APPENDIX G

CONSTRUCTION SCHEDULE AND COST ESTIMATE

APPENDIX G CONSTRUCTION SCHEDULE AND COST ESTIMATE

Table of Contents

APPENDIX G CONSTRUCTION SCHEDULE AND COST ESTIMATE

G.1 Construction Cost Estimate

Major conditions applied for the cost estimate are summarized hereunder.

a) Construction cost will cover preparatory works, main woks, land acquisition cost, administration expenses, engineering service cost and contingencies.

b) Cost of main works will cover the expenses for labor, materials, construction equipment and the contractor's indirect cost (including overhead expenses, profit, etc.).

- Labor cost is estimated on the basis of eight (8) working hours per day.
- Most construction materials are to be supplied from local markets. The imported material cost is estimated on the basis of C.I.F. prices and inland transportation cost.
- Construction equipment and plant will be owned by a contractor. The foreign currency portion includes the costs of depreciation, spare parts and consumables for equipment, while the local component includes the costs of mechanics and labors.

c) All required land and right of way should be acquired by MIST.

d) Prices are based on labor, materials and equipment prices as of June 1992. The exchange rate applied in the estimate is US 1.0 Dollar = Rs. 42.2 = J. Yen 129 (Refer to Table G-3).

Additionally, it should be noted that the cost has been estimated on the basis of the assumption as enumerated hereunder.

a) Land Acquisition: The cost for land acquisition is estimated to be Rs.20,000,000 for Atherfield estate, Rs.10,000,000 for Martin estate, and Rs. 37,300,000 for Katana estate (Refer to Table G-4).

b) Administration Expenses: Administration expenses for project management and supervision of implementation is estimated in proportion to the direct construction cost. About 3 % of the total direct construction cost is assumed for this purpose.

c) Engineering Service Expense: Engineering service is estimated in proportion to the direct construction cost to cover the engineering works such as detailed design and construction supervision. Engineering service is estimated at about 8 % of total direct construction cost.

d) Taxation: Taxes (business turnover tax, custom duty, income tax, corporation tax, surcharge, wealth tax and exercise tax) are distributed to the unit price or lump sum of each work item of the direct construction cost.

e) Contingency: Physical contingency is estimated at 10 % of the direct construction cost, land acquisition, administration expenses and engineering service expenses. Price contingency is estimated on the basis of price escalation at the rate of 5 % per annum for both foreign and local portion.

Based on the conditions as explained above, the construction cost of each industrial estate has been estimated as shown in Table G-1 and as summarized hereunder.

(Rs. 10^6)

Description	Atherfield	Martin (I)	Martin (II)	Sirigamp.	Ekala	Katana
1) Preparatory works	7.4	4.7	5.6	13.9	7.7	5.6
2) Main works	652.2	369.9	454.2	431.6	1,019.3	281.2
3) Land compensation	20.0	3.4	6.6	-		37.3
4) Administration exp.	19.8	11.2	13.8	13.4	30.8	8.6
5) Engineering services	52.8	30.0	36.8	35.6	82.2	22.9
6) Physical contingency	75.2	41.9	51.7	49.5	114.0	35.6
7) Price Contingency	135.6	65.5	258.3	881.6	225.7	60.1
Total	963.0	526.6	827.0	1,425.6	1479.7	451.3

The annual disbursement of the estimated cost is shown in Table G-2.

G.2 Operation and Maintenance Cost

Prior to the estimate of operation and maintenance cost of facilities to be installed in the estates, duties for operation and maintenance have been allocated to the industrial estate

company which will manage the estates and to the agencies and entities to operate such facilities, as shown in Table G-5.

The annual operation and maintenance costs include salaries of project administration staff, materials and labour costs for operation and maintenance of project facilities, costs for operation and maintenance of O&M equipment, and running costs of project facilities. The annual operation and maintenance costs are estimated as shown in Table G-6.

G.3 Construction Schedule

Working conditions and construction work schedule have been elaborated in the following manner:

1) Working Conditions

The working conditions for the construction planning have been assumed as follows:

a) Workable day and hour: Estimate of workable days and hours has a close relation to labor regulations, weather, handling of materials, etc. As a result of survey and study on such conditions, one shift work for eight (8) working hours per day has been applied.

b) Weather conditions: Working days are estimated by deducting the Sundays, national holidays and suspension days caused by rainfall from the yearly calendar days. A suspension day means the time when the work is stopped due to rains. The criteria applied in estimating the suspension day is tabulated hereunder.

Suspension days for works

Amount of rainfall (mm)	Work -Suspended day	
	Earth works	Concrete works
0 ~ 5	0	0
6 ~ 10	0.5	0
11 ~ 20	1	0
21 ~ 30	1	0.5
Over 30	2	1

c) Swell factor: The volume of soil will be changed when it is moved, hulled and compacted. It is classified into three conditions, i.e., natural, loose and compacted. The soil in natural condition is defined as soil in its original position. The soil in the loose condition is defined as soil after its excavation and hauling. The compacted soil is defined as soil which has been subject to compaction.

d) Hourly production rate of construction equipment: Hourly production rates of major equipment are estimated on the basis of conventional construction methods and formula, considering the site conditions.

2) Construction Work Schedule

a) Pre-construction program: Pre-construction program consists of finance arrangements, selection of consultant, selection of contractors and land acquisition. After acquiring a finance agreement between the Government and a financial agency, it is scheduled that the selection of consultant will be concluded within a period of six (6) months.

b) Mobilization: Mobilization and temporary works will be completed within three (3) months after commencement of works.

c) Construction time schedule: Construction of each industrial estate is scheduled to be completed in eighteen (18) months, as shown in Figure G-1

Table G-1 SUMMARY OF CONSTRUCTION COST (1/6)
(Atherfield Estate)

Item No.	Description of Works	Foreign Currency Portion (J. Yen 1,000)	Local Currency Portion (Rs.1,000)	Total Equivalent (Rs.1,000)	Total Equivalent (J.Yen 1,000)
I.	Preparatory Works	16,950	1,816	7,359	22,501
II.	Main Works				
II.1	Road Works	263,900	37,008	123,303	377,029
II.2	Earthworks	507,000	28,650	194,439	594,579
II.3	Drainage System	12,902	1,866	6,085	18,606
II.4	Water Supply System	324,696	36,685	142,861	436,837
II.5	Sewerage System	161,138	19,590	72,282	221,022
II.6	Solid Waste Disposal	14,275	2,128	6,796	20,780
II.7	Power Supply System	119,542	11,668	50,758	155,210
II.8	Administration Building	41,400	3,780	17,318	52,955
II.9	Residential Area	43,984	5,345	19,728	60,323
II.10	Other Facilities	35,037	7,212	18,669	57,083
	Sub total of Item I + II	1,540,824	155,748	659,598	2,016,926
III.	Land Compensation	0	20,000	20,000	61,137
IV.	Administration Expenses	0	19,788	19,788	60,489
V.	Engineering Services Expenses	123,266	12,460	52,768	161,354
	Sub total of Item I to V	1,664,090	207,996	752,154	2,299,906
VI.	Physical Contingency	166,409	20,800	75,215	229,991
	Sub total of Item I to VI	1,830,499	228,795	827,369	2,529,897
VII.	Price Contingency	304,527	36,018	135,598	414,629
	GRAND TOTAL	2,135,026	264,813	962,967	2,944,526

Note; Administration Expense; 3% of (I + II)
Engineering Services Expense; 8% of (I + II)
Physical Contingency; 10% of (I to V)
Price Contingency; 5%/Annum

Table G-1 SUMMARY OF CONSTRUCTION COST (2/6)
(Martin Estate) Phase (I)

Item No.	Description of Works	Foreign Currency Portion (J. Yen 1,000)	Local Currency Portion (Rs.1,000)	Total Equivalent (Rs.1,000)	Total Equivalent (J.Yen 1,000)
I.	Preparatory Works	10,700	1,160	4,659	14,246
II.	Main Works				
II.1	Road Works	93,825	13,185	43,866	134,130
II.2	Earthworks	153,765	10,465	60,746	185,755
II.3	Drainage System	76,187	15,415	40,328	123,309
II.4	Water Supply System	314,672	37,408	140,306	429,023
II.5	Sewerage System	17,495	1,974	7,695	23,529
II.6	Solid Waste Disposal	12,848	1,915	6,116	18,702
II.7	Power Supply System	136,538	13,907	58,555	179,050
II.8	Administration Building	19,320	1,764	8,082	24,712
II.9	Residential Area	0	0	0	0
II.10	Other Facilities	7,852	1,634	4,202	12,847
	Sub total of Item I + II	843,202	98,827	374,554	1,145,303
III.	Land Compensation		3,400	3,400	10,393
IV.	Administration Expenses		11,237	11,237	34,349
V.	Engineering Services Expenses	67,456	7,906	29,964	91,624
	Sub total of Item I to V	910,658	121,370	419,155	1,281,670
VI.	Physical Contingency	91,066	12,137	41,915	128,167
	Sub total of Item I to VI	1,001,724	133,507	461,070	1,409,837
VII.	Price Contingency	143,391	18,648	65,537	200,396
	GRAND TOTAL	1,145,115	152,155	526,607	1,610,233

Note; Administration Expense; 3% of (I + II)
Engineering Services Expense; 8% of (I + II)
Physical Contingency; 10% of (I to V)
Price Contingency; 5%/Annum

Table G-1 SUMMARY OF CONSTRUCTION COST (3/6)
(Martin Estate) Phase (II)

Item No.	Description of Works	Foreign Currency Portion (J. Yen 1,000)	Local Currency Portion (Rs.1,000)	Total Equivalent (Rs.1,000)	Total Equivalent (J.Yen 1,000)
I.	Preparatory Works	12,840	1,392	5,591	17,095
II.	Main Works				
II.1	Road Works	145,425	20,451	68,005	207,941
II.2	Earthworks	251,340	17,105	99,293	303,628
II.3	Drainage System	219,233	45,943	117,632	359,675
II.4	Water Supply System	79,142	6,463	32,342	98,899
II.5	Sewerage System	126,277	16,832	58,125	177,730
II.6	Solid Waste Disposal	22,840	3,404	10,873	33,246
II.7	Power Supply System	29,248	3,180	12,744	38,969
II.8	Administration Building	16,560	1,512	6,927	21,182
II.9	Residential Area	76,037	9,215	34,079	104,206
II.10	Other Facilities	26,837	5,452	14,228	43,503
	Sub total of Item I + II	1,005,779	130,949	459,839	1,406,073
III.	Land Compensation		6,600	6,600	20,175
IV.	Administration Expenses		13,795	13,795	42,170
V.	Engineering Services Expenses	80,462	10,476	36,787	112,486
	Sub total of Item I to VI	1,086,241	161,820	517,021	1,580,905
VII.	Physical Contingency	108,624	16,182	51,702	158,090
	Sub total of Item I to VI	1,194,865	178,002	568,723	1,738,995
VIII.	Price Contingency	536,980	79,173	258,305	779,002
	GRAND TOTAL	1,731,845	257,175	827,028	2,517,997

Note; Administration Expense; 3% of (I + II)
Engineering Services Expense; 8% of (I + II)
Physical Contingency; 10% of (I to V)
Price Contingency; 5%/Annum

Table G-1 SUMMARY OF CONSTRUCTION COST (4/6)
(Sirigampola Estate)

Item No.	Description of Works	Foreign Currency Portion (J. Yen 1,000)	Local Currency Portion (Rs.1,000)	Total Equivalent (Rs.1,000)	Total Equivalent (J.Yen 1,000)
I.	Preparatory Works	32,370	3,272	13,857	42,372
II.	Main Works				
II.1	Road Works	133,000	18,650	62,141	190,011
II.2	Earthworks	10,050	603	3,889	11,893
II.3	Drainage System	186,005	39,096	99,920	305,516
II.4	Water Supply System	259,492	25,070	109,924	336,128
II.5	Sewerage System	52,789	8,057	25,319	77,418
II.6	Solid Waste Disposal	8,565	1,277	4,078	12,469
II.7	Power Supply System	116,466	9,811	47,895	146,457
II.8	Administration Building	35,880	3,276	15,009	45,894
II.9	Residential Area	87,671	10,403	39,071	119,472
II.10	Other Facilities	46,139	9,346	24,433	74,709
	Sub total of Item I + II	968,427	128,861	445,537	1,362,339
III.	Land Compensation		0	0	0
IV.	Administration Expenses		13,366	13,366	40,858
V.	Engineering Services Expenses	77,474	10,309	35,643	108,987
	Sub total of Item I to V	1,045,901	152,536	494,546	1,512,184
VI.	Physical Contingency	104,590	15,254	49,455	151,218
	Sub total of Item I to VI	1,150,491	167,790	544,000	1,663,403
VII.	Price Contingency	1,866,179	271,357	881,598	2,695,683
	GRAND TOTAL	3,016,670	439,147	1,425,598	4,359,085

Note; Administration Expense; 3 % of (I + II) Physical Contingency; 10% of (I to V)
Engineering Services Expense; 8 % of (I + II) Price Contingency; 5%/Annum

Table G-1 SUMMARY OF CONSTRUCTION COST (5/6)
(Ekala Estate)

