000/year
		Assistant	1 person/unit	Rp.1,200,000/year

(3)-3 Continue

Work Component	Materials and Inputs		Specification	Unit Price
Forest fire control	Fire fighting pump		Rabit P203 (Including 40 m hose) Service life: 6 years	US$2,000/pump
	Hand pump		KOKOKU Jet Shooter Water storage capacity: 18 ℓ Dry weight: 1.6 kg Service life: 5 years	US$215/pump
	Chainsaw	Base machine	KOMATSU G621 AVS Productive machine hour: 20 min/fire x 10 fires Service life: 5 years	US$370/unit
		Fuel	Fuel consumption: 0.67 ℓ/hour	Rp.385/ℓ
		Lubricant	Lubricant consumption: 0.03 ℓ/hour	Rp.700/ℓ
	Bushcutter	Base machine	KOMATSU-BC Service life: 5,000 hours	US$465/unit
		Fuel	Fuel consumption: 0.67 ℓ/hour	Rp.385/ℓ
		Lubricant	Lubricant consumption: 0.03 ℓ/hour	Rp.700/ℓ
	Scoop		Service life: 5 years	Rp.6,000/scoop
	Slashing knife		Service life: 5 years	Rp.3,800/knife
	Helmet		Service life: 5 years	US$10/helmet
	Safety shoes		Service life: 5 years	US$50/shoe
	Telescope		KAWASAKI B x7 Service life: 12 years	US$279/telescope

(3)-4 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Forest fire control	Siren	MATSUSHITA DENKO EA 7,110 Service life: 12 years	US$78/siren
	Public-address system	NOBORU ELECTRIC NK25CM Service life: 12 years	US$131/system
	Walkie-talkie	KEN WOOD TH205 Service life: 10 years	US$357/walkie-talkie

(4)-1 Unit Cost Estimate for Forest Road Plan

Work Component	Materials and Inputs		Specification	Unit Price
Public road maintenance	Motor grader	Base machine	KOMATSU GD510R 125HP Productive machine capacity: 3.6 km/hour, 10 km/day (one return trip) Productive machine hour: 6 hours/day 1,440 hours/year Service life: 15,000 hours/year Depreciation period: 10 years	US$69,700/machine
		Parts		US$1.88/hour
		Fuel	Fuel consumption: 21 ℓ/hour	Rp.200/ℓ
		Lubricant	Lubricant consumption: 0.28 ℓ/hour	Rp.700/ℓ
		Operator	1 person/machine	
Main forest road construction	Bulldozer	Base machine	KOMATSU D65A 155 HP Productive machine capacity: 300 m^3/hour Dozing capacity: 216 m/day 1m x 10m x 0.6m x 1.11 = 6.66 m^3 300m^3x80%x6 hours = 1,440 m^3/day 1,440m^3 ÷ 6.66m^3 = 216 m/day 1.11: Conversion factor Productive machine hour: 6 hours/day 1,440 hours/year Service life: 11,520 hours Depreciation period: 8 years	US$114,500/unit 25th-30th year: Base cost price ÷ Service life x Number of productive machines
		Parts	Including under carriage	US$5.39/hour
		Fuel	Fuel consumption: 25 ℓ/hour	Rp.200/ℓ

(4)-2 Continue

Work Component	Materials and Inputs		Specification	Unit Price
Main forest road construction		Lubricant	Lubricant consumption: 0.35 ℓ/hour	Rp.700/ℓ
		Operator	1 person/machine	Rp.2,400,000/year
		Assistant	1 person/machine	Rp.1,200,000/year
		Lease cost		Base machine price ÷ 8 years x 110%
	Motor grader		Same as public road maintenance.	
	Brash breaker			
		Base machine	KOMATSU D65A with attachment 24 Inch x 1 Link Productive machine capacity: 0.17 ha/hour 1 ha/day 5 m x 2km x 80% ≒ 1.6 km/day Productive machine hour: 6 hours/day 1,440 hours/year Service life: 2,880 hours Depreciation period: 2 years	US$11,000/unit 30th year: Base machine price ÷ Service life x Number of productive machines
		Parts	In the purchasing year	Base machine price x 10%
	Vibratory roller			
		Base machine	KOMATSU JV80A 67HP Productive machine capacity: 13.5 km/hour, 10 km/day (4 return trips) 13.5 km x 6 hours ÷ 1/4 x 50% ≒ 10 km	US$52,000/unit

(4)-3 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Main forest road construction		Service life: 10,000 hours Depreciation period: 7 years	
	Parts		US$2.00/hour
	Fuel	Fuel consumption: 11 ℓ/hour	Rp.200/ℓ
	Lubricant	Lubricant consumption: 0.15 ℓ/hour	Rp.700/ℓ
	Lease cost	Including the operator Leasing in each 10 days	Base machine price/7 year/240 day x 150% (including Operator)
	Back hoe type excavator		
	Base machine	KOMATSU PC200 106HP Productive machine capacity: 648 m^3/day 30 sec/cycle, 6 hours/day Bucket capacity: 0.9 m^3 Service life: 15,000 hours Depreciation period: 10 years.	US$79,500 27th-30th year: Base machine price/Service life x Number of productive machine
	Parts		US$1.75/hour
	Fuel	Fuel consumption: 12.6 ℓ/hour	Rp.200/ℓ
	Lubricant	Lubricant consumption: 0.19 ℓ/hour	Rp.700/ℓ
	Operator	1 person/unit	Rp.2,400,000/year
Main forest road maintenance	Motor grader	Same as public road maintenance	
	Brash breaker	Same as main forest road construction 1 time/year	
	Back hoe type excavator	"	

(4)-4 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Working forest road construction	Bulldozer	Same as main forest road KOMATSU D65A 155HP Productive machine capacity: 360 m/day 1m x 6m x 0.6m x 1.11 ≒ 4.00 m^3 300 m^3 x 80% x 6 hours = 1,440 m^3/day 1,440 m^3/4.00 m^3 = 360 m/day	
	Motor grader	Same as public road maintenance	
	Brash breaker	Same as main forest road construction	
	Vibratory roller	Same as main forest road construction Productive machine capacity: 13.5 km/hour 20 km/day (2 return trips) 13.5km x 6 hour ÷ 1/2 x 50% ≒ 20km	
	Back hoe type excavater	Same as main forest road construction	
Working forest road maintenance	Motor grador	Same as public road maintenance	
	Brash breaker	Same as main forest road construction 1 time/year	
	Back hoe type excavator	"	
Bridge construction	Construction cost (Bridge type A)	Length: 15 m	Rp.46,111,000/bridge
	" (Bridge type B)	Length: 10 m	Rp.35,010,000/bridge

(4)-5 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Bridge construction	Construction cost (Bridge type C)	Length: 5 m Using corrugated steel pipe - Service life: 30 years - Depreciation period: 30 years	Rp.6,893,000/bridge
Gravelling	Gravel	Mainly public roads streaching from North to South in only first 2 years. 4 m x 20 cm. - Gravels will be transported to the spot by the seller.	Rp.24,000/m^3

(5) Unit Cost Estimate for Felling Plan

Work Component	Materials and Inputs		Specification	Unit Price
Salvage cutting/ Thinning/Logging	Chainsaw	Main machine	G621.AVS Productive machine capacity: Assuming cutting volume rate same as cutting trees' number rate. Thinning/felling: 3 m^3/hour Thinning: (Cutting 50% of planted trees) Salvage cutting: 12 hours/ha (Cutting 50% of planted trees) 6 hours/ha (Cutting 25% of planted trees) Productive machine hours: 6 hours/day 1,440 hours/year Service life: 2,880 hours Depreciation period: 2 years - Purchasing one spare chainsaw/5-10 productive chainsaws	US$370/unit
		Parts	In the purchasing year - Spare parts will not be purchased for spare machines.	50% of base machine price
		Fuel	Fuel consumption: 0.67 ℓ/hour	Rp.385/ℓ
		Lubricant	Lubricant consumption: 0.03 ℓ/hour	Rp.700/ℓ
		Operator	1 person/unit	Rp.1,800,000/year
		Assistant	1 person/unit	Rp.1,200,000/year

(6)-1 Unit Cost Estimate for Skidding/Transportation Plan

Work Component	Materials and Inputs	Specification	Unit Price
Skidding/mounting/Loading and unloading	Tractor		
	Base machine	KOMATSU 65A 155HP (Including towing winch) Productive machine capacity: 10 m^3/hour Productive machine hour: 6 hours/day, 1,440 hours/year Service life: 11,520 hours Depreciation period: 8 years	US$98,800/machine 24th-30th year: Base machine price ÷ Service life x Number of productive machines
	Parts	Including under carriage	US$5.47/hour
	Fuel	Fuel consumption: 25 ℓ/hour	Rp.280/ℓ
	Lubricant	Lubricant consumption: 0.25 ℓ/hour	Rp.700/ℓ
	Operator	1 person/machine	Rp.2,400,000/year
	Assistant	1 person/machine	Rp.1,200,000/year
	Lease cost		Base machine price ÷ 8 years x 110%
	Log loader		
	Base machine	KOMATSU WA180 110HP Productive machine capacity: 40 m^3/hour Productive machine hour: 6 hours/day, 1,440 hours/year Service life: 11,520 hours Depreciation period: 8 years	US$57,900/machine 24th-30th year: Base machine price ÷ Service life x Number of productive machines
	Parts	Including under carriage	US$1.48/hour

(6)-2 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Skidding/mounting/Loading and unloading	Fuel	Fuel consumption: 23 ℓ/hour	Rp.200/ℓ
	Lubricant	Lubricant consumption: 0.17 ℓ/hour	Rp.700/ℓ
	Operator	1 person/unit	Rp.2,400,000/year
	Lease cost		Base machine price ÷ 8 years x 110%
Transportation	Logging truck		
	Base machine	HINO FS275 14 ton	US$92,600/unit
		Productive machine capacity: 25 m^3/unit/day Productive machine hour: 6 hours/day 1,440 hours/year Transporting distance: 50 km on the average (2 return trips/day) Service life: 7,200 hours Depreciation period: 8 years	27th-30th year: Base machine price ÷ Service life x Number of productive machines
	Parts	Including under carriage	US$2.00/hour
	Fuel	Fuel consumption: 15 ℓ/hour	Rp.200/ℓ
	Lubricant	Lubricant consumption: 0.17 ℓ/hour	Rp.700/ℓ
	Operator	1 person/unit	Rp.2,400,000/year
	Assistant	1 person/unit	Rp.1,200,000/year
	Lease cost		Base machine price ÷ 5 years x 110%

(6)-3 Continue

Work Component	Materials and Inputs		Specification	Unit Price
Transportation	Tugboat (Iron)	Base machine	Dumping place - Palembang Dimension: 28.2mx8.6mx3.5mx2.7m 568HP (2 units) 11.2 knots Drawbar pull capacity: 14 t Shipping distance: 173.5 km	US$904,000/boat 21st-30th year: Base machine price ÷ Service life x Number of productive boats
		Parts/Repair cost	In a boat/year	Base machine price ÷ 20 years x 6%
		Fuel	Fuel consumption: 50 ℓ/hour	Rp.200/ℓ
		Lubricant	Lubricant consumption: 0.74 ℓ/hour	Rp.700/ℓ
		Captain	1 person/boat	Rp.2,400,000/year
		Chief engineer	1 person/boat	Rp.2,000,000/year
		Crew	3 persons/boat	Rp.1,000,000/year/person
Transportation	Barge (Iron)	Base machine	Displacement: 100 t (200 m^3/barge) Service life: 20 years Depreciation period: 20 years	US$358,000/barge 16th-30th year: Base machine price Service life x Number of productive barge
		Parts/Repairing	In a barge/year	Base machine price ÷ 20 years x 3%
		Crew	2 persons/barge	Rp.1,000,000/person/year
		Lease cost		Base machine price ÷ 20 years x 110%

(7)-1 Unit Cost Estimate for Administration and Other General Plan

Work Component	Materials and Inputs	Specification	Unit Price
Building Construction/ Maintenance			
Industrial Plantation Center	Office building	466 m^2/house Service life: 25 years To be shared by the office for the second working unit.	Rp.130,000/m^2
	Warehouse	400 m^2, Service life: 25 years	Rp.70,000/m^2
	Fuel storage	50 m^2, Service life: 25 years	Rp.100,000/m^2
	Garage	150 m^2, Service life: 25 years	Rp.50,000/m^2
	Generator building	40 m^2, Service life: 25 years	Rp.100,000/m^2
	Housing (For Director)	120 m^2, Service life: 25 years	Rp.150,000/m^2
	" (For Section chief)	100 m^2, Service life: 25 years	Rp.130,000/m^2
	" (For Staff)	70 m^2, Service life: 25 years	Rp.130,000/m^2
	" (For Driver)	30 m^2, Service life: 25 years	Rp.130,000/m^2
	Guesthouse	270 m^2, Service life: 25 years	Rp.130,000/m2
Working Unit Management Office	Office building	176 m^2, Service life: 25 years	Same as Industrial Plantation Center
	Warehouse	150 m^2, Service life: 25 years	
	Fuel storage	20 m^2, Service life: 25 years	
	Garage	100 m^2, Service life: 25 years	
	Generator building	20 m^2, Service life: 25 years	

(7)-2 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Working Unit Management Office	Housing (For Unit manager)	100 m^2, Service life: 25 years	
	" (For Staff)	70 m^2, Service life: 25 years	
	" (For Driver)	30 m^2, Service life: 25 years	
Building construction/ Maintenance	Laborers' lodge	3.3 m^2 Prefabricated Service life: 5 years	US$216/$m^2$
	Maintenance cost		3rd-10th year: 1% of construction cost 11th-25th year: 2% of construction cost
Facility installment/ Maintenance	Water storage tank Industrial Plantation Center	200 m^3, Service life: 15 years 50 ℓ/person x 400 person x 10 days	Rp.6,200,000/tank
	Working Unit Management Office	100 m^3, Service life: 15 years 50 ℓ/person x 200 person x 10 days	Rp.6,200,000/tank
	Waterworks Industrial Plantation Center	Service life: 15 years	Rp.40,000,000/set
	Working Unit Management Office	Service life: 15 years 2 offices	Rp.20,000,000/set
	Electric works Industrial Plantation Center	Service life: 10 years	Rp.28,000,000/set

