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Multi-sectoral, Inter-temporal Models Applied to India

Richard S. Eckaus and Kirit S. Parikh

Volume II

(Tables and Figures)

Center for International Studies
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April 1966

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Planning for Growth

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ctoral Classification Compared to I.S.I. Classification

Aggregated Sectors	I.S.I. Sectors	Descriptive Notes
1. Agriculture and Plantation AG. PL.	11 Plantations	Natural rubber, tea and coffee.
	13 Animal Husbandry and fishery	Including hides and skins, wool.
	15 Food grains	Including cereal substitutes and pulses
	18 Other agriculture	Including cotton, jute, sugarcane, oil seeds, tobacco, fruits and vegetables, spices, etc.
	21 Forestry products	Timber, firewood, resins, etc
2. Mining and Metal M.M.	6 Iron and Steel	Including ferro-alloys and special steel
	7 Iron ore	
	9 Other metals	Non-ferrous metals and alloys including precious metals.
	10 Other minerals	
	30 Coal and coke	
3. Equipment EQIPMT	3 Electrical Equipment and machinery	Including domestic electrical appliances
	4 Transport Equipment and accessories	Including tractors and bulldosers.
	5 Non-electrical equipment and machinery	Including instruments like surgical tools, water meters etc. and consumer goods such as furniture and fixtures, cutlery, utensils, clocks, razor blades, etc.
4. Chemicals CHEMIC	19 Fertilizers	
	23 Petroleum products	
	24 Crude Oil	
	25 Rubber products	Including tires and tubes, belting and rubber footwear.

Table 3-1 Cont'd.

Aggregated Sectors	I.S.I. Sectors	Descriptive Notes
4. Chemicals CHEMIC	26 Synthetic rubber	
	27 Chemicals	Including matches, paper, newsprint, artificial silk yarn, soaps and cosmetics, drugs and pharmaceuticals, dye stuff and inks, paints and varnishes, plastics; excluding synthetic rubber and chemical fertilizers.
5. Cement, Glass, Wooden Products, etc. CMGLWD	8 Cement	
	20 Glass and non-metallic mineral products: wooden products	Including glass and glassware structural clay products and refractories, chinaware, asbestos, hume pipes; plywoo cane products and strawboard
6. Food, clothing and leather FOODCL	12 Leather and leather products	Leather tanning, leather foot wear and leather components.
	14 Food industries	Including tobacco and product alcohol and non-alcoholic beverages, salted and preser food and prepared foods.
	16 Cotton and other textiles	Including hosiery and knitted fabrics, cordage, twine and rope, carpet weaving.
	17 Jute textiles and coir products	
7. Electricity ELTCTR	29a Electricity - Thermal	Generation, transmission, and distribution of thermal electricity.
	29b Electricity - Hydro	Generation, transmission, and distribution of hydro electr city.
8. Transport TRANS	22 Motor Transport	Goods and passengers transpor
	28 Railways	Goods and passengers tran

Table 3-1 Cont'd.

Aggregated Sectors		I.S.I. Sectors	Descriptive Notes
9. Construction CONSTR	1	Construction 1	Urban and industrial
	2	Construction 2	Rural
10. Housing HOUS.		Housing	
11. Others and Margin OTHMAR		"Others" Margin	Including other industries, other transport and commerce and services.

TABLE 3.2

Inter-industrial Transactions—1960-61

Value in Rs. crores; 1959-60 producers prices)

(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1 Construction, urban and industrial								
2 Construction, rural . .								
3 Electrical equipment . .			2·3	0·6	1·6	1·6		
4 Transport equipment . .				7·0				
5 Non-electrical equipment .	23·0	3·0	6·0	1.0	6·0	2·7	0·2	
6 Iron and steel .	214·0.	26·0	4·0	22·0	74·0	43·0		
7 Iron ore . .						3·5		
8 Cement . .	44·0	5·4						
9 Other metals .			10·0	3·0	44·0	12·0		
10 Other minerals .			0·3			6·7		0·7
11 Plantations .								
12 Leather & leather products .			0·3				0·0	
13 Animal husbandry								
14 Food industries .								
15 Food grains .								
16 Cotton other textiles . .			0·3					
17 Jute textiles .			0·5	0·4		0·6		7.8
18 Other agriculture								
19 Chemical fertilizers								
20 Glass, woodenand non-metallic mineral products	280·0	35·0	2·1	0·6	1·0		0·1	
21 Forestery products	61·3	7·6	0·5	11·0				
22 Motor transport								
23 Petroleum products			0·8	2·0	1·0	2·4		0·3
24 Crude oil . .								
25 Rubber products	.		0·3	8·0	0·1			
26 Rubber .								
27 Chemicals .			2·8	4·4	5·2	6·0		
28 Railways . .								
29 Electricity .			2·5	3·0	4·0	6·0	0·1	3·1
30 Coal . .			0·2	0·4	2·5	6·4	0·0	5·8
31 Others . .			40·0	27·0	27·5	27·6	0·3	3·7
32 Total, rows 1-31	622·3	77·0	72·8	90·4	163·9	118·6	0·7	20·4
33 Value added .	327·9	308·7	45·4	90·6	129·7	110·8	7·0	19·5
34 Margin . .	250·8	30·3	8·8	20·0	49·9	39·6	0·1	6·7
35 Value of output .	1201·0	416·0	126·0	201·0	343·5	269·0	7·8	52·0

Source —Planning Unit, Indian Statistical Institute, New Delhi.

(0)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1 Construction, urban and industrial								
2 Construction, rural								
3 Electrical equipment								
4 Transport equipment								
5 Non-electrical equipment		1·1				6·6		
6 Iron and steel								
7 Iron ore								
8 Cement								
9 Other metals	8·3							
10 Other minerals	5·4							
11 Plantations								
12 Leather & leather products		0·2		46·0				4·[illegible]
13 Animal husbandry				42·0		16·4		16·0
14 Forest industries				2·0	55·0	48·4		5·[illegible]
15 Food grains					97·0	23·0	421·0	
16 Cotton and other textiles								18·0
17 Jute textiles	0·0		1·0	0·2		6·6	2·9	3·9
18 Other agriculture						772·0	2·7	100·[illegible]
19 Chemical fertilizers			6·3				15·0	
20 Glass, wooden and non-metallic mineral products		0·3	3·3			0·9		0·4
21 Forestry products	0·1			9·0				
22 Motor transport								
23 Petroleum products	0·3		0·4	1·6		4·5	11·9	[illegible]
24 Crude oil								
25 Coal products								
26 Rubber								
27 Chemicals	0·4		1·6	12·0	19·0	7·3	3·8	31·[illegible]
28 Railways								
29 Electricity	0·6	0·3	0·2	1·3		5·8	5·6	22·[illegible]
30 Coal	0·4	0·0	0·6	0·2		2·9	0·4	6·0
31 Others	0·1	1·7	11·4	5·5		90·0	8·9	72·[illegible]
32 Total, rows 1-31	15·7	4·1	21·8	118·8	151·0	984·1	472·2	189·[illegible]
33 Value added	12·8	40·8	163·0	47·3	932·0	271·2	3189·0	277·0
34 Margin	3·5	0·5	3·2	22·0	27·0	67·4	12·8	33·5
35 Value of output	32·0	45·4	195·0	189·0	1130·0	1323·0	3974·0	800·0

(0)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
1 Construction, urban and industrial . .								
2 Construction, rural . .								
3 Electrical equipment . .								
4 Transport equipment . .								
5 Non-electrical equipment .	0·5			1·2			7·7	
6 Iron and steel .								
7 Iron ore .								
8 Cement . .				3·2				
9 Other metals .								
10 Other minerals .				6·0				
11 Plantations .								
12 Leather & leather products .								
13 Animal husbandry								
14 Food industries .								
15 Food grains .								
16 Cotton and other textiles . .	0·4			0·4				
17 Jute textiles .	3·0		0·9					
18 Other agriculture	61·0	84·0						
19 Chemical fertilizers		9·0						
20 Glass, wooden and non-metallic mineral products				8·4				
21 Forestry products								
22 Motor transport .				59·0				
23 Petroleum Products	0·3	6·3	0·1	10·0		130·0	0·1	
24 Crude oil . .							43·6	
25 Rubber products						21·0		
26 Rubber . .								
27 Chemicals .	2·9	2·1	4·2	26·0			1·2	
28 Railways . .								
29 Electricity . .	5·5	2·2	0·3	7·0			2·4	
30 Coal . .	0·5		1·2	6·4				
31 Others . .	6·0		3·1	39·0	9·0	36·0	25·6	0·5
32 Total, rows 1-31	7[illegible]·1	1[illegible]3·3	9·8	166·6	9·0	187·0	80·6	0·3
33 Value added .	46·6	1992·6	9·2	168·0	171·0	216·0	55·6	2·9
34 Margin . .	3·5	1·4	1·7	33·4		3·0	2·8	
35 Value of output .	130·0	2097·0	20·7	398·0	180·0	406·0	139·0 +98·1 taxes	3·2

(0)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
1 Construction, urban and industrial								133·0
2 Construction, rural								
3 Electrical equipment							6·1	
4 Transport equipment							7·0	
5. Non electrical equipment	0·3		1·7			3·8	64·5	
6 Iron and steel							580·2	−4·2
7 Iron ore							3·5	1·5
8 Cement							52·6	
9 Other metals			3·1				50·4	−4·0
10 Other minerals			8·2				32·3	1·2
11 Plantations	15·5						15·5	
12 Leather and leather products							[illegible]	[illegible]
13 Animal and [illegible]			2·8				[illegible]	
14 Fish [illegible]			1·9				121·0	
15 Food grains							541·0	
16 Other food [illegible]	[illegible]		0·3				[illegible]	
17 Jute textiles			1·7				[illegible]	[illegible]
18 Other agriculture			0·3				[illegible]	[illegible]
19 Chemical fertilizers							30·3	[illegible]
20 Glass, wood and non metallic mineral products			6·8				344·9	
21 Forestry products			12·5				161·0	11·7
22 Motor transport							220·0	73·0
23 Petroleum products	0·1		2·8	23·0	2·9	0·1	207·1	
24 Crude oil							43·6	
25 Rubber products	0·7						30·1	
26 Rubber	1·4						1·4	
27 Chemicals	1·1		63·0				[illegible]	
28 Railways							[illegible]	[illegible]
29 Electricity	0·8		0·2	3·4		3·2	83·0	6·3
30 Coal	0·1		3·1	31·7	13·5	7·3	89·9	[illegible]
31 Others	5·0		11·0	17·7	12·7	1·7	[illegible]	
32 Total [illegible]	5·3		[illegible]	75·8	29·1	19·1	[illegible]	[illegible]
33 Value added	24·7		1·1·8	378·0	[illegible]	89·2	965·2	[illegible]
34 Margin	7·5		14·8	0·2	8·4	0·7	664·2	
35 Value of output	67·5		281·0	151·0	103·0	109·0	1697·7	[illegible]
							198·1 taxes on petroleum products	

		household	Government	stock	exports	imports	gross fixed capital formation	Total output
	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)
1	Construction, urban and industrial		164·0				944·0	1261·0
2	Construction, rural						416·0	416·0
3	Electrical equipment	33·4	16·9	1·8	0·8	57·0	124·0	126·0
4	Transport equipment	39·2	45·9	4·6	0·5	69·2	173·0	201·0
5	Non-electrical equipment	142·0	31·0	15·7	2·9	228·7	345·0	343·5
6	Iron & Steel			4·0	10·1	120·9		269·0
7	Iron ore			0·4	2·4			7·8
8	Cement			—0·2	0·3	0·1		92·0
9	Other metals			1·7	0·2	49·3		3[illegible]
10	Other minerals				24·5	16·0		45·[illegible]
11	Plantations	73·7		5·8	109·5	8·5		196·[illegible]
12	Leather & leather-products	9[illegible]		0·8	23·7	0·3		16[illegible]·0
13	Animal husbandry	105·[illegible]			20·0	19·2		11[illegible]
14	Food industries	97[illegible]	93·0	102·3	36·1	9·5		13[illegible]
15	Food grains	352[illegible]		57·8		144·9		397[illegible]·0
16	Cotton & other textiles	702·0	11·3	9·2	54·5	4·0		800·0
17	Jute textiles			1·6	94·4	0·1		13[illegible]·0
18	Other Agriculture	761·4		19·1	49·3	124·8		2097·0
19	Chemical fertilizers			1·3		10·7		20·7
20	Glass, wooden and non-metallic mineral products	6[illegible]·2		—1·9	2·4	10·0		395·0
21	Forestry products				12·4	5·1		18[illegible]·0
22	Motor transport	113·0						[illegible]
23	Petroleum products	[illegible]	27·3		4·1	82·6		237·[illegible]
24	Crude oil					49·4		5·2
25	Rubber products	39·6		0·2	0·6	3·3		67·5
26	Rubber			0·[illegible]		2·3		
27	Chemicals	17[illegible]		5·8	9·9	111·2		[illegible]
28	Paper	[illegible]						[illegible]
29	Electricity	11·[illegible]	[illegible]	—2·[illegible]				[illegible]
30	Coal	[illegible]		2·3	1·8	0·1		10[illegible]·0
31	Other	18[illegible]			7·[illegible]	11·1		
32	Total (1–31)	79[illegible]	[illegible]	231·1	[illegible]	1090·5	[illegible]	
33	Value added		[illegible]					[illegible]
34	Margin	[illegible]			104·8		270·0	
35	Value of output	[illegible]	[illegible]	231·1	632·9	1090·5	2276·0	14795·0

(a) represents adjustment for exaggerated industrial consumption shown in table.
(b) inclusive of margin.
(c) inclusive of "others".
(d) row total is less by 495·0 than column total if entries in row 22 and 29 are considered.
(e) gross value added.

TABLE 3-3

MODIFIED INPUT-OUTPUT TABLE FOR 1960-61
(Value in Rs. Crores; 1959-60 producers prices)

	1 CONSTU	2 CONSTR	3 ELEQIP	4 TRANEQ	5 MECIP	6 IRCAST	7 IRCNCR	8 CEMENT	9 O METL	10 O MIN.	11 PLANTN	12 LEATHR
1 CONSTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2 CONSTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3 ELEQIP	0.	0.	2.300	.600	1.600	1.600	0.	0.	0.	0.	0.	0.
4 TRANEQ	0.	0.	0.	7.000	0.	0.	0.	0.	0.	0.	0.	0.
5 MECIP	23.000	3.000	6.000	1.000	6.000	2.700	.200	0.	0.	1.100	0.	0.
6 IRONST	210.361	25.558	3.932	21.626	69.793	42.269	-0.	-0.	-0.	-0.	-0.	-0.
7 IRONOR	0.	0.	0.	0.	0.	3.500	0.	0.	0.	0.	0.	0.
8 CEMENT	42.171	5.175	-0.	-0.	-0.	4.792	-0.	-0.	-0.	-0.	-0.	-0.
9 O METL	-0.	-0.	9.876	2.963	43.453	11.851	-0.	-0.	8.197	-0.	-0.	-0.
10 O MIN.	-0.	-0.	.283	-0.	-0.	6.314	-0.	5.372	5.089	-0.	-0.	-0.
11 PLANTN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12 LEATHR	0.	0.	.300	0.	0.	0.	-.031	0.	0.	.200	0.	46.000
13 ANIHUS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	42.000
14 FOODIN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.000
15 FOODGR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16 COTEXT	0.	0.	.300	0.	0.	0.	0.	0.	0.	0.	0.	0.
17 JUTEXT	0.	0.	.500	.400	0.	.600	0.	7.800	.032	0.	1.000	.200
18 O AGRI	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
19 FERTIL	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	6.258	-0.
20 GLASWD	275.055	34.382	2.063	.589	.982	-0.	.059	-0.	-0.	.295	3.242	-0.
21 FOREST	61.300	7.600	.500	11.000	0.	0.	0.	0.	.100	0.	0.	9.000
22 MOTRAN	17.150	0.	6.570	13.720	19.500	39.600	.525	7.620	3.410	3.150	3.410	0.
23 PETPRO	13.500	0.	.800	2.000	1.000	2.400	0.	.300	.300	0.	.400	.600
24 CR.OIL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
25 RUBPRO	0.	0.	.300	8.000	.100	0.	0.	0.	0.	0.	0.	0.
26 RUBBER	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
27 CHEMIC	0.	0.	2.800	4.400	5.200	6.000	0.	0.	.400	0.	1.600	12.000
28 RAILS	25.400	0.	3.530	2.590	3.050	3.290	.240	1.170	2.590	7.520	3.530	0.
29 ELECTR	0.	0.	1.500	3.000	4.000	6.000	.140	3.100	.600	.800	.200	1.300
30 COAL	0.	0.	.100	.400	2.500	11.400	.008	5.800	.400	.045	.600	.200
31 HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	[illegible]	[illegible]	0.	0.
32 OTHERS	151.408	22.030	28.137	22.313	39.879	13.021	-0.	1.172	0.	-0.	5.737	21.270
34 OUTPUT	1201.0	416.0	126.0	201.0	343.5	269.0	7.8	52.6	32.0	45.4	196.0	189.0

COURIER-UNIFORM—1 STOCK FORM 6-1185

TABLE 3-3 (Contd)

	13 ANIHUS	14 FCCDIN	15 FCCDGR	16 COTEXT	17 JUTEXT	18 O AGRI	19 FERTIL	20 GLASWD	21 FCREST	22 MOTRAN	23 PETPRO	24 CR.CI
1 CONSTU	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2 CONSTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3 ELECTP	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4 TRANEQ	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
5 NECCIP	0.	6.600	0.	0.	.500	0.	0.	1.200	0.	0.	7.700	0.
6 IRONST	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.
7 IRONCR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8 CEMENT	-0.	-0.	-0.	-0.	-0.	-0.	-0.	3.067	-0.	-0.	-0.	-0.
9 O METL	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	-0.
10 C MIN.	-0.	-0.	-0.	-0.	-0.	-0.	-0.	5.655	-0.	-0.	-0.	-0.
11 PLANTN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12 LEATHR	0.	0.	0.	4.000	0.	0.	0.	0.	0.	0.	0.	0.
13 ANIHUS	0.	16.400	0.	10.000	0.	0.	0.	0.	0.	0.	0.	0.
14 FOODIN	55.000	48.400	0.	5.600	0.	0.	0.	0.	0.	0.	0.	0.
15 FOODGR	97.000	23.000	421.000	0.	0.	0.	0.	0.	0.	0.	0.	0.
16 COTEXT	0.	0.	0.	18.000	.400	0.	0.	.400	0.	0.	0.	0.
17 JUTEXT	0.	6.600	2.900	3.900	3.000	0.	.900	0.	0.	0.	0.	0.
18 O AGRI	0.	772.000	2.700	300.000	61.000	84.000	0.	0.	0.	0.	0.	0.
19 FERTIL	-0.	-0.	14.901	-0.	-0.	8.941	-0.	-0.	-0.	-0.	-0.	-0.
20 GLASWD	-0.	.884	-0.	6.287	-0.	-0.	-0.	8.252	-0.	-0.	-0.	-0.
21 FOREST	0.	0.	0.	0.	0.	0.	0.	59.000	0.	0.	0.	0.
22 MOTRAN	0.	29.250	12.650	34.300	5.500	22.450	2.360	16.350	0.	0.	10.550	0.
23 PETPRO	0.	4.500	11.900	7.200	.300	6.300	.100	10.000	0.	104.100	.100	0.
24 CR.OIL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	43.600	0.
25 RUBPRO	0.	0.	0.	0.	0.	0.	0.	0.	0.	16.800	0.	0.
26 RUBBER	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
27 CHEMIC	19.000	7.300	3.800	34.000	2.900	2.100	4.200	26.000	0.	0.	1.200	0.
28 RAILS	0.	24.700	3.530	22.700	3.650	7.760	1.410	6.590	0.	18.800	4.700	0.
29 ELECTR	0.	5.800	5.600	22.000	3.500	2.200	.300	7.000	0.	0.	2.400	0.
30 COAL	0.	2.900	.400	6.400	.500	0.	1.200	6.400	0.	0.	0.	0.
31 HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
32 OTHERS	20.221	77.478	4.134	36.324	.112	0.	.210	38.901	7.079	9.753	10.343	.23
34 OUTPUT	1130.0	1323.0	3974.0	800.0	130.0	2097.0	20.7	398.0	180.0	325.0	237.1	3.2

TABLE 3-3 (Contd.)