Item No.	Description of Works	Foreign Currency Portion (J. Yen 1,000)	Local Currency Portion (Rs.1,000)	Total Equivalent (Rs.1,000)	Total Equivalent (J.Yen 1,000)
I.	Preparatory Works	17,655	1,914	7,687	23,506
II.	Main Works				
II.1	Road Works	372,225	52,215	173,933	531,840
II.2	Earthworks	664,090	45,245	262,402	802,398
II.3	Drainage System	292,427	61,540	157,164	480,547
II.4	Water Supply System	299,418	30,738	128,648	393,380
II.5	Sewerage System	130,386	18,955	61,591	188,329
II.6	Solid Waste Disposal	27,165	4,045	12,928	39,530
II.7	Power Supply System	129,594	10,976	53,353	163,146
II.8	Administration Building	41,400	3,780	17,318	52,955
II.9	Residential Area	246,996	29,938	110,706	338,513
II.10	Other Facilities	77,999	15,754	41,260	126,157
	Sub total of Item I + II	2,299,355	275,100	1,026,989	3,140,300
III.	Land Compensation		0	0	0
IV.	Administration Expenses		30,810	30,810	94,181
V.	Engineering Services Expenses	183,948	22,008	82,159	251,224
	Sub total of Item I to V	2,483,303	327,918	1,139,958	3,485,706
VI.	Physical Contingency	248,330	32,792	113,996	348,571
	Sub total of Item I to VI	2,731,634	360,709	1,253,954	3,834,276
VII.	Price Contingency	493,646	64,325	225,747	690,279
	GRAND TOTAL	3,225,280	425,034	1,479,701	4,524,556

Note; Administration Expense; 3 % of (I + II)
Engineering Services Expense; 8 % of (I + II)
Physical Contingency; 10% of (I to VI)
Price Contingency; 5%/Annum

Table G-1 SUMMARY OF CONSTRUCTION COST (6/6)
(Katana Estate)

Item No.	Description of Works	Foreign Currency Portion (J. Yen 1,000)	Local Currency Portion (Rs.1,000)	Total Equivalent (Rs.1,000)	Total Equivalent (J.Yen 1,000)
I.	Preparatory Works	12,840	1,392	5,592	17,095
II.	Main Works				
II.1	Road Works	147,875	20,746	69,121	211,293
II.2	Earthworks	58,150	3,881	22,904	70,014
II.3	Drainage System	68,829	8,709	31,225	95,451
II.4	Water Supply System	149,635	14,575	63,525	194,189
II.5	Sewerage System	43,818	5,756	20,090	61,413
II.6	Solid Waste Disposal	9,750	1,536	4,726	14,445
II.7	Power Supply System	106,734	11,019	45,935	140,418
II.8	Administration Building	41,400	3,150	16,693	51,029
II.9	Residential Area	0	0	0	0
II.10	Other Facilities	12,946	2,697	6,932	21,190
	Sub total of Item I + II	651,977	73,461	286,743	876,538
III.	Land Compensation	0	37,347	37,347	114,165
IV.	Administration Expenses	0	8,602	8,602	26,295
V.	Engineering Services Expenses	52,158	5,876	22,939	70,120
	Sub total of Item I to V	704,135	125,286	355,631	1,087,118
VI.	Physical Contingency	70,414	12,529	35,563	108,712
	Sub total of Item I to VI	774,549	137,815	391,194	1,195,830
VII.	Price Contingency	129,261	17,848	60,132	183,820
	GRAND TOTAL	903,810	155,663	451,326	1,379,650

Note; Administration Expense; 3 % of (I + II)
Engineering Services Expense; 8 % of (I + II)
Physical Contingency; 10% of (I to V)
Price Contingency; 5%/Annum

Table G-2 DISBURSEMENT SCHEDULE (1/6)
(Atherfield Estate)

(Unit : 10^3)

Item No.	Description	Total			1993			1994			1995			1996		
		F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)
I.	Preparatory Works	16,950	1,816	7,359				16,950	1,816	7,359						
II.	Main Works															
II.1	Road Works	263,900	37,008	123,303				58,058	8,142	27,127	145,145	20,354	67,817	60,697	8,512	28,359
II.2	Earthworks	507,000	28,650	194,439				86,190	4,871	33,055	263,640	14,898	101,108	157,170	8,881	60,276
II.3	Drainage System	12,902	1,866	6,085							7,870	1,138	3,712	5,032	728	2,373
II.4	Water Supply System	324,696	36,685	142,860				55,198	6,236	24,286	168,842	19,076	74,287	100,656	11,373	44,287
II.5	Sewerage System	161,138	19,590	72,282				27,393	3,330	12,288	83,792	10,187	37,587	49,953	6,073	22,407
II.6	Solid Waste Disposal	14,275	2,128	6,795							7,138	1,064	3,398	7,137	1,064	3,397
II.7	Power Supply System	119,542	11,668	50,758							35,863	3,500	15,227	83,679	8,168	35,531
II.8	Administration Building	41,400	3,780	17,318							20,700	1,890	8,659	20,700	1,890	8,659
II.9	Residential Area	43,984	5,345	19,728							18,473	2,245	8,286	25,511	3,100	11,442
II.10	Other Facility	35,037	7,212	18,669							14,716	3,029	7,841	20,321	4,183	10,828
	Sub total of Item I + II	1,540,824	155,748	659,596	0	0	0	243,789	24,395	104,115	766,179	77,381	327,922	530,856	53,972	227,559
III.	Land Compensation		20,000	20,000				0	20,000	20,000						
IV.	Administration Expense		19,787	19,787	0	2,770	2,770	0	6,332	6,332	0	7,123	7,123	0	3,562	3,562
V.	Engineering Services Expense	123,265	12,459	52,766	17,257	1,744	7,387	39,445	3,987	16,885	44,375	4,485	18,996	22,188	2,243	9,498
	Sub total of Item I to V	1,664,089	207,994	752,149	17,257	4,514	10,157	283,234	54,714	147,332	810,554	88,989	354,041	553,044	59,777	240,619
VI.	Physical Contingency	166,408	20,799	75,215	1,726	451	1,016	28,323	5,471	14,733	81,055	8,899	35,404	55,304	5,978	24,062
	Sub total of Item I to VI	1,830,497	228,793	827,364	18,983	4,965	11,173	311,557	60,185	162,065	891,609	97,888	389,445	608,348	65,755	264,681
VII.	Price Contingency	304,527	36,018	135,599	949	248	558	31,935	6,169	16,612	140,540	15,430	61,387	131,103	14,171	57,042
	GRAND TOTAL	2,135,024	264,811	962,963	19,932	5,213	11,731	343,492	66,354	178,677	1,032,149	113,318	450,832	739,451	79,926	321,723

Table G-2 DISBURSEMENT SCHEDULE (2/6)
(Martin Estate) (Phase I)

(Unit : 10^3)

Item No.	Description	Total			1993			1994			1995		
		F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (R.S)
I.	Preparatory Works	10,700	1,160	4,659				10,700	1,160	4,659			
II.	Main Works												
II.1	Road Works	93,825	13,185	43,866				23,456	3,296	10,966	70,369	9,889	32,900
II.2	Earthworks	153,765	10,465	60,746				50,742	3,453	20,046	103,023	7,012	40,700
II.3	Drainage System	76,187	15,415	40,328				19,047	3,854	10,082	57,140	11,561	30,246
II.4	Water Supply System	314,672	37,408	140,306				78,668	9,352	35,076	236,004	28,056	105,230
II.5	Sewerage System	17,495	1,974	7,695				4,374	494	1,924	13,121	1,480	5,771
II.6	Solid Waste Disposal	12,848	1,915	6,116							12,848	1,915	6,116
II.7	Power Supply System	136,538	13,907	58,555							136,538	13,907	58,555
II.8	Administration Building	19,320	1,764	8,082				5,796	529	2,424	13,524	1,235	5,658
II.9	Other Facility	7,852	1,634	4,201				2,356	490	1,260	5,496	1,144	2,941
	Sub total of Item I + II	843,202	98,827	374,554	0	0	0	195,139	22,628	86,437	648,063	76,199	288,117
III.	Land Compensation		3,400	3,400	0	1,020	1,020	0	2,380	2,380			
IV.	Administration Expense		11,237	11,237	0	1,573	1,573	0	4,270	4,270	0	5,394	5,394
V.	Engineering Services Expense	67,456	7,906	29,964	9,444	1,107	4,195	25,633	3,004	11,386	32,379	3,795	14,383
	Sub total of Item I to V	910,658	121,370	419,155	9,444	3,700	6,788	220,772	32,282	104,473	680,442	85,388	307,894
VI.	Physical Contingency	91,066	12,137	41,916	944	370	679	22,077	3,228	10,447	68,045	8,539	30,790
	Sub total of Item I to VI	1,001,724	133,507	461,071	10,388	4,070	7,467	242,849	35,510	114,920	748,487	93,927	338,684
VII.	Price Contingency	143,391	18,648	65,537	519	203	373	24,892	3,640	11,780	117,980	14,805	53,384
	GRAND TOTAL	1,145,115	152,155	526,608	10,907	4,273	7,840	267,741	39,150	126,700	866,467	108,732	392,068

Table G-2 DISBURSEMENT SCHEDULE (3/6)
(Martin Estate) (Phase II)

(Unit : 10^3)

Item No.	Description	Total			1998			1999			2000		
		F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)
I.	Preparatory Works	12,840	1,392	5,591				12,840	1,392	5,591			
II.	Main Works												
II.1	Road Works	145,425	20,451	68,005				63,987	8,998	29,922	81,438	11,453	38,083
II.2	Earthworks	251,340	17,105	99,294				108,076	7,355	42,696	143,264	9,750	56,598
II.3	Drainage System	219,233	45,943	117,632				72,347	15,161	38,818	146,886	30,782	78,814
II.4	Water Supply System	79,142	6,463	32,342				26,117	2,133	10,673	53,025	4,330	21,669
II.5	Sewerage System	126,277	16,832	58,125				41,671	5,555	19,181	84,606	11,277	38,944
II.6	Solid Waste Disposal	22,840	3,404	10,873							22,840	3,404	10,873
II.7	Power Supply System	29,248	3,180	12,744							29,248	3,180	12,744
II.8	Administration Building	16,560	1,512	6,927				4,968	454	2,079	11,592	1,058	4,848
II.9	Residential Area	76,037	9,215	34,079				22,811	2,765	10,224	53,226	6,450	23,855
II.10	Other Facility	26,837	5,452	14,227				8,051	1,636	4,269	18,786	3,816	9,958
	Sub total of Item I + II	1,005,779	130,949	459,839	0	0	0	360,868	45,449	163,453	644,911	85,500	296,386
III.	Land Compensation		6,600	6,600	0	4,620	4,620	0	1,980	1,980			
IV.	Administration Expense		13,795	13,795	0	2,069	2,069	0	5,242	5,242	0	6,484	6,484
V.	Engineering Services Expense	80,462	10,476	36,787	21,725	2,829	9,933	29,771	3,876	13,611	28,966	3,771	13,243
	Sub total of Item I to V	1,086,241	161,820	517,021	21,725	9,518	16,622	390,639	56,547	184,286	673,877	95,755	316,113
VI.	Physical Contingency	108,624	16,182	51,702	2,173	952	1,662	39,064	5,655	18,429	67,387	9,575	31,611
	Sub total of Item I to VI	1,194,865	178,002	568,723	23,898	10,470	18,284	429,703	62,202	202,715	741,264	105,330	347,724
VII.	Price Contingency	536,980	79,173	258,305	8,128	3,561	6,219	174,932	25,322	82,525	353,920	50,290	169,561
	GRAND TOTAL	1,731,845	257,175	827,028	32,026	14,031	24,503	604,635	87,524	285,240	1,095,184	155,620	517,285

Table G-2 DISBURSEMENT SCHEDULE (4/6)
(Sirigampola Estate)

(Unit : 10^3)

Item No.	Description	Total			2010			2011			2012		
		F.C (J.Y)	L.C (R.S)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)
I.	Preparatory Works	32,370	3,272	13,857				32,370	3,272	13,857			
II.	Main Works												
II.1	Road Works	133,000	18,650	62,141				43,890	6,155	20,507	89,110	12,495	41,634
II.2	Earthworks	10,050	603	3,889				7,035	422	2,722	3,015	181	1,167
II.3	Drainage System	186,005	39,096	99,919				46,501	9,774	24,980	139,504	29,322	74,939
II.4	Water Supply System	259,492	25,070	109,924				64,873	6,268	27,481	194,619	18,802	82,443
II.5	Sewerage System	52,789	8,057	25,320				13,197	2,014	6,329	39,592	6,043	18,991
II.6	Solid Waste Disposal	8,565	1,277	4,077							8,565	1,277	4,077
II.7	Power Supply System	116,466	9,811	47,895							116,466	9,811	47,895
II.8	Administration Building	35,880	3,276	15,009							35,880	3,276	15,009
II.9	Residential Area	87,671	10,403	39,071							87,671	10,403	39,071
II.10	Other Facility	46,139	9,346	24,433							46,139	9,346	24,433
	Sub total of Item I + II	968,427	128,861	445,535	0	0	0	207,866	27,905	95,876	760,561	100,956	349,659
III.	Land Compensation		0	0	0	0	0	0	0	0			
IV.	Administration Expense		13,366	13,366	0	1,871	1,871	0	5,079	5,079	0	6,416	6,416
V.	Engineering Services Expense	77,474	10,309	35,643	10,846	1,443	4,990	29,440	3,917	13,544	37,188	4,949	17,109
	Sub total of Item I to V	1,045,901	152,536	494,544	10,846	3,314	6,861	237,306	36,901	114,499	797,749	112,321	373,184
VI.	Physical Contingency	104,590	15,254	49,455	1,085	331	686	23,731	3,690	11,450	79,774	11,233	37,319
	Sub total of Item I to VI	1,150,491	167,790	543,999	11,931	3,645	7,547	261,037	40,591	125,949	877,523	123,554	410,503
VII.	Price Contingency	1,866,179	271,357	881,598	16,783	5,106	10,594	398,590	61,980	192,319	1,450,806	204,271	678,685
	GRAND TOTAL	3,016,670	439,147	1,425,597	28,714	8,751	18,141	659,627	102,571	318,268	2,328,329	327,825	1,089,188