(7)-3 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Facility installment/ Maintenance	Working Unit Management Office	Service life: 10 years 2 offices	Rp.28,000,000/set
	Fencing	800 m/site x 3 sites Service life: 10 years	Rp.7,000/m
	Site preparation Industrial Plantation Center	Earth works 22,000 m^2	Rp.3,600/m^2
	Working Unit Management Office	11,000 m^2 x 2 offices	Rp.3,600/m^2
	Radio Communication SW radio Base machine	160 W x 2 units	US$8,600/unit
	Antenna	Center - Palembang x 2 sets	US$7,100/antenna
	Antenna installment cost	2 places	US$2,140/set
	Spare parts		US$17,200 Base machine price x 10%
	VHF radio Base machine	25 W 150 MHz 3 units	US$3,600/unit
	Antenna	3 units	US$700/antenna
	Antenna installment cost	3 units	US$700/set
	Power source	3 sets	US$700/set
	Spare parts		US$1,050/unit
	Walkie-talkie	150 MHz, 10 W 4 sites x 3 offices	US$2,500/unit
	Air conditioner	Cooling 8 Air conditioners 10,000 Kcal	US$7,000/Air conditioner

(7)-4 Continue

Work Component	Materials and Inputs		Specification	Unit Price
Facility installment/ Maintenance	Facility maintenance cost			3rd-11th year: 3% of procurement & installment cost 11th-25th year: 5% of procurement & installment cost
Transportation		Jeep	4 vehicles 60 km/day, 14,400 km/year Service life: 7 years	US$15,244/jeep
	Motorcycle		4 vehicles x 3 offices Service life: 7 years	US$1,800/motorcycle
Electricity & Water supply	Generator		50 KWH Productive machine hour: 12 hours/day 360 hours/year 2 generators Service life: 7 years	US$12,800/generator
	Water pump		4 water pump Service life: 7 years	US$7,000/pump
Operation	Personnel	Director		Rp.7,200,000/year
		Section chief		Rp.6,000,000/year
		Unit manager		Rp.6,000,000/year
		Staff		Rp.4,200,000/year
Repair		Building	Parts warehouse, Repair Bay Service life: 8 years	US$57,870/building
		Parts/equipment	Transmission Jack, Engine compressor, Parts washer	US$506,000/set

(7)-5 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Repair	Office Supply	Equipment	US$25,000/equipment Rp.67,000,000/equipment
	Fuel/Lubricant	Fuel consumption: 25,560 ℓ/shop Lubricant consumption: 180 ℓ/shop	Rp.200/ℓ Rp.700/ℓ
	Engineer	10 person/shop	Rp.2,400,000/year
	Assistant	10 person/shop	Rp.1,200,000/year
Consultant	Detailed Design, Tender etc.	A: Management (General Administration)	Rp.112,295,000/man.month US$137,667/man.month
		B: Procurement/Facility	Rp.105,880,000/man.month US$124,829/man.month
		C: Civil/Equipment	Rp.96,225,000/man.month US$111,477/man.month
			Rp: Local Currency Portion US$: Foreign Currency Portion
	Execution Management	A: Management (General Administration)	Same as Detailed Design.
		B: Nursery Planting/Forest road	
		C: Equipment/Forest Protection	
Local Development Promotion Measure	Building/Civil Construction	Farm road, dam Boader, plow	Rp.1 million/household
	Material	Seed, Fertilizer Instrument	
	Guidance	Establishment of Model farmland 100 Household/year 8 years	

(7)-6 Continue

Work Component	Materials and Inputs	Specification	Unit Price
Countermeasure for Environmental Impact	Monitoring Survey	Hydrogy, Water quality Climate, Flora and Fauna 8 years	Rp.5 million/unit

II-9 FINANCE PLAN BY WORK AND YEAR (ITEM)

(1) Nursery Stock Production Plan
(2) Plantation Plan
(3) Forest Protection Plan
(4) Forest Road Plan
(5) Felling Plan
(6) Skidding and Transportation Plan
(7) Repair Shop Plan
(8) Administration and Other General Plan

Table (1) Nursery Stock Production Plan

Nursery Stock Production — Financial Plan

(Base Cost)

Year	Building Construction & Facility Installment		Maintenance		Machinery		Fuel & Lubricant		Material and Tool		Sub total		Labour	
	L/C.	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	67,658	5,872	0	0	0	78,147	133	0	28,222	9,938	88,885	93,957	77,968	0
2	0	0	0	0	0	15,499	281	0	36,378	5,931	36,579	21,430	117,184	0
3	0	0	677	176	0	15,499	286	0	31,251	2,845	32,134	17,728	128,515	0
4	0	0	677	176	0	1,928	288	0	31,745	10,688	32,631	12,793	122,381	0
5	0	0	677	176	0	1,928	228	0	34,186	7,213	35,880	9,317	131,798	0
6	0	0	677	176	0	55,965	238	0	34,873	2,432	35,788	58,573	134,457	0
7	0	0	677	176	0	37,681	218	0	31,868	9,436	32,755	47,293	122,859	0
8	0	0	677	176	0	1,928	199	0	30,132	8,289	31,888	8,393	116,177	0
9	0	0	677	176	0	1,928	93	0	15,782	670	16,552	2,788	62,363	0
10	0	0	677	176	0	1,928	139	0	23,786	6,947	24,522	9,951	93,696	0
11	0	5,872	1,353	0	0	17,748	191	0	25,653	8,595	27,197	36,216	96,489	0
12	0	0	1,353	0	0	15,499	145	0	24,785	1,271	26,283	16,778	97,927	0
13	0	0	1,353	176	0	48,755	157	0	26,681	7,946	28,191	56,877	135,434	0
14	0	0	1,353	176	0	1,928	159	0	27,284	6,566	28,716	8,678	107,575	0
15	0	0	1,353	176	0	1,928	146	0	24,866	1,892	26,365	3,196	98,299	0
16	0	0	1,353	176	0	55,965	195	0	31,418	10,382	32,956	66,443	124,125	0
17	0	0	1,353	176	0	15,499	185	0	31,568	6,961	33,186	22,576	124,885	0
18	0	0	1,353	176	0	1,928	191	0	25,651	1,484	27,195	3,588	96,489	0
19	0	0	1,353	176	0	24,118	145	0	24,777	6,828	26,275	31,185	97,927	0
20	0	0	1,353	176	0	1,928	157	0	26,675	7,488	28,185	9,513	135,434	0
21	0	0	1,353	176	0	42,384	159	0	28,348	2,891	29,860	44,661	113,835	0
22	0	0	1,353	176	0	15,499	146	0	26,579	6,184	28,078	21,779	186,483	0
23	0	0	1,353	176	0	15,499	186	0	33,173	18,558	34,711	26,335	132,553	0
24	0	0	1,353	176	0	1,928	185	0	33,384	2,426	34,922	4,538	133,447	0
25	0	0	1,353	176	0	24,118	191	0	27,585	3,194	29,129	27,488	185,638	0
26	67,658	0	0	176	0	28,823	145	0	26,737	18,579	94,532	39,578	187,332	0
27	0	0	0	176	0	15,499	157	0	28,469	3,113	29,026	18,788	114,829	0
28	0	0	677	176	0	15,499	159	0	28,987	3,165	29,743	18,848	115,789	0
29	0	0	677	176	0	1,928	146	0	24,872	8,618	25,695	10,714	98,299	0
30	0	0	677	176	0	1,928	185	0	31,418	6,185	32,280	8,289	124,125	0

(L/C Rpl,000, F/C US$)

Total	
L/C	F/C
165,973	93,957
147,683	21,438
152,649	17,728
155,822	12,793
160,888	9,317
170,237	58,573
155,614	47,293
147,185	8,393
78,915	2,788
118,218	9,951
123,086	36,216
124,218	16,778
133,025	56,877
136,291	8,678
124,664	3,196
157,881	66,443
157,901	22,576
123,684	3,588
124,282	31,186
133,819	9,513
142,895	44,661
134,571	21,779
187,274	26,335
168,369	4,538
134,767	27,488
281,864	39,578
142,656	18,788
145,452	18,848
123,994	10,714
156,496	8,289

Table (2) Plantation Plan

Financial Plan

Year	Farm Tractor (base machine)		Bushcutter		Farm Tractor (attachment)		Parts		Fuel & Lubricant		Materials & Tools		Sub total	
	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	0	756,900	0	19,590	0	76,000	0	62,248	68,881	0	81,726	6,324	158,607	915,062
2	0	396,480	0	29,295	0	55,200	0	86,510	118,684	0	123,878	1,298	242,562	510,695
3	0	0	0	34,410	0	77,400	0	95,142	132,588	0	129,881	1,298	261,589	288,242
4	0	0	0	32,885	0	55,200	0	93,837	138,287	0	132,753	6,324	269,040	186,646
5	0	84,100	0	37,200	0	77,400	0	103,100	145,809	0	142,455	1,298	288,554	383,178
6	0	11,564	0	35,340	0	55,200	0	101,617	149,363	0	146,563	1,298	295,926	285,818
7	0	0	0	35,985	0	58,000	0	95,326	148,821	0	134,614	6,324	274,635	196,455
8	0	0	0	36,698	0	47,800	0	87,895	131,944	0	127,615	1,298	259,559	167,675
9	0	0	0	10,995	0	7,400	0	30,410	78,183	0	78,953	1,298	141,456	64,784
10	0	420,560	0	25,118	0	47,800	0	55,548	88,595	0	102,835	6,324	183,438	555,282
11	0	84,100	0	22,328	0	16,400	0	52,584	84,038	0	105,278	1,298	185,388	178,684
12	0	84,100	0	26,648	0	36,800	0	56,172	84,097	0	106,556	1,298	191,553	284,482
13	0	84,100	0	24,645	0	46,400	0	59,588	91,885	0	114,624	6,324	205,629	214,977
14	0	0	0	28,038	0	36,800	0	61,910	93,042	0	117,814	1,298	218,956	128,838
15	0	0	0	23,258	0	29,400	0	55,368	88,722	0	107,528	1,298	196,251	169,248
16	0	168,280	0	32,550	0	55,200	0	72,560	103,885	0	134,618	6,324	238,423	334,048
17	0	0	0	29,760	0	33,800	0	69,207	109,392	0	135,608	1,298	245,808	133,317
18	0	168,280	0	25,575	0	33,200	0	55,450	98,150	0	105,978	1,298	186,134	283,724
19	0	84,100	0	23,250	0	22,800	0	52,403	84,836	0	107,530	6,324	181,575	188,137
20	0	252,380	0	27,435	0	55,200	0	62,383	91,885	0	115,851	1,298	206,856	398,088
21	0	11,564	0	20,970	0	33,800	0	63,127	97,656	0	122,712	1,298	228,368	135,950
22	0	0	0	27,435	0	48,000	0	61,367	94,600	0	116,895	6,324	218,785	135,726
23	0	168,280	0	33,945	0	66,000	0	77,657	112,231	0	143,417	1,298	255,648	347,892
24	0	23,128	0	34,875	0	20,600	0	74,854	118,494	0	144,728	1,298	263,222	163,747
25	0	0	0	20,070	0	66,000	0	63,317	99,770	0	110,832	6,324	215,811	182,611
26	0	21,025	0	28,305	0	14,600	0	59,117	95,190	0	117,868	1,298	213,867	124,597
27	0	42,050	0	29,760	0	73,400	0	68,730	100,586	0	124,548	1,298	225,864	215,238
28	0	74,630	0	30,225	0	14,800	0	63,822	103,810	0	126,818	6,324	229,870	180,089
29	0	63,075	0	25,575	0	51,400	0	58,876	91,330	0	107,944	1,298	199,274	189,416
30	0	86,283	0	10,043	0	10,000	0	61,158	105,462	0	134,858	1,298	248,358	181,286

Labour		Total	
L/C	F/C	L/C	F/C
271,260	0	421,703	915,062
476,188	0	718,062	510,695
562,877	0	823,686	288,242
598,296	0	867,336	186,646
644,681	0	933,155	383,178
669,183	0	965,189	285,818
638,489	0	913,134	196,455
685,793	0	865,352	167,675
488,320	0	541,382	64,784
451,134	0	634,564	555,282
453,333	0	642,633	178,684
465,878	0	656,631	284,482
482,622	0	688,251	214,977
490,278	0	707,234	128,838
474,868	0	678,311	169,248
552,441	0	788,864	334,048
575,530	0	828,598	133,317
486,744	0	692,878	283,724
466,527	0	658,182	188,137
483,372	0	688,478	398,088
517,341	0	737,789	135,950
562,236	0	713,821	135,726
508,820	0	646,474	347,892
617,984	0	881,126	163,747
548,171	0	755,982	182,611
521,358	0	734,425	124,597
537,813	0	762,867	215,238
548,286	0	777,314	180,089
495,524	0	695,708	189,416
567,486	0	887,846	181,286