25 RUBPRC	26 RUBBER	27 CHEMIC	28 RAILS	29 ELECTR	30 COAL	31 HOUS.	32 OTHERS	33 SUM	34 OUTPUT
0.	0.	0.	0.	0.	0.	0.	153.000	153.000	1201.000
0.	0.	0.	0.	0.	0.	0.	0.	0.	416.000
0.	0.	0.	0.	0.	0.	0.	0.	6.100	126.000
0.	0.	0.	0.	0.	0.	0.	0.	7.000	201.000
.300	0.	1.700	0.	0.	3.800	0.	0.	64.800	343.500
-0.	-0.	-0.	-0.	-0.	-0.	2.261	0.	382.300	269.000
0.	0.	0.	0.	0.	0.	0.	0.	3.500	7.800
-0.	-0.	-0.	-0.	-0.	-0.	2.425	0.	60.130	52.600
-0.	-0.	3.061	-0.	-0.	-0.	-0.	0.	80.400	32.000
-0.	-0.	7.728	-0.	-0.	-0.	.660	0.	33.000	45.400
15.500	0.	0.	0.	0.	0.	0.	0.	15.500	196.000
0.	0.	0.	0.	0.	0.	0.	0.	50.531	189.000
0.	0.	2.800	0.	0.	0.	0.	18.300	89.500	1130.000
0.	0.	10.900	0.	0.	0.	0.	0.	121.900	1323.000
0.	0.	0.	0.	0.	0.	0.	0.	541.000	3974.000
7.000	0.	.300	0.	0.	0.	0.	0.	26.400	800.000
0.	0.	1.700	0.	0.	0.	0.	4.600	34.132	130.000
0.	0.	.300	0.	0.	0.	0.	172.000	392.000	2097.000
-0.	-0.	-0.	-0.	-0.	-0.	-0.	0.	30.300	20.700
-0.	-0.	6.680	-0.	-0.	-0.	6.100	0.	351.070	398.000
0.	0.	12.500	0.	0.	0.	0.	11.700	172.700	180.000
3.940	0.	26.400	4.470	12.150	4.470	2.890	62.000	364.385	325.000
.100	0.	2.800	23.000	2.900	.100	0.	12.400	207.100	237.100
0.	0.	0.	0.	0.	0.	0.	0.	43.600	3.200
.700	0.	0.	0.	0.	0.	0.	4.200	30.100	67.500
1.400	0.	0.	0.	0.	0.	0.	0.	1.400	.010
4.400	.005	63.000	0.	0.	0.	0.	0.	200.305	284.000
4.700	0.	5.880	9.400	0.	2.350	.940	59.600	229.620	454.000
.800	.000	6.200	3.400	0.	3.200	0.	6.300	89.340	103.000
.100	.000	3.100	31.700	13.500	7.300	0.	4.000	58.953	109.000
0.	0.	0.	0.	0.	0.	0.	0.	0.	569.280
3.036	0.	5.128	3.170	7.039	-0.	25.384	0.	743.900	5854.600
34 OUTPUT 67.5	.01	284.0	454.0	103.0	109.0	569.28	5854.6		

TABLE 3-4

INPUT-OUTPUT COEFFICIENT MATRIX FOR THIRD PLAN PERIOD, a

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL
AG.PL.	.080	.000	.017	.C51	.131	.505
M.M.	.000	.208	.231	.C25	.052	.004
EQIPMT	0.	.020	.037	.C16	.003	.0C3
CHEMIC	.010	.020	.037	.199	.081	.028
CMGLWC	.000	.011	.005	.C11	.025	.003
FOODCL	.008	.002	.002	.034	.018	.057
ELECTR	.001	.023	.013	.C16	.022	.013
TRANS	.007	.145	.073	.C98	.070	.049
CONSTR	0.	0.	0.	0.	C.	0.
HOUS.	0.	0.	0.	0.	C.	0.
OTHMAR	.005	.028	.135	.C32	.089	.055
SUM	.111	.458	.55C	.480	.491	.718

	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR
AG.PL.	0.	0.	.043	C.	.035
M.M.	.131	.041	.146	.005	.001
EQIPMT	0.	0.	.C16	0.	0.
CHEMIC	.028	.185	.C08	0.	.003
CMGLWC	0.	0.	.221	.015	0.
FOODCL	0.	0.	0.	0.	.001
ELECTR	0.	.004	0.	0.	.001
TRANS	.118	.042	.026	.007	.021
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	.068	.017	.107	.045	0.
SUM	.346	.288	.567	.071	.061

TABLE 3-5

INPUT-OUTPUT COEFFICIENT MATRIX FOR FOURTH PLAN PERIOD, a

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL
AG.PL.	.079	.000	.01[illegible]	.048	.134	.502
M.M.	.000	.235	.263	.027	.048	.004
EQIPMT	0.	.018	.033	.014	.003	.003
CHEMIC	.010	.023	.03[illegible]	.198	.082	.029
CMGLWD	.000	.013	.005	.011	.026	.003
FOODCL	.008	.002	.002	.034	.015	.056
ELECTR	.001	.023	.012	.016	.022	.014
TRANS	.007	.150	.071	.099	.068	.050
CONSTR	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	.005	.033	.132	.032	.090	.055
SUM	.110	.498	.558	.479	.488	.715

7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR
0.	0.	.035	0.	.035
.131	.037	.118	.005	.001
0.	0.	.013	0.	0.
.028	.202	.006	0.	.003
0.	0.	.180	.015	0.
0.	0.	0.	0.	.001
0.	.004	0.	0.	.001
.118	.043	.018	.007	.021
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
.068	.018	.090	.045	0.
.346	.304	.459	.071	.061

Table 3-6

Aggregate Inventory Output Coefficients, S_j

	32 Sectors			11 Sectors				
	CSO[1]	PPD[2]	Reference set	Sector	Reference Set Third Plan	Reference Set Fourth Plan	Lower Set Third Plan	Lower Set Fourth Plan
1. Construction, urban			.068					
2. Construction, rural			.068					
3. Electrical Equipment	.361	.336	.34	1.AG.PL.	.393	.393	.131	.131
4. Transport Equipment	.399	.233	.40	2.M.M.	.240	.236	.240	.236
5. Non-Electrical Equipment	.425	.389	.39	3.EQIPMT	.384	.384	.384	.384
6. Iron and Steel	.352	.230	.23	4.CHEMIC	.528	.527	.259	.259
7. Iron Ore		.200	.20	5.CMGLWD	.237	.236	.237	.236
8. Cement	.292	.070	.29	6.FOODCL	.361	.359	.181	.181
9. Other Metals	.261	.240	.24	7.ELECTR	.129	.129	.129	.129
10. Other Minerals			.24	8.TRANS	.020	.018	.020	.018
11. Plantations			.368	9.CONSTR	.068	.068	.068	.068
12. Leather & leather prods.	.302		.30	10.HOUS.	0.	0.	0.	0.
13. Animal Husbandry			.020	11.OTHMAR	.008	.008	.008	.008
14. Food industries	.326		.33					
15. Food grains			.430					
16. Cotton & other textiles	.283	.123	.28					
17. Jute textiles	.251		.25					
18. Other agriculture			.430					
19. Chemical fertilizers	.514	.500	.50					
20. Glass, wooden, etc.	.279	.231	.23					
21. Forestry products			.020					
22. Motor transport			.016					
23. Petroleum products	.141		.14					
24. Crude oil			.60					
25. Rubber products	.230	.23	.23					
26. Rubber			.30					
27. Chemicals	.305	.275	.28					
28. Railways			.022					
29. Electricity, total	.147		.129					
30. Coal		.187	.190					
31. Housing			0.					
32. Others			.008					

[1] Central Statistical Organisation - Annual Survey of Industries, 1960.

[2] P.P.D. "Notes on Perspective of Development, India" Table M. Individual sectors are not necessarily complete.

[3] Amartya Kumar Sen Working Capital in the Indian Economy: A Conceptual Framework and Some Estimates. estimates

Agriculture	.14
Manufacture	1.05
Small Industries	.40 to .60
Trading	1.10

[4] J. Mirrlees' estimate of inventory/output ratio in Agriculture is 0.860.

TABLE 3-7

INVENTORY-OUTPUT COEFFICIENT MATRICES FOR THIRD PLAN PERIOD, s

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL
AG.PL.	.318	.000	.023	.031	.101	.298
M.M.	.001	.162	.258	.019	.039	.002
EQIPMT	0.	.044	.046	.054	.002	.002
CHEMIC	.041	.014	.046	.394	.062	.018
CMGLWD	.002	.014	.007	.007	.019	.002
FOODCL	.031	.005	.003	.023	.013	.040
ELECTR	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.
SUM	.393	.240	.384	.528	.237	.361

	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR
AG.PL.	0.	0.	.007	0.	.007
M.M.	.106	.012	.023	0.	.000
EQIPMT	0.	0.	.003	0.	0.
CHEMIC	.023	.009	.001	0.	.001
CMGLWD	0.	0.	.035	0.	0.
FOODCL	0.	0.	0.	0.	.000
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.
SUM	.129	.020	.068	0.	.008

TABLE 3-8

INVENTORY-OUTPUT COEFFICIENT MATRIX FOR FOURTH PLAN PERIOD, s

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL
AG.PL.	.318	.000	.011	.076	.102	.302
M.M.	.001	.190	.295	.042	.037	.003
EQIPMT	0.	.015	.037	.023	.002	.002
CHEMIC	.041	.019	.033	.315	.063	.017
CMGLWD	.002	.010	.006	.018	.020	.002
FOODCL	.031	.002	.002	.054	.012	.034
ELECTR	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.
SUM	.393	.236	.384	.527	.236	.359

	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR
AG.PL.	0.	0.	.007	0.	.007
M.M.	.106	.003	.023	0.	.000
EQIPMT	0.	0.	.003	0.	0.
CHEMIC	.023	.016	.001	0.	.001
CMGLWD	0.	0.	.035	0.	0.
FOODCL	0.	0.	0.	0.	.000
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.
SUM	.129	.018	.068	0.	.008

Table 3-9

Aggregate Capital/Output Coefficients Matrix, b

Serial No.	Sector	Total	Construction Industrial & Construction Urban	Construction Industrial & Construction Rural	Equipment excl. Transport	Transport Equipment	Othe and Marg
		Fixed Capital Coefficients					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Construction, industrial & urban	0.153	0.04	-	.10	-	.013
2.	Construction, rural	-	-	-	-	-	-
3.	Electrical equipment	0.695	0.30	-	0.35	-	.045
4.	Transport equipment	0.752	0.30	-	0.40	-	.052
5.	Non-electrical equipment	1.072	0.45	-	0.55	-	.072
6.	Iron and steel	2.252	0.93	-	1.17	-	.152
7.	Iron ore	1.993	0.75	-	1.10	-	.143
8.	Cement	1.788	0.85	-	0.83	-	.108
9.	Other metals	2.825	1.30	-	1.35	-	.175
10.	Other minerals	2.673	1.17	-	1.33	-	.173
11.	Plantations	1.586	0.40	0.15	0.90	-	.136
12.	Leather & leather products	0.369	0.20	-	0.15	-	.019
13.	Animal husbandry & fishery	1.591	0.80	0.50	0.20	-	.091
14.	Food industries	0.412	0.13	-	0.25	-	.032
15.	Food grains	1.591	0.80	0.50	0.20	-	.091
16.	Cotton & other textiles	0.964	0.25	-	0.72	-	.094
17.	Jute textiles	1.051	0.35	-	0.62	-	.081
18.	Other agriculture	1.591	0.80	0.50	0.20	-	.091
19.	Chemical fertilizers	1.565	1.00	-	0.50	-	.065
20.	Glass, wooden & non-metallic mineral products	0.689	0.35	-	0.30	-	.039
21.	Forestry products	1.591	0.80	0.50	0.20	-	.091
22.	Motor transport	1.356	b/	-	-	1.20	.156
23.	Petroleum products c/	0.475	0.26	-	0.19	-	.025
24.	Crude oil	7.137	3.95	-	2.82	-	.367
25.	Rubber products	0.539	0.20	-	0.30	-	.039
26.	Synthetic rubber	1.621	0.83	-	0.70	-	.091
27.	Chemicals	0.892	0.35	-	0.48	-	.062
28.	Railways	2.599	b/	-	-	2.30	.299
29a.	Thermal electricity	6.133	2.80	-	2.95	-	.383
29b.	Hydro electricity	6.947	4.80	-	1.90	-	.247
30.	Coal	2.117	1.10	-	0.90	-	.117
31.	Housing	10.00	10.00	-	-	-	-
32.	Others and Margin	0.157	.10	-	-	.502	.066

a/ Included in item (13): Animal husbandry & fishery.
b/ Not required because of its oxogenous nature.
c/ Including lubricating oils and naphtha.

Table 3-10

Aggregate Capital Output Ratios, b and Capital Proportion Matrix, p,
For Third Plan Period

Capital Type \ Sector	(1) AG.PL.	(2) M.M.	(3) EQIPMT	(4) CHEMIC	(5) CMGLWD	(6) FOODCL	(7) ELECTR	(8) TRANS	(9) CONSTR	(10) HOUS.	(11) OTHMAR
1. AG.PL.	-	-	-	-	-	-	-	-	-	-	-
2. M.M.	-	-	-	-	-	-	-	-	-	-	-
3. EQIPMT	.138	.496	.516	.490	.471	.628	.404	.885	.654	0.	.319
4. CHEMIC	-	-	-	-	-	-	-	-	-	-	-
5. CMGLWD	-	-	-	-	-	-	-	-	-	-	-
6. FOODCL	-	-	-	-	-	-	-	-	-	-	-
7. ELECTR	-	-	-	-	-	-	-	-	-	-	-
8. TRANS	-	-	-	-	-	-	-	-	-	-	-
9. CONSTR	.844	.441	.418	.446	.468	.290	.543	0.	.261	1.0	.639
10. HOUS.	-	-	-	-	-	-	-	-	-	-	-
11. OTHMAR	.018	.064	.066	.064	.061	.082	.053	.115	.085	0.	.042
Sum	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Capital Output Ratio Reference Set	1.511	2.416	.905	.875	.894	.551	6.259	2.222	.153	10.000	.156
'Lower' Set	1.000	2.416	.905	.875	.894	.551	6.259	2.222	.153	7.5000	.156

Table 3-11

Aggregate Capital Output Ratios, b, and Capital Proportion Matrix, p,
For Fourth Plan Period

Capital Type \ Sector	(1) AG.PL.	(2) M.M.	(3) EQIPMT	(4) CHEMIC	(5) CMGLWD	(6) FOODCL	(7) ELECTR	(8) TRANS	(9) CONSTR	(10) HOUS.	(11) OTHMAR
1. AG.PL.	-	-	-	-	-	-	-	-	-	-	-
2. M.M.	-	-	-	-	-	-	-	-	-	-	-
3. EQIPMT	.138	.503	.515	.471	.444	.629	.404	.885	.654	0.	.319
4. CHEMIC	-	-	-	-	-	-	-	-	-	-	-
5. CMGLWD	-	-	-	-	-	-	-	-	-	-	-
6. FOODCL	-	-	-	-	-	-	-	-	-	-	-
7. ELECTR	-	-	-	-	-	-	-	-	-	-	-
8. TRANS	-	-	-	-	-	-	-	-	-	-	-
9. CONSTR	.844	.432	.418	.468	.498	.289	.543	0.	.261	1.000	.639
10. HOUS.	-	-	-	-	-	-	-	-	-	-	-
11. OTHMAR	.018	.065	.067	.061	.058	.082	.053	.115	.085	0.	.042
Sum	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Capital Output Ratio Reference Set	1.510	2.477	.955	1.056	.862	.557	6.259	2.173	.153	10.0	.156
'Lower' Set	1.000	2.477	.955	1.056	.862	.557	6.259	2.173	.153	7.5	.156

TABLE 3-12

LAG PROPORTIONS MATRICES FOR THIRD PLAN PERIOD, p', p'', p'''

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	.069	.248	.258	.245	.222	.314	.202	.442	.327	0.	.160
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.282	.147	.139	.149	.166	.097	.181	0.	.087	.333	.213
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.009	.032	.034	.032	.029	.041	.026	.057	.042	0.	.021
SUM	.359	.427	.431	.425	.417	.452	.409	.500	.456	.333	.393

	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	.069	.248	.258	.245	.222	.314	.202	.442	.327	0.	.160
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.282	.147	.139	.149	.166	.097	.181	0.	.087	.333	.213
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.009	.032	.034	.032	.029	.041	.026	.057	.042	0.	.021
SUM	.359	.427	.431	.425	.417	.452	.409	.500	.456	.333	.393

	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.282	.147	.139	.149	.166	.097	.181	0.	.087	.333	.213
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE 3-13

LAG PROPORTIONS MATRICES FOR FOURTH PLAN PERIOD, P', P'', P'''

P'

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	.069	.251	.257	.235	.222	.315	.202	.442	.327	0.	.160
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.281	.144	.139	.156	.166	.096	.181	0.	.087	.333	.213
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.009	.033	.033	.031	.029	.041	.026	.057	.042	0.	.021
SUM	.359	.428	.430	.422	.417	.452	.409	.500	.456	.333	.393

P''

	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	.069	.251	.257	.235	.222	.315	.202	.442	.327	0.	.160
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.281	.144	.139	.156	.166	.096	.181	0.	.087	.333	.213
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.009	.033	.033	.031	.029	.041	.026	.057	.042	0.	.021
SUM	.359	.428	.430	.422	.417	.452	.409	.500	.456	.333	.393

P'''

	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.281	.144	.139	.156	.166	.096	.181	0.	.087	.333	.213
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SUM	.281	.144	.139	.156	.166	.096	.181	[illegible]	[illegible]	[illegible]	[illegible]

TABLE 3-14

ALTERNATIVE LAG PROPORTION MATRICES-SHORTENED LAGS, p', p'', p'''

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	.069	.251	.257	.235	.222	.315	.202	.442	.654	0.	.320
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.422	.144	.209	.234	.249	.144	.181	0.	.262	.500	.639
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.009	.033	.033	.031	.029	.041	.026	.057	.084	0.	.041
SUM	.500	.428	.500	.500	.500	.500	.409	.500	1.000	.500	1.000

	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	.069	.251	.257	.235	.222	.315	.202	.442	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.422	.144	.209	.234	.249	.144	.181	0.	0.	.500	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.009	.033	.033	.031	.029	.041	.026	.057	0.	0.	0.
SUM	.500	.428	.500	.500	.500	.500	.409	.500	0.	.500	0.

	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	.144	0.	0.	0.	0.	.181	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SUM	0.	.144	0.	0.	0.	0.	.181	0.	0.	0.	0.

TABLE 3-15

NON-COMPETITIVE IMPORT COEFFICIENTS, m', AND COMPETITIVE IMPORT CEILINGS-RATIOS OF COMPETITIVE IMPORTS TO "UNCOMMITTED" FOREIGN EXCHANGE, m''

		m'	m''
1	AG.PL.	.301000	.016000
2	M.M.	.199000	.145000
3	EQIPMT	.348000	.235000
4	CHEMIC	.162000	.261000
5	CMGLWD	.020000	.004000
6	FOODCL	.027000	.000080
7	ELECTR	0.	0.
8	TRANS	0.	0.
9	CONSTR	0.	0.
10	HOUS.	0.	0.
11	OTHMAR	.020000	0.

TABLE 3-16

DECREASING NON-COMPETITIVE IMPORT COEFFICIENTS FOR THE FOURTH PLAN PERIOD, m'

	1966-67	1967-68	1968-69	1969-70	1970-71
1 AG.PL.	.0160	.0160	.0160	.0160	.0160
2 M.M.	.1150	.1450	.1300	.1000	.0850
3 EQIPMT	.2250	.2350	.2300	.2200	.2100
4 CHEMIC	.2000	.2610	.2300	.1700	.1300
5 CMGLWD	.0040	.0040	.0040	.0040	.0040
6 FOODCL	.0001	.0001	.0001	.0001	.0001
7 ELECTR	0.	0.	0.	0.	0.
8 TRANS	0.	0.	0.	0.	0.
9 CONSTR	0.	0.	0.	0.	0.
10 HOUS.	0.	0.	0.	0.	0.
11 OTHMAR	0.	0.	0.	0.	0.

TABLE 3-17

DEPRECIATED CAPITAL FOR THIRD AND FOURTH PLAN PERIODS, D
(Rupees crores, 1959-60 producers prices)

		1961-62	1962-63	1963-64	1964-65	1965-66
1	AG.PL.	143.6563	145.8519	148.0475	150.2431	152.4388
2	M.M.	65.8512	66.8577	67.8642	68.8706	69.8771
3	EQIPMT	14.6194	14.8428	15.0662	15.2897	15.5131
4	CHEMIC	47.9160	48.6483	49.3806	50.1130	50.8453
5	CMGLWD	13.0896	13.2897	13.4898	13.6898	13.8899
6	FOODCL	30.2738	30.7365	31.1992	31.6619	32.1246
7	ELECTR	40.5330	41.1525	41.7720	42.3915	43.0110
8	TRANS	84.5926	85.8855	87.1784	88.4713	89.7642
9	CONSTR	1.2641	1.2834	1.3027	1.3220	1.3414
10	HOUS.	186.8274	189.6828	192.5382	195.3937	198.2491
11	OTHMAR	134.1757	136.2264	138.2771	140.3278	142.3786
12	SUM	916.0000	930.0000	944.0000	958.0000	972.0000

		1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73
1	AG.PL.	154.7912	157.1437	159.4961	161.8486	164.3578	166.8671	169.3764
2	M.M.	70.9554	72.0338	73.1121	74.1905	75.3407	76.4910	77.6412
3	EQIPMT	15.7525	15.9919	16.2313	16.4707	16.7261	16.9814	17.2368
4	CHEMIC	51.6300	52.4146	53.1993	53.9839	54.8209	55.6578	56.4948
5	CMGLWD	14.1042	14.3186	14.5329	14.7473	14.9759	15.2046	15.4332
6	FOODCL	32.6203	33.1161	33.6118	34.1076	34.6364	35.1652	35.6940
7	ELECTR	43.6747	44.3385	45.0022	45.6660	46.3740	47.0820	47.7900
8	TRANS	91.1494	92.5347	93.9199	95.3052	96.7828	98.2604	99.7380
9	CONSTR	1.3621	1.3828	1.4035	1.4242	1.4462	1.4683	1.4904
10	HOUS.	201.3085	204.3679	207.4273	210.4867	213.7501	217.0134	220.2768
11	OTHMAR	144.5758	146.7730	148.9702	151.1674	153.5110	155.8547	158.1984
12	SUM	987.0000	1002.0000	1017.0000	1032.0000	1048.0000	1064.0000	1080.0000

TABLE 3-18

DEPRECIATION COMPOSITION MATRIX, r
FOR THIRD AND FOURTH PLAN PERIODS

	1	2	3	4	5	6
		M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL
AG.PL.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.
EQIPMT	.265	.538	.568	.519	.549	.679
CHEMIC	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.
CONSTR	.700	.391	.357	.413	.379	.231
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	.035	.071	.075	.068	.072	.090
SUM	1.000	1.000	1.000	1.000	1.000	1.000

7	8	9	10	11
ELECTR	TRANS	CONSTR	HOUS.	OTHMAR
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
.311	.885	.812	0.	.308
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
.648	0.	.080	1.000	.652
0.	0.	0.	0.	0.
.041	.115	.109	0.	.041
1.000	1.000	1.000	1.000	1.000

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	.133	.269	.284	.259	.275	.339	.156	.442	.406	0.	.154
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.233	.130	.119	.138	.126	.077	.216	0.	.027	.333	.217
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.017	.035	.038	.034	.036	.045	.021	.057	.054	0.	.020
SUM	.383	.435	.441	.431	.437	.461	.392	.500	.487	.333	.391