Table G-2 DISBURSEMENT SCHEDULE (5/6)
(Ekala Estate)

(Unit : 10^3)

Item No.	Description	Total			1993			1994			1995			1996		
		F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)
I.	Preparatory Works	17,655	1,914	7,687				17,655	1,914	7,687						
II.	Main Works															
II.1	Road Works	372,225	52,215	173,933				59,556	8,354	27,829	178,668	25,063	83,488	134,001	18,798	62,616
II.2	Earthworks	664,090	45,245	262,403				99,614	6,787	39,361	292,200	19,908	115,457	272,276	18,550	107,585
II.3	Drainage System	292,427	61,540	157,164							152,062	32,001	81,725	140,365	29,539	75,439
II.4	Water Supply System	299,418	30,738	128,648							155,697	15,984	66,897	143,721	14,754	61,751
II.5	Sewerage System	130,386	18,955	61,591							67,801	9,857	32,028	62,585	9,098	29,563
II.6	Solid Waste Disposal	27,165	4,045	12,928										27,165	4,045	12,928
II.7	Power Supply System	129,594	10,976	53,353							10,368	878	4,268	119,226	10,098	49,085
II.8	Administration Building	41,400	3,780	17,318							8,280	756	3,464	33,120	3,024	13,854
II.9	Residential Area	246,996	29,938	110,706							49,399	5,988	22,141	197,597	23,950	88,565
II.10	Other Facility	77,999	15,754	41,259										77,999	15,754	41,259
	Sub total of Item I + II	2,299,355	275,100	1,026,990	0	0	0	176,825	17,055	74,877	914,475	110,435	409,468	1,208,055	147,610	542,645
III.	Land Compensation		0	0	0	0	0	0	0	0						
IV.	Administration Expense		30,810	30,810	0	4,313	4,313	0	8,935	8,935	0	9,243	9,243	0	8,319	8,319
V.	Engineering Services Expense	183,948	22,008	82,159	25,753	3,081	11,502	53,345	6,382	23,826	55,184	6,602	24,647	49,666	5,943	22,184
	Sub total of Item I to V	2,483,303	327,918	1,139,959	25,753	7,394	15,815	230,170	32,372	107,638	969,659	126,280	443,358	1,257,721	161,872	573,148
VI.	Physical Contingency	248,330	32,792	113,996	2,575	739	1,582	23,017	3,237	10,764	96,966	12,628	44,336	125,772	16,188	57,314
	Sub total of Item I to VI	2,731,633	360,710	1,253,955	28,328	8,133	17,397	253,187	35,609	118,402	1,066,625	138,908	487,694	1,383,493	178,060	630,462
VII.	Price Contingency	493,646	64,325	225,747	1,416	407	870	25,952	3,650	12,136	168,127	21,895	76,873	298,151	38,373	135,868
	GRAND TOTAL	3,225,279	425,035	1,479,702	29,744	8,540	18,267	279,139	39,259	130,538	1,234,752	160,803	564,567	1,681,644	216,433	766,330

Table G-2 DISBURSEMENT SCHEDULE (6/6)
(Katana Estate)

(Unit : 10)

Item No.	Description	Total			1993			1994			1995			1996		
		F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)	F.C (J.Y)	L.C (Rs.)	Total Equiv. (Rs.)
I.	Preparatory Works	12,840	1,392	5,592				12,840	1,392	5,592						
II.	Main Works															
II.1	Road Works	147,875	20,746	69,121				32,533	4,564	15,207	81,331	11,410	38,016	34,011	4,772	15,898
II.2	Earthworks	58,150	3,881	22,904				9,886	660	3,894	30,238	2,018	11,910	18,026	1,203	7,100
II.3	Drainage System	68,829	8,709	31,225							41,297	5,226	18,735	27,532	3,483	12,490
II.4	Water Supply System	149,635	14,575	63,526				25,438	2,478	10,799	77,810	7,579	33,033	46,387	4,518	19,694
II.5	Sewerage System	43,818	5,756	20,090				7,449	979	3,415	22,785	2,993	10,447	13,584	1,784	6,228
II.6	Solid Waste Disposal	9,750	1,536	4,726							4,875	768	2,363	4,875	768	2,363
II.7	Power Supply System	106,734	11,019	45,935							43,507	4,628	18,861	63,227	6,391	27,074
II.8	Administration Building	41,400	3,150	16,693							20,700	1,575	8,347	20,700	1,575	8,346
II.9	Residential Area	0	0	0							0	0	0	0	0	0
II.10	Other Facility	12,946	2,697	6,932							6,473	1,348	3,466	6,473	1,349	3,466
	Sub total of Item I + II	651,977	73,461	286,744	0	0	0	88,146	10,073	38,907	329,016	37,545	145,178	234,815	25,843	102,659
III.	Land Compensation		37,347	37,347		37,347	37,347	0	0	0						
IV.	Administration Expense		8,602	8,602	0	1,204	1,204	0	2,753	2,753	0	3,097	3,097	0	1,548	1,548
V.	Engineering Services Expense	52,158	5,876	22,939	7,052	806	3,113	26,321	3,004	11,614	18,785	2,067	8,213	0	0	0
	Sub total of Item I to V	704,135	125,286	355,632	7,052	39,357	41,664	114,467	15,830	53,274	347,801	42,709	156,488	234,815	27,391	104,207
VI.	Physical Contingency	70,414	12,529	35,563	705	3,936	4,166	11,447	1,583	5,327	34,780	4,271	15,649	23,482	2,739	10,421
	Sub total of Item I to VI	774,549	137,815	391,195	7,757	43,293	45,830	125,914	17,413	58,601	382,581	46,980	172,137	258,297	30,130	114,628
VII.	Price Contingency	129,261	17,848	60,132	388	2,165	2,292	12,906	1,785	6,005	60,304	7,405	27,133	55,663	6,493	24,702
	GRAND TOTAL	903,810	155,663	451,327	8,145	45,458	48,122	138,820	19,198	64,606	442,885	54,385	199,270	313,960	36,623	139,330

Table G-3 DATA FOR EXAMINATION OF CURRENCY CONVERSION RATES

No.	Month/Year	Summary of Exchange Rs./100 Yen	Currency Conversion Rs./1US$	J. Yen/1US$
1.	July 1991	29.49	40.61	137.8
2.	August 1991	30.46	41.78	137.1
3.	September 1991	31.53	41.90	132.9
4.	October 1991	32.15	42.09	130.9
5.	November 1991	32.54	42.34	130.1
6.	December 1991	32.91	41.24	125.3
7.	January 1992	33.97	42.77	125.9
8.	February 1992	31.86	41.20	129.3
9.	March 1992	32.26	42.88	132.9
10.	April 1992	32.25	43.05	133.5
11.	May 1992	33.44	43.17	129.1
12.	June 1992	32.18	40.38	125.5
	Average	32.09	41.95	130.9
Currency conversion rates to be applied for the cost estimate		32.7	42.2	129

Table G-4 LAND ACQUISITION & COMPENSATION COST

Description	Quantity (ha)	Quantity (Nos)	Unit cost (Rs.)	Amount (Rs.)
I. Martin Estate				
Paddy field	2.1	-		0
Tea field	-	-		
Coconut field	135.8	-		0
Rubber field	-	-		
Oil palm field	-	-		
Forest	-	-		
Others field	-	-		
Wood house	-	-		
Brick house	-	23		0
Others house	-	12		0
Sub total	137.9	35		0
Compensation cost	L.S	L.S		10,000,000
II. Sirigampola Estate				
Paddy field	4.9	-	12,200	59,780
Tea field	-	-		
Coconut field	185.4	-	60,700	11,253,780
Rubber field	-	-		
Oil palm field	-	-		
Forest	45.3	-	20,300	919,590
Others field, Tanks	3.6	-	6,100	21,960
-do - Roads	0.8	-	12,200	9,760
Wood house	-	-		
Brick house	-	17	70,000	1,190,000
Others house	-	-		
Sub total	240.0	17		13,454,870
III. Atherfield Estate				
Paddy field	-	-		
Tea field	11.0	-	84,200	926,200
Coconut field	3.9	-	67,600	263,640
Rubber field	120.1	-	67,600	8,118,760
Oil palm field	-	-		
Forest	-	-		
Others field	-	-		
Wood house	-	-		
Brick house	-	8	40,000	320,000
Others house	-	12	30,000	360,000
Sub total	135.0	20		9,988,600
Compensation cost	L.S	L.S		20,000,000
IV. Katana Estate				
Compensation cost	L.S	L.S		37,347,000

Table G-5 ALLOTMENT OF CONSTRUCTION FACILITIES

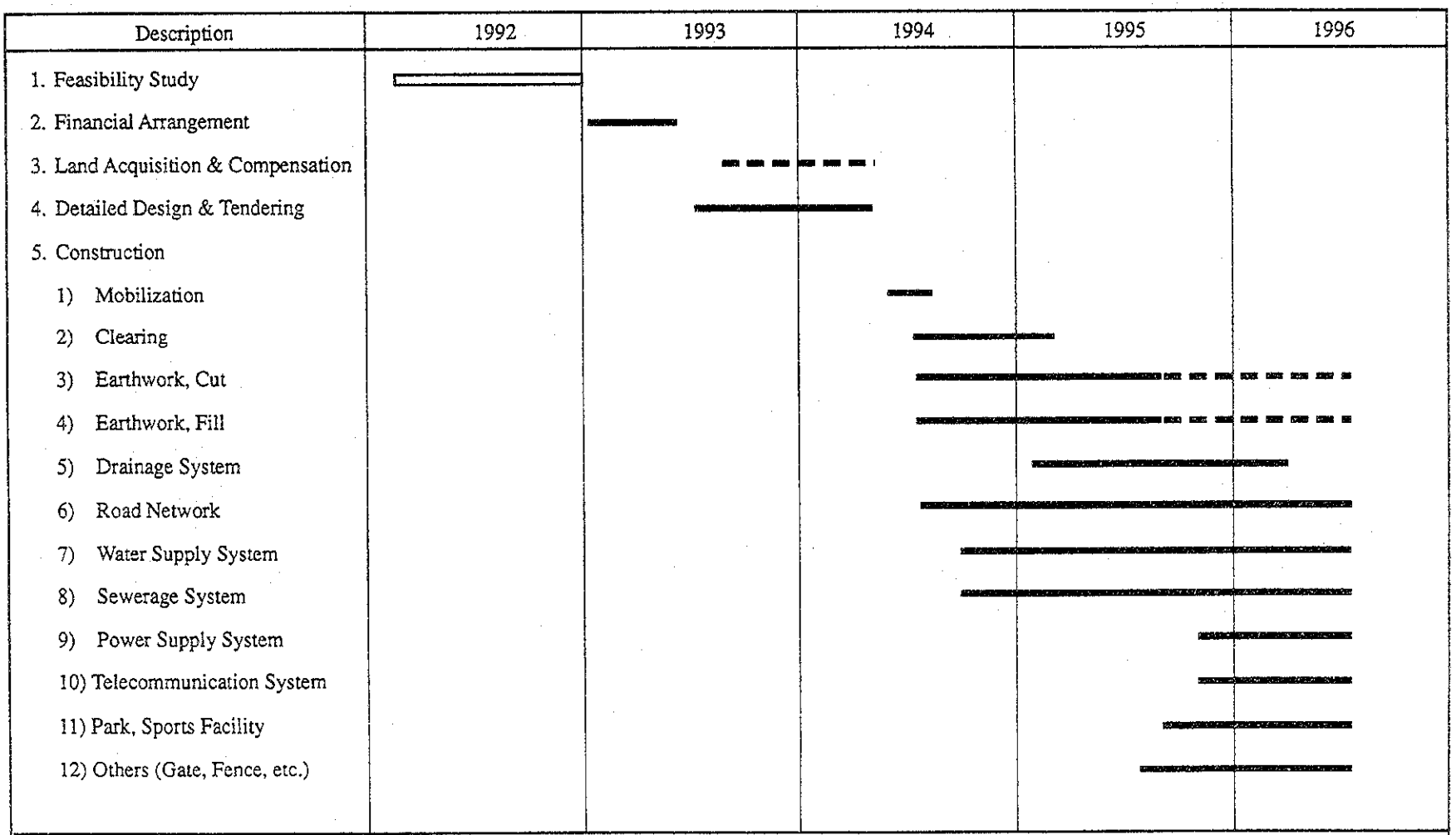
No.	Item	Construction				Maintenance Operation			
		Excution		Cost Bearing		Excution		Cost Bearing	
		IECO	Other Agency	IECO	Other Agency	IECO	Other Agency	IECO	Other Agency
1.	Land acquisition & compensation	-	-	-	O	-	-	-	-
2.	Road								
	- Road in EPZ (main, sub, others)	O	-	O	-	O	-	O	-
	- Access road	-	O	O	-	O	-	O	-
3.	Water supply facility (conduit pipe, distribution tank, pipe)	O	-	O	-	O	-	O	-
4.	Sewerage (sewage treatment plant, sewer)	O	-	O	-	O	-	O	-
5.	Drainage	O	-	O	-	O	-	O	-
6.	Solid waste disposal	O	-	O	-	O	-	O	-
7.	Electric facility (substation, electic line)	O	-	O	-	O	-	O	-
8.	Telecommunication facility	O	-	O	-	O	-	O	-
9.	Administrative facility								
	- Office, etc.	O	-	O	-	O	-	O	-
	- Fire station	-	O	O	-	-	O	-	O
	- Post office	-	O	O	-	-	O	-	O
10.	Service facility								
	- Bank, restaurant, etc.	-	O	-	O	-	O	-	O
	- Clinic, etc.	O	-	O	-	-	O	-	O
	- Gasoline station	-	O	-	O	-	O	-	O
	- Bus terminal	-	O	-	O	-	O	-	O
11.	Others (park, sports facility, fence)	O	-	O	-	O	-	O	-