Table (3) Forest Protection Plan

Forest Protection Financial Plan

Base Cost Year	Maintenance		Look-out tower construction		Vehicle (base machine)		Machinery (base machine)		Protection materials		Parts		Fuel &	
	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	15,192	0	0	0	0	187,532	0	260,616	147	8,670	0	5,196	3,921	0
2	20,256	0	0	0	0	0	0	0	0	0	0	5,280	4,816	0
3	15,192	0	152	0	0	0	0	0	0	0	0	5,428	4,154	0
4	20,256	0	355	0	0	0	0	0	0	0	0	5,565	4,364	0
5	20,256	0	507	0	0	0	0	3,900	0	0	0	5,681	4,426	0
6	10,128	0	718	0	0	61,888	0	6,456	147	3,600	0	5,785	4,534	0
7	20,256	0	913	0	0	0	0	6,888	0	0	0	5,870	4,623	0
8	10,128	0	1,014	0	0	45,732	0	0	0	0	0	5,870	4,623	0
9	0	0	1,217	0	0	0	0	240,166	0	0	0	5,870	4,623	0
10	0	0	1,318	0	0	0	0	0	0	0	0	5,870	4,623	0
11	0	0	1,470	0	0	61,888	0	6,456	588	2,142	0	5,870	4,623	0
12	0	0	1,672	0	0	0	0	0	0	0	0	5,870	4,623	0
13	0	0	1,824	0	0	0	0	9,888	0	2,028	0	5,870	4,623	0
14	0	0	2,026	0	0	0	0	0	0	0	0	5,870	4,623	0
15	0	0	2,228	0	0	45,732	0	0	0	0	0	5,870	4,623	0
16	0	0	2,330	0	0	61,888	0	6,456	147	3,600	0	5,870	4,623	0
17	0	0	2,532	0	0	0	0	240,166	0	0	0	5,870	4,623	0
18	0	0	2,634	0	0	0	0	0	0	0	0	5,870	4,623	0
19	0	0	2,634	0	0	0	0	6,888	0	0	0	5,870	4,623	0
20	0	0	2,634	0	0	0	0	0	0	0	0	5,870	4,623	0
21	0	0	2,634	0	0	61,888	0	18,358	147	5,742	0	5,870	4,623	0
22	0	0	2,634	0	0	45,732	0	0	0	0	0	5,870	4,623	0
23	0	0	2,634	0	0	0	0	0	0	0	0	5,870	4,623	0
24	0	0	2,634	0	0	0	0	0	0	0	0	5,870	4,623	0
25	0	0	2,634	0	0	0	0	254,166	0	2,928	0	5,870	4,623	0
26	0	0	2,634	0	0	61,888	0	6,456	147	3,600	0	5,870	4,623	0
27	0	0	2,634	0	0	0	0	0	0	0	0	5,870	4,623	0
28	0	0	2,634	0	0	0	0	0	0	0	0	5,870	4,623	0
29	0	0	2,634	0	0	45,732	0	3,900	0	0	0	5,870	4,623	0
30	0	0	2,634	0	0	0	0	0	0	0	0	5,870	4,623	0

Sub total		Labour		Total	
L/C	F/C	L/C	F/C	L/C	F/C
19,260	382,814	27,360	0	46,620	382,814
24,272	5,280	27,360	0	51,632	5,280
19,488	5,428	27,360	0	46,850	5,428
24,915	5,565	27,360	0	52,275	5,565
25,189	9,581	27,360	0	52,548	9,581
15,519	77,635	27,360	0	42,879	77,635
25,792	11,870	27,360	0	53,152	11,870
15,766	51,682	27,360	0	43,125	51,682
5,848	254,836	27,360	0	33,208	254,836
5,941	5,870	27,360	0	33,301	5,870
6,891	76,262	27,360	0	34,841	76,262
6,295	5,870	27,360	0	33,655	5,870
6,447	10,898	27,360	0	33,807	16,606
6,849	5,870	27,360	0	34,209	5,870
6,851	51,682	27,360	0	34,211	51,682
7,100	77,720	27,360	0	34,460	77,720
7,155	254,836	27,360	0	34,515	254,836
7,257	5,870	27,360	0	34,617	5,870
7,257	11,870	27,360	0	34,617	11,870
7,257	5,870	27,360	0	34,617	5,870
7,404	83,762	27,360	0	34,764	83,762
7,257	51,682	27,360	0	34,617	51,682
7,257	5,870	27,360	0	34,617	5,870
7,257	5,870	27,360	0	34,617	5,870
7,257	262,864	27,360	0	34,617	262,864
7,404	77,720	27,360	0	34,764	77,720
7,257	5,870	27,360	0	34,617	5,870
7,257	5,870	27,360	0	34,617	5,870
7,257	55,582	27,360	0	34,617	55,582
7,257	5,870	27,360	0	34,617	5,870

Table (4) Forest Road Plan

Forest Road Financial Plan

Base Cost Year	Machinery (lease) L/C	F/C	Parts L/C	F/C	Fuel & Lubricant L/C	F/C	Bridge Construction L/C	F/C	Gravelling L/C	F/C	Subtotal L/C	F/C	Labour L/C	F/C
1	0	743,864	0	39,495	47,893	0	96,258	486,655	469,824	0	613,977	1,278,814	22,800	0
2	0	464	0	36,360	46,695	0	58,591	296,248	469,824	0	575,310	333,881	22,800	0
3	0	147,964	0	46,915	52,948	0	45,356	229,295	0	0	99,208	424,174	26,480	0
4	0	125,964	0	53,589	62,589	0	69,714	360,979	0	0	123,223	486,452	30,000	0
5	0	158,364	0	62,378	67,918	0	78,571	356,810	0	0	138,489	578,152	33,600	0
6	0	11,464	0	63,155	71,693	0	58,658	256,895	0	0	122,543	328,714	33,600	0
7	0	71,268	0	74,718	78,854	0	45,814	231,642	0	0	124,668	377,568	37,200	0
8	0	11,000	0	50,825	51,988	0	0	0	0	0	51,988	61,825	26,480	0
9	0	308,588	0	54,425	51,988	0	0	0	0	0	51,988	452,925	26,480	0
10	0	11,880	0	50,825	51,988	0	0	0	0	0	51,988	61,825	26,480	0
11	0	169,588	0	54,425	51,988	0	0	0	0	0	51,988	223,925	26,480	0
12	0	125,588	0	50,825	51,988	0	0	0	0	0	51,988	175,525	26,480	0
13	0	169,588	0	54,425	51,988	0	0	0	0	0	51,988	223,925	26,480	0
14	0	88,788	0	50,825	51,988	0	0	0	0	0	51,988	138,725	26,480	0
15	0	55,888	0	54,425	51,988	0	0	0	0	0	51,988	189,425	26,480	0
16	0	11,888	0	50,825	51,988	0	0	0	0	0	51,988	61,825	26,480	0
17	0	478,888	0	54,425	51,988	0	0	0	0	0	51,988	532,425	26,480	0
18	0	11,888	0	50,825	51,988	0	0	0	0	0	51,988	61,825	26,480	0
19	0	169,588	0	54,425	51,988	0	0	0	0	0	51,988	223,925	26,480	0
20	0	125,588	0	50,825	51,988	0	0	0	0	0	51,988	175,525	26,480	0
21	0	169,588	0	54,425	51,988	0	0	0	0	0	51,988	223,925	26,480	0
22	0	11,888	0	50,825	51,988	0	0	0	0	0	51,988	61,825	26,480	0
23	0	55,888	0	54,425	51,988	0	0	0	0	0	51,988	185,425	26,480	0
24	0	17,878	0	50,825	51,988	0	0	0	0	0	51,988	67,995	26,480	0
25	0	104,988	0	54,425	51,988	0	0	0	0	0	51,988	159,333	26,480	0
26	0	68,388	0	50,825	51,988	0	0	0	0	0	51,988	119,933	26,480	0
27	0	127,178	0	54,425	51,988	0	0	0	0	0	51,988	181,595	26,480	0
28	0	97,483	0	50,825	51,988	0	0	0	0	0	51,988	147,568	26,480	0
29	0	155,785	0	54,425	51,988	0	0	0	0	0	51,988	210,228	26,480	0
30	0	105,295	0	49,475	51,988	0	0	0	0	0	51,988	155,778	26,480	0

Total L/C	Total F/C
636,677	1,278,814
598,118	333,881
125,690	424,174
153,223	486,452
172,889	578,152
156,143	328,714
161,860	377,568
78,388	61,825
78,388	452,925
78,388	61,825
78,388	223,925
78,388	175,525
78,388	223,925
78,388	138,725
78,388	189,425
78,388	61,825
78,388	532,425
78,388	61,825
78,388	223,925
78,388	175,525
78,388	223,925
78,388	61,825
78,388	185,425
78,388	67,995
78,388	159,333
78,388	119,933
78,388	181,595
78,388	147,568
78,388	210,228
78,388	155,778

Table (5) Felling Plan

Felling Financial Plan

Base Cost	Chainsaw (base machine)		Parts		Fuel & Lubricant		Sub Total		Labour		Total	
Year	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	0	1,850	0	925	1,525	0	1,525	2,775	12,000	0	13,525	2,775
2	0	2,220	0	1,110	3,777	0	3,777	3,330	27,000	0	30,777	3,330
3	0	2,590	0	1,295	4,260	0	4,260	3,885	33,000	0	37,260	3,885
4	0	12,580	0	6,290	14,987	0	14,987	18,870	111,000	0	125,987	18,870
5	0	8,880	0	4,440	21,311	0	21,311	13,320	159,000	0	180,311	13,320
6	0	1,850	0	925	16,393	0	16,393	2,775	78,000	0	88,393	2,775
7	0	9,250	0	4,625	18,845	0	18,845	13,875	81,000	0	91,845	13,875
8	0	14,800	0	7,400	23,629	0	23,629	22,200	177,000	0	200,629	22,200
9	0	24,420	0	12,210	38,640	0	38,640	36,630	288,000	0	326,640	36,630
10	0	28,860	0	14,430	52,307	0	52,307	43,290	393,000	0	445,307	43,290
11	0	25,160	0	12,580	53,332	0	53,332	37,740	398,000	0	452,332	37,740
12	0	26,640	0	13,320	51,831	0	51,831	39,960	381,000	0	432,831	39,960
13	0	32,190	0	16,095	57,587	0	57,587	48,285	432,000	0	489,587	48,285
14	0	27,380	0	13,690	58,796	0	58,796	41,070	438,000	0	496,796	41,070
15	0	28,860	0	14,430	55,285	0	55,285	43,290	414,000	0	469,285	43,290
16	0	39,960	0	19,980	67,824	0	67,824	59,940	507,000	0	574,824	59,940
17	0	33,070	0	16,535	72,706	0	72,706	50,505	543,000	0	615,706	50,505
18	0	24,420	0	12,210	57,253	0	57,253	36,630	429,000	0	486,253	36,630
19	0	37,000	0	18,500	68,582	0	68,582	55,500	453,000	0	513,582	55,500
20	0	28,120	0	14,060	64,326	0	64,326	42,180	480,000	0	544,326	42,180
21	0	38,850	0	19,425	66,847	0	66,847	58,275	492,000	0	558,847	58,275
22	0	25,530	0	12,765	63,435	0	63,435	38,295	474,000	0	537,435	38,295
23	0	51,430	0	25,715	76,134	0	76,134	77,145	567,000	0	643,134	77,145
24	0	26,640	0	13,320	76,795	0	76,795	39,960	573,000	0	649,795	39,960
25	0	37,000	0	18,500	62,487	0	62,487	55,500	468,000	0	530,487	55,500
26	0	32,560	0	16,280	68,498	0	68,498	48,840	513,000	0	581,498	48,840
27	0	41,440	0	20,720	73,881	0	73,881	62,160	540,000	0	613,881	62,160
28	0	30,710	0	15,355	71,847	0	71,847	46,065	531,000	0	602,847	46,065
29	0	31,450	0	15,725	61,424	0	61,424	47,175	456,000	0	517,424	47,175
30	0	45,140	0	22,570	75,580	0	75,580	67,710	564,000	0	639,580	67,710

Table (6) Skidding and Transportation Plan

Skidding & Transportation Financial Plan

Base Cost

Year	Machinery L/C	Machinery F/C	Parts L/C	Parts F/C	Fuel & Lubricant L/C	Fuel & Lubricant F/C	Sub total L/C	Sub total F/C	Labour L/C	Labour F/C	Total L/C	Total F/C
1	0	1,511,300	0	17,372	90,551	0	90,551	1,528,672	19,000	0	109,551	1,528,672
2	0	448,700	0	30,234	118,038	0	118,038	478,934	35,000	0	153,038	478,934
3	0	92,600	0	42,789	124,843	0	124,843	135,389	39,400	0	163,443	135,389
4	0	882,800	0	66,306	188,073	0	188,073	949,206	74,000	0	254,673	949,206
5	0	212,099	0	110,718	291,642	0	291,642	332,789	106,800	0	398,442	332,789
6	0	0	0	11,888	83,220	0	83,220	11,888	19,000	0	102,220	11,888
7	0	0	0	15,744	88,410	0	88,410	15,744	19,000	0	107,410	15,744
8	0	2,945,800	0	133,567	389,981	0	389,981	3,079,367	114,000	0	503,981	3,079,367
9	0	5,258,000	0	272,426	558,485	0	558,485	5,530,426	227,800	0	786,285	5,530,426
10	0	6,230,600	0	411,142	974,384	0	974,384	6,647,142	353,400	0	1,327,784	6,647,142
11	0	463,800	0	422,447	889,277	0	889,277	885,447	357,000	0	1,246,277	885,447
12	0	446,000	0	429,734	897,502	0	897,502	875,634	364,200	0	1,261,702	875,634
13	0	1,198,498	0	468,623	930,871	0	930,871	1,627,113	380,400	0	1,327,871	1,627,113
14	0	1,655,400	0	469,581	958,567	0	958,567	2,124,587	392,600	0	1,343,167	2,124,587
15	0	926,800	0	438,293	899,615	0	899,615	1,356,293	366,600	0	1,266,215	1,356,293
16	0	3,848,698	0	542,338	1,113,463	0	1,113,463	3,591,028	460,000	0	1,573,463	3,591,028
17	0	2,337,800	0	587,860	1,171,656	0	1,171,656	2,924,965	492,000	0	1,663,656	2,924,965
18	0	116,788	0	454,181	938,997	0	938,997	578,891	383,000	0	1,313,997	578,891
19	0	1,656,200	0	468,997	939,933	0	939,933	2,117,197	392,600	0	1,332,533	2,117,197
20	0	1,851,100	0	495,389	984,586	0	984,586	2,346,579	415,000	0	1,399,586	2,346,579
21	0	2,715,551	0	538,292	1,112,482	0	1,112,482	3,253,843	459,800	0	1,572,482	3,253,843
22	0	162,800	0	512,970	1,070,325	0	1,070,325	674,970	441,200	0	1,528,525	674,970
23	0	2,280,241	0	635,821	1,366,238	0	1,366,238	2,842,862	531,800	0	1,837,238	2,842,862
24	0	1,999,893	0	648,394	1,311,761	0	1,311,761	2,648,287	546,600	0	1,852,361	2,648,287
25	0	565,875	0	511,848	1,070,344	0	1,070,344	1,077,723	434,800	0	1,515,344	1,077,723
26	0	2,585,736	0	544,357	1,118,646	0	1,118,646	3,130,093	468,000	0	1,578,646	3,130,093
27	0	716,085	0	586,864	1,172,769	0	1,172,769	1,290,769	492,000	0	1,664,769	1,290,769
28	0	1,122,579	0	594,313	1,183,845	0	1,183,845	1,716,892	499,200	0	1,682,245	1,716,892
29	0	1,248,573	0	594,514	991,894	0	991,894	1,753,087	418,600	0	1,410,494	1,753,087
30	0	1,978,578	0	625,311	1,293,821	0	1,293,821	2,603,881	529,000	0	1,822,821	2,603,881