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	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	.133	.269	.284	.259	.275	.339	.156	.442	.406	0.	.154
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.233	.130	.119	.138	.126	.077	.216	0.	.027	.333	.217
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.017	.035	.038	.034	.036	.045	.021	.057	.054	0.	.020
SUM	.383	.435	.441	.431	.437	.461	.392	.500	.487	.333	.391

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	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR
AG.PL.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	.233	.130	.119	.138	.126	.077	.216	0.	.027	.333	.217
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SUM	.233	.130	.119	.138	.126	.077	.216	0.	.027	.333	.217

TABLE 3-20

EXPORT PROJECTIONS FOR THIRD PLAN PERIOD, E
(Rupees crores, 1959-60 producers prices)

		1961-62	1962-63	1963-64	1964-65	1965-66
1	AG.PL.	198.188	206.370	214.552	223.037	231.826
2	M.M.	40.090	41.745	43.400	45.117	46.894
3	EQIPMT	4.336	4.515	4.694	4.880	5.072
4	CHEMIC	15.088	15.711	16.334	16.980	17.649
5	CMGLWD	2.793	2.908	3.023	3.143	3.267
6	FCCDCL	215.656	224.560	233.463	242.696	252.259
7	ELECTR	0.	0.	0.	0.	0.
8	TRANS	0.	0.	0.	0.	0.
9	CONSTR	0.	0.	0.	0.	0.
10	HOUS.	0.	0.	0.	0.	0.
11	OTHMAR	177.836	185.178	192.519	200.133	208.019
12	SUM	654.000	681.000	708.000	736.000	765.000

TABLE 3-21

EXPORT PROJECTIONS FOR FOURTH PLAN PERIOD, E
(Rupees crores, 1959-60 producers prices)

		1966-67	1967-68	1968-69	1969-70	1970-71
1	AG.PL.	195.922	210.328	228.026	249.430	276.389
2	M.M.	159.650	171.389	185.812	203.252	225.221
3	EQIPMT	62.356	66.941	72.574	79.386	87.966
4	CHEMIC	48.457	52.020	56.397	61.691	68.359
5	CMGLWD	6.759	7.256	7.867	8.605	9.535
6	FOODCL	355.953	382.126	414.281	453.167	502.148
7	ELECTR	0.	0.	0.	0.	0.
8	TRANS	0.	0.	0.	0.	0.
9	CONSTR	0.	0.	0.	0.	0.
10	HOUS.	0.	0.	0.	0.	0.
11	OTHMAR	122.903	131.940	143.043	156.469	173.381
12	SUM	952.000	1022.000	1108.000	1212.000	1343.000

TABLE 3-22

GOVERNMENT CONSUMPTION FOR THIRD PLAN PERIOD, G
(Rupees Crores, 1959-60 producers prices)

		1961-62	1962-63	1963-64	1964-65	1965-66
1	AG.PL.	0.	0.	0.	0.	0.
2	M.M.	0.	0.	0.	0.	0.
3	EQIPMT	97.596	101.204	104.993	108.601	112.209
4	CHEMIC	28.402	29.452	30.555	31.605	32.655
5	CMGLWD	0.	0.	0.	0.	0.
6	FOODCL	109.120	113.154	117.389	121.423	125.457
7	ELECTR	4.923	5.105	5.296	5.478	5.660
8	TRANS	0.	0.	0.	0.	0.
9	CONSTR	108.200	112.200	116.400	120.400	124.400
10	HOUS.	0.	0.	0.	0.	0.
11	OTHMAR	192.758	199.884	207.367	214.493	221.619
12	SUM	541.000	561.000	582.000	602.000	622.000

TABLE 3-23

GOVERNMENT CONSUMPTION FOR FOURTH PLAN PERIOD, G
(Rupees crores, 1959-60 producers prices)

		1966-67	1967-68	1968-69	1969-70	1970-71
1	AG.PL.	0.	0.	0.	0.	0.
2	M.M.	0.	0.	0.	0.	0.
3	EQIPMT	199.883	212.331	226.222	241.195	257.611
4	CHEMIC	58.170	61.792	65.835	70.192	74.970
5	CMGLWD	0.	0.	0.	0.	0.
6	FOODCL	223.484	237.401	252.932	269.673	288.028
7	ELECTR	10.083	10.711	11.411	12.167	12.995
8	TRANS	0.	0.	0.	0.	0.
9	CONSTR	221.600	235.400	250.800	267.400	285.600
10	HOUS.	0.	0.	0.	0.	0.
11	OTHMAR	394.760	419.365	446.800	476.373	508.796
12	SUM	1108.000	1177.000	1254.000	1337.000	1428.000

TABLE 3-24

CONSUMPTION PROPORTIONS, c

1	AG.PL.	.38790
2	M.M.	.00047
3	EQIPMT	.02416
4	CHEMIC	.03005
5	CMGLWD	.00589
6	FOODCL	.14318
7	ELECTR	.00103
8	TRANS	.01752
9	CONSTR	0.
10	HOUS.	.04617
11	OTHMAR	.34363

Table 3-25

Third Plan Targets and Initial Output Levels - ThirtyTwo Sectors
(Rs. Crores, 1959-60 Prices)

Sector	X(O) 1960-61	X(S) 1965-66
1. Construction - 1 urban & industrial	1,201.0	1,980.0
2. Construction - 2 rural	416.0	436.0
3. Electrical equipment	126.0	362.0
4. Transport equipment	201.0	417.0
5. Non-electrical equipment	343.5	888.0
6. Iron and steel	269.0	909.0
7. Iron ore	7.8	22.0
8. Cement	52.6	88.0
9. Other metals	32.0	80.0
10. Other minerals	45.4	77.0
11. Plantations	196.0	250.0
12. Leather and leather products	189.0	220.0
13. Animal husbandry	1,130.0	1,323.0
14. Food industries	1,323.0	1,733.0
15. Food grains	3,974.3	4,846.0
16. Cotton and other textiles	800.0	1,093.0
17. Jute textiles	130.0	165.0
18. Other agriculture	2,097.0	2,571.0
19. Chemical fertilizers	20.7	166.0
20. Glass, wooden and non-metallic mineral products	398.0	620.0
21. Forestry products	180.0	262.0
22. Motor transport	325.0	580.0
23. Petroleum products	237.1	659.0
24. Crude oil	3.2	46.0
25. Rubber products	67.5	127.0
26. Rubber - synthetic	-	17.0
27. Chemicals	284.0	742.0
28. Railways	454.0	640.0
29. Electricity	103.4	286.0
30. Coal	109.0	206.0
31. Housing	700.0	988.0[1]
32. Others and Margin	8,338.0	14,640.0[2]

1. Constant percent of projected national income.

2. Constant percent of the sum of domestic output in all sectors.

TABLE 3-26

THIRD PLAN TARGETS, INITIAL OUTPUT LEVELS AND PROJECTED GROWTH RATES - ELEVEN SECTORS
(Rupees Crores, 1959-60 prices)

	Output, 1960-61 X(0)	Initial Growth Rates α(0)	Third Plan Targets: Output, 1965-66 X(5)	Post-Terminal Growth Rates, α(5)	96% Level Third Plan Target: Output, 1965-66 X(5)	Post-Terminal Growth Rates
1 AG.PL.	7577.0000	.0452	9452.0000	.045214	9070.9199	.036647
2 M.M.	462.0000	.2287	1294.0000	.228736	1244.2399	.219137
3 EQIPMT	670.5000	.1998	1667.0000	.199796	1600.3199	.190040
4 CHEMIC	612.5000	.2346	1757.0000	.234619	1686.7199	.224581
5 CMGLWD	450.6000	.0945	708.0000	.094582	679.6799	.085682
6 FOODCL	2442.0000	.0563	3211.0000	.056280	3082.5599	.047691
7 ELECTR	103.0000	.2266	286.0000	.226608	274.5599	.216634
8 TRANS	779.0000	.0938	1220.0000	.093867	1171.1999	.084972
9 CONSTR	1617.0000	.0836	2416.0000	.083621	2319.3599	.074810
10 HOUS.	579.8000	.0419	712.0000	.041934	683.5199	.033462
11 OTHMAR	5854.6000	.0823	8694.0000	.082292	8346.1599	.073490

TABLE 3-27

FOURTH PLAN TARGETS, INITIAL OUTPUT LEVELS AND GROWTH RATES - ADJUSTED ON THIRTY-TWO SECTOR BASIS AND AGGREGATED TO ELEVEN SECTORS

(Rupees Crores, 1959-60 prices)

32 SECTORS

Sector	1965-66 X(0)	1970-71 X(5)
1. Construction, urban }		
2. Construction, rural }	2894	5546
3. Electrical Equipment	367	959
4. Transport Equipment	400	778
5. Non-Electrical Equipment	1508	4019
6. Iron and Steel	804	1861
7. Iron Ore	19.7	44.2
8. Cement	78.9	151
9. Other Metals	85.8	224
10. Other Minerals	73.1	135
11. Plantations	251	282
12. Leather & leather prods.	220	379
13. Animal Husbandry	1288	1865
14. Food industries	1521	2104
15. Food grains	4411	6001
16. Cotton & other textiles	992	2168
17. Jute textiles	165	200
18. Other agriculture	2453	3104
19. Chemical fertilizers	64.6	338
20. Glass, wooden, etc.	724	1449
21. Forestry products	225	281
22. Motor transport	592	1164
23. Petroleum products	552	1266
24. Crude oil	42.7	85.3
25. Rubber products	155	292
26. Rubber	9	30
27. Chemicals	761	1556
28. Railways	663	1076
29. Electricity, total	249	500
30. Coal	184	290
31. Housing	700	988
32. Others	8338	14640

AGGREGATED 11 SECTORS

	Sector	Output, 1965-66 X(0)	Initial Growth Rates α(0)	Output Targets, 1970-71 X(5)	Post-Terminal Growth Rate α(5)
1	AG.PL.	8628.0000	.0600	11533.0000	.0600
2	M.M.	1166.5999	.1700	2554.1999	.1700
3	EQIPMT	2275.0000	.2040	5756.0000	.2040
4	CHEMIC	1614.2999	.1720	3567.2999	.1720
5	CMGLWD	802.8999	.1480	1600.0000	.1480
6	FOODCL	2898.0000	.1090	4235.5999	.1090
7	ELECTR	249.0000	.1500	500.0000	.1500
8	TRANS	1255.0000	.1230	2240.0000	.1230
9	CONSTR	2894.0000	.1390	5546.0000	.1390
10	HOUS.	700.0000	.0720	988.0000	.0720
11	OTHMAR	8338.0000	.1190	14640.0000	.1190

TABLE 3-28

FOURTH PLAN TARGETS, INITIAL OUTPUT LEVELS AND GROWTH RATES - AGGREGATED TO ELEVEN SECTORS AND THEN ADJUSTED
(Rupees Crores, 1959-60 prices)

	Output 1965-66 X(0)	Initial Growth Rates α(0)	Output Targets 1970-71 X(5)	Post-Terminal Growth Rates α(5)
1 AG.PL.	8628.0000	.0600	11533.0000	.0600
2 M.M.	1104.6000	.1700	2384.2999	.1700
3 EQIPMT	1809.0000	.1900	4242.1999	.1900
4 CHEMIC	1519.6000	.1600	3229.5000	.1600
5 CMGLWD	756.0000	.1400	1485.0000	.1400
6 FOODCL	2947.0000	.0800	4350.0000	.0800
7 ELECTR	226.8000	.1400	431.6999	.1400
8 TRANS	1252.0000	.1200	2239.0000	.1200
9 CONSTR	2894.0000	.1400	5546.0000	.1400
10 HOUS.	700.0000	.0700	965.0000	.0700
11 OTHMAR	8354.0000	.1100	13942.0000	.1100

TABLE 3-29

ALTERNATIVE POST-TERMINAL FOURTH PLAN GROWTH RATES

		Post Terminal Growth Rates $\alpha(5)$
1	AG.PL.	.0490
2	M.M.	.1050
3	EQIPMT	.0910
4	CHEMIC	.1140
5	CMGLWC	.0830
6	FCODCL	.0750
7	ELECTR	.1180
8	TRANS	.0960
9	CONSTR	.0810
10	HOUS.	.0600
11	OTHMAR	.1100

GROSS DOMESTIC OUTPUT AND SECTORAL GROWTH RATES

SECTOR	61-62	%	62-63	%	63-64	%	64-65	%	65-66	%	66-67[1]	%	67-68[1]	%	68-69[1]
AG.PL.	7762.35	4.77	8133.22	4.44	8494.50	[illegible]	9014.76	4.31	9403.33	0.0	9403.33	3.66	9747.94	3.66	10105.17
M.M.	567.65	17.59	667.24	25.47	838.57	12.[illegible]	1013.24	14.87	1163.91	30.33	1516.89	21.91	1849.30	21.91	2254.55
EQIPMT	804.46	19.[illegible]	958.14	19.20	1142.42	31.25	1510.93	22.60	1852.46	2.80	1904.44	19.00	2266.36	19.00	2697.06
CHEMIC	634.44	15.86	735.10	12.45	826.69	16.76	965.28	28.23	1237.82	66.86	2065.52	22.46	2529.40	22.46	3097.45
CNGLWD	493.18	5.22	518.94	13.34	590.79	13.85	672.64	9.35	735.56	0.31	737.91	7.5[illegible]	801.14	7.5[illegible]	869.78
FOODCL	2384.86	3.73	2473.83	3.43	2558.69	[illegible]	2716.16	4.65	2842.62	13.61	3229.57	4.77	3383.59	[illegible]	3544.95
ELECTR	110.[illegible]3	8.10	118.95	10.04	13[illegible].9[illegible]	13.27	148.28	11.57	165.45	101.80	334.03	[illegible]	406.40	[illegible]	494.44
TRANS	809.51	7.06	866.74	9.26	947.[illegible]1	11.27	1068.11	10.85	1184.00	7.22	1270.71	8.50	1378.69	8.5[illegible]	1495.84
CONSTR	1748.[illegible]4	1.76	1778.84	14.98	2045.46	15.07	2353.74	11.29	2619.55	-4.84	2492.87	7.42	2679.36	7.46	2879.80
HOUS.	589.[illegible]	2.50	604.07	2.50	619.18	6.35	658.53	3.71	683.02	3.42	706.39	3.35	730.02	3.35	754.45
OTHMAR	5307.16	3.38	5486.99	3.87	5699.61	8.24	6169.60	5.46	6506.88	37.69	8959.51	7.35	9617.94	7.35	10324.76
SUM	21211.[illegible]8		22342.10		23893.87		26291.32		28394.65		32621.23		35390.18		38518.31

Table 4.2

SHADOW PRICE OF X(t)

AG.PL.	.23738	.18433	.[illegible]3998	.75262	.79609
M.M.	6.34600	2.50298	6.35539	3.36769	2.50165
EQIPMT	23.[illegible]2660	2.77326	3.90819	2.77116	1.77718
CHEMIC	3.41063	2.33654	3.54514	2.36426	1.64859
CNGLWD	23.61532	1.15420	117.[illegible]4334	3.16950	1.23822
FOODCL	.46769	.36430	2.91174	.72012	1.07341
ELECTR	1.[illegible]4077	.90147	2.94272	.93219	2.11189
TRANS	.93262	.61848	20.48197	.65137	2.68050
CONSTR	6.57441	1.63456	23.94160	5.35714	1.45928
HOUS.	.39451	.03565	1.94364	4.12837	.64001
OTHMAR	.04306	.03035	.44603	.04650	.14365

1 These are calculated simply by dividing capital stocks by capital output ratios. No test either of static or of dynamic consistency has been applied.

THIRD PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.3

PRIVATE CONSUMPTION

SECTOR	61-62	62-63	63-64	64-65	65-66
AG.PL.	5603.87006	5743.96704	5887.56598	6261.78003	6494.60217
M.M.	6.26408	6.42068	6.58120	6.99950	7.25975
EQIPMT	191.96788	196.76709	201.68626	214.50545	222.48107
CHEMIC	311.11586	318.89377	326.86610	347.64173	360.56756
CMGLWD	65.38131	67.01585	68.69124	73.05726	75.77363
FOODCL	1840.20334	1886.20850	1933.36363	2056.24832	2132.70267
ELECTR	11.35364	11.63748	11.92842	12.68659	13.15830
TRANS	192.62039	197.43591	202.37180	215.23456	223.23730
CONSTR	0.	0.	0.	0.	0.
HOUS.	589.34531	604.07896	619.18092	658.53609	683.02143
OTHMAR	4238.04010	4343.99127	4452.59088	4735.59784	4911.67426
SUM	13050.16162	13376.41602	13710.82605	14582.28699	15124.47754

SUM OF DISCOUNTED CONSUMPTION = 57827.9047852

SUM OF UNDISCOUNTED CONSUMPTION = 69844.1660156

PRICE ON CONSUMPTION GROWTH CONSTRAINT

2	.238298
3	.870248
4	0.
5	0.

SECTOR	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69
AG.PL.	11970.21509	12511.26855	13076.77783	13620.55884	14213.05347	14213.05347	14733.91614	15273.86621
M.M.	1371.23802	1684.84007	2025.81474	2447.71649	2811.54465	3664.22021	4467.18536	5446.10980
EQIPMT	728.09795	873.57188	1033.96426	1367.51402	1676.61018	1723.65598	2051.21970	2441.03366
CHEMIC	661.92553	775.26622	723.71132	845.24422	1083.51872	1808.03616	2214.08594	2711.32654
CNGLWD	441.08197	482.76419	528.38538	601.62784	657.86394	659.96281	716.50981	777.90181
FCODCL	1420.23839	1442.05811	1408.82649	1501.07823	1565.12172	1778.16893	1862.97130	1951.81804
ELECTR	790.74816	969.93169	1077.68796	1035.54233	1035.54236	2090.71658	2543.63708	3094.67584
TRANS	1893.17212	2070.75156	2104.11496	2501.28839	2630.67178	2823.34747	3063.25427	3323.54654
CONSTR	268.08372	290.49559	312.95400	360.11498	400.79196	399.12634	409.94231	440.61007
HOUS.	6040.93610	6294.05109	6557.77173	6588.06232	6830.21240	7063.91754	7300.29181	7544.57556
OTHMAR	991.65182	1073.26468	1161.59438	1020.58418	1018.32708	1402.16423	1505.20877	1615.82608
SUM	26577.38770	28468.26270	30011.60205	31889.33057	33923.25635	37626.36865	40868.22119	44621.28809

TABLE 4.5

CAPITAL STOCK USED

SECTOR	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69
						← TARGET	STOCKS	→
AG.PL.	11732.72986	12293.28210	12839.36438	13625.72314	14213.05249	14213.05396	14733.91675	15273.86731
M.M.	1371.23802	1611.78864	2025.66100	2447.59900	2811.54443	3664.22043	4467.18579	5446.11041
EQIPMT	728.09795	867.18808	1033.97513	1367.50471	1676.61021	1723.65605	2051.21985	2441.03397
CHEMIC	555.35185	643.46983	723.63536	844.94914	1083.51874	1808.03624	2214.08606	2711.32681
CNGLWD	441.08197	464.12602	528.38538	601.58808	657.86389	659.96288	716.50983	777.90186
FOODCL	1313.08141	1362.06660	1408.79308	1495.49451	1565.12175	1778.16895	1862.97139	1951.81815
ELECTR	688.72471	744.53965	819.30527	928.07261	1035.54233	2090.71710	2543.63776	3094.67654
TRANS	1798.63223	1925.76819	2104.13187	2373.18280	2630.67181	2823.34857	3063.25546	3323.54773
CONSTR	267.45131	272.16302	312.95614	360.12329	400.79203	381.40924	409.94239	440.61011
HOUS.	5893.45410	6040.79053	6191.81036	6585.36078	6830.21204	7063.92072	7300.29498	7544.57886
OTHNAR	830.57161	858.71466	891.99044	965.54381	1018.32708	1402.16435	1505.20900	1615.82637
SUM	25620.41406	27083.89648	28880.30732	31595.14038	33923.25537	37608.65723	40868.22852	44621.29688

TABLE 4.6
IDLE CAPITAL

SECTOR	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69
AG.PL.	239.01512	218.42446	235.84876	0.	0.	-.00049	-.00061	-.00110
M.M.	0.	73.03790	0.	0.	0.	-.00021	-.00043	-.00061
EQIPMT	0.	6.35704	0.	0.	0.	-.00008	-.00015	-.00031
CHEMIC	106.63548	131.77221	0.	0.	0.	-.00008	-.00012	-.00027
CNGLWD	0.	18.64527	0.	0.	0.	-.00007	-.00002	-.00005
FOODCL	107.29639	80.08827	0.	0.	0.	-.00002	-.00009	-.00011
ELECTR	102.07161	225.41676	258.36574	106.52858	0.	-.00052	-.00067	-.00070
TRANS	94.67684	145.07639	0.	126.53498	0.	-.00110	-.00119	-.00119
CONSTR	.62410	18.33484	0.	0.	0.	17.71710	-.00009	-.00003
HOUS.	148.15994	253.95572	366.67403	0.	0.	-.00317	-.00317	-.00330
OTHMAR	161.15902	214.62911	269.68377	54.64589	0.	-.00012	-.00023	-.00029
SUM	959.63849	1385.73795	1130.57230	287.70945	0.	17.71125	-.00678	-.00796

Table 4.7

RATIO OF IDLE CAPITAL/TOTAL CAPITAL

SECTOR	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69
AG.PL.	.01997	.01746	.01804	0.	0.	-.00000	-.00000	-.00000
M.M.	0.	.04335	0.	0.	0.	-.00000	-.00000	-.00000
EQIPMT	0.	.00728	0.	0.	0.	-.00000	-.00000	-.00000
CHEMIC	.16110	.16997	0.	0.	0.	-.00000	-.00000	-.00000
CNGLWD	0.	.03862	0.	0.	0.	-.00000	-.00000	-.00000
FOODCL	.07555	.05554	0.	0.	0.	-.00000	-.00000	-.00000
ELECTR	.12908	.23240	.23974	.10287	0.	-.00000	-.00000	-.00000
TRANS	.05001	.07006	0.	.05059	0.	-.00000	-.00000	-.00000
CONSTR	.00233	.06312	0.	0.	0.	.04439	-.00000	-.00000
HOUS.	.02453	.04035	.05591	0.	0.	-.00000	-.00000	-.00000
OTHMAR	.16252	.19998	.23217	.05354	0.	-.00000	-.00000	-.00000
SUM	.03611	.04868	.03767	.00902	0.	.00047	-.00000	-.00000