Remark: O is agency in charge

Table G-6 ANNUAL OPERATION AND MAINTENANCE COSTS

(Unit: Rs. 10^3)

Item No.	Description	Ratio to Direct Construction Cost (%)	Atherfield Estate		Martin Estate (Phase I)		Martin Estate (Phase II)		Sirigampola Estate		Ekala Estate		Katana Estate	
			Direct Const. Cost	Annual O&M Cost	Direct Const. Cost	Annual O&M Cost	Direct Const. Cost	Annual O&M Cost	Direct Const. Cost	Annual O&M Cost	Direct Const. Cost	Annual O&M Cost	Direct Const. Cost	Annual O&M Cost
I.	Preparatory Works	0.0	7,359	0	4,659	0	5,591	0	13,857	0	7,687	0	5,592	0
II.	Road Works	0.6	123,303	740	43,866	263	68,005	408	62,141	373	173,933	1,044	69,121	415
III.	Earthworks	0.2	194,439	389	60,746	121	99,294	199	3,889	8	262,403	525	22,904	46
IV.	Drainage System	1.0	6,085	61	40,328	403	117,632	1,176	99,919	999	157,164	1,572	31,225	312
V.	Water Supply System	0.6	142,860	857	140,306	842	32,342	194	109,924	660	128,648	772	63,526	381
VI.	Sewerage System	1.5	72,282	1,084	7,695	115	58,125	872	25,320	380	61,591	924	20,090	301
VII.	Solid Waste Disposal	1.0	6,795	68	6,116	61	10,873	109	4,077	41	12,928	129	4,726	47
VIII.	Power Supply System	1.8	50,758	914	58,555	1,054	12,744	229	47,895	862	53,353	960	45,935	827
IX.	Administration Building	2.0	17,318	346	8,082	162	6,927	139	15,009	300	17,318	346	16,693	334
X.	Residential Area	3.0	19,728	592	0	0	34,079	1,022	39,071	1,172	110,706	3,321	0	0
XI.	Other Facility	1.0	18,669	187	4,201	42	14,227	142	24,433	244	41,259	413	6,932	69
	Total		659,596	5,238	374,554	3,063	459,839	4,490	445,535	5,039	1,026,990	10,006	286,744	2,733
		ⓐ	ⓑ	ⓒ	ⓓ	ⓔ	ⓕ	ⓖ	ⓗ	ⓘ	ⓙ	ⓚ	ⓛ	ⓜ
			ⓒ=ⓐ x ⓑ /100		ⓔ=ⓐ x ⓓ /100		ⓖ=ⓐ x ⓕ /100		ⓘ=ⓐ x ⓗ /100		ⓚ=ⓐ x ⓙ /100		ⓜ=ⓐ x ⓛ /100	



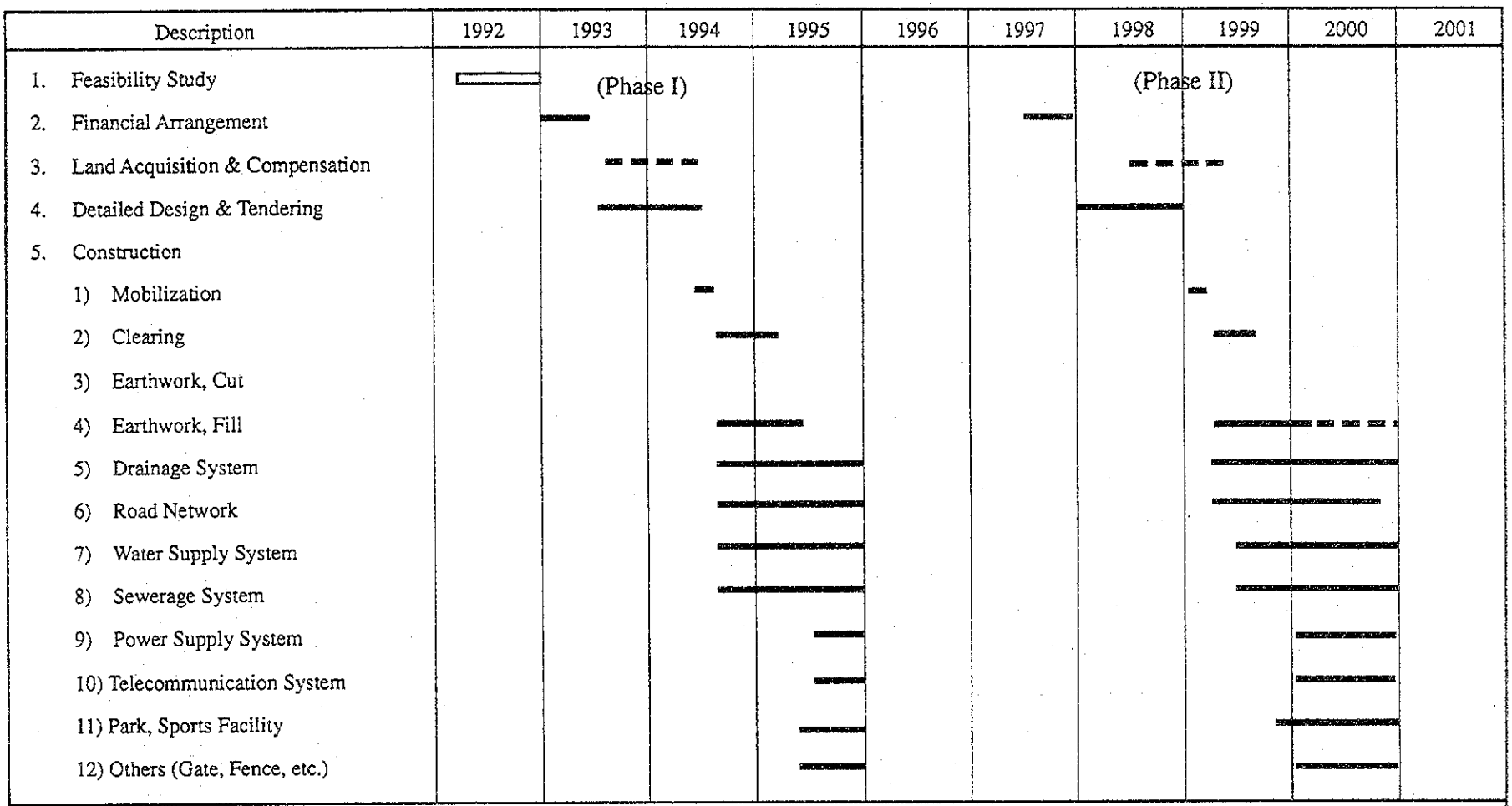
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF INDUSTRY, SCIENCE AND TECHNOLOGY

THE STUDY ON INDUSTRIAL SECTOR DEVELOPMENT
IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

Figure G-1 Implementation Program
(1/5) (Atherfield Estate)

Nippon Koei Co., Ltd. in association with
Unico International Corporation and Japan External Trade Organization (JITRO)



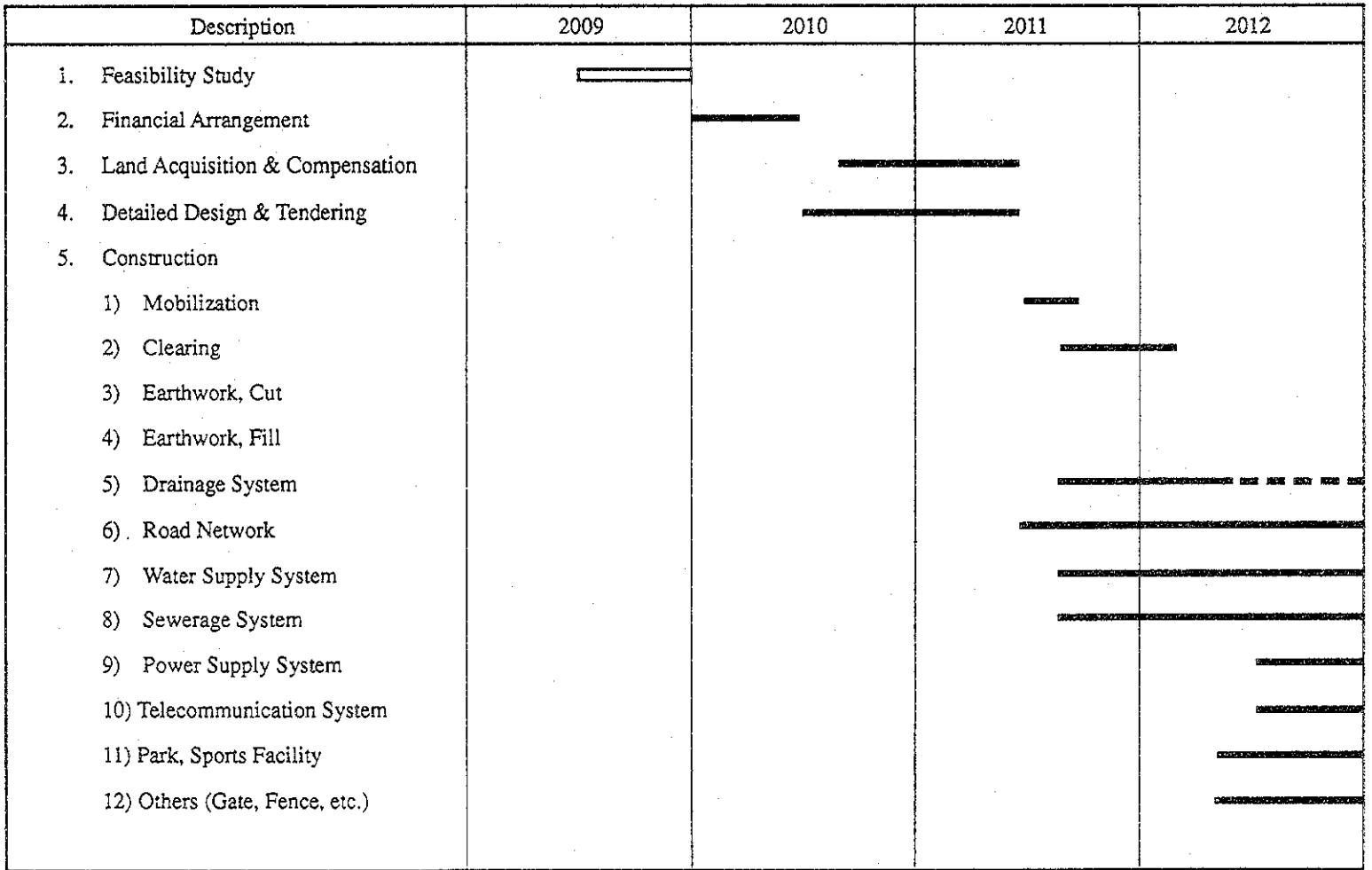
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF INDUSTRY, SCIENCE AND TECHNOLOGY

THE STUDY ON INDUSTRIAL SECTOR DEVELOPMENT
IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

Figure G-1 Implementation Program
(2/5) (Martin Estate)

Nippon Koei Co., Ltd. in association with
Unico International Corporation and Japan External Trade Organization (JITRO)