Table (7) Repair Shop Plan

Repair Shop Financial Plan

Base Cost	Building Construction		Equipment & Tools		Apparatus		Building maintenance		Fuel & Lubricant		Sub total		Labour		Total	
Year	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	57,870	0	0	500,000	67,000	25,000	0	0	5,238	0	130,108	531,000	36,000	0	166,108	531,000
2	0	0	0	0	0	0	0	0	5,238	0	5,238	0	36,000	0	41,238	0
3	0	0	0	0	0	0	579	0	5,238	0	5,817	0	36,000	0	41,817	0
4	0	0	0	0	0	0	579	0	5,238	0	5,817	0	36,000	0	41,817	0
5	0	0	0	0	0	0	579	0	5,238	0	5,817	0	36,000	0	41,817	0
6	0	0	0	0	0	0	579	0	5,238	0	5,817	0	36,000	0	41,817	0
7	0	0	0	0	0	0	579	0	5,238	0	5,817	0	36,000	0	41,817	0
8	0	0	0	0	0	0	579	0	5,238	0	5,817	0	36,000	0	41,817	0
9	115,740	0	0	1,012,000	134,000	50,000	579	0	15,714	0	266,033	1,062,000	108,000	0	374,033	1,062,000
10	0	0	0	0	0	0	579	0	15,714	0	16,293	0	108,000	0	124,293	0
11	0	0	0	0	0	0	2,315	0	15,714	0	18,029	0	108,000	0	126,029	0
12	0	0	0	0	0	0	2,315	0	15,714	0	18,029	0	108,000	0	126,029	0
13	0	0	0	0	0	0	2,315	0	15,714	0	18,029	0	108,000	0	126,029	0
14	0	0	0	0	0	0	2,315	0	15,714	0	18,029	0	108,000	0	126,029	0
15	0	0	0	0	0	0	2,315	0	15,714	0	18,029	0	108,000	0	126,029	0
16	0	0	0	500,000	67,000	25,000	2,315	0	15,714	0	85,029	531,000	108,000	0	193,029	531,000
17	0	0	0	0	0	0	2,315	0	15,714	0	18,029	0	108,000	0	126,029	0
18	0	0	0	0	0	0	2,315	0	15,714	0	18,029	0	108,000	0	126,029	0
19	0	0	0	0	0	0	3,472	0	15,714	0	19,186	0	108,000	0	127,186	0
20	0	0	0	0	0	0	3,472	0	15,714	0	19,186	0	108,000	0	127,186	0
21	0	0	0	0	0	0	3,472	0	15,714	0	19,186	0	108,000	0	127,186	0
22	0	0	0	0	0	0	3,472	0	15,714	0	19,186	0	108,000	0	127,186	0
23	0	0	0	0	0	0	3,472	0	15,714	0	19,186	0	108,000	0	127,186	0
24	0	0	0	1,012,000	134,000	50,000	3,472	0	15,714	0	153,186	1,062,000	108,000	0	261,186	1,062,000
25	0	0	0	0	0	0	3,472	0	15,714	0	19,186	0	108,000	0	127,186	0
26	57,870	0	0	0	0	0	2,315	0	15,714	0	75,899	0	108,000	0	183,899	0
27	0	0	0	0	0	0	2,315	0	15,714	0	18,029	0	108,000	0	126,029	0
28	0	0	0	0	0	0	2,894	0	15,714	0	18,608	0	108,000	0	126,608	0
29	0	0	0	0	0	0	2,894	0	15,714	0	18,608	0	108,000	0	126,608	0
30	0	0	0	0	0	0	2,894	0	15,714	0	18,608	0	108,000	0	126,608	0

Table (8) Administration and Other General Plan

Financial Plan

Base Cost

Year	Building construction L/C	F/C	Building maintenance L/C	F/C	Facility installment L/C	F/C	Facility maintenance L/C	F/C	Vehicle (base machine) L/C	F/C	Vehicle (parts) L/C	F/C	Equipment & material L/C	F/C
												16%		
1	755,140	0	0	0	392,000	141,550	0	0	0	161,770	0	16,178	56,956	21,160
2	0	0	0	0	0	0	0	0	0	0	0	16,178	14,811	0
3	0	0	7,551	0	0	0	7,000	4,943	0	0	0	16,178	14,811	0
4	0	0	7,551	0	0	0	7,000	4,943	0	0	0	16,178	14,811	0
5	0	0	7,551	0	0	0	7,000	4,943	0	0	0	16,178	14,811	0
6	0	0	7,551	0	0	56,000	7,000	4,943	0	0	0	16,178	14,811	15,000
7	0	0	7,551	0	0	0	7,000	4,943	0	0	0	16,178	14,811	2,960
8	0	0	7,551	0	0	0	7,000	2,567	0	161,770	0	16,178	14,811	0
9	0	0	7,551	0	0	0	7,000	2,567	0	0	0	16,178	14,811	0
10	0	0	7,551	0	0	0	7,000	4,943	0	0	0	16,178	14,811	0
11	0	0	15,103	0	128,000	141,550	5,240	2,376	0	0	0	16,178	14,811	15,000
12	0	0	15,103	0	0	0	5,240	2,376	0	0	0	16,178	14,811	0
13	0	0	15,103	0	0	0	9,104	4,943	0	0	0	16,178	14,811	2,960
14	0	0	15,103	0	0	0	9,104	4,943	0	0	0	16,178	14,811	0
15	0	0	15,103	0	0	0	9,104	2,567	0	161,770	0	16,178	14,811	0
16	0	0	15,103	0	184,000	56,000	3,864	2,567	0	0	0	16,178	14,811	15,000
17	0	0	15,103	0	0	0	3,864	4,943	0	0	0	16,178	14,811	0
18	0	0	15,103	0	0	0	7,000	4,943	0	0	0	16,178	14,811	0
19	0	0	15,103	0	0	0	7,000	4,943	0	0	0	16,178	14,811	2,960
20	0	0	15,103	0	0	0	7,000	4,943	0	0	0	16,178	14,811	0
21	0	0	15,103	0	128,000	141,550	3,144	2,376	0	0	0	16,178	14,811	18,200
22	0	0	15,103	0	0	0	3,144	0	0	161,770	0	16,178	14,811	0
23	0	0	15,103	0	0	0	7,000	2,567	0	0	0	16,178	14,811	0
24	0	0	15,103	0	0	0	7,000	4,943	0	0	0	16,178	14,811	0
25	0	0	15,103	0	0	0	7,000	4,943	0	0	0	16,178	14,811	2,960
26	755,140	0	0	0	0	56,000	9,104	4,943	0	0	0	16,178	14,811	15,000
27	0	0	0	0	0	0	9,104	4,943	0	0	0	16,178	14,811	0
28	0	0	7,551	0	0	0	9,104	4,943	0	0	0	16,178	14,811	0
29	0	0	7,551	0	0	0	9,104	4,943	0	161,770	0	16,178	14,811	0
30	0	0	7,551	0	0	0	9,104	4,943	0	0	0	16,178	14,811	0

Fuel & Lubricant L/C	F/C	Laborers' lodge L/C	F/C	Fuel Tank L/C	F/C	Sub total L/C	F/C	Labour L/C	F/C	Total L/C	F/C
59,795	0	0	114,000	0	98,000	1,263,893	544,664	236,400	0	1,500,293	544,664
59,795	0	0	0	0	0	93,868	16,178	236,400	0	330,268	16,178
59,795	0	0	0	0	0	88,365	21,121	236,400	0	324,765	21,121
59,795	0	0	0	0	0	88,365	21,121	236,400	0	324,765	21,121
59,795	0	0	0	0	0	88,365	21,121	236,400	0	324,765	21,121
59,795	0	0	114,000	0	0	88,365	266,121	236,400	0	324,765	266,121
59,795	0	0	0	0	0	88,365	24,881	236,400	0	324,765	24,881
59,795	0	0	0	0	0	88,365	188,521	236,400	0	324,765	188,521
59,795	0	0	0	0	0	88,365	18,745	236,400	0	324,765	18,745
59,795	0	0	0	0	0	88,365	21,121	236,400	0	324,765	21,121
59,795	0	0	114,000	0	287,000	292,940	496,184	236,400	0	459,340	496,184
59,795	0	0	0	0	0	94,149	18,554	236,400	0	330,549	18,554
59,795	0	0	0	0	0	98,813	24,881	236,400	0	334,413	24,881
59,795	0	0	0	0	0	98,813	21,121	236,400	0	334,413	21,121
59,795	0	0	0	0	0	98,813	188,521	236,400	0	334,413	188,521
59,795	0	0	114,000	0	0	197,573	283,745	236,400	0	433,973	283,745
59,795	0	0	0	0	0	92,773	21,121	236,400	0	329,173	21,121
59,795	0	0	0	0	0	95,917	21,121	236,400	0	332,317	21,121
59,795	0	0	0	0	0	95,917	24,881	236,400	0	332,317	24,881
59,795	0	0	0	0	0	95,917	21,121	236,400	0	332,317	21,121
59,795	0	0	114,000	0	278,000	220,853	562,384	236,400	0	457,253	562,384
59,795	0	0	0	0	0	92,853	177,954	236,400	0	329,253	177,954
59,795	0	0	0	0	0	95,917	18,745	236,400	0	332,317	18,745
59,795	0	0	0	0	0	95,917	21,121	236,400	0	332,317	21,121
59,795	0	0	0	0	0	95,917	24,881	236,400	0	332,317	24,881
59,795	0	0	114,000	0	0	838,858	266,121	236,400	0	1,074,458	266,121
59,795	0	0	0	0	0	82,918	21,121	236,400	0	319,318	21,121
59,795	0	0	0	0	0	90,461	21,121	236,400	0	326,861	21,121
59,795	0	0	0	0	0	90,461	182,897	236,400	0	326,861	182,897
59,795	0	0	0	0	0	90,461	21,121	236,400	0	326,861	21,121

	Consultancy		Local Development Promotion Measure		Countermeasure for Environmental Impact	
Year	L/C	F/C	L/C	F/C	L/C	F/C
1	774,720	915,390	100,000	0	5,000	0
2	258,240	305,130	100,000	0	5,000	0
3	258,240	305,130	100,000	0	5,000	0
4	258,240	305,130	100,000	0	5,000	0
5	258,240	305,130	100,000	0	5,000	0
6	258,240	305,130	100,000	0	5,000	0
7	258,240	305,130	100,000	0	5,000	0
8	258,240	305,130	100,000	0	5,000	0
9	0	0	0	0	0	0
10	0	0	0	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
13	0	0	0	0	0	0
14	0	0	0	0	0	0
15	0	0	0	0	0	0
16	0	0	0	0	0	0
17	0	0	0	0	0	0
18	0	0	0	0	0	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0
21	0	0	0	0	0	0
22	0	0	0	0	0	0
23	0	0	0	0	0	0
24	0	0	0	0	0	0
25	0	0	0	0	0	0
26	0	0	0	0	0	0
27	0	0	0	0	0	0
28	0	0	0	0	0	0
29	0	0	0	0	0	0
30	0	0	0	0	0	0