TABLE 4.8

SHADOW RENTAL PRICE OF CAPITAL

SECTOR	61-62	62-63	63-64	64-65	65-66
AG.PL.	0.	0.	0.	.34278	.43899
M.M.	1.44197	0.	1.21664	.17845	.56371
EQIPMT	25.79623	0.	1.59974	.16896	.58471
CHEMIC	0.	0.	.17503	.18137	.55719
CMGLWD	24.91092	0.	128.37625	.20170	.51193
FOODCL	0.	0.	2.63892	.11783	.69844
ELECTR	0.	0.	0.	0.	.20823
TRANS	0.	0.	8.43672	0.	.96036
CONSTR	0.	0.	4.14546	.10602	3.71744
HOUS.	0.	0.	0.	.40572	.05842
OTHMAR	0.	0.	0.	0.	.32471

TABLE 4.9

RATIO - $\frac{\text{INITIAL CAPITAL IN PROCESS COMPLETED}}{\text{INITIAL AVAILABLE CAPITAL IN PROCESS}}$

SECTOR	62-63	63-64
AG.PL.	1.000	1.000
M.M.	1.000	.885
EQIPMT	1.000	.920
CHEMIC	.730	0.
CMGLWD	1.000	1.000
FOODCL	.420	0.
ELECTR	1.000	.490
TRANS	1.000	.170
CONSTR	1.000	.995
HOUS.	1.000	1.000
OTHMAR	1.000	1.000

AG.PL.	6.083212	5.432110
M.M.	.928142	0.
EQIPMT	.944001	0.
CHEMIC	0.	0.
CMGLWD	128.989990	128.101175
FOODGL	0.	0.
ELECTR	.857332	0.
TRANS	1.228992	0.
CONSTR	1.050021	0.
HOUS.	8.524539	7.979734
OTHMAR	2.527952	1.736238

THIRD PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.11
NEW CAPITAL

SECTOR	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69
AG.PL.	0.	541.05370	565.50929	543.78217	592.49355	0.	520.86291	539.95031
M.M.	0.	313.60211	340.97481	421.90172	363.82802	852.67561	802.96523	978.92455
EQIPMT	0.	145.47390	160.39245	333.54976	309.09608	47.04586	327.56376	389.81399
CHEMIC	0.	113.34068	0.	121.53287	238.27448	724.51741	406.04979	497.24069
CNGLWD	0.	41.68220	45.62119	73.24249	56.23608	2.09884	56.54700	61.39200
FOODCL	0.	21.81981	0.	92.25172	64.04341	213.04725	84.80240	88.84677
ELECTR	0.	179.18360	107.75661	0.	0.	1055.17424	452.92059	603.89489
TRANS	0.	262.17208	33.36418	484.35164	217.85467	282.43991	331.05630	352.82700
CONSTR	0.	22.41180	22.45848	47.16137	40.67589	0.	10.81599	30.66780
HOUS.	0.	439.95935	453.42059	222.84833	242.15430	233.70519	437.70098	448.67016
OTHMAR	0.	81.61290	88.32970	0.	0.	383.83718	103.04460	260.29129
SUM	0.	2162.31204	1817.82727	2340.62201	2124.65640	3794.54141	3534.32938	4252.51923

Table 4.12
SHADOW PRICE OF NEW CAPITAL

AG.PL.		9.51687	9.51687	9.51687	9.17409	6.69222	1.63195	.41094
M.M.		7.60161	7.60161	6.38499	6.20655	4.19835	1.23056	.21393
EQIPMT		7.80343	7.80343	6.20371	6.03475	4.04022	1.20728	.20255
CHEMIC		6.61555	6.61555	6.44058	6.25921	4.24692	1.23767	.21744
CNGLWD		135.20402	135.20402	6.82778	6.62609	4.58509	1.28726	.24181
FOODCL		7.86849	7.86849	5.22965	5.11182	3.18964	1.08248	.14126
ELECTR		6.70275	6.70275	6.70275	6.70275	4.89713	1.33313	.26428
TRANS		11.42071	11.42071	2.98402	2.98402	1.22899	.79468	-0.
CONSTR		9.14956	9.14956	5.00412	4.89810	0.	1.05351	.12710
HOUS.		10.71578	10.71578	10.71578	10.31008	7.97973	1.78554	.48638
OTHMAR		7.60653	7.60653	7.60653	7.60653	5.54311	1.42788	.31083

TABLE 4.13

RESTORED CAPACIT

SECTOR	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69
AG.PL.	0.	277.401	281.641	285.880	290.120	294.360	298.902	303.445
M.M.	0.	71.406	72.497	73.588	74.680	75.771	76.940	78.110
EQIPMT	0.	16.089	16.335	16.580	16.826	17.072	17.336	17.599
CHEMIC	0.	50.779	0.	52.331	53.107	53.883	54.715	55.546
CMGLWD	0.	16.159	16.406	16.653	16.900	17.147	17.411	17.676
FOODCL	0.	32.731	0.	33.732	34.232	34.732	35.268	35.804
ELECTR	0.	48.319	49.058	7.533	50.535	51.274	52.065	0.
TRANS	0.	0.	85.885	0.	0.	0.	0.	0.
CONSTR	0.	1.570	1.594	1.618	1.642	0.	1.691	1.717
HOUS.	0.	0.	0.	0.	195.411	198.267	0.	0.
OTHMAR	0.	136.828	138.919	0.	140.844	145.193	147.433	0.
SUM	0.	651.281	662.334	487.915	874.298	887.699	701.762	509.897

Table 4.14

RATIO - RESTORED CAPACITY/DEPRECIATED CAPACITY

	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69
AG.PL.	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
M.M.	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
EQIPMT	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CHEMIC	0.	1.000	0.	1.000	1.000	1.000	1.000	1.000
CMGLWD	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
FOODCL	0.	1.000	0.	1.000	1.000	1.000	1.000	1.000
ELECTR	0.	1.000	1.000	.151	1.000	1.000	1.000	0.
TRANS	0.	0.	1.000	0.	0.	0.	0.	0.
CONSTR	0.	1.000	1.000	1.000	1.000	0.	1.000	1.000
HOUS.	0.	0.	0.	0.	1.000	1.000	0.	0.
OTHMAR	0.	1.000	1.000	0.	.984	1.000	1.000	0.

TABLE 4.15

SHADOW PRICES ON RESTORABLE CAPACITY

SECTOR	62-63	63-64	64-65	65-66	66-67	67-68	68-69
AG.PL.	1.057306	1.320179	5.170472	4.974710	4.706029	1.096219	.234689
M.MJ	.172687	.215612	.844352	.812367	.807917	.178995	.038336
EQIPMT	.202553	.252902	.990390	.952874	.947642	.209955	.044965
CHEMIC	.125311	0.	.612697	.589487	.586265	.129885	.027819
CMGLWD	.417264	.521001	2.040456	1.963193	1.952157	.432598	.092622
FOODCL	.167180	0.	.817391	.786423	.782152	.173274	.037114
ELECTR	1.648699	1.847505	0.	.220436	.327321	.128519	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	.431903	.539261	2.111788	2.031791	0.	.447680	.095880
HOUSJ	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.202741	.227182	0.	0.	.040209	.015772	0.

TABLE 4.16
TOTAL IMPORTS

SECTOR	61-62	62-63	63-64	64-65	65-66
AG.PL.	268.32254	260.62337	239.77519	225.95436	195.39632
M.M.	199.85518	203.17592	213.86486	213.56818	205.42150
EQIPMT	394.60483	411.27571	429.82929	471.61966	499.42821
CHEMIC	261.27871	278.50147	290.88176	306.19402	352.91183
CMGLWD	13.78625	12.77186	11.63671	9.38893	6.62630
FCGDCL	16.13905	14.63760	12.72395	9.26016	5.20069
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	9.27352	0.	0.
SUM	1153.98653	1180.98592	1207.98524	1235.98528	1264.98483

TABLE 4.17
NON-COMPETITIVE IMPORTS

SECTOR	61-62	62-63	63-64	64-65	65-66
AG.PL.	124.19773	130.13152	135.91211	144.23620	150.45342
M.M.	82.31061	96.75001	121.59333	146.92079	168.76716
EQIPMT	189.04947	225.16405	268.47001	355.07045	435.32920
CHEMIC	165.58916	191.86330	215.76625	251.93836	323.07262
CMGLWD	1.97273	2.07579	2.36319	2.69059	2.94228
FCODCL	.19079	.19791	.20470	.21729	.22741
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.

Table 4.18
COMPETITIVE IMPORTS

AG.PL.	144.12480	130.49185	103.86307	81.71816	44.94291
M.M.	117.54457	106.42591	92.27154	66.64739	36.65434
EQIPMT	235.55536	186.11166	161.35928	116.54922	64.09901
CHEMIC	95.68955	86.63817	75.11551	54.25566	29.83921
CMGLWD	11.81353	10.69607	9.27352	6.69834	3.68402
FCODCL	15.94826	14.43970	12.51925	9.04286	4.97328
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	9.27352	0.	0.

TABLE 4.19

SHADOW PRICE ON COMPETITIVE IMPORT CF LINKS

SECTOR	61-62	62-63	63-64	64-65	65-66
AG.PL.	0.	0.	0.	0.	0.
F.M.	1.21561	.46141	1.25677	.52040	.33941
ECIPMT	7.93065	.90095	1.34614	.70245	.34142
CHEMIC	.51407	.34866	.56784	.26109	.13810
MGLWD	.46756	.01940	2.34007	.04834	.00884
FCODCL	.00622	.00486	.07754	-.00088	.00749
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CNSTR	0.	0.	0.	0.	0.
IGUS.	0.	0.	0.	0.	0.
ITHMAR	0.	0.	.00812	0.	0.

SHADOW PRICE ON FOREIGN TRADE BALANCE CONSTRAINTS

	.23738	.18433	.03998	.75262	.79609

INTER-INDUSTRY FLOW -PERIOD 1

	1	2	3	4	5	6	7
	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR
AG.PL.	619.425	.123	13.799	32.211	64.575	1204.409	0.
M.M.	1.024	118.102	185.878	15.733	25.423	9.763	14.422
EQIPMT	0.	11.521	29.400	10.048	1.315	6.934	0.
CHEMIC	77.000	11.273	29.514	125.942	39.734	67.184	3.098
CMGLWD	3.322	6.304	4.360	6.918	12.389	7.006	0.
FOODCL	60.329	1.058	1.800	21.544	8.977	134.850	0.
ELECTR	8.204	13.161	10.197	10.045	11.056	31.830	0.
TRANS	54.632	82.287	58.745	62.080	34.729	117.273	12.979
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	38.069	15.959	108.378	20.252	43.859	132.000	7.520

8	9	10	11	12
TRANS	CONSTR	HOUS.	OTHMAR	SUM
0.	74.485	0.	183.133	2192.159
32.938	255.055	3.023	3.609	664.969
0.	28.106	0.	0.	87.325
149.526	14.593	0.	15.071	532.935
0.	385.704	8.827	0.	434.831
0.	0.	0.	4.192	232.749
3.533	0.	0.	5.731	93.756
33.949	46.001	3.966	110.219	616.860
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
13.427	187.503	26.276	0.	593.243

INVESTMENT MATURING IN 1 YEAR -PERIOD 1

	1	2	3	4	5	6	7
	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	37.170	77.742	37.561	27.734	9.274	6.851	36.213
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	152.361	45.974	20.192	16.888	6.907	2.112	32.450
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	4.815	10.098	4.888	3.604	1.205	.890	4.713

8	9	10	11	12
TRANS	CONSTR	HOUS.	OTHMAR	SUM
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
116.011	7.324	0.	13.034	368.916
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	1.952	146.638	17.384	442.857
0.	0.	0.	0.	0.
15.075	.953	0.	1.698	47.938

INVESTMENT MATURING IN 2 YEARS -PERIOD 1

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	38.850	84.528	41.413	0.	10.151	0.	21.778
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	159.247	49.987	22.262	0.	7.559	0.	19.515
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	5.033	10.979	5.389	0.	1.318	0.	2.834

	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
AG.PL.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.
EQIPMT	14.764	7.339	0.	14.106	232.929
CHEMIC	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	1.956	151.125	18.814	430.466
HOUS.	0.	0.	0.	0.	0.
OTHMAR	1.918	.954	0.	1.837	30.264

INVESTMENT MATURING IN 3 YEARS -PERIOD 1

	1	2	3	4	5	6	7
	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	153.129	61.851	46.297	18.108	12.136	8.930	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

8	9	10	11	12
TRANS	CONSTR	HOUS.	OTHMAR	SUM
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	4.108	74.275	0.	378.834
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.

STOCK HELD -PERIOD 1

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	2521.475	.072	18.358	23.322	49.896	768.465	0.
M.M.	4.482	92.188	207.588	14.083	19.116	6.018	13.416
EQIPMT	0.	24.915	37.203	41.086	1.016	4.380	0.
CHEMIC	320.977	8.157	37.355	298.102	30.687	45.920	2.882
CMGLWD	15.411	7.839	5.654	5.588	9.573	4.181	0.
FOODCL	249.448	2.950	2.501	17.229	6.568	102.676	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
AG.PL.	0.	11.768	0.	44.729	3438.085
M.M.	10.072	40.174	0.	.874	408.012
EQIPMT	0.	4.475	0.	0.	113.075
CHEMIC	7.308	1.913	0.	3.675	756.976
CMGLWD	0.	60.992	0.	0.	109.238
FOODCL	0.	0.	0.	1.027	382.399
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.

SUMMARY OF FLOW -PERIOD I

	X	M	A*X	S*DX	R1+R2+R3
AG.PL.	7761.35	268.31	2192.16	36.09	0.
M.M.	567.66	199.86	664.97	56.20	0.
EQIPMT	804.47	394.62	87.33	10.28	205.76
CHEMIC	634.37	261.27	532.94	8.13	0.
CMGLWD	493.18	13.79	434.83	3.97	0.
FCODCL	2384.61	16.14	232.75	3.23	0.
ELECTR	110.03	0.	93.76	-0.	0.
TRANS	809.46	0.	616.86	-0.	0.
CONSTR	1748.10	0.	0.	-0.	387.74
HOUS.	589.28	0.	0.	-0.	0.
OTHMAR	5306.66	0.	593.24	-0.	27.07

Z1	Z2	Z3	E	G	CONS	CHECK
0.	0.	0.	198.19	0.	5603.23	.00
0.	0.	0.	40.09	0.	6.26	.00
368.92	232.93	0.	4.34	97.60	191.95	.00
0.	0.	0.	15.09	28.40	311.08	.00
0.	0.	0.	2.79	0.	65.37	.00
0.	0.	0.	215.66	109.12	1839.99	-.00
0.	0.	0.	0.	4.92	11.35	.00
0.	0.	0.	0.	0.	192.60	-.00
442.86	430.47	378.83	0.	108.20	0.	.00
0.	0.	0.	0.	0.	589.28	-.00
47.94	30.26	0.	177.84	192.76	4237.55	-.00

INTER-INDUSTRY FLOW -PERIOD 2

	1	2	3	4	5	6	7
	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR
AG.PL.	649.081	.144	16.436	37.327	67.947	1249.384	0.
M.M.	1.074	138.821	221.394	18.232	26.750	10.127	15.591
EQIPMT	0.	13.542	35.017	11.645	1.384	7.193	0.
CHEMIC	80.687	13.250	35.153	145.947	41.809	69.693	3.350
CMGLWD	3.481	7.410	5.193	8.017	13.036	7.268	0.
FOODCL	63.217	1.243	2.143	24.967	9.446	139.885	0.
ELECTR	8.597	15.469	12.145	11.641	11.633	33.018	0.
TRANS	57.248	96.723	69.969	71.941	36.543	121.652	14.032
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	39.892	18.759	129.086	23.468	46.150	136.929	8.129

8	9	10	11	12
TRANS	CONSTR	HOUS.	OTHMAR	SUM
0.	75.794	0.	189.339	2285.452
35.267	259.538	3.099	3.731	733.623
0.	28.600	0.	0.	97.382
160.100	14.850	0.	15.582	580.420
0.	392.484	9.048	0.	445.937
0.	0.	0.	4.334	245.236
3.783	0.	0.	5.925	102.212
36.349	46.810	4.065	113.954	669.286
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
14.377	190.799	26.933	0.	634.522

INVESTMENT MATURING IN 1 YEAR -PERIOD 2

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	38.850	84.528	41.413	0.	10.151	0.	21.778
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	159.247	49.987	22.262	0.	7.559	0.	19.515
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	5.033	10.979	5.389	0.	1.318	0.	2.834

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
14.764	7.339	0.	14.106	232.929
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	1.956	151.125	18.814	430.466
0.	0.	0.	0.	0.
1.918	.954	0.	1.837	30.264

INVESTMENT MATURING IN 2 YEARS -PERIOD 2

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	37.358	104.589	86.123	29.739	16.296	28.967	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	153.129	61.851	46.297	18.108	12.136	8.930	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	4.840	13.585	11.207	3.865	2.117	3.764	0.

	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
AG.PL.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.
EQIPMT	214.326	15.412	0.	0.	532.810
CHEMIC	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	4.108	74.275	0.	378.834
HOUS.	0.	0.	0.	0.	0.
OTHMAR	27.850	2.004	0.	0.	69.232

INVESTMENT MATURING IN 3 YEARS -PERIOD 2

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	166.846	53.337	42.903	35.503	9.318	6.199	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
AG.PL.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	3.543	80.710	0.	398.359
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.

STOCK HELD -PERIOD 2

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	2589.436	.085	21.866	22.673	52.502	736.936	0.
M.M.	4.603	108.362	247.252	13.690	20.115	5.771	12.631
EQIPMT	0.	29.286	44.311	39.942	1.070	4.200	0.
CHEMIC	329.628	9.588	44.493	289.801	32.290	44.036	2.714
CMGLWD	15.827	9.214	6.734	5.433	10.073	4.010	0.
FOODCL	256.171	3.467	2.979	16.749	6.911	98.464	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	11.947	0.	38.729	3474.173
10.245	40.785	0.	.757	464.211
0.	4.543	0.	0.	123.352
7.434	1.942	0.	3.182	765.107
0.	61.919	0.	0.	113.209
0.	0.	0.	.889	385.630
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.

SUMMARY OF FLOW -PERIOD 2

	X	M	A*X	S*DX	R1+R2+R3
AG.PL.	8132.93	260.62	2285.45	158.42	0.
M.M.	667.25	203.17	733.62	88.63	0.
EQIPMT	958.17	411.28	97.38	22.00	181.87
CHEMIC	735.14	278.51	580.42	69.20	0.
CNGLWD	518.94	12.77	445.94	15.86	0.
FCODCL	2473.66	14.64	245.24	19.35	0.
ELECTR	118.95	0.	102.21	0.	0.
TRANS	866.70	0.	669.29	0.	0.
CONSTR	1778.83	0.	0.	0.	458.97
HOUS.	604.01	0.	0.	0.	0.
OTHMAR	5486.49	0.	634.52	0.	23.92

Z1	Z2	Z3	E	G	CONS	CHECK
0.	0.	0.	206.37	0.	5743.31	-.00
0.	0.	0.	41.75	0.	6.42	.00
232.93	532.81	0.	4.52	101.20	196.74	.00
0.	0.	0.	15.71	29.45	318.86	.00
0.	0.	0.	2.91	0.	67.01	.00
0.	0.	0.	224.56	113.15	1885.99	-.00
0.	0.	0.	0.	5.11	11.64	.00
0.	0.	0.	0.	0.	197.41	-.00
430.47	378.83	398.36	0.	112.20	0.	.00
0.	0.	0.	0.	0.	604.01	-.00
30.26	69.23	0.	185.18	199.88	4343.49	-.00

INTER-INDUSTRY FLOW -PERIOD 3

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	678.021	.181	19.596	41.980	77.356	1292.367	0.
M.M.	1.121	174.480	263.964	20.505	30.454	10.476	17.158
EQIPMT	0.	17.021	41.751	13.096	1.576	7.441	0.
CHEMIC	84.284	16.654	41.913	164.140	47.598	72.090	3.686
CMGLWD	3.636	9.314	6.192	9.017	14.841	7.518	0.
FOODCL	66.036	1.562	2.556	28.079	10.754	144.698	0.
ELECTR	8.980	19.443	14.480	13.092	13.244	34.154	0.
TRANS	59.800	121.567	83.422	80.909	41.603	125.837	15.442
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	41.671	23.577	153.907	26.394	52.540	141.640	8.946

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	87.155	0.	196.676	2393.332
38.535	298.439	3.176	3.875	862.183
0.	32.887	0.	0.	113.771
174.936	17.075	0.	16.185	638.562
0.	451.312	9.274	0.	511.104
0.	0.	0.	4.502	258.187
4.134	0.	0.	6.155	113.682
39.718	53.826	4.167	118.370	744.662
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
15.709	219.397	27.606	0.	711.388

INVESTMENT MATURING IN 1 YEAR -PERIOD 3

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELEC
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	37.358	104.589	86.123	29.739	16.296	28.967	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	153.129	61.851	46.297	18.108	12.136	8.930	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	4.840	13.585	11.207	3.865	2.117	3.764	0.

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
214.326	15.412	0.	0.	532.810
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	4.108	74.275	0.	378.834
0.	0.	0.	0.	0.
27.850	2.004	0.	0.	69.232

INVESTMENT MATURING IN 2 YEARS -PERIOD 3

	1	2	3	4	5	6	7
	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	40.704	90.193	79.809	58.306	12.513	20.110	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	166.846	53.337	42.903	35.503	9.318	6.199	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	5.273	11.715	10.386	7.577	1.625	2.613	0.