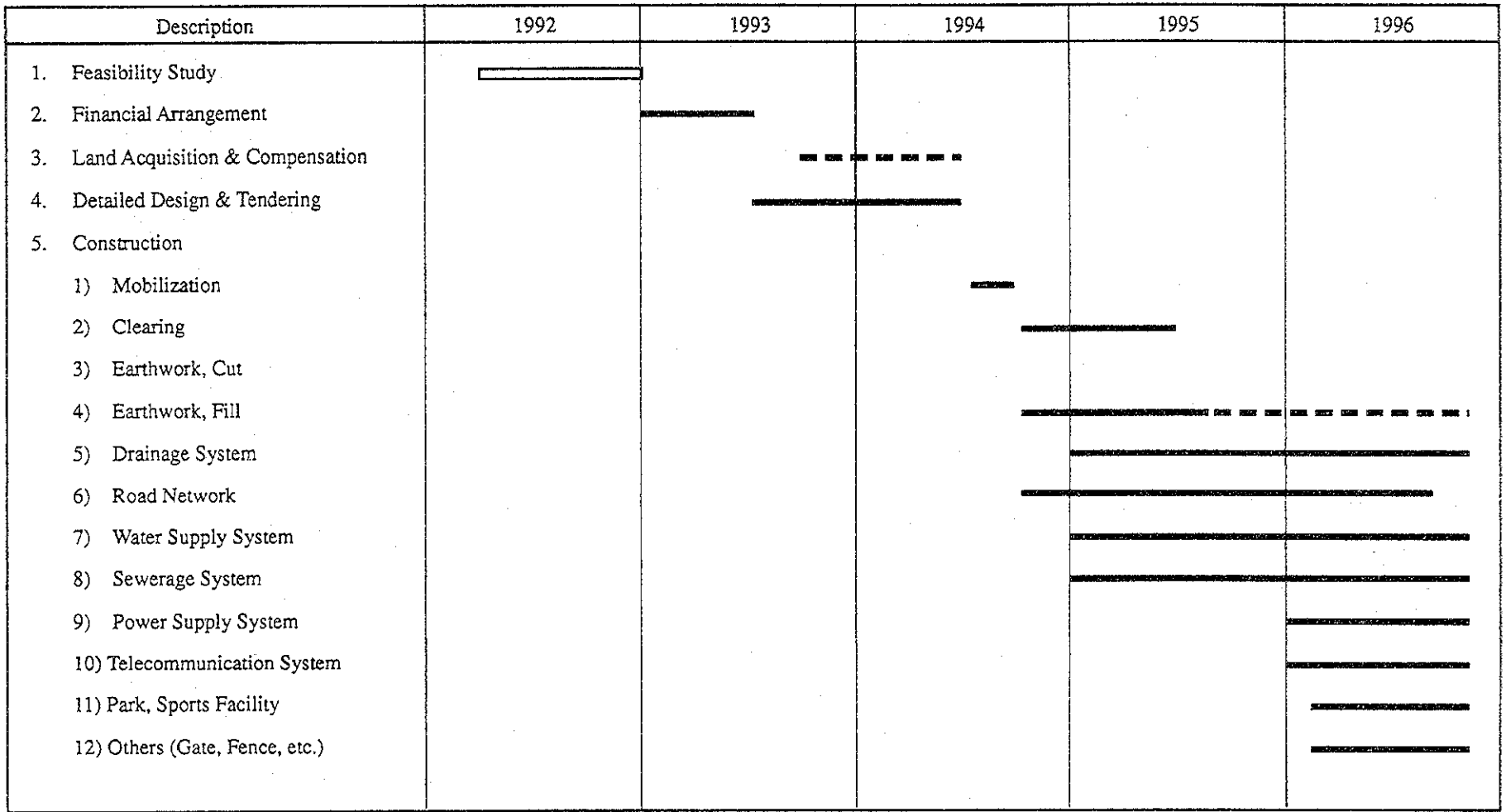
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF INDUSTRY, SCIENCE AND TECHNOLOGY

THE STUDY ON INDUSTRIAL SECTOR DEVELOPMENT
IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

Figure G-1 Implementation Program
(3/5) (Sirigampola Estate)

Nippon Koei Co., Ltd. in association with
Unico International Corporation and Japan External Trade Organization (JITRO)



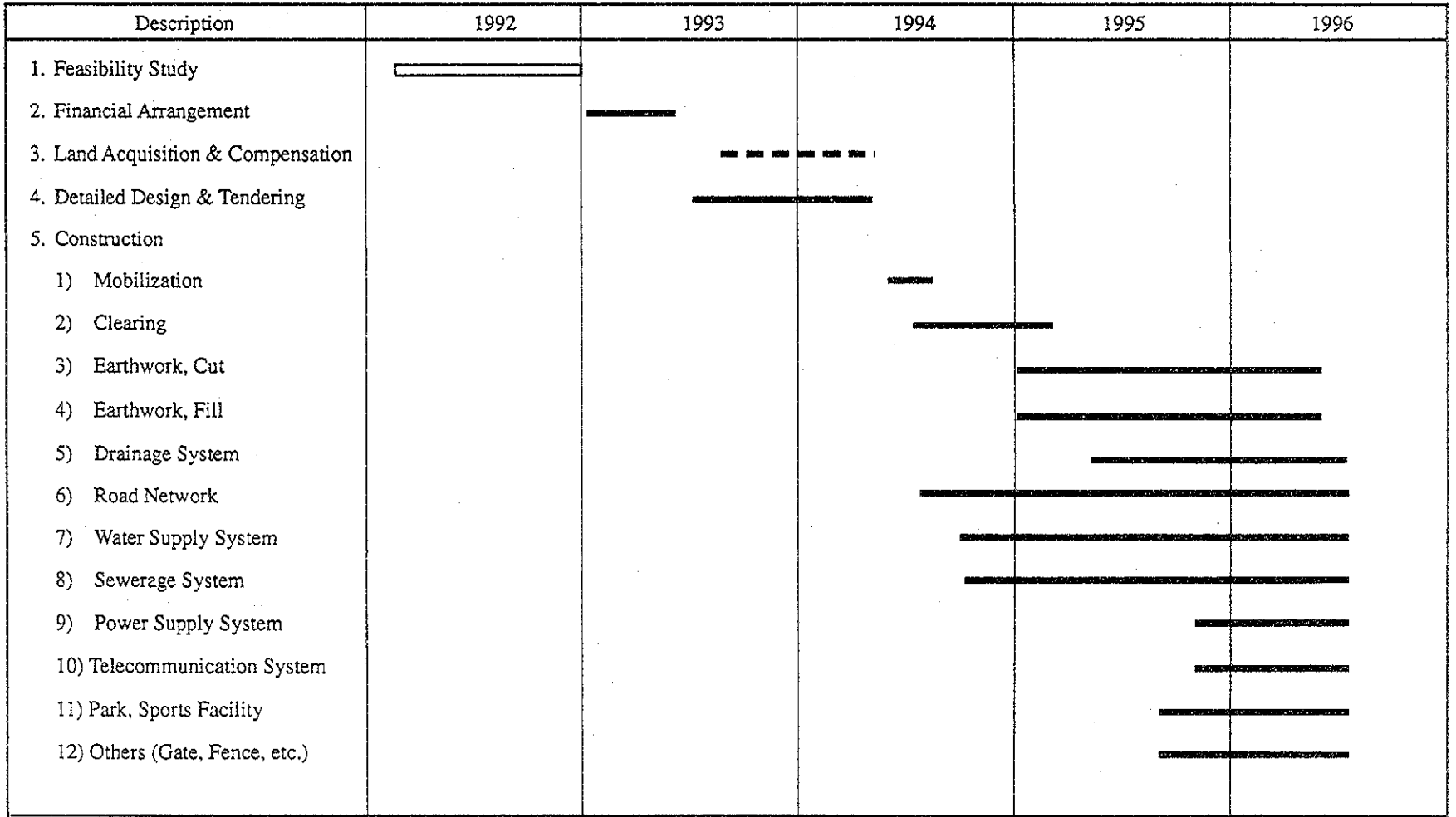
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF INDUSTRY, SCIENCE AND TECHNOLOGY

THE STUDY ON INDUSTRIAL SECTOR DEVELOPMENT IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

Figure G-1 Implementation Program (4/5) (Ekala Estate)

Nippon Koei Co., Ltd. in association with Unico International Corporation and Japan External Trade Organization (JTRO)



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF INDUSTRY, SCIENCE AND TECHNOLOGY

THE STUDY ON INDUSTRIAL SECTOR DEVELOPMENT IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

Figure G-1 (5/5) Implementation Program (Katana Estate)

Nippon Koei Co., Ltd. in association with
Unico International Corporation and Japan External Trade Organization (JTRO)

APPENDIX H

FINANCIAL AND ECONOMIC ANALYSIS

APPENDIX H FINANCIAL AND ECONOMIC ANALYSIS

Table of Contents

APPENDIX H FINANCIAL AND ECONOMIC ANALYSIS

H.1 Financial Analysis

1) Revenue for rental charges

The new industrial estate will earn revenues from leasing industrial and residential land. Rent is assumed to be $3/m^2/year on the basis of comparison with the rent of other EPZs in potentially competitive Asian countries. Revenue from rental charges is summarized in Table H-1.

2) Occupancy rate

Based on experience of other EPZs in Sri Lanka, as well as development of industrial estates having compatible conditions in other countries, the new industrial estates is assumed to be leased out in the following manner:

(accumulated occupancy rate: %)

	Atherfield	Martin (I)	Martin (II)	Katana
Occupancy starts (3rd year of construction)	50	60	50	50
Second year	80	90	80	80
Third year	100	100	100	100

3) Disbursement of costs

Construction cost is scheduled to be disbursed as estimated in Table G-3. The cost for promotion of investment, estimated at $200,000 equivalent, is scheduled to be disbursed in 3 - 4 years. The maintenance cost for the industrial estates is assumed to be covered by maintenance fee, which will be collected separately from tenants, and it is precluded from the cost stream.

4) Financial Internal Rate of Return (FIRR)

Based on the financial benefit and cost stream, financial internal rate of return (FIRR) for the proposed estates has been calculated as summarized hereunder (Refer to Table H-2, Table H-3, and Table H-4):

Atherfield : 8.9%

Martin : 8.2%
Katana : 9.4%

5) Sensitivity analysis

FIRR is most affected by variation of rent and construction cost. The effect of changes in these two factors on FIRRs is calculated as follows (Refer to Tables H-5~16):

(FIRR: %)

	Base case 3$/m^2/year	Rent $2/m^2/year	Rent $4/m^2/year	Construction cost 10% less	Construction cost 20% less
Atherfield	8.9	5.2	12.1	10.0	11.3
Martin	8.2	4.4	11.3	9.3	10.5
Katana	9.4	5.6	12.5	10.5	11.7

FIRR for Atherfield estate can exceed 10% in the event that the construction cost is reduced by 10%. For this reduction, it might be possible to consider that the construction costs for power supply, communication facilities, and access road would be incurred outside the project budget by the respective authorities concerned.

On the other hand, a 20% reduction of construction cost is required for Martin industrial estate so that it will become financially sound. For cost reduction, power supply and telecommunication facilities as well as some of water supply facilities (e.g., water purification plant) are to be executed outside the project budget by the respective authorities concerned.

H.2 Economic Evaluation

1) Economic Benefits

The economic benefits to accrue from the Project are estimated on the basis of following payments (Refer to Table H-17 to H-19):

a) Payment by foreign firms to Sri Lanka employees.

b) Lease payment for the factory lots by foreign firms.

2) Economic Costs

In view of the transfer payments (indirect taxes, subsidies, etc.) and the distortion caused by import duties and export subsidies, 85% of the financial cost is considered to be economic cost of the Project.

3) Economic Internal Rate of Return (EIRR)

Economic benefits and costs stream have been estimated as shown in Tables H-20 to H-22, and EIRR has been calculated as summarized hereunder.

Site	EIRR (%)
Atherfield	35.9
Martin	13.2
Katana	23.0

For the proposed industrial estates sites, EIRR is beyond 10 %, an opportunity cost of capital in Sri Lanka, and, thus, the Projects are considered to be economically feasible.

4) Sensitivity Analysis

Sensitivity has been checked with regard to leasing at lower price and increasing construction costs, as shown in Tables H-23~28, and as summarized hereunder.

Site	Base Case	Leasing Price 2 $/m^2•y	Construction Cost 10% in crease
Atherfield	35.9	35.1	33.6
Martin	13.2	11.7	12.0
Katana	23.0	21.1	21.4

In all cases, EIRR exceeds 10 %, indicating low susceptibility of the Project to the changes in economic costs and benefits..