(1) Project Cost - Total -

Year	Machinery, etc.			General Administration Cost			Personnel Cost			Reserve			Grand Total		
	L/C	F/C	Sub total	L/C	F/C	Sub total	L/C	F/C	Sub total	L/C	F/C	Sub total	L/C	F/C	Sub total
1	674,524	4,773,434	5,337,958	718,802	644,664	1,254,718	394,809	0	394,809	626,036	1,466,764	2,093,398	2,348,841	6,734,862	9,486,893
2	561,672	1,352,758	1,914,430	43,464	18,178	57,642	549,756	0	549,756	336,751	460,946	797,691	1,489,643	1,829,876	3,319,519
3	387,185	794,838	1,181,996	49,643	21,121	70,764	687,389	0	687,389	313,786	396,852	710,638	1,277,843	1,212,883	2,490,640
4	386,554	1,659,592	2,025,140	49,643	21,121	70,764	694,489	0	694,489	329,331	496,366	825,697	1,438,937	2,177,813	3,615,958
5	452,868	1,246,256	1,699,110	49,643	21,121	70,764	772,786	0	772,786	346,879	448,767	795,646	1,622,188	1,716,144	3,338,312
6	319,775	686,516	1,006,291	49,643	206,121	255,764	693,259	0	693,259	324,685	387,172	711,777	1,387,282	1,279,809	2,667,891
7	316,249	662,797	979,046	49,643	24,881	73,724	673,213	0	673,213	321,905	381,713	703,678	1,361,878	1,069,591	2,429,661
8	391,940	3,398,262	3,782,211	49,643	186,521	236,164	752,329	0	752,329	337,693	697,718	1,035,411	1,531,605	4,268,501	5,800,106
9	685,948	7,483,581	8,869,469	49,643	18,745	68,388	773,398	0	773,398	158,762	851,684	1,010,446	1,587,711	8,273,938	9,861,641
10	679,172	7,321,008	8,000,032	49,643	21,121	70,764	949,695	0	949,695	183,647	842,388	1,025,955	1,861,557	8,185,889	10,046,646
11	684,272	1,432,284	2,126,556	125,252	496,184	621,356	957,247	0	957,247	187,258	172,154	359,484	1,964,821	2,100,542	4,064,503
12	668,178	1,318,161	2,016,331	52,893	18,554	71,447	958,632	0	958,632	186,787	151,887	338,574	1,896,482	1,488,582	3,384,984
13	734,881	2,189,875	2,923,856	55,863	24,881	79,144	1,815,298	0	1,815,298	190,649	258,197	448,846	2,881,803	2,466,153	4,467,236
14	744,776	2,439,672	3,184,448	55,863	21,121	76,184	1,829,567	0	1,829,567	199,315	288,079	488,194	2,828,711	2,741,672	4,778,383
15	784,711	1,673,854	2,377,765	55,863	186,521	235,584	983,774	0	983,774	199,173	195,189	385,202	1,933,721	2,948,684	3,882,445
16	897,478	4,721,998	5,619,860	118,998	283,745	314,741	1,147,836	0	1,147,836	229,868	546,886	775,144	2,384,188	5,471,827	7,855,987
17	898,754	3,917,874	4,816,570	52,128	21,121	73,241	1,198,641	0	1,198,641	233,464	456,866	684,336	2,382,979	4,380,811	6,772,798
18	724,876	961,648	1,686,724	53,886	21,121	75,887	1,887,479	0	1,887,479	184,698	118,997	305,695	1,980,139	1,093,876	3,073,815
19	728,537	2,627,735	3,356,272	53,886	24,881	77,967	1,815,858	0	1,815,858	196,808	302,658	498,638	1,094,353	2,954,368	4,048,719
20	764,898	2,978,275	3,743,165	53,886	21,121	75,887	1,857,284	0	1,857,284	284,352	342,819	547,171	2,888,412	3,342,215	5,422,027
21	846,818	3,888,417	4,647,235	124,875	502,364	686,379	1,112,668	0	1,112,668	210,769	445,483	665,252	2,383,322	4,888,284	7,111,526
22	828,256	983,397	1,883,653	51,715	177,954	229,669	1,878,825	0	1,878,825	212,344	115,768	328,184	2,184,148	1,277,111	3,441,251
23	983,888	3,487,928	4,381,720	53,886	18,745	72,631	1,248,038	0	1,248,038	247,388	392,183	639,581	2,532,822	3,918,867	6,358,889
24	1,866,928	3,884,388	5,851,316	53,886	21,121	75,887	1,271,418	0	1,271,418	259,645	458,522	718,887	2,851,769	4,464,831	7,115,888
25	821,463	1,745,618	2,567,873	53,886	24,881	77,967	1,893,248	0	1,893,248	213,988	281,186	495,086	2,182,568	1,970,737	4,153,366
26	815,747	3,631,788	4,447,587	478,815	280,121	678,936	1,123,511	0	1,123,511	234,039	408,244	643,283	2,744,112	4,147,125	6,891,237
27	885,881	1,788,421	2,666,222	46,679	21,121	67,788	1,173,834	0	1,173,834	229,139	285,865	434,284	2,334,553	2,096,687	4,341,166
28	863,661	2,124,984	3,818,645	58,821	21,121	71,942	1,175,488	0	1,175,488	238,285	244,698	474,975	2,356,247	2,398,795	4,741,042
29	761,877	2,276,114	3,037,991	58,821	102,897	233,718	1,849,284	0	1,849,284	283,836	284,496	467,526	2,884,932	2,723,587	4,788,439
30	965,787	3,822,886	4,988,593	58,821	21,121	71,942	1,226,275	0	1,226,275	243,183	347,948	591,123	2,486,866	3,391,867	5,877,933

III. FINANCIAL AND ECONOMIC ANALYSIS

III-1 COST (WORK PLANS)

(1) Nursery Stock Production Plan
(2) Plantation Plan
(3) Forest Protection Plan
(4) Forest Road Plan
(5) Repair Shop Plan
(6) Administration and Other General Plan

(1) Nursery Stock Production Plan

Base Cost (L/C Rpl,000, F/C US$)

Investment Cost

Year	Building Construction and Facility Installment		Machinery		Fuel & Luhricant		Material & Tool		Sub total		Labour		Total	
	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	67650	5872	0	78147	133	0	20222	9838	88005	93857	77868	0	165873	93857
2	0	0	0	0	201	0	30378	5931	30579	5931	117104	0	147683	21430
3	0	0	0	0	206	0	31251	2845	31457	2845	120515	0	151872	17544
4	0	0	0	0	209	0	31745	10688	31954	10688	122391	0	154345	12617
5	0	0	0	0	226	0	34186	7213	34412	7213	131799	0	166211	8141
6	0	0	0	0	230	0	34973	2432	35183	2432	134457	0	169508	58397
7	0	0	0	0	218	0	31868	9436	32078	9436	122859	0	154937	47117
8	0	0	0	0	199	0	30132	6288	30331	6288	116177	0	146508	8217
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(1) Continued

Operation Cost

Maintenance for Building		Renewal of Machinery		Total		Grand total	
L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
0	0	0	0	0	0	165973	93957
0	0	0	15498	0	15499	163182	36929
677	176	0	15499	677	15675	167471	33219
677	176	0	1928	677	2104	156273	14721
677	176	0	1928	677	2104	168139	11245
677	176	0	55965	677	56141	225525	114538
677	176	0	37681	677	37857	192618	84874
677	176	0	1928	677	2104	148436	18321
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0

(2) Plantation Plan

Base Cost (L/C Rpl,000, F/C US$)

Investment Cost

Year	Farm Tractor (Base machine)		Bushcutter		Farm Tractor (attachment)		Fuel Lubricant		Materials & Tools		Sub total		Labour		Total	
	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	0	756900	0	19530	0	70000	68801	0	81726	6324	150527	852754	271266	0	421793	852754
2	0	336400	0	29295	0	55200	118684	0	123878	1298	242562	422185	476100	0	718662	422185
3	0	0	0	34410	0	77400	132588	0	129881	1298	261589	113100	562077	0	823666	113100
4	0	0	0	32685	0	55200	136287	0	132753	6324	269040	93609	598296	0	867336	93609
5	0	84100	0	37200	0	77400	145899	0	143455	1298	288554	199998	644681	0	933155	199998
6	0	11564	0	35340	0	55200	149303	0	146563	1298	295926	103394	609183	0	905109	103394
7	0	0	0	35805	0	59000	140021	0	134614	6324	274635	101129	638499	0	913134	101129
8	0	0	0	30690	0	47800	131944	0	127615	1298	259559	79788	605793	0	865352	79788
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(2) Continued

Operation Cost

Renewal of Bushcutter		Parts		Fuel Lubricant		Sub total		Labour		Total		Grand total	
L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
0	0	0	62267	0	0	0	62267	0	0	0	62267	421793	915021
0	0	0	88538	0	0	0	88538	0	0	0	88538	718662	510723
0	0	0	95175	0	0	0	95175	0	0	0	95175	823666	208275
0	0	0	93068	0	0	0	93068	0	0	0	93068	867336	186677
0	0	0	103224	0	0	0	103224	0	0	0	103224	933155	303214
0	0	0	101651	0	0	0	101651	0	0	0	101651	965109	205045
0	0	0	95361	0	0	0	95361	0	0	0	95361	913134	196490
0	0	0	87925	0	0	0	87925	0	0	0	87925	865352	167705
0	19895	0	9087	39898	0	39898	29082	261558	0	301456	29082	301456	29082
0	25110	0	11417	35220	0	35220	36527	244494	0	279714	36527	279714	36527
0	0	0	0	0	0	0	0	30612	0	30612	0	30612	0
0	0	0	0	0	0	0	0	8181	0	8181	0	8181	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0

(3) Forest Protection Plan

Base Cost (L/C Rpl,000, F/C US$)

Year	Investment Cost										Operation Cost					
	Look-out Tower Construction		Vehicle (base machine)		Machinery		Protection Materials		Total		Look-out Tower Maintenance		Renewal of Vehicle		Renewal of Machinery	
	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	15192	0	0	187532	0	260616	147	8670	15338	376818	0	0	0	0	0	0
2	20256	0	0	0	0	0	0	0	20256	0	0	0	0	0	0	0
3	15192	0	0	0	0	0	0	0	15192	0	152	0	0	0	0	0
4	20256	0	0	0	0	0	0	0	20256	0	355	0	0	0	0	0
5	20256	0	0	0	0	0	0	0	20256	0	507	0	0	0	0	3900
6	10128	0	0	0	0	0	0	0	10128	0	710	0	0	51800	0	6450
7	20256	0	0	0	0	0	0	0	20256	0	913	0	0	0	0	6000
8	10128	0	0	0	0	0	0	0	10128	0	1014	0	0	45732	0	0
9	0	0	0	0	0	0	0	0	0	0	1217	0	0	0	0	248106
10	0	0	0	0	0	0	0	0	0	0	1318	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	1470	0	0	51800	0	6450
12	0	0	0	0	0	0	0	0	0	0	1672	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	1824	0	0	0	0	9900
14	0	0	0	0	0	0	0	0	0	0	2026	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	2228	0	0	45732	0	0
16	0	0	0	0	0	0	0	0	0	0	2330	0	0	51800	0	6450
17	0	0	0	0	0	0	0	0	0	0	506	0	0	0	0	248166
18	0	0	0	0	0	0	0	0	0	0	527	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	527	0	0	0	0	1200
20	0	0	0	0	0	0	0	0	0	0	527	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	527	0	0	12360	0	2070
22	0	0	0	0	0	0	0	0	0	0	527	0	0	9146	0	0
23	0	0	0	0	0	0	0	0	0	0	527	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	527	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	527	0	0	0	0	50833
26	0	0	0	0	0	0	0	0	0	0	527	0	0	12360	0	1298
27	0	0	0	0	0	0	0	0	0	0	527	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	527	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	263	0	0	4573	0	398
30	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	263	0	0	6180	0	1245
32	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	24817
34	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	263	0	0	18753	0	645
37	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	990
38	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	263	0	0	6180	0	25462
42	0	0	0	0	0	0	0	0	0	0	263	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	263	0	0	4573	0	600

(3) Continued

Renewal of Protection Materials		Parts		Fuel		Sub total		Labour		Total		Grand total	
L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
0	0	0	5196	3931	0	3931	5196	27360	0	31291	5196	40638	382014
0	0	0	5288	4026	0	4026	5288	27360	0	31386	5288	51642	5288
0	0	0	5420	4164	0	4316	5420	27360	0	31676	5420	46868	5420
0	0	0	5565	4314	0	4069	5565	27360	0	32429	5565	52285	5565
0	0	0	5681	4436	0	4943	9581	27360	0	32303	9581	52559	9581
147	3600	0	5785	4544	0	5401	77635	27360	0	32761	77635	42889	77635
0	0	0	5870	4633	0	5546	11870	27360	0	32906	11870	53162	11870
0	0	0	5870	4633	0	5647	51602	27360	0	33007	51602	43135	51602
0	0	0	5870	4633	0	5858	254036	27360	0	33218	254036	33218	254036
0	0	0	5870	4633	0	5951	5870	27360	0	33311	5870	33311	5870
147	8670	0	5870	4633	0	6250	82790	27360	0	33610	82790	33610	82790
0	0	0	5870	4633	0	6305	5870	27360	0	33665	5870	33665	5870
0	0	0	5870	4633	0	6457	15770	27360	0	33817	15770	33817	15770
0	0	0	5870	4633	0	6659	5870	27360	0	34019	5870	34819	5870
0	0	0	5870	4633	0	6861	51602	27360	0	34221	51602	34221	51602
147	3600	0	5870	4633	0	7110	77720	27360	0	34470	77720	34470	77720
0	0	0	1174	927	0	1433	249340	5472	0	6905	249340	6905	249340
0	0	0	1174	927	0	1454	1174	5472	0	6926	1174	6926	1174
0	0	0	1174	927	0	1454	2374	5472	0	6926	2374	6926	2374
0	0	0	1174	927	0	1454	1174	5472	0	6926	1174	6926	1174
20	1734	0	1174	927	0	1483	17338	5472	0	6955	17338	6955	17338
0	0	0	1174	927	0	1454	10320	5472	0	6926	10320	6926	10320
0	0	0	1174	927	0	1454	1174	5472	0	6926	1174	6926	1174
0	0	0	1174	927	0	1454	1174	5472	0	6926	1174	6926	1174
0	0	0	1174	927	0	1454	52007	5472	0	6926	52007	6926	52007
20	720	0	1174	927	0	1483	15544	5472	0	6955	15544	6955	15544
0	0	0	1174	927	0	1454	1174	5472	0	6926	1174	6926	1174
0	0	0	1174	927	0	1454	1174	5472	0	6926	1174	6926	1174
0	0	0	587	463	0	726	5550	2736	0	3462	5550	3462	5550
0	0	0	587	463	0	726	587	2736	0	3462	587	3462	587
15	867	0	587	463	0	741	8879	2736	0	3477	8879	3477	8879
0	0	0	587	463	0	726	587	2736	0	3462	587	3462	587
0	0	0	587	463	0	726	25484	2736	0	3462	25484	3462	25484
0	0	0	587	463	0	726	587	2736	0	3462	587	3462	587
0	0	0	587	463	0	726	587	2736	0	3462	587	3462	587
15	360	0	587	463	0	741	12345	2736	0	3477	12345	3477	12345
0	0	0	587	463	0	726	1577	2736	0	3462	1577	3462	1577
0	0	0	587	463	0	726	587	2736	0	3462	587	3462	587
0	0	0	587	463	0	726	587	2736	0	3462	587	3462	587
0	0	0	587	463	0	726	587	2736	0	3462	587	3462	587
15	867	0	587	463	0	741	33096	2736	0	3477	33096	3477	33096
0	0	0	587	463	0	726	587	2736	0	3462	587	3462	587
0	0	0	587	463	0	726	5760	2736	0	3462	5760	3462	5760