8	9	10	11	12
TRANS	CONSTR	HOUS.	OTHMAR	SUM
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
96.401	13.293	0.	0.	411.327
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	3.543	80.710	0.	398.359
0.	0.	0.	0.	0.
12.527	1.729	0.	0.	53.445

INVESTMENT MATURING IN 3 YEARS -PERIOD 3

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	125.002	6.530	107.953	.348	20.623	191.092
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SU
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	77.894	81.757	611.19
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.

STOCK HELD -PERIOD 3

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	2704.887	.107	26.070	25.499	59.772	762.290	0.
M.M.	4.808	136.196	294.794	15.397	22.900	5.970	13.900
EQIPMT	0.	36.809	52.831	44.921	1.218	4.345	0.
CHEMIC	344.324	12.050	53.048	325.927	36.761	45.551	2.986
CMGLWD	16.532	11.581	8.029	6.110	11.467	4.148	0.
FOODCL	267.593	4.358	3.552	18.837	7.868	101.851	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	13.737	0.	40.230	3632.592
11.195	46.898	0.	.786	552.844
0.	5.224	0.	0.	145.347
8.123	2.234	0.	3.305	834.310
0.	71.200	0.	0.	129.067
0.	0.	0.	.923	404.982
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.

TABLE 4.37

SUMMARY OF FLOW -PERIOD 3

	X	M	A*X	S*DX	R1+R2+R3
AG.PL.	8495.54	239.78	2393.33	240.55	0.
M.M.	838.64	213.87	862.18	140.34	0.
EQIPMT	1142.41	429.81	113.77	33.49	169.47
CHEMIC	826.78	290.90	638.56	105.39	0.
CNGLWD	590.80	11.64	511.10	19.62	0.
FOODCL	2558.76	12.72	258.19	29.30	0.
ELECTR	130.91	0.	113.68	0.	0.
TRANS	947.01	0.	744.66	0.	0.
CONSTR	2045.45	0.	0.	0.	540.66
HOUS.	619.11	0.	0.	0.	0.
OTHMAR	5699.11	9.27	711.39	0.	22.35

Z1	Z2	Z3	E	G	CONS	CHECK
0.	0.	0.	214.55	0.	5886.89	.00
0.	0.	0.	43.40	0.	6.58	.00
532.81	411.33	0.	4.69	104.99	201.66	.00
0.	0.	0.	16.33	30.55	326.83	.00
0.	0.	0.	3.02	0.	68.68	.00
0.	0.	0.	233.46	117.39	1933.14	.00
0.	0.	0.	0.	5.30	11.93	-.00
0.	0.	0.	0.	0.	202.35	.00
378.83	398.36	611.20	0.	116.40	0.	-.00
0.	0.	0.	0.	0.	619.11	-.00
69.23	53.44	0.	192.52	207.37	4452.08	.00

INTER-INDUSTRY FLOW -PERIOD 4

	1	2	3	4	5	6	7
	AG.PL.	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR
AG.PL.	719.186	.219	25.917	49.030	88.079	1376.993	0.
M.M.	1.189	210.817	349.117	23.948	34.676	11.162	19.455
EQIPMT	0.	20.566	55.219	15.295	1.794	7.928	0.
CHEMIC	89.402	20.122	55.434	191.704	54.196	76.811	4.180
CMGLWD	3.857	11.254	8.189	10.531	16.898	8.010	0.
FOODCL	70.045	1.888	3.380	32.794	12.244	154.173	0.
ELECTR	9.525	23.492	19.151	15.291	15.080	36.391	0.
TRANS	63.431	146.885	110.334	94.496	47.370	134.077	17.509
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	44.201	28.488	203.556	30.826	59.823	150.915	10.144

8	9	10	11	12
TRANS	CONSTR	HOUS.	OTHMAR	SUM
0.	100.289	0.	213.000	2572.713
43.491	343.414	3.380	4.197	1044.845
0.	37.843	0.	0.	138.645
197.436	19.649	0.	17.529	726.462
0.	519.324	9.869	0.	587.932
0.	0.	0.	4.876	279.400
4.665	0.	0.	6.666	130.261
44.826	61.937	4.434	128.195	853.495
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
17.730	252.460	29.376	0.	827.518

INVESTMENT MATURING IN 1 YEAR -PERIOD 4

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	40.704	90.193	79.809	58.306	12.513	20.110	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	166.846	53.337	42.903	35.503	9.318	6.199	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	5.273	11.715	10.386	7.577	1.625	2.613	0.

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
96.401	13.293	0.	0.	411.327
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	3.543	80.710	0.	398.359
0.	0.	0.	0.	0.
12.527	1.729	0.	0.	53.445

INVESTMENT MATURING IN 2 YEARS -PERIOD 4

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	211.378	12.147	177.289	.467	66.897	213.251
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	125.002	6.530	107.953	.348	20.623	191.092
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	27.456	1.581	23.040	.061	8.692	27.751

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
124.980	0.	0.	61.299	867.708
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	77.894	81.757	611.199
0.	0.	0.	0.	0.
16.240	0.	0.	7.984	112.805

INVESTMENT MATURING IN 3 YEARS -PERIOD 4

	1	2	3	4	5	6	7
	AG.PL.	M.M.	EQIPMT.	CHEMIC	CMGLWD	FOODCL	ELECTI
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	146.675	117.715	45.466	60.501	9.370	8.209	82.02
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

8	9	10	11	12
TRANS	CONSTR	HOUS.	OTHMAR	SUM
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	.942	145.886	21.948	638.736
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.

STOCK HELD -PERIOD 4

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	2869.113	.129	34.480	29.782	68.057	812.205	0.
M.M.	5.100	164.560	389.893	17.983	26.074	6.360	15.761
ECIPMT	0.	44.475	69.874	52.465	1.386	4.629	0.
CHEMIC	365.230	14.560	70.161	380.660	41.857	48.534	3.386
CMGLWD	17.536	13.993	10.619	7.136	13.057	4.419	0.
FOODCL	283.839	5.265	4.698	22.001	8.959	108.521	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	15.807	0.	43.569	3873.143
12.634	53.966	0.	.852	693.184
0.	6.011	0.	0.	178.840
9.167	2.570	0.	3.580	939.705
0.	81.930	0.	0.	148.690
0.	0.	0.	1.000	434.282
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.

SUMMARY OF FLOW -PERIOD 4

	X	M	A*X	S*DX	R1+R2+R3
AG.PL.	9011.35	234.93	2572.71	186.18	0.
M.M.	1013.30	213.57	1044.85	129.90	0.
EQIPMT	1510.95	471.61	138.65	38.20	198.60
CHEMIC	965.62	306.27	726.46	149.06	0.
CNGLWD	672.69	9.39	587.93	17.92	0.
FCODCL	2726.31	.22	279.40	25.92	0.
ELECTR	148.43	0.	130.26	0.	0.
TRANS	1068.82	0.	853.50	0.	0.
CONSTR	2353.70	0.	0.	0.	585.00
HOUS.	658.81	0.	0.	0.	0.
OTHNAR	6172.13	0.	827.52	0.	26.20

Z1	Z2	Z3	E	G	CONS	CHECK
0.	0.	0.	223.04	0.	6264.35	-.00
0.	0.	0.	45.12	0.	7.00	.00
411.33	867.71	0.	4.88	108.60	214.59	.00
0.	0.	0.	16.98	31.60	347.78	.00
0.	0.	0.	3.14	0.	73.09	-.00
0.	0.	0.	242.70	121.42	2057.09	.00
0.	0.	0.	0.	5.48	12.69	-.00
0.	0.	0.	0.	0.	215.32	-.00
398.36	611.20	638.74	0.	120.40	0.	-.00
0.	0.	0.	0.	0.	658.81	.00
53.44	112.80	0.	200.13	214.49	4737.54	-.00

INTER-INDUSTRY FLOW -PERIOD 5

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	750.471	.251	31.775	62.852	96.312	1435.742	0.
M.M.	1.241	242.153	428.027	30.699	37.917	11.638	21.686
EQIPMT	0.	23.623	67.700	19.607	1.962	8.266	0.
CHEMIC	93.291	23.113	67.963	245.746	59.262	80.088	4.659
CMGLWD	4.025	12.926	10.040	13.500	18.478	8.352	0.
FOODCL	73.092	2.168	4.144	42.039	13.389	160.751	0.
ELECTR	9.939	26.984	23.480	19.601	16.489	37.943	0.
TRANS	66.190	168.718	135.273	121.135	51.798	139.798	19.517
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	46.123	32.722	249.566	39.516	65.415	157.354	11.307

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	111.617	0.	224.553	2713.573
48.178	382.204	3.504	4.425	1211,672
0.	42.117	0.	0.	163.275
218.713	21.868	0.	18.480	833.182
0.	577.985	10.232	0.	655.536
0.	0.	0.	5.140	300.723
5.168	0.	0.	7.027	146.633
49.657	68.934	4.597	135.148	960.763
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
19.640	280.976	30.456	0.	933.076

INVESTMENT MATURING IN 1 YEAR -PERIOD 5

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	211.378	12.147	177.289	.467	66.897	213.251
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	125.002	6.530	107.953	.348	20.623	191.092
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	27.456	1.581	23.040	.061	8.692	27.751

8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
124.980	0.	0.	61.299	867.708
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	0.	0.	0.
0.	0.	77.894	81.757	611.199
0.	0.	0.	0.	0.
16.240	0.	0.	7.984	112.805

INVESTMENT MATURING IN 2 YEARS -PERIOD 5

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	35.783	199.055	84.577	99.360	12.582	26.628	91.535
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	146.675	117.715	45.466	60.501	9.370	8.209	82.024
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	4.636	25.855	11.006	12.912	1.634	3.460	11.912

	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
AG.PL.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.
EQIPMT	146.492	3.535	0.	16.456	716.004
CHEMIC	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	.942	145.886	21.948	638.736
HOUS.	0.	0.	0.	0.	0.
OTHMAR	19.036	.460	0.	2.143	93.054

INVESTMENT MATURING IN 3 YEARS -PERIOD 5

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	0.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	152.050	143.510	54.106	74.089	10.173	8.600	109.365
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
AG.PL.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	2.671	149.542	55.442	759.549
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.

STOCK HELD -PERIOD 5

	1 AG.PL.	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL	7 ELECTR
AG.PL.	2993.920	.148	42.273	38.177	74.419	846.858	0.
M.M.	5.322	189.020	478.019	23.052	28.511	6.632	17.569
EQIPMT	0.	51.085	85.667	67.255	1.516	4.827	0.
CHEMIC	381.117	16.724	86.019	487.968	45.769	50.604	3.775
CMGLWD	18.299	16.072	13.019	9.148	14.277	4.608	0.
FOODCL	296.186	6.048	5.759	28.203	9.796	113.151	0.
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 SUM
AG.PL.	0.	17.593	0.	45.932	4059.320
M.M.	13.996	60.061	0.	.898	823.081
EQIPMT	0.	6.690	0.	0.	217.040
CHEMIC	10.155	2.861	0.	3.774	1088.767
CMGLWD	0.	91.184	0.	0.	166.608
FOODCL	0.	0.	0.	1.054	460.197
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.

SUMMARY OF FLOW -PERIOD

	X	M			
AG.PL.	9403.34	195.40	2713.57	158.73	0.
M.M.	1163.91	205.42	1211.67	103.51	0.
EQIPMT	1852.46	499.43	163.28	63.21	201.94
CHEMIC	1237.83	352.91	833.18	346.68	0.
CNGLWD	735.57	6.63	655.54	7.62	0.
FCODCL	2842.63	5.20	300.72	36.68	0.
ELECTR	165.45	0.	146.63	0.	0.
TRANS	1184.00	0.	960.76	0.	0.
CONSTR	2619.56	0.	0.	0.	485.68
HOUS.	683.02	0.	0.	0.	0.
OTHMAR	6506.88	0.	933.08	0.	26.64

Z1	Z2	Z3	E	G	CONS	CHECK
0.	0.	0.	231.83	0.	6494.60	.00
0.	0.	0.	46.89	0.	7.26	-.00
867.71	716.00	0.	5.07	112.21	222.48	-.00
0.	0.	0.	17.65	32.65	360.57	-.00
0.	0.	0.	3.27	0.	75.77	-.00
0.	0.	0.	252.26	125.46	2132.70	.00
0.	0.	0.	0.	5.66	13.16	.00
0.	0.	0.	0.	0.	223.24	-.00
611.20	638.74	759.55	0.	124.40	0.	-.00
0.	0.	0.	0.	0.	683.02	.00
112.80	93.05	0.	208.02	221.62	4911.67	-.00

NATIONAL INCOME ACCOUNTS

CONSUMPTION	13048.660278	13374.876831	13709.248291	14588.266846	15124.476
INVENTORIES CHANGE	117.897453	373.460052	568.700317	547.170036	716.437073
FIXED INVESTMENT	1932.205078	2072.895813	2455.207550	3093.579376	3799.054840
TOTAL INVESTMENT	2670.669952	3111.110687	3756.389801	4450.548279	5229.743835
GOVERNMENT EXPENDITURE	540.999992	560.999985	581.999985	601.999985	621.999985
VALUE ADDED BY GOVT.	899.753296	933.015884	967.941612	1001.204216	1034.466812
EXPORTS	653.986908	680.986359	707.985817	735.985260	764.984688
IMPORTS	1153.986664	1180.985886	1207.985260	1235.985077	1264.984528
GROSS NATIONAL PRODUCT	16660.083496	17480.003174	18515.579346	20142.018799	21510.686768
REPLACEMENT	620.567459	664.754829	732.481956	809.798920	714.251991
NET NATIONAL PRODUCT	16039.515991	16815.248291	17783.097168	19332.219727	20796.434570
SAVINGS	2170.669952	2611.110687	3256.389801	3950.548279	4729.743835
GROSS NAT. OUTPUT	21209.159668	22341.057129	23894.510742	26302.085449	28394.651855
INTERMEDIATE PRODUCT	5448.827271	5794.068970	6346.870300	7161.272339	7918.433960
CONS./GROSS NAT. PROD.	.783229	.765153	.740417	.724270	.703115
TOTAL INVST/GR.NAT.PR.	.160304	.177981	.202877	.220958	.243123
SAVINGS/GR. NAT. PROD.	.130292	.149377	.175873	.196135	.219879

Table 4.51

ALTERNATIVE TARGET MODEL SOLUTIONS FOR THIRD PLAN

		Private Consumption				Gross National Product		Gross Domestic Savings/GNP		Total Gros Investment
		Dis-counted Sum	Un-discounted Sum	In First Year	In Fifth Year	In First Year	In Fifth Year	In First Year	In Fifth Year	
T-1	Third Plan Targets 'Reference' s, b and lags	← INFEASIBLE								
T-2	'Reference' s and lags lower Capital-Output ratios b	← INFEASIBLE								
T-3	'Reference' lags and Capital-Output ratios; lower inventory-coefficients s	← INFEASIBLE								
T-4	'Reference' lags; lower s and b	← INFEASIBLE								
T-5	Shorter lags; lower s and b	59517	71832	13357	15260	16908	22029	.1248	.2320	19171
T-6	96% of Third Plan Targets Reference Solution Social discount rate w = 0.10 C (t+1) ≥ 1.025 C(t)	57828	69846	13049	15124	16660	21511	.1303	.2199	19218
	All the following solutions are with 96% level of Third Plan Targets									
T-7	Social discount rate w = 0.0	69846	69846	13049	15124	16660	21511	.1303	.2199	19218
T-8	Social discount rate w = 0.20	49451	69844	13050	15124	16662	21511	.1303	.2199	19218
T-9	C (t+1) ≥ C(t)	58128	70133	13286	15124	16915	21511	.1293	.2199	19223
T-10	C (t+1) ≥ 1.05 C(t)	57221	69252	12533	15234	16134	21498	.1339	.2143	19212
T-11	Initial Capacity in Cement and Non-Metals increased by 5%	58550	70660	13237	15138	16920	21429	.1325	.2163	19167
T-12	Initial Capacity in Construction increased by 5%	58055	70101	13119	15125	16131	21509	.1309	.2198	19190

Table 4.51 (cont.)

T-13	All initial capacities increased by 10%	66508	80654	14633	18644	18415	23149	.1271	.1230	1690
T-14	All initial capacities reduced by 10%	← INFEASIBLE								
T-15	Capital Output ratio in Agriculture increased to 2.5 from 1.5	← INFEASIBLE								
T-16	Capital Output ratio in Agriculture decreased to 1.0 from 1.5	59603	72163	13275	16245	16920	22084	.1303	.1894	1862
T-17	Capital Output ratio in Housing reduced to 7.5 from 10.0	58864	71064	13244	15206	16916	21519	.1319	.2164	1900
T-18	'Lower' b- Capital Output ratios in Housing and Agriculture 7.5 and 1.0 respectively	59807	72473	13269	16637	16881	22297	.1286	.1796	1844
T-19	'Reference' lags, 'lower' s, and lower Capital Output ratios in Agriculture and Housing	60841	73713	13377	16540	16893	22301	.1270	.1778	1762
T-20	'Shorter' lags, 'lower' s and lower Capital-Output ratios in Agriculture and Housing	61568	74662	13377	16912	16958	22373	.1262	.1700	1763
T-21	'Shorter' lags and 'lower' s	59947	72435	13377	15736	16960	21739	.1263	.2000	1826
T-22	NFCI[1] increased by 25% to Rs. 625.0 Crores per year	59209	71470	13342	15350	16937	21589	.1272	.2123	1920
T-23	NFCI increased by 50% to Rs. 750.0 Crores per year	59735	72177	13377	15777	16912	21717	.1239	.1972	1926
T-24	NFCI increased by 100% to Rs.1000.0 Crores per year	60288	72893	13377	16001	16716	21673	.1136	.1853	1943
T-25	NFCI reduced by 25% to Rs. 375.0 Crores per year	52640	63748	11771	14867	15051	21317	.1222	.2249	1914

[1] Net Foreign Capital Inflow

Table 4.51 (cont.)

T-26	NFCI reduced to 0.0	← INFEASIBLE								
T-27	No competitive import ceilings	59173	71522	12989	15618	16233	21179	.1453	.2071	9246
T-28	NFCI increased by 100% to Rs. 1000.0 Crores per year No import ceilings	60725	73495	13377	16247	16671	21710	.1412	.1984	19343
T-29	Intra-plan export growth rate reduced by 1% to 3%	57745	69755	13019	15131	16623	21509	.1301	.2195	19218
T-30	Intra-plan export growth rate increased by 1% to 5%	57947	69973	13094	15117	16715	21512	.1305	.2203	19219
T-31	PPD 65-66 Output estimates covered on 11 sectors 'Reference' b, s and lags	59352	71769	13256	15928	16909	21447	.1308	.1800	17956
T-32	'Reference' s and lags; 'lower' b	60264	73116	13279	17095	16896	22134	.1288	.1528	17336
T-33	'lower' b and s, 'shorter' lags	61987	75270	13377	17480	16958	22548	.1262	.1513	17175

THIRD PLAN PERIOD TARGET MODEL

TABLE 4.52
NATIONAL INCOME ACCOUNTS
P.P.D. ESTIMATES OF 1965-66 LIKELY ACHIEVMENTS AS TARGETS

	1961-62	1962-63	1963-64	1964-65	1965-66
CONSUMPTION	13256.390381	13668.243896	14177.337891	14738.684204	15928.317871
INVENTORIES CHANGE	202.250355	366.767223	443.804562	526.151070	515.829063
FIXED INVESTMENT	-1892.778564	2114.158051	2523.078186	2967.386810	3314.911072
TOTAL INVESTMENT	-2712.163788	3141.597687	3596.116180	4144.231079	4361.776672
GOVERNMENT EXPENDITURE	540.999992	560.999985	581.999985	601.999985	621.999985
VALUE ADDED BY GOVT.	899.753296	933.015884	967.941612	1001.204216	1034.466812
EXPORTS	653.986908	680.986359	707.985817	735.985260	764.984688
IMPORTS	1153.986603	1180.986084	1207.985413	1235.985016	1264.984360
GROSS NATIONAL PRODUCT	16909.307373	17803.857422	18823.395020	19986.119141	21446.561279
REPLACEMENT	617.134895	660.672424	629.233467	650.693260	531.036606
NET NATIONAL PRODUCT	16292.172363	17143.184814	18194.161377	19335.425781	20915.524658
SAVINGS	2212.163788	2641.597687	3096.116180	3644.231079	3861.776672
GROSS NAT. OUTPUT	21522.492676	22796.053955	24251.706055	25921.120361	27985.071289
INTERMEDIATE PRODUCT	5512.934265	5925.209229	6396.248962	6936.205322	7572.980469
CONS./GROSS NAT. PROD.	.783971	.767712	.753176	.737446	.742698
TOTAL INVST/GR.NAT.PR.	.165395	.176456	.191045	.207355	.203379
SAVINGS/GR. NAT. PROD.	.130825	.148372	.164482	.182338	.180065

From Table 3.2

ACTUAL CONSUMPTION IN 1960-61	12604.9
ACTUAL GROSS NATIONAL PRODUCT IN 1960-61	16037.0

FOURTH PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.54

GROSS DOMESTIC OUTPUT AND SECTORAL GROWTH RATES

SECTOR	66-67	67-68	68-69	69-70*	70-71	71-72[1]	72-73[1]	73-74[1]
AG.PL.	8473.15637	9133.20337	9538.14990	10094.07532	11076.66223	12222.18103	12952.54578	13726.55518
M.M.	1292.38196	1512.08688	1662.98289	2062.35223	2884.70416	2780.94278	3243.56958	3783.15714
EQIPMT	1932.55185	2561.72470	2704.58218	2406.79794	2922.23511	3030.62140	5965.57275	7074.28662
CHEMIC	864.19530	1212.47783	1320.64987	1546.05324	2127.62521	3755.05655	4366.14014	5076.66919
CMGLWD	640.63274	674.64535	906.02741	1043.59969	1288.37646	1699.68082	1945.39725	2226.63596
FOODCL	3009.38214	3197.04294	3330.53479	3506.13123	3777.44830	4702.30798	5083.14954	5494.83563
ELECTR	169.10184	193.30764	209.45645	226.25267	273.61986	491.00943	558.46715	635.19259
TRANS	1209.75046	1352.72070	1467.87807	1577.20412	1887.16675	2515.03500	2825.10098	3173.39343
CONSTR	2884.93747	2430.43512	3818.61905	4302.35944	5363.02582	6316.49438	7194.03210	8193.48425
HOUS.	705.42956	723.06532	741.14199	759.67049	778.66241	1028.99472	1097.23334	1169.99722
OTHMAR	6903.98206	7239.41107	7619.84601	7797.17688	8298.23474	15445.82776	17111.86304	18957.60229
SUM	28085.50073	30230.12012	33319.86768	35321.67236	40677.75977	55988.15039	62343.06934	69511.80762

Table 4.55

SHADOW PRICE OF X

AG.PL.	.05578	.15927	.17956	.18896	2.13333
M.M.	7.15835	64.83441	13.02207	3.07371	18.05552
EQIPMT	2.08390	4.18406	17.24518	4.19412	19.47141
CHEMIC	.84650	2.74308	4.44350	2.24450	19.41205
CMGLWD	.50514	1.46093	3.19894	1.06922	1.88777
FOODCL	.13555	.43509	.61691	.36086	1.11505
ELECTR	1.01766	2.75591	7.48891	1.65350	1.47413
TRANS	.45957	2.89044	1.60065	.66613	4.48507
CONSTR	.98164	6.71037	3.49707	.98165	2.57174
HOUS.	.04827	.37888	.12886	.03776	2.29879
OTHMAR	.01995	.11089	.07548	.03351	.21078

[1] These are calculated simply by dividing capital stocks by capital output ratios. No test either of static or of dynamic consistency has been applied.