Table H-1 REVENUE FROM RENTAL CHARGES OF FACTORY LOTS

	Area (ha)	Unit Price ($/m 2. Year)	Revenue (1,000$/Year)
Atherfield	75.4	3	2,262
Martin (1st Phase)	28.5	3	855
Martin (2nd Phase)	62.0	3	1,860
Martin (Total)	90.5	3	2,715
Katana	44.0	3	1,320

Table H-2 FINANCIAL BENEFIT AND COST STREAM
(ATHERFIELD)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	265	50	315	0	-315
1994	3,840	50	3,890	0	-3,890
1995	9,229	50	9,279	0	-9,279
1996	6,272	50	6,322	0	-6,322
1997	0	0	0	1,131	1,131
1998	0	0	0	1,810	1,810
1999	0	0	0	2,262	2,262
2000	0	0	0	2,262	2,262
2001	0	0	0	2,262	2,262
2002	0	0	0	2,262	2,262
2003	0	0	0	2,262	2,262
2004	0	0	0	2,262	2,262
2005	0	0	0	2,262	2,262
2006	0	0	0	2,262	2,262
2007	0	0	0	2,262	2,262
2008	0	0	0	2,262	2,262
2009	0	0	0	2,262	2,262
2010	0	0	0	2,262	2,262
2011	0	0	0	2,262	2,262
2012	0	0	0	2,262	2,262
2013	0	0	0	2,262	2,262
2014	0	0	0	2,262	2,262
2015	0	0	0	2,262	2,262
2016	0	0	0	2,262	2,262
2017	0	0	0	2,262	2,262
2018	0	0	0	2,262	2,262
2019	0	0	0	2,262	2,262
2020	0	0	0	2,262	2,262
2021	0	0	0	2,262	2,262
2022	0	0	0	2,262	2,262
2023	0	0	0	2,262	2,262
				FIRR=	8.90%

Table H-3 FINANCIAL BENEFIT AND COST STREAM
(MARTIN)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	177	70	247	0	-247
1994	2,723	70	2,793	0	-2,793
1995	8,026	60	8,086	0	-8,086
1996	0	0	0	513	513
1997	0	0	0	770	770
1998	433	70	503	855	352
1999	4,804	70	4,874	855	-4,019
2000	8,240	60	8,300	855	-7,445
2001	0	0	0	1,785	1,785
2002	0	0	0	2,343	2,343
2003	0	0	0	2,715	2,715
2004	0	0	0	2,715	2,715
2005	0	0	0	2,715	2,715
2006	0	0	0	2,715	2,715
2007	0	0	0	2,715	2,715
2008	0	0	0	2,715	2,715
2009	0	0	0	2,715	2,715
2010	0	0	0	2,715	2,715
2011	0	0	0	2,715	2,715
2012	0	0	0	2,715	2,715
2013	0	0	0	2,715	2,715
2014	0	0	0	2,715	2,715
2015	0	0	0	2,715	2,715
2016	0	0	0	2,715	2,715
2017	0	0	0	2,715	2,715
2018	0	0	0	2,715	2,715
2019	0	0	0	2,715	2,715
2020	0	0	0	2,715	2,715
2021	0	0	0	2,715	2,715
2022	0	0	0	2,715	2,715
2023	0	0	0	2,715	2,715
				FIRR=	8.17%

Table H-4 FINANCIAL BENEFIT AND COST STREAM
(KATANA)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Income (US$1,000)	Balance (US$1,000)
1992	0	0	0	0	0
1993	1,140	50	1,190	0	-1,190
1994	1,531	50	1,581	0	-1,581
1995	4,722	50	4,772	0	-4,772
1996	3,302	50	3,352	0	-3,352
1997	0	0	0	660	660
1998	0	0	0	1,061	1,061
1999	0	0	0	1,320	1,320
2000	0	0	0	1,320	1,320
2001	0	0	0	1,320	1,320
2002	0	0	0	1,320	1,320
2003	0	0	0	1,320	1,320
2004	0	0	0	1,320	1,320
2005	0	0	0	1,320	1,320
2006	0	0	0	1,320	1,320
2007	0	0	0	1,320	1,320
2008	0	0	0	1,320	1,320
2009	0	0	0	1,320	1,320
2010	0	0	0	1,320	1,320
2011	0	0	0	1,320	1,320
2012	0	0	0	1,320	1,320
2013	0	0	0	1,320	1,320
2014	0	0	0	1,320	1,320
2015	0	0	0	1,320	1,320
2016	0	0	0	1,320	1,320
2017	0	0	0	1,320	1,320
2018	0	0	0	1,320	1,320
2019	0	0	0	1,320	1,320
2020	0	0	0	1,320	1,320
2021	0	0	0	1,320	1,320
2022	0	0	0	1,320	1,320
2023	0	0	0	1,320	1,320
				FIRR=	9.36%

Table H-5 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF $2.0 RENTAL FEE:ATHERFIELD)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net benefit (US$1,000)
1992	0	0	0	0	0
1993	265	50	315	0	-315
1994	3,840	50	3,890	0	-3,890
1995	9,229	50	9,279	0	-9,279
1996	6,272	50	6,322	0	-6,322
1997	0	0	0	754	754
1998	0	0	0	1,206	1,206
1999	0	0	0	1,508	1,508
2000	0	0	0	1,508	1,508
2001	0	0	0	1,508	1,508
2002	0	0	0	1,508	1,508
2003	0	0	0	1,508	1,508
2004	0	0	0	1,508	1,508
2005	0	0	0	1,508	1,508
2006	0	0	0	1,508	1,508
2007	0	0	0	1,508	1,508
2008	0	0	0	1,508	1,508
2009	0	0	0	1,508	1,508
2010	0	0	0	1,508	1,508
2011	0	0	0	1,508	1,508
2012	0	0	0	1,508	1,508
2013	0	0	0	1,508	1,508
2014	0	0	0	1,508	1,508
2015	0	0	0	1,508	1,508
2016	0	0	0	1,508	1,508
2017	0	0	0	1,508	1,508
2018	0	0	0	1,508	1,508
2019	0	0	0	1,508	1,508
2020	0	0	0	1,508	1,508
2021	0	0	0	1,508	1,508
2022	0	0	0	1,508	1,508
2023	0	0	0	1,508	1,508
				FIRR=	5.15%

Table H-6 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF $4.0 RENTAL FEE: ATHERFIELD)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	265	50	315	0	-315
1994	3,840	50	3,890	0	-3,890
1995	9,229	50	9,279	0	-9,279
1996	6,272	50	6,322	0	-6,322
1997	0	0	0	1,508	1,508
1998	0	0	0	2,413	2,413
1999	0	0	0	3,016	3,016
2000	0	0	0	3,016	3,016
2001	0	0	0	3,016	3,016
2002	0	0	0	3,016	3,016
2003	0	0	0	3,016	3,016
2004	0	0	0	3,016	3,016
2005	0	0	0	3,016	3,016
2006	0	0	0	3,016	3,016
2007	0	0	0	3,016	3,016
2008	0	0	0	3,016	3,016
2009	0	0	0	3,016	3,016
2010	0	0	0	3,016	3,016
2011	0	0	0	3,016	3,016
2012	0	0	0	3,016	3,016
2013	0	0	0	3,016	3,016
2014	0	0	0	3,016	3,016
2015	0	0	0	3,016	3,016
2016	0	0	0	3,016	3,016
2017	0	0	0	3,016	3,016
2018	0	0	0	3,016	3,016
2019	0	0	0	3,016	3,016
2020	0	0	0	3,016	3,016
2021	0	0	0	3,016	3,016
2022	0	0	0	3,016	3,016
2023	0	0	0	3,016	3,016
				FIRR=	12.05%

Table H-7 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF 10 % REDUCTION OF CONSTRUCTION COST: ATHERFIELD)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	239	50	289	0	-289
1994	3,456	50	3,506	0	-3,506
1995	8,306	50	8,356	0	-8,356
1996	5,645	50	5,695	0	-5,695
1997	0	0	0	1,131	1,131
1998	0	0	0	1,810	1,810
1999	0	0	0	2,262	2,262
2000	0	0	0	2,262	2,262
2001	0	0	0	2,262	2,262
2002	0	0	0	2,262	2,262
2003	0	0	0	2,262	2,262
2004	0	0	0	2,262	2,262
2005	0	0	0	2,262	2,262
2006	0	0	0	2,262	2,262
2007	0	0	0	2,262	2,262
2008	0	0	0	2,262	2,262
2009	0	0	0	2,262	2,262
2010	0	0	0	2,262	2,262
2011	0	0	0	2,262	2,262
2012	0	0	0	2,262	2,262
2013	0	0	0	2,262	2,262
2014	0	0	0	2,262	2,262
2015	0	0	0	2,262	2,262
2016	0	0	0	2,262	2,262
2017	0	0	0	2,262	2,262
2018	0	0	0	2,262	2,262
2019	0	0	0	2,262	2,262
2020	0	0	0	2,262	2,262
2021	0	0	0	2,262	2,262
2022	0	0	0	2,262	2,262
2023	0	0	0	2,262	2,262
				FIRR=	9.99%

Table H-8 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF 20 % REDUCTION OF CONSTRUCTION COST: ATHERFIELD)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	212	50	262	0	-262
1994	3,072	50	3,122	0	-3,122
1995	7,383	50	7,433	0	-7,433
1996	5,018	50	5,068	0	-5,068
1997	0	0	0	1,131	1,131
1998	0	0	0	1,810	1,810
1999	0	0	0	2,262	2,262
2000	0	0	0	2,262	2,262
2001	0	0	0	2,262	2,262
2002	0	0	0	2,262	2,262
2003	0	0	0	2,262	2,262
2004	0	0	0	2,262	2,262
2005	0	0	0	2,262	2,262
2006	0	0	0	2,262	2,262
2007	0	0	0	2,262	2,262
2008	0	0	0	2,262	2,262
2009	0	0	0	2,262	2,262
2010	0	0	0	2,262	2,262
2011	0	0	0	2,262	2,262
2012	0	0	0	2,262	2,262
2013	0	0	0	2,262	2,262
2014	0	0	0	2,262	2,262
2015	0	0	0	2,262	2,262
2016	0	0	0	2,262	2,262
2017	0	0	0	2,262	2,262
2018	0	0	0	2,262	2,262
2019	0	0	0	2,262	2,262
2020	0	0	0	2,262	2,262
2021	0	0	0	2,262	2,262
2022	0	0	0	2,262	2,262
2023	0	0	0	2,262	2,262
				FIRR=	11.27%

Table H-9 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF $2.0 RENTAL FEE: MARTIN)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	177	70	247	0	-247
1994	2,723	70	2,793	0	-2,793
1995	8,026	60	8,086	0	-8,086
1996	0	0	0	342	342
1997	0	0	0	513	513
1998	433	70	503	570	67
1999	4,804	70	4,874	570	-4,304
2000	8,240	60	8,300	570	-7,730
2001	0	0	0	1,190	1,190
2002	0	0	0	1,562	1,562
2003	0	0	0	1,810	1,810
2004	0	0	0	1,810	1,810
2005	0	0	0	1,810	1,810
2006	0	0	0	1,810	1,810
2007	0	0	0	1,810	1,810
2008	0	0	0	1,810	1,810
2009	0	0	0	1,810	1,810
2010	0	0	0	1,810	1,810
2011	0	0	0	1,810	1,810
2012	0	0	0	1,810	1,810
2013	0	0	0	1,810	1,810
2014	0	0	0	1,810	1,810
2015	0	0	0	1,810	1,810
2016	0	0	0	1,810	1,810
2017	0	0	0	1,810	1,810
2018	0	0	0	1,810	1,810
2019	0	0	0	1,810	1,810
2020	0	0	0	1,810	1,810
2021	0	0	0	1,810	1,810
2022	0	0	0	1,810	1,810
2023	0	0	0	1,810	1,810
				FIRR=	4.37%

Table H-10 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF $4.0 RENTAL FEE: MARTIN)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	177	70	247	0	-247
1994	2,723	70	2,793	0	-2,793
1995	8,026	60	8,086	0	-8,086
1996	0	0	0	684	684
1997	0	0	0	1,026	1,026
1998	433	70	503	1,140	637
1999	4,804	70	4,874	1,140	-3,734
2000	8,240	60	8,300	1,140	-7,160
2001	0	0	0	2,380	2,380
2002	0	0	0	3,124	3,124
2003	0	0	0	3,620	3,620
2004	0	0	0	3,620	3,620
2005	0	0	0	3,620	3,620
2006	0	0	0	3,620	3,620
2007	0	0	0	3,620	3,620
2008	0	0	0	3,620	3,620
2009	0	0	0	3,620	3,620
2010	0	0	0	3,620	3,620
2011	0	0	0	3,620	3,620
2012	0	0	0	3,620	3,620
2013	0	0	0	3,620	3,620
2014	0	0	0	3,620	3,620
2015	0	0	0	3,620	3,620
2016	0	0	0	3,620	3,620
2017	0	0	0	3,620	3,620
2018	0	0	0	3,620	3,620
2019	0	0	0	3,620	3,620
2020	0	0	0	3,620	3,620
2021	0	0	0	3,620	3,620
2022	0	0	0	3,620	3,620
2023	0	0	0	3,620	3,620
				FIRR=	11.33%

Table H-11 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF 10% REDUCTION OF CONSTRUCTION COST: MARTIN)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	159	70	229	0	-229
1994	2,451	70	2,521	0	-2,521
1995	7,223	60	7,283	0	-7,283
1996	0	0	0	513	513
1997	0	0	0	770	770
1998	390	70	460	855	395
1999	4,324	70	4,394	855	-3,539
2000	7,416	60	7,476	855	-6,621
2001	0	0	0	1,785	1,785
2002	0	0	0	2,343	2,343
2003	0	0	0	2,715	2,715
2004	0	0	0	2,715	2,715
2005	0	0	0	2,715	2,715
2006	0	0	0	2,715	2,715
2007	0	0	0	2,715	2,715
2008	0	0	0	2,715	2,715
2009	0	0	0	2,715	2,715
2010	0	0	0	2,715	2,715
2011	0	0	0	2,715	2,715
2012	0	0	0	2,715	2,715
2013	0	0	0	2,715	2,715
2014	0	0	0	2,715	2,715
2015	0	0	0	2,715	2,715
2016	0	0	0	2,715	2,715
2017	0	0	0	2,715	2,715
2018	0	0	0	2,715	2,715
2019	0	0	0	2,715	2,715
2020	0	0	0	2,715	2,715
2021	0	0	0	2,715	2,715
2022	0	0	0	2,715	2,715
2023	0	0	0	2,715	2,715
				FIRR=	9.26%