(4) Forest Road Plan

Base Cost (L/C Rpl,000, F/C US$)

Investment Cost | Operation Cost

Year	Machinery		Fuel & Lubricant		Bridge Construction		Gravelling		Sub total		Labour		Total		Renewal of Machinery	
	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	0	743668	47883	0	86258	486655	469824	0	613877	1230515	22800	0	636677	1230515	0	0
2	0	460	46885	0	58591	296248	469824	0	575310	296708	22800	0	598110	296708	0	0
3	0	147968	53948	0	45350	229295	0	0	99298	377255	26400	0	125698	377255	0	0
4	0	125968	62508	0	60714	306970	0	0	123223	432939	30000	0	153223	432939	0	0
5	0	158968	67918	0	78571	356810	0	0	138488	515778	33600	0	172088	515778	0	0
6	0	11468	71893	0	58050	256085	0	0	122543	267955	33600	0	156143	267555	0	0
7	0	71204	78854	0	45814	231042	0	0	124668	302846	37200	0	161868	302846	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11000
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	398500
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11000
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	169500
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125500
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	159500
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80700
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55000
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11000
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85000
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2200
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33000
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25100
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33000
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2200
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11000
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3594
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28982
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12182
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25434
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19497
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13105

(4) Continued

Parts		Fuel & Lubricant		Sub total		Labour		Total		Grand total	
L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
0	39495	0	0	0	39495	0	0	0	39495	636677	1270010
0	36369	0	0	0	36369	0	0	0	36369	598110	333877
0	46815	0	0	0	46815	0	0	0	46815	125698	424170
0	53589	0	0	0	53589	0	0	0	53589	153223	480448
0	62370	0	0	0	62370	0	0	0	62370	172088	578148
0	63155	0	0	0	63155	0	0	0	63155	156143	330710
0	74710	0	0	0	74710	0	0	0	74710	161868	377556
0	50025	51988	0	51988	61025	26400	0	78388	61025	78388	61025
0	54425	51988	0	51988	452825	26400	0	78388	452925	78388	452925
0	50025	51988	0	51988	61025	26400	0	78388	61025	78388	61025
0	54425	51988	0	51988	223925	26400	0	78388	223925	78388	223925
0	50025	51988	0	51988	175525	26400	0	78388	175525	78388	175525
0	54425	51988	0	51988	223925	26400	0	78388	223925	78388	223925
0	50025	51988	0	51988	130725	26400	0	78388	130725	78388	130725
0	54425	51988	0	51988	109425	26400	0	78388	109425	78388	109425
0	50025	51988	0	51988	61025	26400	0	78388	61025	78388	61025
0	10885	10398	0	10398	106485	5280	0	15678	106485	15678	106485
0	10885	10398	0	10398	12285	5280	0	15678	12285	15678	12285
0	10885	10398	0	10398	44785	5280	0	15678	44785	15678	44785
0	10885	10398	0	10398	35185	5280	0	15678	35185	15678	35185
0	10885	10398	0	10398	44785	5280	0	15678	44785	15678	44785
0	10885	10398	0	10398	12285	5280	0	15678	12285	15678	12285
0	10885	10398	0	10398	21885	5280	0	15678	21885	15678	21885
0	10885	10398	0	10398	13599	5280	0	15678	13599	15678	13599
0	10885	10398	0	10398	30987	5280	0	15678	30987	15678	30987
0	10885	10398	0	10398	23867	5280	0	15678	23867	15678	23867
0	10885	10398	0	10398	35439	5280	0	15678	35439	15678	35439
0	10885	10398	0	10398	30382	5280	0	15678	30382	15678	30382
0	5883	5199	0	5199	18188	2640	0	7839	18188	7839	18188
0	5443	5199	0	5199	18548	2640	0	7839	18548	7839	18548
0	5883	5199	0	5199	18188	2640	0	7839	18188	7839	18188
0	5443	5199	0	5199	18548	2640	0	7839	18548	7839	18548
0	5883	5199	0	5199	18188	2640	0	7839	18188	7839	18188
0	5443	5199	0	5199	18548	2640	0	7839	18548	7839	18548
0	5883	5199	0	5199	18188	2640	0	7839	18188	7839	18188
0	5443	5199	0	5199	18548	2640	0	7839	18548	7839	18548
0	5883	5199	0	5199	18188	2640	0	7839	18188	7839	18188
0	5443	5199	0	5199	18548	2640	0	7839	18548	7839	18548
0	5883	5199	0	5199	18188	2640	0	7839	18188	7839	18188
0	5443	5199	0	5199	18548	2640	0	7839	18548	7839	18548
0	5883	5199	0	5199	18188	2640	0	7839	18188	7839	18188

(5) Repair Shop Plan

Base Cost (L/C Rp1,000, F/C US$)

Year	Investment Cost								Operation Cost							
	Building Construction		Machinery & Tools		Equipment		Total		Renewal of Building		Machinery & Tools		Equipment		Building Maintenance	
	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	57870	0	0	506000	67000	25000	124870	531000	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	578	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	579	0
16	0	0	0	0	0	0	0	0	0	0	0	58000	67000	25000	579	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
26	0	0	0	0	0	0	0	0	11574	0	0	0	0	0	116	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
31	0	0	0	0	0	0	0	0	0	0	0	5068	6700	2500	58	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0

(5) Continued

Fuel & Lubricant		Sub total		Labour		Total		Grand total	
L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
5238	0	5238	0	36000	0	41238	0	166188	531000
5238	0	5238	0	36000	0	41238	0	41238	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	5817	0	36000	0	41817	0	41817	0
5238	0	72817	75600	36000	0	108817	75600	108817	75600
1048	0	1164	0	7200	0	8364	0	8364	0
1048	0	1164	0	7200	0	8364	0	8364	0
1048	0	1164	0	7200	0	8364	0	8364	0
1048	0	1164	0	7200	0	8364	0	8364	0
1048	0	1164	0	7200	0	8364	0	8364	0
1048	0	1164	0	7200	0	8364	0	8364	0
1048	0	1164	0	7200	0	8364	0	8364	0
1048	0	1164	0	7200	0	8364	0	8364	0
1048	0	12738	0	7200	0	19938	0	19938	0
1048	0	1164	0	7200	0	8364	0	8364	0
1048	0	1164	0	7200	0	8364	0	8364	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	7282	7560	3600	0	10882	7560	10882	7560
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0
524	0	582	0	3600	0	4182	0	4182	0

(6) Administration and Other General Plan

Base Cost (L/C Rpl,000, F/C US$)

Year	Investment Cost														Operation Cost	
	Building Construction		Facility Installment		Vehicle		Equipment & Tools		Laborer's lodge		Fuel Tank		Sub total		Renewal of Building	
	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
1	755140	0	392000	141558	0	161776	56958	21160	0	114000	0	90000	1284898	528486	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	151028	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(6) Continued

Building Maintenance		Renewal of Facility		Facility Maintenance		Renewal of Vehicle		Parts		Renewal of Equipment & Tools		Fuel & Lubricant		Renewal of Laborer's Lodge	
L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
0	0	0	0	0	0	0	0	0	16178	0	0	59795	0	0	0
0	0	0	0	0	0	0	0	0	16178	14011	0	59795	0	0	0
7551	0	0	0	7008	4943	0	0	0	16178	14011	0	59795	0	0	0
7551	0	0	0	7008	4943	0	0	0	16178	14011	0	59795	0	0	0
7551	0	0	0	7008	4943	0	0	0	16178	14011	0	59795	0	0	0
7551	0	0	56088	7008	4943	0	0	0	16178	14011	15000	59795	0	0	114000
7551	0	0	0	7008	4943	0	0	0	16178	14011	2960	59795	0	0	0
7551	0	0	0	7008	2567	0	161776	0	16178	14011	0	59795	0	0	0
7551	0	0	0	7008	2567	0	0	0	16178	14011	0	59795	0	0	0
7551	0	0	0	7008	4943	0	0	0	16178	14011	0	59795	0	0	0
15103	0	128800	141550	5248	2378	0	0	0	16178	14011	15000	59795	0	0	0
15103	0	0	0	5248	2378	0	0	0	16178	14011	0	59795	0	0	0
15103	0	0	0	9104	4943	0	0	0	16178	14011	2960	59795	0	0	0
15103	0	0	0	9104	4943	0	0	0	16178	14011	0	59795	0	0	0
15103	0	0	0	9104	2567	0	161776	0	16178	14011	0	59795	0	0	0
15103	0	184800	56000	3864	2567	0	0	0	16178	14011	15000	59795	0	0	0
15103	0	0	0	3864	989	0	0	0	3236	2802	0	11959	0	0	0
15103	0	0	0	1402	989	0	0	0	3236	2802	0	11959	0	0	0
15103	0	0	0	1402	989	0	0	0	3236	2802	592	11959	0	0	0
15103	0	0	0	1402	989	0	0	0	3236	2802	0	11959	0	0	0
15103	0	25760	28316	629	475	0	0	0	3236	2802	3648	11959	0	0	0
15103	0	0	0	628	0	0	32355	0	3236	2802	0	11959	0	0	0
15103	0	0	0	1402	513	0	0	0	3236	2802	0	11959	0	0	0
15103	0	0	0	1402	989	0	0	0	3236	2802	0	11959	0	0	0
15103	0	0	0	1402	989	0	0	0	3236	2802	592	11959	0	0	0
0	0	0	11200	1821	989	0	0	0	3236	2802	3000	11959	0	0	0
0	0	0	0	1821	989	0	0	0	3236	2802	0	11959	0	0	0
1510	0	0	0	1821	989	0	0	0	3236	2802	0	11959	0	0	0
1510	0	0	0	918	494	0	16178	0	0	1401	0	5980	0	0	0
1510	0	0	0	918	494	0	0	0	1618	1401	0	5980	0	0	0
1510	0	23368	14155	918	494	0	0	0	1618	1401	1786	5980	0	0	0
1510	0	0	0	918	494	0	0	0	1618	1401	0	5980	0	0	0
1510	0	0	0	918	494	0	0	0	1618	1401	0	5980	0	0	0
1510	0	0	0	918	494	0	0	0	1618	1401	0	5980	0	0	0
1510	0	0	0	918	494	0	0	0	1618	1401	0	5980	0	0	0
3021	0	0	5648	918	494	0	16178	0	1618	1401	1500	5980	0	0	0
3021	0	0	0	918	494	0	0	0	1618	1401	296	5980	0	0	0
3021	0	0	0	918	494	0	0	0	1618	1401	0	5980	0	0	0
3021	0	0	0	918	494	0	0	0	1618	1401	0	5980	0	0	0
3021	0	0	0	918	494	0	0	0	1618	1401	0	5980	0	0	0
3021	0	12880	14155	918	494	0	0	0	1618	1401	1820	5980	0	0	0
3021	0	0	0	918	494	0	0	0	1618	1401	0	5980	0	0	0
3021	0	0	0	918	494	0	16178	0	1618	1401	296	5980	0	0	0

(6) Continued

Renewal of Fuel Tank		Sub total		Labour		Total		Grand total	
L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C
0	0	59795	16178	236400	0	296195	16178	1500293	544664
0	0	73886	16178	236400	0	310286	16178	310286	16178
0	0	88365	21121	236400	0	324765	21121	324765	21121
0	0	88365	21121	236400	0	324765	21121	324765	21121
0	0	88365	21121	236400	0	324765	21121	324765	21121
0	0	88365	206121	236400	0	324765	206121	324765	206121
0	0	88365	24081	236400	0	324765	24081	324765	24081
0	0	88365	188521	236400	0	324765	188521	324765	188521
0	0	88365	18745	236400	0	324765	18745	324765	18745
0	0	88365	21121	236400	0	324765	21121	324765	21121
0	94000	222949	265104	236400	0	459349	265104	459349	265104
0	0	94149	18554	236400	0	330549	18554	330549	18554
0	0	98013	24081	236400	0	334413	24081	334413	24081
0	0	98013	21121	236400	0	334413	21121	334413	21121
0	0	98013	188521	236400	0	334413	188521	334413	188521
0	0	197573	89745	236400	0	433973	89745	433973	89745
0	0	33728	4225	47288	0	81008	4225	81008	4225
0	0	31266	4225	47288	0	78546	4225	78546	4225
0	0	31266	4817	47288	0	78546	4817	78546	4817
0	0	31266	4225	47288	0	78546	4225	78546	4225
0	18000	56253	53661	47288	0	103533	53661	103533	53661
0	0	30483	35591	47288	0	77773	35591	77773	35591
0	0	31266	3749	47288	0	78546	3749	78546	3749
0	0	31266	4225	47288	0	78546	4225	78546	4225
0	0	31266	4817	47288	0	78546	4817	78546	4817
0	0	167618	18425	47288	0	214898	18425	214898	18425
0	0	16582	4225	47288	0	63862	4225	63862	4225
0	0	18092	4225	47288	0	65372	4225	65372	4225
0	0	9881	16672	23648	0	33441	16672	33441	16672
0	0	9881	2112	23648	0	33441	2112	33441	2112
0	9000	33161	27863	23648	0	56801	27863	56801	27863
0	0	9881	2112	23648	0	33441	2112	33441	2112
0	0	9881	2112	23648	0	33441	2112	33441	2112
0	0	9881	2112	23648	0	33441	2112	33441	2112
0	0	9881	2112	23648	0	33441	2112	33441	2112
0	0	11312	25398	23648	0	34952	25398	34952	25398
0	0	11312	2408	23648	0	34952	2408	34952	2408
0	0	11312	2112	23648	0	34952	2112	34952	2112
0	0	11312	2112	23648	0	34952	2112	34952	2112
0	0	11312	2112	23648	0	34952	2112	34952	2112
0	9000	24192	27887	23648	0	47832	27887	47832	27887
0	0	11312	2112	23648	0	34952	2112	34952	2112
0	0	11312	18586	23648	0	34952	18586	34952	18586