TABLE 4.56

PRIVATE CONSUMPTION

SECTOR	66-67	67-68	68-69	69-70	70-71
AG.PL.	5926.71014	6074.87805	6226.75000	6382.41876	6541.97937
M.MJ	7.18111	7.36064	7.54466	7.73327	7.92661
EQIPMT	369.13977	378.36827	387.82748	397.52317	407.46125
CHEMIC	459.13287	470.61120	482.37648	494.43590	506.79681
CMGLWD	89.99310	92.24293	94.54900	96.91273	99.33555
FOODCL	2187.64209	2242.33316	2298.39151	2355.85129	2414.74762
ELECTR	15.73733	16.13077	16.53404	16.94739	17.37107
TRANS	267.68745	274.37964	281.23914	288.27011	295.47687
CONSTR	0.	0.	0.	0.	0.
HOUSI	705.42977	723.06553	741.14217	759.67073	778.66251
OTHMAR	5250.31042	5381.56824	5516.10748	5654.01019	5795.36053
SUM	15278.96375	15660.93811	16052.46155	16453.77295	16865.11768

SUM OF DISCOUNTED CONSUMPTION = 66663.7402344

SUM OF UNDISCOUNTED CONSUMPTION = 80311.2529297

PRICE FOR MONOTONICITY OF CONSUMPTION

2	.837706
3	1.259559
4	1.253901
5	1.636190

TABLE 4.57

AVAILABLE CAPITAL STOCK

SECTOR	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	13807.04980	14635.47253	15513.60083	15613.77722	16722.21533	18451.57959	19554.19604	20722.7019
M.MJ	3200.88116	3745.03091	4381.68616	7144.63330	7144.63336	7064.10712	8033.54568	9369.85791
EQIPMT	2055.12762	2445.60172	2910.26608	4521.18671	4521.18671	4802.58264	5695.15253	6753.60815
CHEMIC	1660.79697	2158.52441	2503.88834	2503.88834	2503.88834	3963.95026	4609.02832	5359.08386
CMGLWD	742.79402	846.78518	965.33508	1110.41301	1110.41301	1464.90390	1676.67940	1919.07060
FOODCL	1773.97491	1915.89285	2069.16425	2658.29016	2658.29016	2620.92532	2833.19489	3062.65628
ELECTR	1618.25107	1844.80615	2103.07901	2103.07901	2103.07904	3073.17880	3495.38992	3975.60663
TRANS	3046.46448	3412.04013	3821.48489	3727.56497	5560.87231	5464.08948	6137.72937	6894.41888
CONSTR	504.77147	575.43938	656.00088	829.26928	966.42359	966.42364	1100.68684	1253.60301
HOUS.	7489.99994	8014.29962	8204.57764	7997.13141	7786.62604	10289.94360	10972.32935	11699.96790
OTHMAR	1451.21509	1610.84875	1788.04205	1636.12744	1481.97226	2417.27194	2678.00647	2965.86453
SUM	37551.32520	41204.74072	44917.12354	49845.35938	52559.59814	60578.95459	66785.83691	73977.43750

TABLE 4.58

CAPITAL STOCK USED

SECTOR	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	12791.75757	13788.21643	14399.55591	15238.82410	16722.21533	18451.58228	19554.19922	20722.70581
M.M.	3200.88116	3745.03091	4118.75983	5107.88983	7144.63336	6887.64441	8033.44611	9369.85876
EQIPMT	1844.94963	2445.60172	2581.98346	2297.69772	2789.76996	4802.58337	5695.15338	6753.60919
CHEMIC	912.27070	1279.92816	1394.11783	1632.06030	2245.98502	3963.95035	4609.02856	5359.08435
CMGLWD	552.14229	581.45660	780.87790	899.44731	1110.41301	1464.90392	1676.67953	1919.07074
FOODCL	1677.33984	1781.93600	1856.34033	1954.21246	2105.43634	2620.92542	2833.19507	3062.65656
ELECTR	1058.39186	1209.89333	1310.96577	1416.09329	1712.56015	3073.17896	3495.39005	3975.60690
TRANS	2628.26862	2938.88104	3189.06778	3426.58707	4100.00360	5464.08960	6137.72968	6894.41937
CONSTR	441.39556	371.85670	584.24854	658.26171	820.54307	966.42364	1100.68690	1253.60309
HOUS.	7054.29913	7230.65631	7411.42200	7596.70758	7786.62604	10289.94727	10972.33337	11699.97229
OTHMAR	1080.47357	1132.96805	1192.50620	1220.25839	1298.67392	2417.27203	2678.00656	2966.86475
SUM	33242.16895	36506.42383	38819.84424	41448.03857	47836.85840	60402.49951	66785.84570	73977.44824

TABLE 4.59

IDLE CAPITAL

SECTOR	66-6[illegible]	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	1015.29223	847.25610	1114.04491	374.95312	0.	-.00269	-.00317	-.00391
M.M.	0.	0.	262.92633	2036.74345	0.	176.46271	-.00043	-.00085
EQIPMT	210.17799	0.	328.28262	2223.48898	1731.41673	-.00073	-.00085	-.00104
CHEMIC	948.52627	878.59624	1109.77051	871.82803	257.90332	-.00009	-.00024	-.00049
CMGLWD	190.65173	265.32858	184.45718	210.96570	0.	-.00002	-.00014	-.00014
FOODCL	96.63507	133.95685	212.82391	704.07769	552.85381	-.00009	-.00018	-.00027
ELECTR	559.85920	634.91283	792.11324	686.98571	390.51889	-.00015	-.00012	-.00027
TRANS	418.19586	473.15908	632.41711	300.97790	1460.86870	-.00012	-.00031	-.00049
CONSTR	63.37591	203.58269	71.75233	171.00757	145.88052	0.	-.00006	-.00008
HOUS.	435.70080	783.64330	793.15562	400.42381	0.	-.00366	-.00403	-.00439
OTHMAR	370.74151	477.88070	595.53585	415.86905	183.29834	-.00009	-.00009	-.00021
SUM	4209.15637	4698.31622	6097.27942	8397.32056	4722.74017	176.45506	-.00963	-.01215

Table 4.60

RATIO OF IDLE CAPITAL/TOTAL CAPITAL

AG.PL.	.07353	.05789	.07181	.02401	0.	-.00000	-.00000	-.00000
M.M.	0.	0.	.06001	.28507	0.	.02498	-.00000	-.00000
EQIPMT	.10227	0.	.11280	.49179	.38296	-.00000	-.00000	-.00000
CHEMIC	.50974	.40704	.44322	.34819	.10300	-.00000	-.00000	-.00000
CMGLWD	.25667	.31334	.19108	.18999	0.	-.00000	-.00000	-.00000
FOODCL	.05447	.06992	.10286	.26486	.20797	-.00000	-.00000	-.00000
ELECTR	.34597	.34416	.37664	.32666	.18569	-.00000	-.00000	-.00000
TRANS	.13727	.13867	.16549	.08074	.26270	-.00000	-.00000	-.00000
CONSTR	.12555	.35379	.10938	.20621	.15095	0.	-.00000	-.00000
HOUS.	.05817	.09778	.09667	.05007	0.	-.00000	-.00000	-.00000
OTHMAR	.25547	.29666	.33307	.25418	.12369	-.00000	-.00000	-.00000
SUM	.11475	.11402	.13575	.16847	.08985	.00291	-.00000	-.00000

FOURTH PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.61

SHADOW RENTAL PRICES OF CAPITAL

SECTOR	66-67	67-68	68-69	69-70	70-71
AG.PL.	0.	0.	0.	0.	1.00915
M.M.	2.43073	27.13875	0.	0.	1.59037
EQIPMT	0.	1.31123	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	.18952
FOODCL	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	.21383
OTHMAR	0.	0.	0.	0.	0.

FOURTH PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.62

RATIO - $\frac{\text{INITIAL CAPITAL IN PROCESS COMPLETED}}{\text{AVAILABE INITIAL CAPITAL IN PROCESS}}$

SECTOR	67-68	68-69
AG.PL.	1.000	1.000
M.M.	1.000	1.000
EQIPMT	1.000	1.000
CHEMIC	1.000	1.000
CNGLWD	1.000	1.000
FOODCL	1.000	1.000
ELECTR	1.000	1.000
TRANS	1.000	1.000
CONSTR	1.000	1.000
HOUS.	1.000	.339
OTHMAR	1.000	1.000
SUM		

TABLE 4.63

SHADOW PRICES ON INITIAL CAPITAL IN PROCESS

SECTOR	67-68	68-69
AG.PL.	4.209612	2.031869
M.MJ	33.478394	4.318106
EQIPMT	7.718297	4.390698
CHEMIC	6.032364	3.996973
CMGLWC	5.992996	3.946755
FOODCL	7.077762	5.110294
ELECTR	5.466610	3.402847
TRANS	8.569887	6.712063
CONSTR	7.218199	5.261681
HOUS.	2.236565	0.
OTHMAR	4.743910	2.644100

FOURTH PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.64

NEW CAPITAL

SECTOR	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	0.	828.42297	878.12839	100.18066	1108.43895	1729.36461	1102.61691	1168.60633
M.M.	0.	544.14977	636.65528	2762.94720	0.	0.	969.33865	1336.41246
EQIPMT	0.	390.47427	464.66443	1610.92015	0.	281.39599	892.57000	1058.45573
CHEMIC	0.	297.72746	345.36389	0.	0.	1460.06198	645.07816	750.05572
CMGLWD	0.	103.99110	118.54990	145.07796	0.	354.49096	211.77548	242.39120
FOODCL	0.	141.91798	153.27140	589.12592	0.	0.	212.26959	229.46148
ELECTR	0.	226.55519	258.27288	0.	0.	970.09981	422.21119	480.21679
TRANS	0.	365.57580	409.44479	0.	1928.61255	0.	771.90038	756.68963
CONSTR	0.	70.66799	80.56150	173.26880	137.15381	0.	134.26320	152.91618
HOUS.	0.	524.29999	190.28027	0.	0.	2717.08701	682.38598	727.63879
OTHMAR	0.	159.63368	177.19330	0.	0.	935.29971	260.73460	288.85815
SUM	0.	3653.41608	3712.38593	5381.52057	3174.20526	8447.79993	6305.14386	7191.60205

Table 4.65

SHADOW PRICES OF NEW CAPITAL

AG.PL.	4.62992	4.62992	4.62992	4.62992	1.27384	1.62351	.72343
M.M.	34.14440	7.00566	7.00566	7.00566	0.	5.04521	.37007
EQIPMT	8.39209	7.08086	7.08086	7.08086	1.56811	5.15399	.35876
CHEMIC	6.67655	6.67655	6.67655	6.67655	1.53379	4.74131	.40145
CMGLWD	6.61904	6.61904	6.61904	6.61904	1.51251	4.48985	.42717
FOODCL	7.82891	7.82891	7.82891	7.82891	1.35045	6.23080	.24766
ELECTR	6.06607	6.06607	6.06607	6.06607	1.48183	4.11849	.46574
TRANS	9.49316	9.49316	9.49316	9.49316	.86494	8.62822	-0.
CONSTR	7.98556	7.98556	7.98556	7.98556	1.30385	6.45771	.22400
HOUS.	2.56375	2.56375	2.56375	2.56375	1.16557	.32718	.85716
OTHMAR	5.28621	5.28621	5.28621	5.28621	1.41537	3.32306	.54778

FOURTH PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.66

RESTORED CAPACITY

SECTOR	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	0.	297.172	301.688	306.205	310.721	315.538	320.356	325.173
M.MJ	0.	75.839	76.992	78.144	79.297	0.	81.756	82.985
EQIPMT	0.	17.396	17.661	17.925	18.189	18.471	18.753	19.035
CHEMIC	0.	56.900	57.765	58.630	59.495	60.417	61.339	62.262
CMGLWD	0.	17.458	17.724	17.989	18.254	18.537	18.820	19.103
FOODCL	0.	35.190	35.725	36.260	36.794	0.	37.935	38.506
ELECTR	0.	52.065	52.856	53.647	54.439	55.283	56.127	56.971
TRANS	0.	91.149	92.535	0.	0.	0.	0.	99.738
CONSTR	0.	1.691	1.717	1.743	1.768	1.796	1.823	1.851
HOUS.	0.	201.327	204.386	0.	0.	0.	217.033	220.297
OTHMAR	0.	147.433	149.674	0.	0.	156.545	158.935	161.325
SUM	0.	993.622	1008.723	570.543	578.958	626.588	972.878	1087.246

Table 4.67

RATIO - RESTORED CAPACITY/DEPRECIATED CAPACITY

	1	2	3	4	5	6	7	8
AG.PL.	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
M.MJ	0.	1.000	1.000	1.000	1.000	0.	1.000	1.000
EQIPMT	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CHEMIC	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
CMGLWD	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
FOODCL	0.	1.000	1.000	1.000	1.000	0.	1.000	1.000
ELECTR	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
TRANS	0.	1.000	1.000	0.	0.	0.	0.	1.000
CONSTR	0.	1.000	1.000	1.000	1.000	1.000	1.000	1.000
HOUS.	0.	1.000	1.000	0.	0.	0.	1.000	1.000
OTHMAR	0.	1.000	1.000	0.	0.	1.000	1.000	1.000

FOURTH PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.68

SHADOW PRICES OF RESTORED CAPACITY

SECTOR	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	.156884	1.229322	1.788217	1.788226	1.126775	.567878	.411015
M.M.	.021412	.167791	.244077	.244114	0.	.077440	.056120
EQIPMT	.031293	.245220	.356708	.356753	.224700	.113201	.082010
CHEMIC	.030576	.239597	.230461	.230489	.219569	.110630	.080123
CMGLWD	.062964	.493383	.717694	.717714	.452206	.227890	.164961
FOODCL	.024307	.190482	.277084	.277130	0.	.087903	.063712
ELECTR	.149352	.449864	1.239630	1.239650	1.696261	1.395730	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	.064472	.505223	.734921	.735019	.090121	.233202	.168971
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	.018362	.055293	0.	0.	.208544	.171593	0.

FOURTH PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.69

TOTAL IMPORTS

SECTOR	66-67	67-68	68-69	69-70	70-71
AG.PL.	235.59195	198.81580	208.75449	229.30808	177.22659
M.M.	276.25404	266.05731	286.92229	354.33942	418.28210
EQIPMT	609.54073	683.85479	715.65141	662.30013	686.72524
CHEMIC	297.89218	354.55906	381.96571	448.53664	555.31017
CMGLWD	11.49305	7.40257	8.22603	9.73211	5.15351
FOODCL	12.29695	6.60615	6.47904	7.78340	.30220
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	8.93052	4.70399	0.	0.	0.
SUM	1451.99937	1521.99963	1607.99896	1711.99976	1842.99979

TABLE 4.70

NON-COMPETITIVE IMPORTS

SECTOR	66-67	67-68	68-69	69-70	70-71
AG.PL.	135.57050	146.13125	152.61040	161.50520	177.22659
M.M.	187.39538	219.25260	241.13252	299.04107	418.28210
EQIPMT	454.14968	602.00530	635.57681	565.59751	686.72524
CHEMIC	225.55497	316.45671	344.68961	403.51989	555.31017
CMGLWD	2.56253	2.69858	3.62411	4.17440	5.15351
FOODCL	.24075	.25576	.26644	.28049	.30220
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.

TABLE 4.71

COMPETITIVE IMPORTS

AG.PL.	100.02145	52.68455	56.14409	67.80288	0.
M.M.	88.85866	46.80471	45.78978	55.29835	0.
EQIPMT	155.39105	81.84949	80.07460	96.70263	0.
CHEMIC	72.33720	38.10235	37.27610	45.01675	0.
CMGLWD	8.93052	4.70399	4.60192	5.55771	0.
FOODCL	12.05620	6.35039	6.21259	7.50290	0.
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	8.93052	4.70399	0.	0.	0.

TABLE 4.72

SHADOW PRICES ON COMPETITIVE IMPORT CEILING

SECTOR	66-67	67-68	68-69	69-70	70-71
AG.PL.	0.	0.	0.	0.	.57869
M.M.	1.41341	12.87035	2.55566	.57406	3.55110
EQIPMT	.70579	1.40063	5.93884	1.39380	6.70270
CHEMIC	.12810	.41858	.69076	.33300	3.11060
CMGLWD	.00899	.02603	.06039	.01760	.03354
FOODCL	.00215	.00745	.01181	.00464	84.76132
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	-.00072	-.00097	0.	0.	0.

SHADOW PRICE ON FOREIGN TRADE BALANCE CONSTRAINTS

0.05578	0.15927	0.17956	0.18896	0.21078

FOURTH PLAN TARGET MODEL REFERENCE SOLUTION

TABLE 4.73

NATIONAL INCOME ACCOUNTS

	66-67	67-68	68-69	69-70	70-71
CONSUMPTION	15278.963745	15660.938110	16052.461549	16453.772949	16865.117676
INVENTORIES CHANGE	-209.808346	510.595779	451.292912	1327.700165	2683.526031
FIXED INVESTMENT	3756.554962	4174.466492	5836.097107	5704.343323	7031.820862
TOTAL INVESTMENT	4442.285461	5419.695374	6879.455139	7729.392090	10556.546143
GOVERNMENT EXPENDITURE	1107.999985	1176.999969	1253.999969	1336.999969	1427.999969
VALUE ADDED BY GOVT.	1842.747971	1957.503922	2085.564911	2223.604706	2374.949524
EXPORTS	951.999977	1021.999977	1107.999969	1211.999969	1342.999954
IMPORTS	1451.999374	1521.999634	1607.998962	1711.999756	1842.999786
GROSS NATIONAL PRODUCT	22171.996826	23715.136963	25771.481689	27243.769287	30724.612793
REPLACEMENT	895.538857	734.633148	592.065125	697.348633	841.199394
NET NATIONAL PRODUCT	21276.457764	22980.503662	25179.416504	26546.420654	29883.413330
SAVINGS	3942.285461	4919.695374	6379.455139	7229.392090	10056.546143
GROSS NAT. OUTPUT	28085.500732	30230.120117	33319.867676	35321.672363	40677.759766
INTERMEDIATE PRODUCT	7756.251709	8472.487305	9633.951660	10301.510132	12328.101807
CONS./GROSS NAT. PROD.	.689111	.660377	.622877	.603946	.548912
TOTAL INVST/GR.NAT.PR.	.200356	.228533	.266941	.283712	.343586
SAVINGS/GR. NAT. PROD.	.177805	.207450	.247539	.265359	.327312

Table 4.74

ALTERNATIVE TARGET MODEL SOLUTIONS FOR FOURTH PLAN

		Private Consumption				Gross National Product		Gross Domestic Savings/GNP		Total Gros Investment
		Dis-counted Sum	Un-discounted Sum	In First Year	In Fifth Year	In First Year	In Fifth Year	In First Year	In Fifth Year	
F-1.0	Reference Solution 'Reference' s, b and lags Social Discount Rate w = 0.10 C (t+1) $\geqq$ 1.025 C(t) Net Foreign Capital Inflow = Rs. 500 Crores per year Constant m'(t) X(0) and X(5) extended for cover-age on 11 sector basis	66664	80311	15279	16865	22172	30725	.1778	.3273	35027
F-1.1	C (t+1) $\geqq$ 1.05 C(t)	64737	78348	14179	17235	21082	30906	.1874	.3193	34961
F-1.2	Net Foreign Capital Inflow (NFCI) increased by 25% to Rs. 625 Crores per year	74197	90197	16132	21434	23441	33646	.1859	.2499	35060
F-1.3	NFCI increased by 50% to Rs. 750 Crores per year	75101	91448	16201	22449	23551	34340	.1868	.2355	35262
F-1.4	NFCI increased to Rs. 625 Crores in the 4th year and to Rs. 750 Crores in the 5th year	74230	90349	16043	21969	23407	34229	.1885	.2470	35211

Table 4.74 (cont.)