Table H-12 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF 20 % REDUCTION OF CONSTRUCTION COST: MARTIN)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	142	70	212	0	-212
1994	2,178	70	2,248	0	-2,248
1995	6,421	60	6,481	0	-6,481
1996	0	0	0	513	513
1997	0	0	0	770	770
1998	346	70	416	855	439
1999	3,843	70	3,913	855	-3,058
2000	6,592	60	6,652	855	-5,797
2001	0	0	0	1,785	1,785
2002	0	0	0	2,343	2,343
2003	0	0	0	2,715	2,715
2004	0	0	0	2,715	2,715
2005	0	0	0	2,715	2,715
2006	0	0	0	2,715	2,715
2007	0	0	0	2,715	2,715
2008	0	0	0	2,715	2,715
2009	0	0	0	2,715	2,715
2010	0	0	0	2,715	2,715
2011	0	0	0	2,715	2,715
2012	0	0	0	2,715	2,715
2013	0	0	0	2,715	2,715
2014	0	0	0	2,715	2,715
2015	0	0	0	2,715	2,715
2016	0	0	0	2,715	2,715
2017	0	0	0	2,715	2,715
2018	0	0	0	2,715	2,715
2019	0	0	0	2,715	2,715
2020	0	0	0	2,715	2,715
2021	0	0	0	2,715	2,715
2022	0	0	0	2,715	2,715
2023	0	0	0	2,715	2,715
				FIRR=	10.53%

Table H-13 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF $ 2.0 RENTAL FEE: KATANA)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Income (US$1,000)	Balance (US$1,000)
1992	0	0	0	0	0
1993	1,140	50	1,190	0	-1,190
1994	1,531	50	1,581	0	-1,581
1995	4,722	50	4,772	0	-4,772
1996	3,302	50	3,352	0	-3,352
1997	0	0	0	440	440
1998	0	0	0	707	707
1999	0	0	0	880	880
2000	0	0	0	880	880
2001	0	0	0	880	880
2002	0	0	0	880	880
2003	0	0	0	880	880
2004	0	0	0	880	880
2005	0	0	0	880	880
2006	0	0	0	880	880
2007	0	0	0	880	880
2008	0	0	0	880	880
2009	0	0	0	880	880
2010	0	0	0	880	880
2011	0	0	0	880	880
2012	0	0	0	880	880
2013	0	0	0	880	880
2014	0	0	0	880	880
2015	0	0	0	880	880
2016	0	0	0	880	880
2017	0	0	0	880	880
2018	0	0	0	880	880
2019	0	0	0	880	880
2020	0	0	0	880	880
2021	0	0	0	880	880
2022	0	0	0	880	880
2023	0	0	0	880	880
				FIRR=	5.58%

Table H-14 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF $4.0 RENTAL FEE : KATANA)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Income (US$1,000)	Balance (US$1,000)
1992	0	0	0	0	0
1993	1,140	50	1,190	0	-1,190
1994	1,531	50	1,581	0	-1,581
1995	4,722	50	4,772	0	-4,772
1996	3,302	50	3,352	0	-3,352
1997	0	0	0	880	880
1998	0	0	0	1,413	1,413
1999	0	0	0	1,760	1,760
2000	0	0	0	1,760	1,760
2001	0	0	0	1,760	1,760
2002	0	0	0	1,760	1,760
2003	0	0	0	1,760	1,760
2004	0	0	0	1,760	1,760
2005	0	0	0	1,760	1,760
2006	0	0	0	1,760	1,760
2007	0	0	0	1,760	1,760
2008	0	0	0	1,760	1,760
2009	0	0	0	1,760	1,760
2010	0	0	0	1,760	1,760
2011	0	0	0	1,760	1,760
2012	0	0	0	1,760	1,760
2013	0	0	0	1,760	1,760
2014	0	0	0	1,760	1,760
2015	0	0	0	1,760	1,760
2016	0	0	0	1,760	1,760
2017	0	0	0	1,760	1,760
2018	0	0	0	1,760	1,760
2019	0	0	0	1,760	1,760
2020	0	0	0	1,760	1,760
2021	0	0	0	1,760	1,760
2022	0	0	0	1,760	1,760
2023	0	0	0	1,760	1,760
				FIRR=	12.52%

Table H-15 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF 10 % REDUCTION OF CONSTRUCTION COST : KATANA)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Income (US$1,000)	Balance (US$1,000)
1992	0	0	0	0	0
1993	1,026	50	1,076	0	-1,076
1994	1,378	50	1,428	0	-1,428
1995	4,250	50	4,300	0	-4,300
1996	2,972	50	3,022	0	-3,022
1997	0	0	0	660	660
1998	0	0	0	1,060	1,060
1999	0	0	0	1,320	1,320
2000	0	0	0	1,320	1,320
2001	0	0	0	1,320	1,320
2002	0	0	0	1,320	1,320
2003	0	0	0	1,320	1,320
2004	0	0	0	1,320	1,320
2005	0	0	0	1,320	1,320
2006	0	0	0	1,320	1,320
2007	0	0	0	1,320	1,320
2008	0	0	0	1,320	1,320
2009	0	0	0	1,320	1,320
2010	0	0	0	1,320	1,320
2011	0	0	0	1,320	1,320
2012	0	0	0	1,320	1,320
2013	0	0	0	1,320	1,320
2014	0	0	0	1,320	1,320
2015	0	0	0	1,320	1,320
2016	0	0	0	1,320	1,320
2017	0	0	0	1,320	1,320
2018	0	0	0	1,320	1,320
2019	0	0	0	1,320	1,320
2020	0	0	0	1,320	1,320
2021	0	0	0	1,320	1,320
2022	0	0	0	1,320	1,320
2023	0	0	0	1,320	1,320
				FIRR=	10.44%

Table H-16 SENSITIVITY ANALYSIS OF FIRR
(IN CASE OF 20 % REDUCTION OF CONSTRUCTION COST : KATANA)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Income (US$1,000)	Balance (US$1,000)
1992	0	0	0	0	0
1993	912	50	962	0	-962
1994	1,225	50	1,275	0	-1,275
1995	3,778	50	3,828	0	-3,828
1996	2,642	50	2,692	0	-2,692
1997	0	0	0	660	660
1998	0	0	0	1,060	1,060
1999	0	0	0	1,320	1,320
2000	0	0	0	1,320	1,320
2001	0	0	0	1,320	1,320
2002	0	0	0	1,320	1,320
2003	0	0	0	1,320	1,320
2004	0	0	0	1,320	1,320
2005	0	0	0	1,320	1,320
2006	0	0	0	1,320	1,320
2007	0	0	0	1,320	1,320
2008	0	0	0	1,320	1,320
2009	0	0	0	1,320	1,320
2010	0	0	0	1,320	1,320
2011	0	0	0	1,320	1,320
2012	0	0	0	1,320	1,320
2013	0	0	0	1,320	1,320
2014	0	0	0	1,320	1,320
2015	0	0	0	1,320	1,320
2016	0	0	0	1,320	1,320
2017	0	0	0	1,320	1,320
2018	0	0	0	1,320	1,320
2019	0	0	0	1,320	1,320
2020	0	0	0	1,320	1,320
2021	0	0	0	1,320	1,320
2022	0	0	0	1,320	1,320
2023	0	0	0	1,320	1,320
				FIRR=	11.72%

Table H-17 ECONOMICAL BENEFIT
(ATHERFIELD)

(at 1992 constant price)

	Benefit of Employment by Foreign Enterprise			Benefit of Land Rent	
	No. of Employees	Wage ($/Year)	Benefit ($1,000)	by Foreign Enterprise ($1,000)	Total Benefit ($1,000)
1993	0	0	0	0	0
1994	0	0	0	0	0
1995	0	0	0	0	0
1996	0	0	0	0	0
1997	7,500	600	4,500	452	4,952
1998	12,000	600	7,200	724	7,924
1999	15,000	600	9,000	905	9,905
2000	15,000	600	9,000	905	9,905
2001	15,000	600	9,000	905	9,905
2002	15,000	600	9,000	905	9,905
2003	15,000	600	9,000	905	9,905
2004	15,000	600	9,000	905	9,905
2005	15,000	600	9,000	905	9,905
2006	15,000	600	9,000	905	9,905
2007	15,000	600	9,000	905	9,905
2008	15,000	600	9,000	905	9,905
2009	15,000	600	9,000	905	9,905
2010	15,000	600	9,000	905	9,905
2011	15,000	600	9,000	905	9,905
2012	15,000	600	9,000	905	9,905
2013	15,000	600	9,000	905	9,905
2014	15,000	600	9,000	905	9,905
2015	15,000	600	9,000	905	9,905
2016	15,000	600	9,000	905	9,905
2017	15,000	600	9,000	905	9,905
2018	15,000	600	9,000	905	9,905
2019	15,000	600	9,000	905	9,905
2020	15,000	600	9,000	905	9,905
2021	15,000	600	9,000	905	9,905
2022	15,000	600	9,000	905	9,905
2023	15,000	600	9,000	905	9,905

Remark: Percentages of foreign enterprises by number of employee and factory area are assumed 75 % and 40 % respectively based on the investment projection of foreign enterprises as shown in Table D-16.

Table H-18 ECONOMICAL BENEFIT
(MARTIN)

(at 1992 constant price)

	Benefit of Employment by Foreign Enterprise			Benefit of Land Rent	
	No. of Employees	Wage ($/Year)	Benefit ($1,000)	by Foreign Enterprise ($1,000)	Total Benefit ($1,000)
1993	0	0	0	0	0
1994	0	0	0	0	0
1995	0	0	0	0	0
1996	660	600	396	180	576
1997	990	600	594	270	864
1998	2,120	600	1,272	624	1,896
1999	2,740	600	1,644	819	2,463
2000	3,150	600	1,890	950	2,840
2001	3,150	600	1,890	950	2,840
2002	3,150	600	1,890	950	2,840
2003	3,150	600	1,890	950	2,840
2004	3,150	600	1,890	950	2,840
2005	3,150	600	1,890	950	2,840
2006	3,150	600	1,890	950	2,840
2007	3,150	600	1,890	950	2,840
2008	3,150	600	1,890	950	2,840
2009	3,150	600	1,890	950	2,840
2010	3,150	600	1,890	950	2,840
2011	3,150	600	1,890	950	2,840
2012	3,150	600	1,890	950	2,840
2013	3,150	600	1,890	950	2,840
2014	3,150	600	1,890	950	2,840
2015	3,150	600	1,890	950	2,840
2016	3,150	600	1,890	950	2,840
2017	3,150	600	1,890	950	2,840
2018	3,150	600	1,890	950	2,840
2019	3,150	600	1,890	950	2,840
2020	3,150	600	1,890	950	2,840
2021	3,150	600	1,890	950	2,840
2022	3,150	600	1,890	950	2,840
2023	3,150	600	1,890	950	2,840

Remark: Percentages of foreign enterprises by number of employee and factory area are assumed 35 % based on the investment projection of foreign enterprises as shown in Table D-16.

Table H-19 ECONOMICAL BENEFIT
(KATANA)

(at 1992 constant price)

	Benefit of Employment by Foreign Enterprise			Benefit of Land Rent	Total Benefit
	No. of Employees	Wage ($/Year)	Benefit ($1,000)	by Foreign Enterprise ($1,000)	($1,000)
1993	0	0	0	0	0
1994	0	0	0	0	0
1995	0	0	0	0	0
1996	0	0	0	0	0
1997	1,750	600	1,050	495	1,545
1998	2,800	600	1,680	795	2,475
1999	3,500	600	2,100	990	3,090
2000	3,500	600	2,100	990	3,090
2001	3,500	600	2,100	990	3,090
2002	3,500	600	2,100	990	3,090
2003	3,500	600	2,100	990	3,090
2004	3,500	600	2,100	990	3,090
2005	3,500	600	2,100	990	3,090
2006	3,500	600	2,100	990	3,090
2007	3,500	600	2,100	990	3,090
2008	3,500	600	2,100	990	3,090
2009	3,500	600	2,100	990	3,090
2010	3,500	600	2,100	990	3,090
2011	3,500	600	2,100	990	3,090
2012	3,500	600	2,100	990	3,090
2013	3,500	600	2,100	990	3,090
2014	3,500	600	2,100	990	3,090
2015	3,500	600	2,100	990	3,090
2016	3,500	600	2,100	990	3,090
2017	3,500	600	2,100	990	3,090
2018	3,500	600	2,100	990	3,090
2019	3,500	600	2,100	990	3,090
2020	3,500	600	2,100	990	3,090
2021	3,500	600	2,100	990	3,090
2022	3,500	600	2,100	990	3,090
2023	3,500	600	2,100	990	3,090

Remark: Percentages of foreign enterprises by number of employee and factory area are assumed 75 % based on the investment projection of foreign enterprises as shown in Table D-16.