(US$)

Year	Nursery Cost	Planting Cost	Forest Protection Cost	Forest Road Cost	Repair Shop Cost	Sub total	General Administration Cost	Total	Reserve	Transportation & Travelling Cost
1	187,200	1,151,983	488,218	1,627,694	624,319	3,998,466	1,387,526	5,386,932	375,488	3,774
2	119,897	914,466	34,381	669,894	23,167	1,760,925	198,451	1,951,376	136,376	5,145
3	118,977	671,009	31,751	494,787	23,493	1,340,017	203,573	1,543,590	89,662	5,667
4	101,812	673,944	34,938	572,528	23,493	1,406,716	203,573	1,610,289	94,746	5,981
5	105,002	827,458	39,189	674,827	23,493	1,669,889	203,573	1,873,462	117,731	6,235
6	216,176	747,241	101,730	418,431	23,493	1,501,071	388,573	1,889,644	93,915	6,388
7	172,397	709,487	41,737	468,493	23,493	1,415,607	206,533	1,622,140	88,378	6,170
8	93,009	653,858	75,835	105,063	23,493	951,258	362,973	1,314,231	49,331	5,888
9	0	198,439	272,693	496,963	23,493	991,588	201,197	1,192,785	79,421	3,382
10	0	193,678	24,584	105,063	23,493	346,818	203,573	550,383	15,993	3,286
11	0	17,198	101,672	267,963	23,493	410,326	523,165	933,491	34,271	2,884
12	0	4,586	24,783	219,563	23,493	272,435	204,256	476,691	21,742	1,878
13	0	0	34,768	267,963	23,493	326,224	211,953	538,177	27,588	1,833
14	0	0	24,982	174,763	23,493	223,238	208,993	432,231	17,281	1,833
15	0	0	76,827	153,463	23,493	247,783	368,393	616,176	19,736	1,833
16	0	0	97,085	105,063	136,733	338,881	333,550	672,431	28,846	1,833
17	0	0	253,219	115,293	4,699	373,211	49,735	422,946	36,313	366
18	0	0	5,065	21,813	4,699	30,777	48,352	79,129	2,869	366
19	0	0	5,265	53,593	4,699	64,557	48,944	113,501	5,447	366
20	0	0	5,065	43,913	4,699	53,677	48,352	102,029	4,359	366
21	0	0	21,245	53,593	4,699	79,537	111,826	191,363	6,945	366
22	0	0	14,211	21,813	4,699	39,923	79,284	119,207	2,984	366
23	0	0	5,065	30,693	4,699	40,457	47,876	88,333	3,837	366
24	0	0	5,065	22,487	4,699	32,171	48,352	80,523	2,248	366
25	0	0	55,898	39,795	4,699	100,392	48,944	149,336	9,838	366
26	0	0	19,451	31,875	11,201	62,527	139,150	201,677	5,244	366
27	0	0	5,065	44,247	4,699	54,011	40,103	94,114	4,392	366
28	0	0	5,065	39,190	4,699	48,954	40,951	89,905	3,887	366
29	0	0	7,495	22,512	2,349	32,356	35,459	67,815	2,732	183
30	0	0	2,532	22,952	2,349	27,833	20,899	48,732	2,288	183
31	0	0	10,832	22,512	13,673	47,017	58,974	105,991	4,198	183
32	0	0	2,532	22,952	2,349	27,833	20,899	48,732	2,288	183
33	0	0	27,349	22,512	2,349	52,210	20,899	73,109	4,717	183
34	0	0	2,532	22,952	2,349	27,833	20,899	48,732	2,288	183
35	0	0	2,532	22,512	2,349	27,393	20,899	48,292	2,236	183
36	0	0	14,298	22,952	2,349	39,599	45,826	84,625	3,455	183
37	0	0	3,522	22,512	2,349	28,383	22,044	50,427	2,335	183
38	0	0	2,532	22,952	2,349	27,833	21,748	49,581	2,288	183
39	0	0	2,532	22,512	2,349	27,393	21,748	49,141	2,236	183
40	0	0	2,532	22,952	2,349	27,833	21,748	49,581	2,288	183
41	0	0	35,849	22,512	2,349	59,910	53,959	113,869	5,486	183
42	0	0	2,532	22,952	2,349	27,833	21,748	49,581	2,288	183
43	0	0	7,785	22,512	2,349	32,566	38,222	70,788	2,753	183

(Continued)

(US$)

Insurance Fee	Social Insurance Cost	Miscellaneous Cost	Sub total	Consultancy Cost	Local Development Promotion Measure	Countermeasure for Environmental Impact	Sub total	Total	Grand total
73,578	37,741	10,000	508,573	1,350,625	56,180	2,809	1,409,615	1,918,188	7,297,120
19,342	51,447	10,000	222,310	450,209	56,180	2,809	509,198	731,508	2,682,884
12,265	56,671	10,000	173,665	450,209	56,180	2,809	509,198	682,863	2,206,453
13,812	59,014	10,000	182,673	450,209	56,180	2,809	509,198	691,871	2,382,160
16,339	62,346	10,000	212,651	450,209	56,180	2,809	509,198	721,849	2,595,311
15,478	63,876	10,000	189,649	450,209	56,180	2,809	508,198	698,847	2,588,491
12,078	61,783	10,000	179,321	450,209	56,180	2,809	509,198	688,519	2,318,659
8,714	58,884	10,000	132,817	450,209	56,180	2,809	509,198	642,015	1,956,246
11,578	33,818	10,000	137,319	0	0	0	0	137,319	1,330,104
2,125	32,868	10,000	63,293	0	0	0	0	63,293	613,076
9,970	26,843	10,000	76,288	0	0	0	0	76,288	1,009,779
3,387	18,783	10,000	55,710	0	0	0	0	55,710	532,401
4,299	18,324	10,000	62,830	0	0	0	0	62,830	608,213
2,710	18,324	10,000	50,148	0	0	0	0	50,148	482,379
5,469	18,324	10,000	55,362	0	0	0	0	55,362	671,538
6,313	18,324	10,000	65,316	0	0	0	0	65,316	737,747
5,590	3,665	10,000	55,934	0	0	0	0	55,934	478,888
432	3,665	10,000	16,532	0	0	0	0	16,532	95,661
948	3,665	10,000	28,426	0	0	0	0	28,426	133,927
776	3,665	10,000	19,166	0	0	0	0	19,166	121,195
2,116	3,665	10,000	23,882	0	0	0	0	23,882	214,456
1,834	3,665	10,000	18,049	0	0	0	0	18,049	137,256
578	3,665	10,000	17,638	0	0	0	0	17,638	105,971
453	3,665	10,000	16,692	0	0	0	0	16,692	97,215
1,485	3,665	10,000	24,546	0	0	0	0	24,546	173,882
2,271	3,665	10,000	21,546	0	0	0	0	21,546	223,223
657	3,665	10,000	19,888	0	0	0	0	19,888	113,194
594	3,665	10,000	18,512	0	0	0	0	18,512	108,417
648	1,833	10,000	15,388	0	0	0	0	15,388	83,203
354	1,833	10,000	14,658	0	0	0	0	14,658	63,382
1,212	1,833	10,000	17,426	0	0	0	0	17,426	123,417
354	1,833	10,000	14,658	0	0	0	0	14,658	63,382
719	1,833	10,000	17,452	0	0	0	0	17,452	98,561
354	1,833	10,000	14,658	0	0	0	0	14,658	63,382
347	1,833	10,000	14,598	0	0	0	0	14,598	62,881
892	1,833	10,000	16,363	0	0	0	0	16,363	108,988
379	1,833	10,000	14,738	0	0	0	0	14,738	65,157
367	1,833	10,000	14,663	0	0	0	0	14,663	64,244
366	1,833	10,000	14,612	0	0	0	0	14,612	63,753
367	1,833	10,000	14,663	0	0	0	0	14,663	64,244
1,338	1,833	10,000	18,832	0	0	0	0	18,832	132,701
367	1,833	10,000	14,663	0	0	0	0	14,663	64,244
685	1,833	10,000	15,454	0	0	0	0	15,454	86,242

New Plantation

(Rp)

Year	Pulp				Construction Timber					
					Thining			Felling		
	Am	Aa	Af	Total	Sm	Sb	Sub Total	Af	Pc	Sm
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
9	2,038,060,000	2,038,060,000	1,221,720,000	5,297,840,000	0	0	0	583,870,000	0	0
10	3,061,840,000	3,061,840,000	1,835,385,000	7,959,065,000	0	0	0	877,170,000	0	0
11	3,150,440,000	3,150,440,000	1,888,500,000	8,189,380,000	0	0	0	902,545,000	0	0
12	3,199,780,000	3,199,780,000	1,918,065,000	8,317,405,000	0	0	0	916,035,000	0	0
13	3,445,520,000	3,445,520,000	2,065,395,000	8,956,435,000	0	0	0	987,870,000	0	0
14	3,515,100,000	3,515,100,000	2,107,140,000	9,137,340,000	0	0	0	1,007,820,000	0	0
15	3,212,000,000	3,212,000,000	1,925,355,000	8,349,355,000	0	0	0	920,150,000	0	0
16	4,856,200,000	4,856,200,000	2,431,470,000	10,543,870,000	0	0	0	1,162,835,000	0	0
17	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	2,276,820,000	0
22	0	0	0	0	0	0	0	0	3,420,690,000	0
23	0	0	0	0	0	0	0	0	3,519,740,000	0
24	0	0	0	0	0	0	0	0	3,574,830,000	0
25	0	0	0	0	0	0	0	0	3,849,440,000	0
26	0	0	0	0	450,100,000	385,840,000	835,940,000	0	3,927,210,000	0
27	0	0	0	0	676,270,000	579,740,000	1,256,010,000	0	3,588,410,000	0
28	0	0	0	0	695,870,000	596,400,000	1,292,270,000	0	3,393,180,000	0
29	0	0	0	0	706,720,000	605,710,000	1,312,430,000	0	0	0
30	0	0	0	0	761,840,000	652,260,000	1,413,300,000	0	0	0
31	0	0	0	0	776,440,000	665,420,000	1,441,860,000	0	0	0
32	0	0	0	0	709,450,000	608,160,000	1,317,610,000	0	0	0
33	0	0	0	0	670,310,000	574,980,000	1,245,790,000	0	0	0
34	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	2,591,260,000
37	0	0	0	0	0	0	0	0	0	3,892,310,000
38	0	0	0	0	0	0	0	0	0	4,005,750,000
39	0	0	0	0	0	0	0	0	0	4,068,330,000
40	0	0	0	0	0	0	0	0	0	4,381,020,000
41	0	0	0	0	0	0	0	0	0	4,469,430,000
42	0	0	0	0	0	0	0	0	0	4,083,870,000
43	0	0	0	0	0	0	0	0	0	3,861,090,000

Am: Acacia mangium Aa: Acacia auriculiformis Af: Albizzia falcataria Pc: Peronema canescens Sm: Swietenia macrophylla Sb: Schima wallichii var, bancana

(Continued)

Existing Man-made Forest

Pulp

Sb	Sub total	Total		Grand total	(US$)
0	0	0	328,000,000	328,000,000	184,270
0	0	0	812,540,000	812,540,000	456,483
0	0	0	918,340,000	918,340,000	515,921
0	0	0	1,906,100,000	1,906,100,000	1,070,843
0	0	0	2,604,480,000	2,604,480,000	1,463,191
0	0	0	198,740,000	198,740,000	111,652
0	0	0	290,160,000	290,160,000	163,011
0	0	0	2,926,320,000	2,926,320,000	1,644,000
0	583,870,000	583,870,000	0	5,981,710,000	3,304,331
0	877,178,000	877,178,000	0	8,836,235,000	4,964,177
0	902,545,000	902,545,000	0	9,091,925,000	5,107,823
0	916,685,000	916,685,000	0	9,234,150,000	5,187,725
0	987,870,000	987,870,000	0	9,943,585,000	5,586,239
0	1,007,820,000	1,007,820,000	0	10,144,360,000	5,699,079
0	920,150,000	920,150,000	0	9,269,585,000	5,207,587
0	1,162,835,000	1,162,835,000	0	11,705,905,000	6,576,351
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	2,276,828,000	2,276,828,000	0	2,276,828,000	1,279,112
0	3,420,698,000	3,420,698,000	0	3,420,698,000	1,921,736
0	3,519,740,000	3,519,740,000	0	3,519,740,000	1,977,382
0	3,574,838,000	3,574,838,000	0	3,574,838,000	2,008,331
0	3,849,448,000	3,849,448,000	0	3,849,448,000	2,162,607
0	3,927,218,000	4,763,158,000	0	4,763,158,000	2,675,927
0	3,588,418,000	4,844,428,000	0	4,844,428,000	2,721,584
0	9,393,188,000	4,685,458,000	0	4,685,458,000	2,632,275
0	0	1,312,438,000	0	1,312,438,000	737,328
0	0	1,413,388,000	0	1,413,388,000	793,989
0	0	1,441,868,000	0	1,441,868,000	810,034
0	0	1,317,618,000	0	1,317,618,000	740,238
0	0	1,245,798,000	0	1,245,798,000	699,882
0	0	0	0	0	0
0	0	0	0	0	0
2,221,248,000	4,812,588,000	4,812,588,000	0	4,812,588,000	2,703,652
3,337,118,000	7,230,828,000	7,230,828,000	0	7,230,828,000	4,061,889
3,433,298,000	7,439,848,000	7,439,848,000	0	7,439,848,000	4,179,236
3,486,988,000	7,555,318,000	7,555,318,000	0	7,555,318,000	4,244,556
3,754,668,000	8,135,688,000	8,135,688,000	0	8,135,688,000	4,570,607
3,838,758,000	8,318,188,000	8,318,188,000	0	8,318,188,000	4,673,022
3,598,778,000	7,798,148,000	7,798,148,000	0	7,798,148,000	4,381,034
3,389,958,000	7,171,648,000	7,171,648,000	0	7,171,648,000	4,029,011