F-2.0 Decreasing Non-Competitive import coefficient m'(t) to reflect import substitution; NFCI is Rs. 500 Crores	73661	89420	16011	20547	23363	33523	.1883	.2736	34972
F-2.1 NFCI decreased by 25% to Rs. 375 Crores/year	68069	82559	15110	19813	21981	33077	.1783	.2860	34950
F-2.2 NFCI decreased by 50% to Rs. 250 Crores/year	60613	73466	12982	19559	19554	32987	.1852	.2918	34981
F-3.0 Lower inventory coefficients s m'(t) constant	73395	88733	16157	19118	23163	31847	.1751	.2803	33189
F-4.0 Lower inventory coefficients s Capital coefficient in Agriculture decreased to 1.0	75713	91997	16153	20877	23314	32659	.1806	.2443	31567
F-5.0 Lower inventory coefficients s Capital coefficient in Agriculture increased to 2.5 from 1.51	62291	75043	14277	15759	21272	30195	.1901	.3522	36511
F-6.0 "Lower" inventory coefficients s "Lower" capital coefficients b constant m'(t) $C(t+1) \geq 1.025\ C(t)$ $w = .10$	76443	93024	16154	21431	23289	32892	.1797	.2328	30943
F-6.1 Net Foreign Capital Inflow up by 25% to Rs. 625.0 Crores per year	79706	97721	16174	24890	23548	35626	.1878	.1946	32058
F-6.2 Net Foreign Capital Inflow up by 50% to Rs. 750.0 Crores per year	80355	98610	16223	25370	23343	35911	.1786	.1876	32365
F-6.3 Net Foreign Capital Inflow up by 100% to Rs. 1000.0 Crores per year	81085	99584	16223	25725	23025	35879	.1673	.1770	32858
F-6.4 Net Foreign Capital Inflow reduced by 25% to Rs. 375.0 Crores per year	68192	82152	15629	17252	22342	29656	.1684	.2900	30808

F-6.5	Net Foreign Capital Inflow reduced by 100% to Rs.0.0 per year	16637	20043	3813	4209	10272	17519	.3415	.5427	30785
F-7.0	Shorter lags Coverage extended on 11 sector basis "lower" s and b C (t+1) ≥ 1.025 C(t) Discount rate w = .10	80241	97986	16039	22525	23579	33263	.1947	.2085	30694
F-7.1	NFCI up by 25% to Rs. 625.0 Crores per year	83067	101951	16061	24631	23693	35370	.1976	.1961	31704
F-7.2	NFCI up by 50% to Rs. 750.0 Crores per year	84446	103927	16157	26157	23765	36701	.1960	.1837	32873
F-7.3	NFCI doubled to Rs. 1000.0 Crores per year	85809	105871	16214	28459	23742	38285	.1927	.1573	34734
F-7.4	NFCI reduced by 25% to Rs. 375.0 Crores per year	75463	91501	16128	20028	23255	31069	.1796	.2330	30265
F-7.5	NFCI reduced by 100% to Rs. 0.0 per year	29488	35525	6759	7460	13657	18713	.2891	.3981	30255
F-8.0	Fourth Plan Coverage extended on 32 sector basis C (t+1) ≥ 1.05 C(t) Discount rate w = .10	36350	43992	7962	9677	13487	25988	.1864	.4813	39170
F-8.1	Discount rate w = 0.00	42992	43992	7962	9677	13487	25988	.1864	.4813	39170
F-8.2	Discount rate w = 0.20	31024	43992	7962	9677	13487	25988	.1864	.4813	39170
F-8.3	NFCI up by 25% to Rs. 625.0 Crores per year	55476	67140	12151	14769	18822	30163	.1947	.3843	39178
F-8.4	NFCI up by 50% to Rs. 750.0 Crores per year	70826	85717	15513	18856	22959	33110	.1958	.3156	39028
F-8.5	NFCI doubled to Rs. 1000.0 Crores per year	73907	89850	15840	21578	23159	34917	.1886	.2731	39216

Table 4.74 (cont.)

F-8.6	Reduced by 25% to Rs. 375.0 Crores per year	16913	20469	3704	4503	8065	21711	.1669	.6175	39158
F-8.7	NFCI cut off to 0.0					INFEASIBLE				
F-8.8	Export projection rate reduced by 1.0% to 6.0% per year	34588	41860	7576	9208	12982	25584	.1843	.4914	39167
F-8.9	Export projection rate increased by 1.0% to 8.0% per year	38044	46043	8333	10128	13973	26379	.1882	.4719	39166
F-8.10	Targets lowered by 10% to 90% level	74863	91341	15730	23190	23465	32698	.2026	.1745	39292
F-8.11	Initial Capacity increased by 10%	81513	99187	17317	23678	25553	33615	.2068	.1825	32368
F-8.12	C (t+1) ≧ 1.025 C(t)	37421	45082	8577	9467	14200	25844	.1840	.4865	39170
F-8.13	C (t+1) ≧ 1.0 C(t)	38572	46250	9250	9250	14919	25696	.1822	.4920	39169
F-8.14	C/O in Housing reduced to 7.5	38761	46911	8490	10319	14099	26296	.1886	.4630	38441
F-8.15	No Ceilings on competitive imports	51519	62352	11284	13716	17305	28639	.1774	.3882	39048
F-8.16	No Ceilings on competitive imports NFCI doubled to Rs. 1000.0 Crores per year	76184	92545	16253	21735	23632	35049	.1874	.2714	39150
F-8.17	Post terminal growth rates $\overline{\alpha(s)}$ from Fifth Plan C (t+1) ≧ 1.025 C(t)	72083	87148	16058	18861	23603	31265	.1947	.2260	34478

Table 4-75

Alternative Calculations of Fourth Plan Investment Requirements (in Rs. Crores)

1.0 P.P.D. Notes Estimates in Current Prices	
1.1 Net Fixed Investment	20,760
1.2 Inventory Investment	1,400
1.3 Total Net Investment	22,160
1.4 Replacement[1]	4,000
1.5 Total Gross Investment	26,160

2.0 Incremental Calculations for Adjusted P.P.D. Targets in 1959-60 Prices

	$\overline{X(0)}$ and $\overline{X(5)}$ Adjusted on Eleven Sector Basis				$\overline{X(0)}$ and $\overline{X(5)}$ Adjusted on Thirty-Two Sector Basis			
	1	2	3	4	5	6	7	8
	Reference Parameters	Reference Parameters Fifth Plan $\alpha(5)$	Lower s Lower b	Lower s Lower b Fifth Plan $\alpha(5)$	Reference Parameters	Reference Parameters Fifth Plan $\alpha(5)$	Lower s Lower b	Lower s Lower b Fifth Plan $\alpha(5)$
2.1 $\Sigma b_i[\overline{X_i(5)}(1+\alpha_i(5))-\overline{X_i(0)}(1+\alpha(0))]$	22,915	21,373	20,635	19,183	25,487	23,541	23,147	21,293
2.2 Terminal Capital in Process	5,082	3,607	4,546	3,168	5,735	3,855	5,192	3,412
2.3 Initial Capital in Process	2,948	2,948	2,551	2,551	3,226	3,226	2,825	2,826
2.4 Net Fixed Investment	25,049	22,032	22,630	19,800	27,996	24,170	25,514	21,879
2.5 Inventory Investment								
$\Sigma s_i[\overline{X_i(5)}(1+\alpha_i(5))-\overline{X_i(0)}(1+\alpha_i(0))]$	4,766	4,388	3,129	2,830	5,428	4,926	3,738	3,328
2.6 Total Net Investment	29,815	26,420	25,759	22,630	33,424	29,096	29,252	25,207
2.7 Replacement Investment	5,138	5,138	5,138	5,138	5,138	5,138	5,138	5,138
2.8 Total Gross Investment	34,953	31,558	30,897	27,768	38,562	34,234	34,390	30,345

1 Interpolated from P.P.D. Notes, Table 7, p. 11.

Table 4-76

ALTERNATIVE TRANSIT MODEL SOLUTIONS FOR THE FOURTH PLAN PERIOD

Unless otherwise indicated the following assumptions are made in all solutions:

(1) the social discount rate, w = .10 ;

(2) the minimum intra-plan growth rate required for aggregate consumption, p, = 5% ; i.e. $C(t+1) \geq 1.05\ C(t)$

(3) the intra-plan growth rate for exports, ε , = 7%;

(4) the level of aggregate consumption of the initial period is left unconstrained ;

(5) the post-terminal growth rates for private consumption, government consumption, exports and imports are 5%, 2.5%, 4% and 3%, respectively ;

(6) the net foreign capital inflow from all sources including foreign aid is Rs. 500 crores annually ;

(7) all other parameters as specified for the Fourth Plan Target Model.

	Private Consumption				Gross National Product		Gross Domestic Savings/GNP		Total Gro Investmen
	Dis-counted Sum	Undis-counted Sum	in First Year	in Fifth Year	in First Year	in Fifth Year	in First Year	in Fifth Year	Over Five Years
R-1 Reference Solution $C(t+1) \geq 1.025\ C(t)$	77,112	94,246							
R-2 $C(t+1) \geq C(t)$	77,586	94,926	16,253	24,133	21,685	31,092	.1144	.1015	19,904
R-3 $C(t+1) \geq 1.05\ C(t)$	76,383	93,124	16,143	23,544	21,675	30,086	.1191	.0911	18,491
All of the following variations are with $C(t+1) \geq 1.05\ C(t)$									
R-4 Social discount rate $\omega = 0$	76,339	93,201	16,022	24,146	21,642	30,935	.1234	.0965	19,837
R-5 Social discount rate $\omega = 0.20$	64,855	92,790	16,253	21,866	21,522	27,850	.1077	.0783	14,787
R-6 All initial capacities increased by 10%	84,212	102,704	17,769	26,124	23,592	32,883	.1218	.0899	20,201
R-7 All initial capacities decreased by 10%	68,615	83,637	14,516	21,078	19,709	27,435	.1138	.0931	16,816
R-8 Post-terminal consumption growth rate, ϕ, reduced to 2.5%	77,031	94,070	16,144	24,472	21,478	29,861	.1110	.0531	16,664
R-9 Post-terminal consumption growth rate, ϕ, increased to 7.5%	75,644	91,939	16,193	21,698	22,048	29,369	.1317	.1317	18,965
R-10 No competitive import ceilings	79,458	97,028	16,253	23,506	22,038	24,279	.1286	.0957	18,308
R-11 Net Foreign Capital Inflow (NFCI) increased by 25%	75,801	93,623	16,241	23,627	21,574	30,042	.1104	.0869	18,396
R-12 NFCI increased by 50%	77,191	94,154	16,275	24,015	21,473	30,403	.1047	.0850	18,980
R-13 NFCI increased by 100%	77,895	95,128	16,275	24,405	21,062	30,694	.0872	.0810	19,301
R-14 NFCI reduced by 25%	76,024	92,712	16,046	23,558	21,728	30,264	.1257	.0959	18,600

(Table Cont'd.)

Table Cont'd.

	Private Consumption				Gross National Product		Gross Domestic Savings/GNP		Total Gross Investment
	Dis-counted Sum	Undis-counted Sum	in First Year	in Fifth Year	in First Year	in Fifth Year	in First Year	in Fifth Year	Over Five Years
R-15 NFCI reduced to 0	74,779	91,236	15,746	23,374	22,069	30,506	.1528	.1091	19,156
R-16 Intra-plan and post-terminal export growth rate = 6.0%	76,434	93,196	16,146	23,606	21,620	30,046	.1167	.0878	18,281
R-17 Intra-plan and post-terminal export growth rate = 8.0%	76,432	93,198	16,142	23,633	21,616	29,980	.1167	.0849	18,242
R-18 NFCI increased by 100%. No competitive import ceilings	81,629	99,973	16,253	24,536	21,444	30,999	.0917	.0858	19,625
R-19 Capital-output ratio in Housing lowered to 7.5 from 10.0	76,571	93,421	16,123	23,928	21,708	30,183	.1213	.0813	18,159
R-20 Capital-output ratio in Agriculture raised to 2.5 from 1.5	75,627	91,793	16,253	20,772	21,690	27,562	.1146	.1084	16,446
R-21 Extreme case: C/O in Agriculture = 2.5 Initial Capacities reduced by 10% Export rate = 6% NFCI reduced by 25% Post-terminal growth rate of consumption increased to 7.5%	66,616	80,730	14,466	17,992	20,246	26,836	.1397	.1879	19,775

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.77

GROSS DOMESTIC OUTPUT

(RS. CRORES, 1959-60 PRODUCERS PRICES)

SECTOR	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	9145.67957	9694.41956	10276.08472	11906.95056	13582.47058	14296.55212	15038.31531	15818.65833
M.M.	1364.92195	1046.83937	970.58666	1084.94011	1224.43541	1317.23434	1400.58926	1489.20770
EQIPMT	1316.27910	1233.22746	969.13441	798.06700	1116.86339	1685.67824	1778.79140	1877.30621
CHEMIC	777.83463	1109.76054	1210.64719	1337.42223	1506.14810	1609.86496	1710.17082	1816.34261
CMGLWD	748.28090	846.18726	837.61243	769.01888	771.76611	842.80833	882.99776	925.27739
FOODCL	3164.30640	3339.34592	3506.43259	4050.64838	4709.83698	4960.32587	5224.53571	5503.01776
ELECTR	125.70409	173.04614	185.57793	211.59070	234.19975	247.11302	260.73820	275.12480
TRANS	1212.73180	1237.54668	1242.13950	1367.17403	1583.13579	1719.33456	1811.70154	1909.10393
CONSTR	3296.26523	3754.44937	3804.15015	3215.07938	2905.86349	3271.60709	3418.02222	3571.86218
HOUS.	750.39998	769.15897	788.38799	928.36067	1115.02299	1170.77425	1229.31296	1290.77858
OTHMAR	7125.78894	7331.70782	7468.85681	8490.09253	10037.06201	10706.95911	11252.42676	11826.01941
SUM	29028.19165	30535.68823	31259.60962	34159.34326	38786.80371	41828.25049	44007.60059	46302.69727

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.78

SHADOW PRICES OF OUTPUT

(RS. CRORES, 1959-60 PRODUCERS PRICES)

SECTOR	66-67	67-68	68-69	69-70	70-71
AG.PL.	.00089	0.	4.62623	1.16126	.39329
M.M.	0.	.00032	.22901	.14644	.09126
EQIPMT	.00089	.00076	.31396	.22891	.14274
CHEMIC	.00050	.00045	.21194	.41559	.25930
CMGLWO	.00080	.00070	.21147	.55970	.20443
FOODCL	.00089	.00065	.99115	1.69837	.51068
ELECTR	.00048	.00043	.02230	.05086	.03790
TRANS	.00023	.00021	.05218	.09204	.06170
CONSTR	.24281	.21488	.20552	.18461	.08723
HOUS.	15.03633	.00026	.01074	.20699	.43067
OTHMAR	.00638	.00563	.13567	.07300	.02837

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.79

PRIVATE CONSUMPTION

(RS. CRORES, 1959-60 PRODUCERS PRICES)

SECTOR	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	6304.52185	6462.13525	6623.68848	7799.67621	9367.93298	9836.32959	10328.14600	10844.55310
M.M.	7.63889	7.82986	8.02561	9.45050	11.35068	11.91821	12.51412	13.13983
EQIPMT	392.67143	402.48824	412.55043	485.79576	583.47321	612.64687	643.27921	675.44316
CHEMIC	488.40134	500.61140	513.12668	604.22858	725.71896	762.00491	800.10515	840.11039
CMGLWD	95.72991	98.12317	100.57624	118.43282	142.24575	149.35803	156.82593	164.66723
FOODCL	2327.09833	2385.27591	2444.90775	2878.98334	3457.85162	3630.74417	3812.28137	4002.89539
ELECTR	16.74055	17.15906	17.58804	20.71066	24.87489	26.11864	27.42457	28.79580
TRANS	284.75180	291.87061	299.16737	352.28236	423.11469	444.27042	466.48394	489.80812
CONSTR	0.	0.	0.	0.	0.	0.	0.	0.
HOUS.	750.39900	769.15902	788.38799	928.36053	1115.02312	1170.77426	1229.31297	1290.77859
OTHMAR	5585.00342	5724.62885	5867.74445	6909.51978	8298.79553	8713.73523	9149.42200	9606.89294
SUM	16252.95605	16659.28101	17075.76270	20107.43994	24150.38086	25357.89990	26625.79468	27957.08398

SUM OF DISCOUNTED CONSUMPTION = 77111.9902344

SUM OF UNDISCOUNTED CONSUMPTION = 94245.8085938

PRICE FOR MONOTONICITY OF CONSUMPTION

2	.295668
3	1.173345
4	0.
5	0.

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.80

AVAILABLE CAPITAL STOCK

(RS. CRORES, 1960-61 PRODUCERS PRICES)

SECTOR	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	13807.04980	14635.47253	15513.60083	18861.26416	20505.18408	21583.20898	22703.04248	23881.11133
M.M.	3380.54318	3865.60303	3788.61142	3710.46719	3631.17038	3550.64417	3468.88855	3688.36752
EQIPMT	2614.93655	1902.24326	1884.58255	1866.65746	1848.46797	1829.99648	1811.24297	1792.20744
CHEMIC	1997.20926	2102.95782	2045.19275	1986.56274	1927.06804	1866.65091	1805.31137	1917.38727
CMGLWD	794.41072	852.34685	834.62314	816.63414	798.37984	779.84249	761.02213	797.45558
FOODCL	1791.32140	1986.57536	2203.11203	2661.91626	2625.12183	2764.74304	2912.01035	3067.21518
ELECTR	1792.23599	1904.29068	1851.43457	1797.78717	1743.34856	1688.06593	1631.93930	1721.97519
TRANS	3061.94406	3438.56314	3861.50638	3927.46140	3832.15619	3735.37338	3935.03592	4147.66449
CONSTR	504.32869	574.43024	582.03452	553.73256	551.96416	550.16830	548.34503	546.49434
HOUS.	7503.99994	8044.28766	8623.47607	9283.60657	11150.23035	11707.74170	12293.12244	12907.77368
OTHMAR	1460.17970	1633.94107	1828.37996	1724.95549	1570.80029	1675.65147	1761.00826	1850.77565
SUM	38708.15820	40940.71045	43016.55322	47191.04346	50183.88965	51732.08545	53631.96631	56318.42578

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.81

RATIO - IDLE CAPITAL [illegible]

SECTOR	66-67	67-68	68-69	69-70	70-71			
RATIO OF IDLE CAPITAL/TOTAL CAPITAL								
AG.PL.	0.	0.	0.	.04695	0.	-.00000	-.00000	-.00000
M.M.	.0.	.32928	.36550	.27580	.16484	.08117	.00000	.00000
EQIPMT	.51945	.38109	.50907	.59184	.42318	.12062	.06243	-.00000
CHEMIC	.58887	.44293	.37512	.28931	.17495	.08959	.00000	.00000
CMGLWD	.18818	.14436	.13504	.18838	.16686	.06854	-.00001	-.00000
FOODCL	.01543	.06309	.11290	.15185	0.	.00000	.00000	-.00000
ELECTR	.56101	.43124	.37264	.26336	.15919	.08377	.00000	-.00000
TRANS	.13952	.21809	.30114	.24371	.10247	-.00000	-.00000	.00000
CONSTR	0.	0.	0.	.11165	.19452	.09018	.04630	-.00000
HOUS.	0.	.04384	.08577	0.	0.	-.00000	-.00000	-.00000
OTHMAR	.23627	.29776	.36070	.22972	0.	.00001	.00000	.00000
SUM	.11598	.13649	.15633	.12789	.05238	.01780	.00258	-.00000

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.82

SHADOW RENTAL PRICE OF CAPITAL

(RS. CRORES, 1960-60 PRODUCERS PRICES)

SECTOR	66-67	67-68	68-69	69-70	70-71
AG.PL.	.00052	-.00022	3.83963	0.	.04871
M.M.	-.00016	0.	0.	0.	0.
EQIPMT	0.	0.	0.	0.	0.
CHEMIC	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.
FOODCL	-0.	0.	0.	0.	.00162
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	-0.
CONSTR	1.58198	1.39997	.04092	0.	0.
HOUS.	1.50360	0.	0.	.01940	.04255
OTHMAR	0.	0.	0.	0.	.02843

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.83

SHADOW PRICE OF NEW CAPITAL

(RS. CROREES, 1959-60 PRODUCERS PRICES)

SECTOR	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	4.04899	4.04921	.20958	.20958	.07429	.06205	.02454
M.M.	.03537	.03537	.03537	.03537	0.	.02282	.01255
EQIPMT	0.	-0.	-0.	-0.	0.	0.	-0.
CHEMIC	.03831	.03831	.03831	.03831	0.	.02469	.01362
CMGLWD	.04071	.04071	.04071	.04071	0.	.02622	.01449
FOODCL	.16869	.16869	.16869	.16869	.09481	.06386	.00840
ELECTR	.04432	.04432	.04432	.04432	0.	.02852	.01580
TRANS	.14739	.14739	.14739	.14739	.08260	.06479	-0.
CONSTR	1.44089	.04092	0.	-0.	0.	0.	-0.
HOUS.	.22105	.22105	.22105	.20165	.06850	.06153	.02907
OTHMAR	.19157	.19157	.19157	.19157	.08185	.06271	.01858

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.84

NON-COMPETITIVE IMPORTS

(RS. CRORES, 1959-60 PRODUCERS PRICES)

SECTOR	66-67	67-68	68-69	69-70	70-71	71-72	72-73	73-74
AG.PL.	146.33087	155.11071	164.41735	190.51121	217.31953	228.74483	240.61304	253.09853
M.M.	197.91368	151.79171	140.73507	157.31631	177.54313	190.99898	203.08544	215.93512
EQIPMT	309.32558	289.80845	227.74658	187.54574	262.46289	396.13438	418.01598	441.16696
CHEMIC	203.01484	289.64750	315.97891	349.06720	393.10465	420.17475	446.35458	474.06542
CMGLWD	2.99312	3.38475	3.35045	3.07608	3.08706	3.37123	3.53199	3.70111
FOODCL	.25314	.26715	.28051	.32405	.37679	.39683	.41796	.44024
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.	0.