Table H-20 ECONOMIC BENEFIT AND COST STREAM
(ATHERFIELD)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	225	43	268	0	-268
1994	3,264	43	3,307	0	-3,307
1995	7,845	43	7,888	0	-7,888
1996	5,331	43	5,374	0	-5,374
1997	0	0	0	4,952	4,952
1998	0	0	0	7,924	7,924
1999	0	0	0	9,905	9,905
2000	0	0	0	9,905	9,905
2001	0	0	0	9,905	9,905
2002	0	0	0	9,905	9,905
2003	0	0	0	9,905	9,905
2004	0	0	0	9,905	9,905
2005	0	0	0	9,905	9,905
2006	0	0	0	9,905	9,905
2007	0	0	0	9,905	9,905
2008	0	0	0	9,905	9,905
2009	0	0	0	9,905	9,905
2010	0	0	0	9,905	9,905
2011	0	0	0	9,905	9,905
2012	0	0	0	9,905	9,905
2013	0	0	0	9,905	9,905
2014	0	0	0	9,905	9,905
2015	0	0	0	9,905	9,905
2016	0	0	0	9,905	9,905
2017	0	0	0	9,905	9,905
2018	0	0	0	9,905	9,905
2019	0	0	0	9,905	9,905
2020	0	0	0	9,905	9,905
2021	0	0	0	9,905	9,905
2022	0	0	0	9,905	9,905
2023	0	0	0	9,905	9,905
				EIRR=	35.89%

Table H-21 ECONOMIC BENEFIT AND COST STREAM
(MARTIN)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	150	60	210	0	-210
1994	2,315	60	2,375	0	-2,375
1995	6,822	51	6,873	0	-6,873
1996	0	0	0	576	576
1997	0	0	0	864	864
1998	368	60	428	1,896	1,468
1999	4,084	60	4,144	2,463	-1,681
2000	7,004	51	7,055	2,840	-4,215
2001	0	0	0	2,840	2,840
2002	0	0	0	2,840	2,840
2003	0	0	0	2,840	2,840
2004	0	0	0	2,840	2,840
2005	0	0	0	2,840	2,840
2006	0	0	0	2,840	2,840
2007	0	0	0	2,840	2,840
2008	0	0	0	2,840	2,840
2009	0	0	0	2,840	2,840
2010	0	0	0	2,840	2,840
2011	0	0	0	2,840	2,840
2012	0	0	0	2,840	2,840
2013	0	0	0	2,840	2,840
2014	0	0	0	2,840	2,840
2015	0	0	0	2,840	2,840
2016	0	0	0	2,840	2,840
2017	0	0	0	2,840	2,840
2018	0	0	0	2,840	2,840
2019	0	0	0	2,840	2,840
2020	0	0	0	2,840	2,840
2021	0	0	0	2,840	2,840
2022	0	0	0	2,840	2,840
2023	0	0	0	2,840	2,840
				EIRR=	13.18%

Table H-22 ECONOMIC BENEFIT AND COST STREAM
(KATANA)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	969	43	1,012	0	-1,012
1994	1,301	43	1,344	0	-1,344
1995	4,014	43	4,057	0	-4,057
1996	2,807	43	2,850	0	-2,850
1997	0	0	0	1,545	1,545
1998	0	0	0	2,475	2,475
1999	0	0	0	3,090	3,090
2000	0	0	0	3,090	3,090
2001	0	0	0	3,090	3,090
2002	0	0	0	3,090	3,090
2003	0	0	0	3,090	3,090
2004	0	0	0	3,090	3,090
2005	0	0	0	3,090	3,090
2006	0	0	0	3,090	3,090
2007	0	0	0	3,090	3,090
2008	0	0	0	3,090	3,090
2009	0	0	0	3,090	3,090
2010	0	0	0	3,090	3,090
2011	0	0	0	3,090	3,090
2012	0	0	0	3,090	3,090
2013	0	0	0	3,090	3,090
2014	0	0	0	3,090	3,090
2015	0	0	0	3,090	3,090
2016	0	0	0	3,090	3,090
2017	0	0	0	3,090	3,090
2018	0	0	0	3,090	3,090
2019	0	0	0	3,090	3,090
2020	0	0	0	3,090	3,090
2021	0	0	0	3,090	3,090
2022	0	0	0	3,090	3,090
2023	0	0	0	3,090	3,090
2024	0	0	0	3,090	3,090
				EIRR=	22.96%

Table H-23 SENSITIVITY ANALYSIS OF EIRR
(IN CASE OF $ 2.0 RENTAL FEE: ATHERFIELD)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	225	43	268	0	-268
1994	3,264	43	3,307	0	-3,307
1995	7,845	43	7,888	0	-7,888
1996	5,331	43	5,374	0	-5,374
1997	0	0	0	4,801	4,801
1998	0	0	0	7,683	7,683
1999	0	0	0	9,603	9,603
2000	0	0	0	9,603	9,603
2001	0	0	0	9,603	9,603
2002	0	0	0	9,603	9,603
2003	0	0	0	9,603	9,603
2004	0	0	0	9,603	9,603
2005	0	0	0	9,603	9,603
2006	0	0	0	9,603	9,603
2007	0	0	0	9,603	9,603
2008	0	0	0	9,603	9,603
2009	0	0	0	9,603	9,603
2010	0	0	0	9,603	9,603
2011	0	0	0	9,603	9,603
2012	0	0	0	9,603	9,603
2013	0	0	0	9,603	9,603
2014	0	0	0	9,603	9,603
2015	0	0	0	9,603	9,603
2016	0	0	0	9,603	9,603
2017	0	0	0	9,603	9,603
2018	0	0	0	9,603	9,603
2019	0	0	0	9,603	9,603
2020	0	0	0	9,603	9,603
2021	0	0	0	9,603	9,603
2022	0	0	0	9,603	9,603
2023	0	0	0	9,603	9,603
				EIRR=	35.12%

Table H-24 SENSITIVITY ANALYSIS OF EIRR
(IN CASE OF 10 % INCREASE OF COST: ATHERFIELD)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	248	47	295	0	-295
1994	3,590	47	3,638	0	-3,638
1995	8,630	47	8,677	0	-8,677
1996	5,864	47	5,911	0	-5,911
1997	0	0	0	4,952	4,952
1998	0	0	0	7,924	7,924
1999	0	0	0	9,905	9,905
2000	0	0	0	9,905	9,905
2001	0	0	0	9,905	9,905
2002	0	0	0	9,905	9,905
2003	0	0	0	9,905	9,905
2004	0	0	0	9,905	9,905
2005	0	0	0	9,905	9,905
2006	0	0	0	9,905	9,905
2007	0	0	0	9,905	9,905
2008	0	0	0	9,905	9,905
2009	0	0	0	9,905	9,905
2010	0	0	0	9,905	9,905
2011	0	0	0	9,905	9,905
2012	0	0	0	9,905	9,905
2013	0	0	0	9,905	9,905
2014	0	0	0	9,905	9,905
2015	0	0	0	9,905	9,905
2016	0	0	0	9,905	9,905
2017	0	0	0	9,905	9,905
2018	0	0	0	9,905	9,905
2019	0	0	0	9,905	9,905
2020	0	0	0	9,905	9,905
2021	0	0	0	9,905	9,905
2022	0	0	0	9,905	9,905
2023	0	0	0	9,905	9,905
				EIRR=	33.55%

Table H-25 SENSITIVITY ANALYSIS OF EIRR
(IN CASE OF $2.0 RENTAL FEE: MARTIN)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	150	60	210	0	-210
1994	2,315	60	2,375	0	-2,375
1995	6,822	51	6,873	0	-6,873
1996	0	0	0	516	516
1997	0	0	0	774	774
1998	368	60	428	1,688	1,260
1999	4,084	60	4,144	2,523	-1,621
2000	7,004	51	7,055	2,523	-4,532
2001	0	0	0	2,523	2,523
2002	0	0	0	2,523	2,523
2003	0	0	0	2,523	2,523
2004	0	0	0	2,523	2,523
2005	0	0	0	2,523	2,523
2006	0	0	0	2,523	2,523
2007	0	0	0	2,523	2,523
2008	0	0	0	2,523	2,523
2009	0	0	0	2,523	2,523
2010	0	0	0	2,523	2,523
2011	0	0	0	2,523	2,523
2012	0	0	0	2,523	2,523
2013	0	0	0	2,523	2,523
2014	0	0	0	2,523	2,523
2015	0	0	0	2,523	2,523
2016	0	0	0	2,523	2,523
2017	0	0	0	2,523	2,523
2018	0	0	0	2,523	2,523
2019	0	0	0	2,523	2,523
2020	0	0	0	2,523	2,523
2021	0	0	0	2,523	2,523
2022	0	0	0	2,523	2,523
2023	0	0	0	2,523	2,523
				EIRR=	11.68%

Table H-26 SENSITIVITY ANALYSIS OF EIRR
(IN CASE OF 10 % INCREASE OF COST: MARTIN)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	165	66	231	0	-231
1994	2,547	66	2,613	0	-2,613
1995	7,504	56	7,560	0	-7,560
1996	0	0	0	576	576
1997	0	0	0	864	864
1998	405	66	471	1,896	1,425
1999	4,492	66	4,558	2,840	-1,718
2000	7,704	56	7,760	2,840	-4,920
2001	0	0	0	2,840	2,840
2002	0	0	0	2,840	2,840
2003	0	0	0	2,840	2,840
2004	0	0	0	2,840	2,840
2005	0	0	0	2,840	2,840
2006	0	0	0	2,840	2,840
2007	0	0	0	2,840	2,840
2008	0	0	0	2,840	2,840
2009	0	0	0	2,840	2,840
2010	0	0	0	2,840	2,840
2011	0	0	0	2,840	2,840
2012	0	0	0	2,840	2,840
2013	0	0	0	2,840	2,840
2014	0	0	0	2,840	2,840
2015	0	0	0	2,840	2,840
2016	0	0	0	2,840	2,840
2017	0	0	0	2,840	2,840
2018	0	0	0	2,840	2,840
2019	0	0	0	2,840	2,840
2020	0	0	0	2,840	2,840
2021	0	0	0	2,840	2,840
2022	0	0	0	2,840	2,840
2023	0	0	0	2,840	2,840
				EIRR=	12.00%

Table H-27 SENSITIVITY ANALYSIS OF EIRR
(IN CASE OF $2.0 RENTAL FEE: KATANA)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	969	43	1,012	0	-1,012
1994	1,301	43	1,344	0	-1,344
1995	4,014	43	4,057	0	-4,057
1996	2,807	43	2,850	0	-2,850
1997	0	0	0	1,380	1,380
1998	0	0	0	2,210	2,210
1999	0	0	0	2,760	2,760
2000	0	0	0	2,760	2,760
2001	0	0	0	2,760	2,760
2002	0	0	0	2,760	2,760
2003	0	0	0	2,760	2,760
2004	0	0	0	2,760	2,760
2005	0	0	0	2,760	2,760
2006	0	0	0	2,760	2,760
2007	0	0	0	2,760	2,760
2008	0	0	0	2,760	2,760
2009	0	0	0	2,760	2,760
2010	0	0	0	2,760	2,760
2011	0	0	0	2,760	2,760
2012	0	0	0	2,760	2,760
2013	0	0	0	2,760	2,760
2014	0	0	0	2,760	2,760
2015	0	0	0	2,760	2,760
2016	0	0	0	2,760	2,760
2017	0	0	0	2,760	2,760
2018	0	0	0	2,760	2,760
2019	0	0	0	2,760	2,760
2020	0	0	0	2,760	2,760
2021	0	0	0	2,760	2,760
2022	0	0	0	2,760	2,760
2023	0	0	0	2,760	2,760
2024	0	0	0	2,760	2,760
				EIRR=	21.06%

Table H-28 SENSITIVITY ANALYSIS OF EIRR
(IN CASE OF 10 % INCREASE OF CONSTRUCTION COST: KATANA)

(at 1992 constant price)

	Construction Cost (US$1,000)	Promotion Cost (US$1,000)	Total Cost (US$1,000)	Benefit (US$1,000)	Net Benefit (US$1,000)
1992	0	0	0	0	0
1993	1,066	43	1,109	0	-1,109
1994	1,431	43	1,474	0	-1,474
1995	4,415	43	4,458	0	-4,458
1996	3,088	43	3,131	0	-3,131
1997	0	0	0	1,545	1,545
1998	0	0	0	2,475	2,475
1999	0	0	0	3,090	3,090
2000	0	0	0	3,090	3,090
2001	0	0	0	3,090	3,090
2002	0	0	0	3,090	3,090
2003	0	0	0	3,090	3,090
2004	0	0	0	3,090	3,090
2005	0	0	0	3,090	3,090
2006	0	0	0	3,090	3,090
2007	0	0	0	3,090	3,090
2008	0	0	0	3,090	3,090
2009	0	0	0	3,090	3,090
2010	0	0	0	3,090	3,090
2011	0	0	0	3,090	3,090
2012	0	0	0	3,090	3,090
2013	0	0	0	3,090	3,090
2014	0	0	0	3,090	3,090
2015	0	0	0	3,090	3,090
2016	0	0	0	3,090	3,090
2017	0	0	0	3,090	3,090
2018	0	0	0	3,090	3,090
2019	0	0	0	3,090	3,090
2020	0	0	0	3,090	3,090
2021	0	0	0	3,090	3,090
2022	0	0	0	3,090	3,090
2023	0	0	0	3,090	3,090
2024	0	0	0	3,090	3,090
				EIRR=	21.38%

JICA

SRI LANKA SMALL SCALE INDUSTRIAL SECTOR DEVELOPMENT

FINAL REPORT

VOL. 4

MARCH 1992