III-4 CASH FLOW FOR FINANCIAL ANALYSIS

Year	Cost	Benefit	Balance (US$)
1	7,297,120	184,270	-7,112,850
2	2,682,884	456,483	-2,226,401
3	2,226,453	515,921	-1,710,532
4	2,382,168	1,070,843	-1,231,317
5	2,595,311	1,463,191	-1,132,120
6	2,588,491	111,652	-2,476,839
7	2,310,659	163,811	-2,147,648
8	1,956,246	1,644,000	-312,246
9	1,338,184	3,304,332	1,974,228
10	613,676	4,964,177	4,350,501
11	1,809,779	5,107,823	4,698,044
12	532,481	5,187,725	4,655,324
13	600,213	5,586,239	4,986,026
14	482,379	5,699,079	5,216,700
15	671,538	5,207,587	4,536,049
16	737,747	6,576,351	5,838,604
17	478,880	0	-478,880
18	95,661	0	-95,661
19	133,927	0	-133,927
20	121,195	0	-121,195
21	214,455	1,279,112	1,064,657
22	137,256	1,921,736	1,784,480
23	105,971	1,977,382	1,871,411
24	97,215	2,008,331	1,911,116
25	173,882	2,162,607	1,988,725
26	223,223	2,675,927	2,452,704
27	113,194	2,721,584	2,608,390
28	188,417	2,632,275	2,523,858
29	83,283	737,320	654,117
30	63,382	793,989	730,607
31	123,417	810,034	686,617
32	63,382	740,230	676,848
33	98,561	699,882	609,321
34	63,382	0	-63,382
35	62,891	0	-62,891
36	188,988	2,703,652	2,602,664
37	65,157	4,061,809	3,996,652
38	64,244	4,179,236	4,114,992
39	63,753	4,244,556	4,180,803
40	64,244	4,578,607	4,586,363
41	132,701	4,663,022	4,530,321
42	-64,244	4,261,034	4,196,790
43	86,242	4,029,011	3,942,769
		FIRR=	9.45%

Labour (L/C Rpl,000, F/C US$)

			SHR 2/3		(US$ Conversion)	
Year	L/C	F/C	L/C	F/C	L/C	F/C
1	435,394	0	290,263	0	163,069	0
2	679,364	0	452,909	0	254,443	0
3	772,352	0	514,901	0	289,278	0
4	814,847	0	542,698	0	304,887	0
5	873,360	0	582,240	0	327,101	0
6	900,600	0	600,400	0	337,303	0
7	861,918	0	574,612	0	322,816	0
8	811,730	0	541,153	0	304,019	0
9	351,318	0	234,212	0	131,588	0
10	334,254	0	222,836	0	125,189	0
11	128,372	0	80,248	0	45,083	0
12	97,941	0	65,294	0	36,682	0
13	89,760	0	59,840	0	33,618	0
14	89,760	0	59,840	0	33,618	0
15	89,760	0	59,840	0	33,618	0
16	89,760	0	59,840	0	33,618	0
17	17,952	0	11,968	0	6,724	0
18	17,952	0	11,968	0	6,724	0
19	17,952	0	11,968	0	6,724	0
20	17,952	0	11,968	0	6,724	0
21	17,952	0	11,968	0	6,724	0
22	17,952	0	11,968	0	6,724	0
23	17,952	0	11,968	0	6,724	0
24	17,952	0	11,968	0	6,724	0
25	17,952	0	11,968	0	6,724	0
26	17,952	0	11,968	0	6,724	0
27	17,952	0	11,968	0	6,724	0
28	17,952	0	11,968	0	6,724	0
29	8,976	0	5,984	0	3,362	0
30	8,976	0	5,984	0	3,362	0
31	8,976	0	5,984	0	3,362	0
32	8,976	0	5,984	0	3,362	0
33	8,976	0	5,984	0	3,362	0
34	8,976	0	5,984	0	3,362	0
35	8,976	0	5,984	0	3,362	0
36	8,976	0	5,984	0	3,362	0
37	8,976	0	5,984	0	3,362	0
38	8,976	0	5,984	0	3,362	0
39	8,976	0	5,984	0	3,362	0
40	8,976	0	5,984	0	3,362	0
41	8,976	0	5,984	0	3,362	0
42	8,976	0	5,984	0	3,362	0
43	8,976	0	5,984	0	3,362	0

(Rp)

Year	Pulp	Construction Timber														
		Thining						Felling								
	Am	Aa	Af	Total	Sm	Sb	Sub Total	Af	Pc	Sm	Sb	Sub total	Total	Grand total	(US$)	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	2.588.336	2.588.336	1.588.236	6.764.908	0	0	0	1.890.071	0	0	0	0	1.890.071	1.890.071	8.654.979	4.862.348
10	3.888.537	3.888.537	2.386.081	10.163.875	0	0	0	2.839.525	0	0	0	0	2.839.525	2.839.525	13.002.600	7.304.831
11	4.001.858	4.001.858	2.455.850	10.457.168	0	0	0	2.921.667	0	0	0	0	2.921.667	2.921.667	13.378.835	7.516.198
12	4.863.618	4.863.619	2.493.485	10.620.723	0	0	0	2.967.448	0	0	0	0	2.967.448	2.967.448	13.588.163	7.633.799
13	4.375.818	4.375.818	2.685.814	11.436.634	0	0	0	3.195.287	0	0	0	0	3.195.287	3.195.287	14.631.921	8.220.188
14	4.464.177	4.464.177	2.739.282	11.667.636	0	0	0	3.259.808	0	0	0	0	3.259.808	3.259.808	14.927.584	8.386.238
15	4.879.248	4.879.248	2.582.962	10.661.442	0	0	0	2.978.657	0	0	0	0	2.978.657	2.978.657	13.640.899	7.662.977
16	5.151.374	5.151.374	3.168.911	13.463.659	0	0	0	3.761.673	0	0	0	0	3.761.673	3.761.673	17.225.332	9.677.153
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	4.228.388	0	0	4.228.388	4.228.388	4.228.388	2.375.494	
22	0	0	0	0	0	0	0	0	6.352.718	0	0	6.352.718	6.352.718	6.352.718	3.568.938	
23	0	0	0	0	0	0	0	0	6.536.668	0	0	6.536.668	6.536.668	6.536.668	3.672.281	
24	0	0	0	0	0	0	0	0	6.638.978	0	0	6.638.978	6.638.978	6.638.978	3.729.758	
25	0	0	0	0	0	0	0	0	7.148.968	0	0	7.148.968	7.148.968	7.148.968	4.016.278	
26	0	0	0	0	835.980	716.568	1.552.468	0	7.293.398	0	0	7.293.398	8.129.298	8.129.298	4.567.817	
27	0	0	0	0	1.255.938	1.076.688	2.332.598	0	6.664.198	0	0	6.664.198	7.928.128	7.928.128	4.449.586	
28	0	0	0	0	1.292.338	1.107.688	2.398.938	0	6.301.628	0	0	6.301.628	7.593.958	7.593.958	4.266.264	
29	0	0	0	0	1.312.488	1.124.898	2.437.378	0	0	0	0	0	1.312.488	1.312.488	737.348	
30	0	0	0	0	1.413.368	1.211.348	2.624.708	0	0	0	0	0	1.413.368	1.413.368	794.022	
31	0	0	0	0	1.441.968	1.235.788	2.677.748	0	0	0	0	0	1.441.968	1.441.968	810.096	
32	0	0	0	0	1.317.558	1.129.448	2.446.998	0	0	0	0	0	1.317.558	1.317.558	740.197	
33	0	0	0	0	1.245.798	1.067.828	2.313.618	0	0	0	0	0	1.245.798	1.245.798	699.882	
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
36	0	0	0	0	0	0	0	0	4.812.348	4.125.168	8.937.508	8.937.508	8.937.508	5.021.067		
37	0	0	0	0	0	0	0	0	7.229.698	6.197.488	13.427.188	13.427.188	13.427.188	7.543.368		
38	0	0	0	0	0	0	0	0	7.439.258	6.376.118	13.815.368	13.815.368	13.815.368	7.761.438		
39	0	0	0	0	0	0	0	0	7.555.478	6.475.828	14.031.298	14.031.298	14.031.298	7.882.747		
40	0	0	0	0	0	0	0	0	8.136.188	6.972.948	15.109.128	15.109.128	15.109.128	8.488.278		
41	0	0	0	0	0	0	0	0	8.300.378	7.114.258	15.414.628	15.414.628	15.414.628	8.659.899		
42	0	0	0	0	0	0	0	0	7.584.338	6.501.438	14.085.768	14.085.768	14.085.768	7.913.348		
43	0	0	0	0	0	0	0	0	7.171.718	6.147.058	13.318.768	13.318.768	13.318.768	7.482.449		

Am: Acacia mangium Aa: Acacia auriculiformis Af: Albizzia falcataria Pc: Peronema canescens Sm: Swietenia macrophylla Sb: Schima wallichii var,bancana

(UNIT: M3, Y, 1000)

	GROUP 1		GROUP 2		GROUP 3		TOTAL	
	VOLUME	INCOME	VOLUME	INCOME	VOLUME	INCOME	VOLUME	INCOME
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	45.748	228.740	0	0	0	0	45.748	228.740
5	68.728	343.640	0	0	0	0	68.728	343.640
6	70.717	353.585	0	0	0	0	70.717	353.585
7	71.823	359.115	0	0	0	0	71.823	359.115
8	77.341	386.705	0	0	0	0	77.341	386.705
9	78.983	394.515	0	0	0	0	78.983	394.515
10	72.098	360.490	5.924	29.620	0	0	78.022	390.110
11	68.174	340.870	8.900	44.500	0	0	77.074	385.370
12	0	0	9.158	45.790	0	0	9.158	45.790
13	0	0	9.301	46.505	0	0	9.301	46.505
14	0	0	10.016	50.080	0	0	10.016	50.080
15	0	0	10.218	51.090	0	0	10.218	51.090
16	0	0	9.337	46.685	8.935	44.675	18.272	91.360
17	0	0	8.829	44.145	8.193	45.965	18.022	90.110
18	0	0	0	0	9.337	46.685	9.337	46.685
19	0	0	0	0	10.054	50.270	10.054	50.270
20	0	0	0	0	10.257	51.285	10.257	51.285
21	0	0	0	0	9.373	46.865	9.373	46.865
22	0	0	0	0	8.863	44.315	8.863	44.315
23	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0

III-8 CASH FLOW FOR ECONOMIC ANALYSIS

Year	Cost	Benefit	Balance (US$)
1	7,082,777	184,270	-6,898,507
2	2,407,352	456,483	-1,950,869
3	1,933,508	515,921	-1,417,587
4	2,014,979	1,070,843	-944,136
5	2,297,022	1,591,697	-705,325
6	2,231,065	304,708	-1,926,357
7	1,978,761	361,654	-1,617,107
8	1,669,499	1,845,750	176,251
9	1,131,586	4,575,389	3,443,803
10	418,272	6,766,491	6,348,219
11	854,429	6,953,394	6,098,965
12	381,251	7,056,095	6,674,844
13	458,594	7,398,696	6,940,102
14	332,760	7,539,878	7,207,118
15	521,919	6,893,874	6,371,955
16	588,129	8,715,770	8,127,641
17	448,957	51,326	-397,631
18	65,737	50,624	-15,113
19	184,803	27,772	-76,231
20	91,271	28,242	-63,029
21	184,532	2,013,264	1,828,732
22	107,332	3,007,765	2,900,433
23	76,047	3,092,663	3,016,616
24	67,291	3,115,783	3,048,492
25	143,958	3,355,130	3,211,172
26	193,380	3,881,683	3,688,303
27	83,271	3,816,915	3,733,644
28	78,494	3,666,732	3,588,238
29	68,241	720,333	652,092
30	48,428	775,699	727,279
31	108,456	791,396	682,940
32	48,428	723,115	674,695
33	75,599	683,731	608,132
34	48,428	0	-48,428
35	47,929	0	-47,929
36	86,827	4,905,197	4,819,170
37	50,195	7,369,282	7,319,087
38	49,282	7,582,328	7,533,046
39	48,791	7,700,838	7,652,047
40	49,282	8,292,387	8,243,105
41	117,740	8,460,055	8,342,315
42	49,282	7,730,733	7,681,451
43	71,280	7,309,778	7,238,498
		EIRR=	14.31%