Table 4.85

COMPETITIVE IMPORTS

AG.PL.	145.69935	190.22885	227.40272	248.07188	237.52081	239.74071	241.92705	243.91775
M.M.	117.84152	77.10266	150.34262	117.03050	157.03201	153.61341	151.86531	149.66415
EQIPMT	193.02053	219.93233	262.91077	286.80737	229.62978	110.72107	104.04512	96.55596
CHEMIC	95.93128	102.38226	79.32650	133.51376	127.83510	116.39318	106.31037	95.17947
CMGLWD	11.84362	12.63979	15.10981	16.48318	15.78210	16.06401	16.48631	16.91774
FOODCL	15.98889	17.06371	20.39825	22.25229	21.30584	21.93628	22.58513	23.25295
ELECTR	0.	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	11.84362	12.63979	0.	0.	0.	0.	0.	0.

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.86

SHADOW PRICES ON COMPETITIVE IMPORT CEILINGS AND FOREIGN TRADE BALANCE CONSTRAINTS
(RS. CRORES, 1959-60 PRODUCERS PRICES)

SECTOR	66-67	67-68	68-69	69-70	70-71
AG.PL.	0.	-.00010	1.32870	.30546	.15448
M.M.	-.00018	0.	.00349	0.	.00932
EQIPMT	-0.	.00015	.03551	.02870	0.
CHEMIC	-.00006	.00002	0.	.04360	.04840
CMGLWD	-.00000	.00001	-.00001	.00826	.00278
FOODCL	-0.	.00001	.02104	.04190	.01949
ELECTR	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.
OTHMAR	.00011	.00011	0.	0.	0.

SHADOW PRICES ON FOREIGN EXCHANGE BALANCE CONSTRAINTS

0.00089	0.00032	0.21194	0.14644	0.35298

FOURTH PLAN TRANSIT MODEL REFERENCE SOLUTION

TABLE 4.87

NATIONAL INCOME ACCOUNTS

(RS. CRORES, 1959-60 PRODUCERS PRICES)

	66-67	67-68	68-69	69-70	70-71
CONSUMPTION	16252.956055	16659.281006	17075.762695	20107.439941	24150.380859
INVENTORIES CHANGE	-825.075676	226.638762	822.250969	1138.377365	716.552345
FIXED INVESTMENT	3588.356293	3830.237549	3517.401703	2505.401123	2283.562683
TOTAL INVESTMENT	3145.265656	4439.966309	4712.729553	4061.800079	3487.182190
GOVERNMENT EXPENDITURE	1107.999985	1176.999969	1253.999969	1336.999969	1427.999969
VALUE ADDED BY GOVT.	1842.747971	1957.503922	2085.564911	2223.604706	2374.949524
EXPORTS	951.999977	1021.999977	1107.999969	1211.999969	1342.999954
IMPORTS	1452.000000	1521.999619	1607.999512	1711.999542	1842.999664
GROSS NATIONAL PRODUCT	21848.968994	23733.750977	24628.056885	27229.844238	30940.512207
REPLACEMENT	381.485046	383.090050	373.076942	418.021610	487.067189
NET NATIONAL PRODUCT	21467.483887	23350.660889	24254.979736	26811.822510	30453.444824
SAVINGS	2645.265656	3939.966309	4212.729553	3561.800079	2987.182190
GROSS NAT. OUTPUT	29028.191650	30535.688232	31259.609619	34159.343262	38786.803711
INTERMEDIATE PRODUCT	8021.913208	8462.842041	8547.022705	8990.503052	10045.956909
CONS./GROSS NAT. PROD.	.743877	.701924	.693346	.738434	.780542
TOTAL INVST/GR.NAT.PR.	.143955	.187074	.191356	.149167	.112706
SAVINGS/GR. NAT. PROD.	.121071	.166007	.171054	.130805	.096546

Table 4-88

Investment Requirements in Fourth Plan Transit Model
Reference Solution

(in Rs. crores)

1.	Total Net Fixed Investment	15,726
2.	Inventory Investment	2,079
3.	Total Net Investment during the Fourth Plan Period	17,805
4.	Replacement	2,079
5.	Total Gross Investment during the Fourth Plan Period	19,884

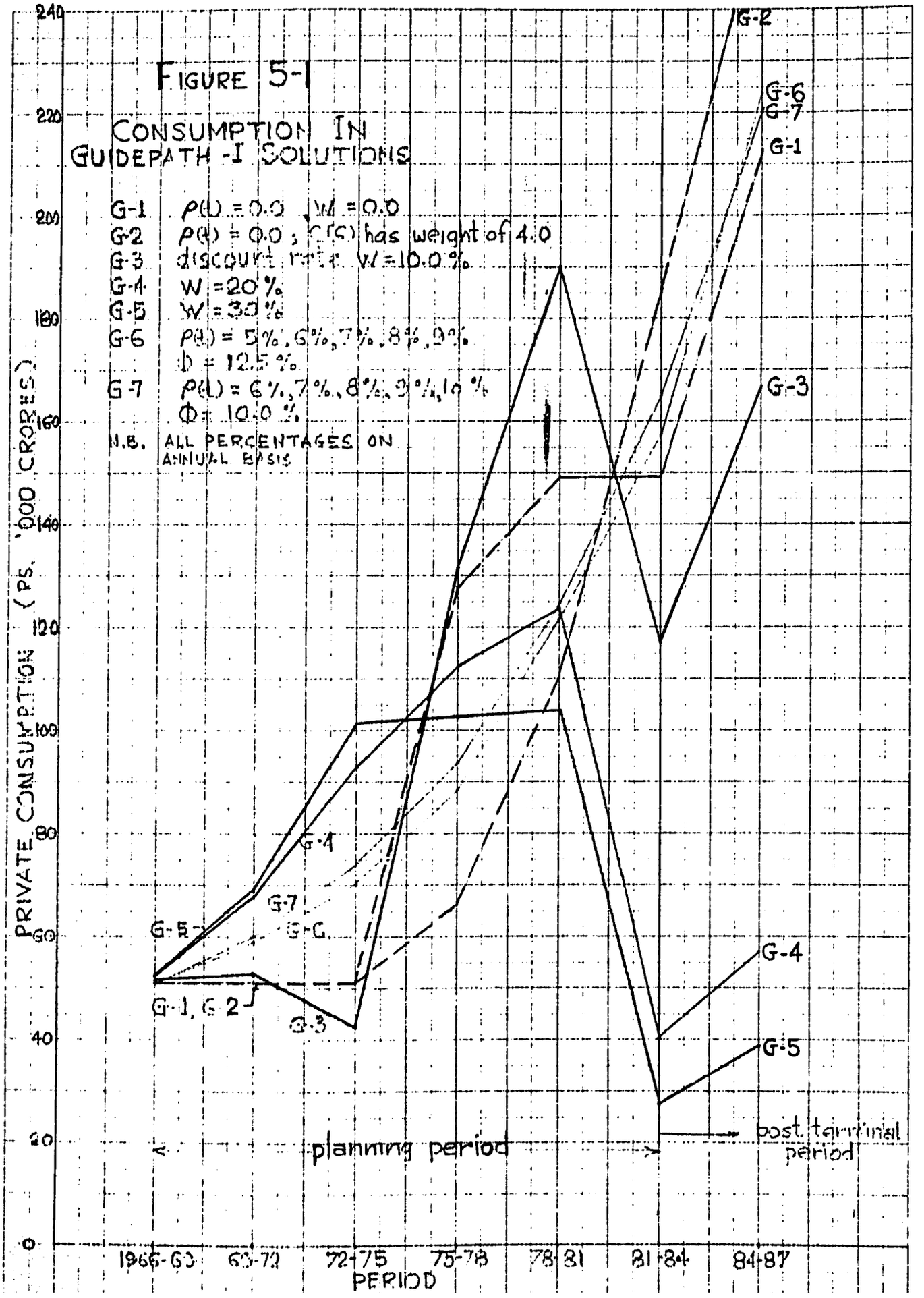
FIGURE 5-1
CONSUMPTION IN GUIDEPATH -I SOLUTIONS
G-1 ρ(t) = 0.0 ; W = 0.0
G-2 ρ(t) = 0.0 ; C(c) has weight of 4.0
G-3 discount rate W = 10.0 %
G-4 W = 20 %
G-5 W = 30 %
G-6 ρ(t) = 5%, 6%, 7%, 8%, 9%
Φ = 12.5 %
G-7 ρ(t) = 6%, 7%, 8%, 9%, 10 %
Φ = 10.0 %
N.B. ALL PERCENTAGES ON ANNUAL BASIS
PRIVATE CONSUMPTION (PS. '000 CRORES)
PERIOD
1966-69
69-72
72-75
75-78
78-81
81-84
84-87
planning period
post terminal period
G-1, G 2
G-3
G-4
G-5
G-6
G-7
G-2
0
20
40
60
80
100
120
140
160
180
200
220
240

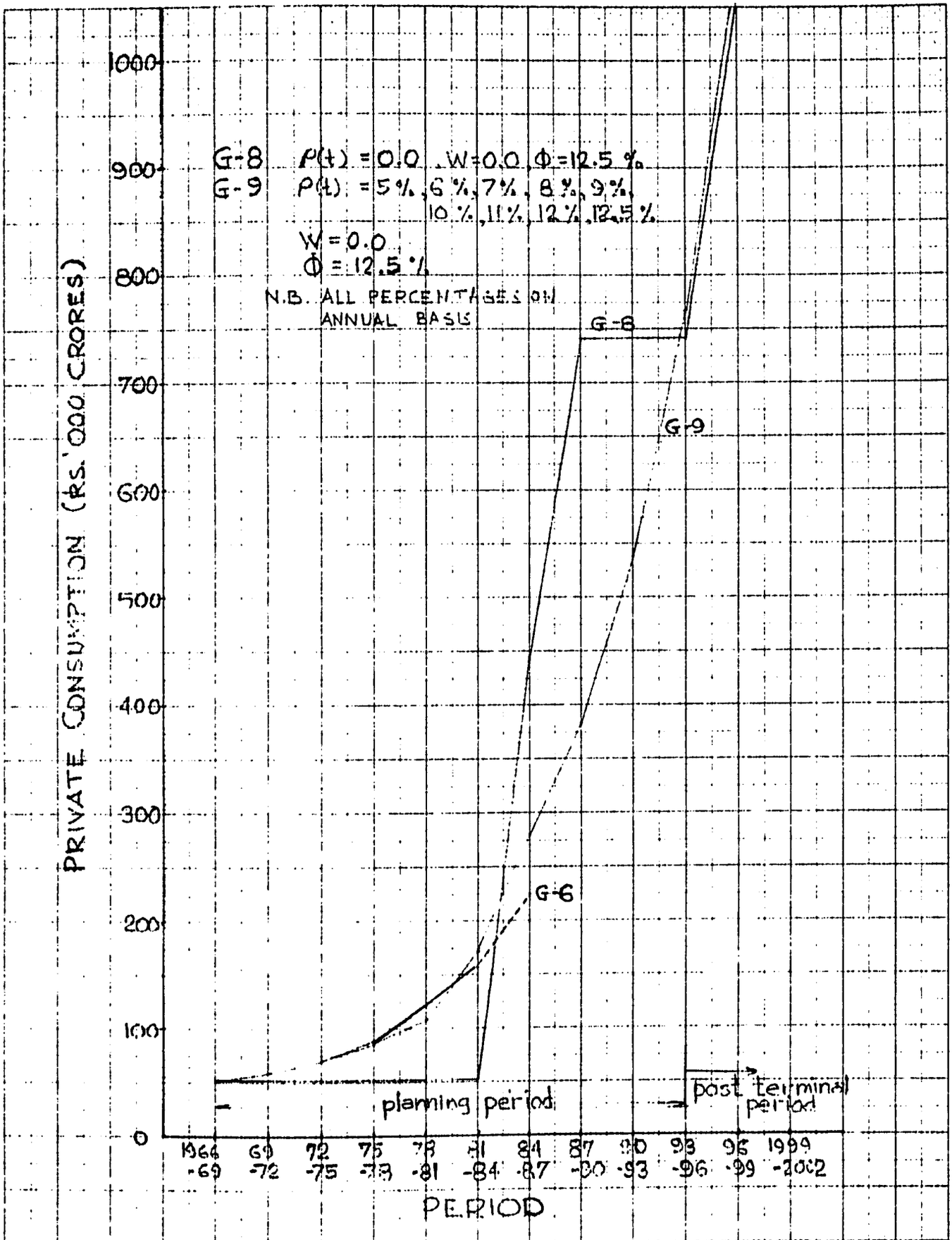

FIGURE 5-2 CONSUMPTION IN THIRTY YEAR GUIDEPATH I SOLUTIONS

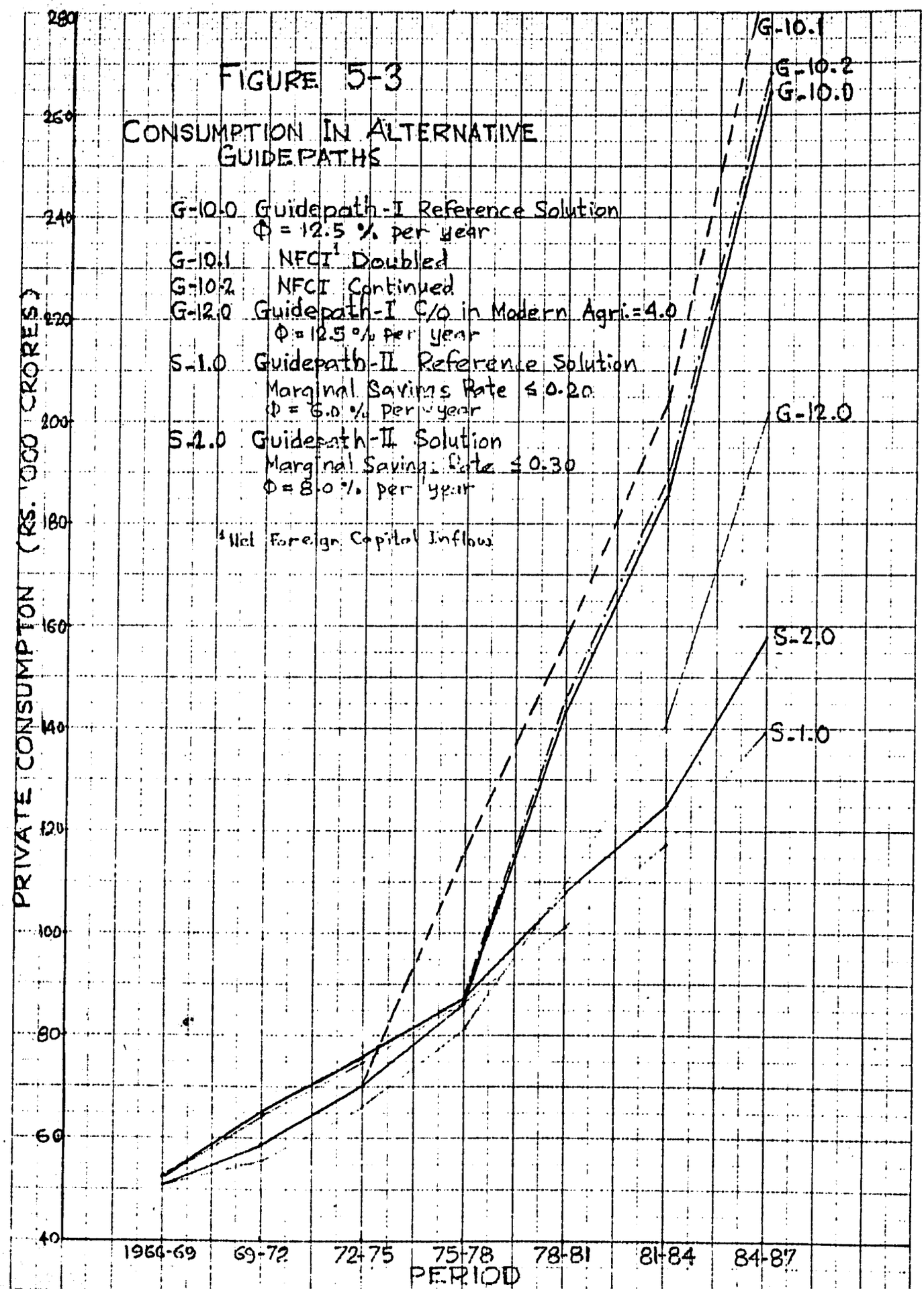
FIGURE 5-3
CONSUMPTION IN ALTERNATIVE GUIDEPATHS
G-10.0 Guidepath-I Reference Solution
Φ = 12.5 % per year
G-10.1 NFCI[1] Doubled
G-10.2 NFCI Continued
G-12.0 Guidepath-I C/Q in Modern Agri. = 4.0
Φ = 12.5 % per year
S-1.0 Guidepath-II Reference Solution
Marginal Savings Rate ≤ 0.20
Φ = 6.0 % per year
S-2.0 Guidepath-II Solution
Marginal Savings Rate ≤ 0.30
Φ = 8.0 % per year
[1] Net Foreign Capital Inflow
G-10.1
G-10.2
G-10.0
G-12.0
S-2.0
S-1.0
PRIVATE CONSUMPTION (RS. '000 CRORES)
280
260
240
220
200
180
160
140
120
100
80
60
40
1966-69
69-72
72-75
75-78
78-81
81-84
84-87
PERIOD

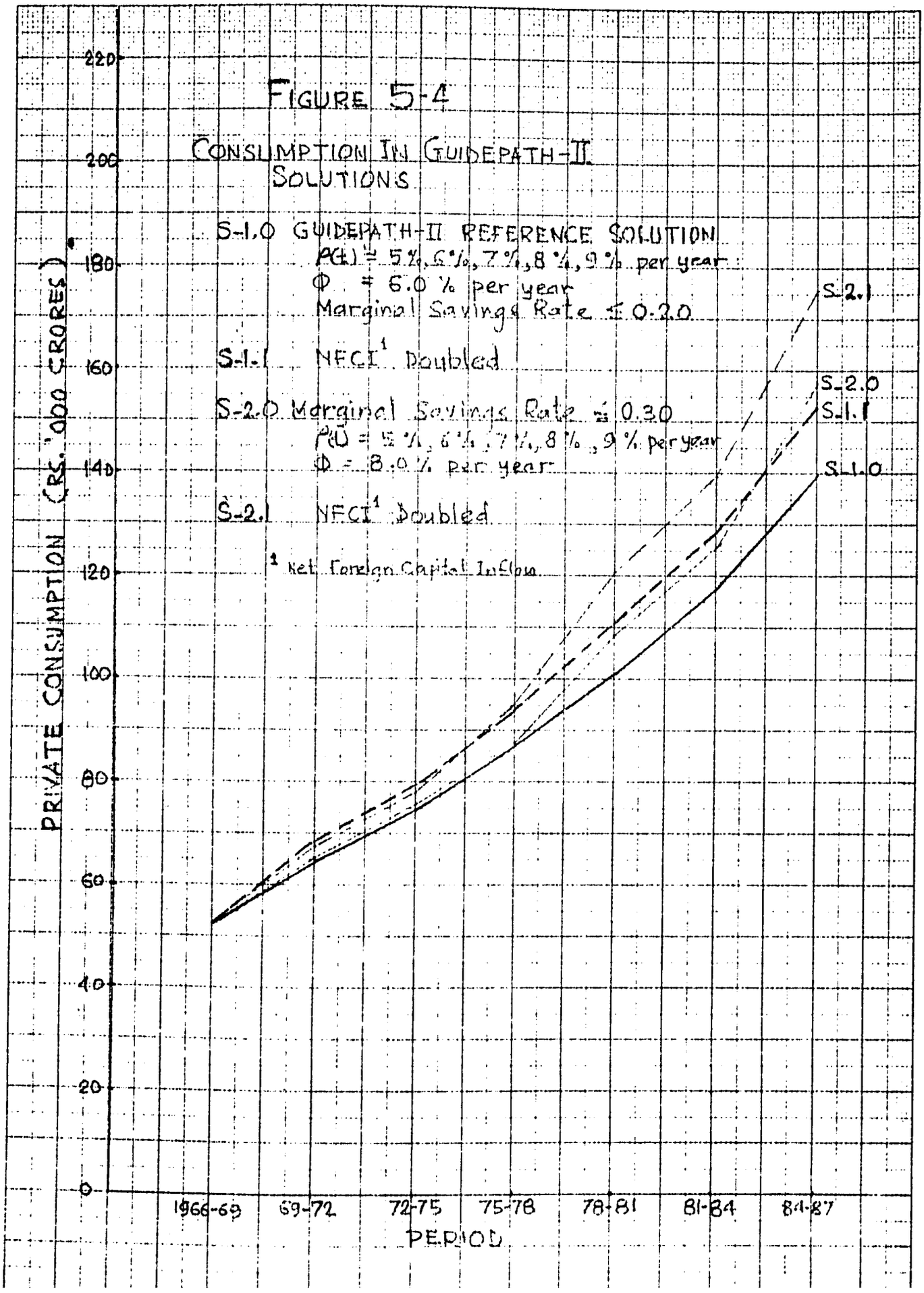
FIGURE 5-4
CONSUMPTION IN GUIDEPATH-II SOLUTIONS
S-1.0 GUIDEPATH-II REFERENCE SOLUTION
P(t) = 5%, 6%, 7%, 8%, 9% per year
Φ = 6.0% per year
Marginal Savings Rate = 0.20
S-1.1 NFCI[1] Doubled
S-2.0 Marginal Savings Rate = 0.30
P(t) = 5%, 6%, 7%, 8%, 9% per year
Φ = 8.0% per year
S-2.1 NFCI[1] Doubled
[1] Net Foreign Capital Inflow
S-2.1
S-2.0
S-1.1
S-1.0
PRIVATE CONSUMPTION (RS. '000 CRORES)
0
20
40
60
80
100
120
140
160
180
200
220
1966-69
69-72
72-75
75-78
78-81
81-84
84-87
PERIOD

2. 19021

TABLE 5-3

INPUT - OUTPUT COEFFICIENTS MATRIX FOR PERIOD 1966-67 to 1972-73

	1 INCAGR	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL
AG.PL.	.007	.000	.010	.048	.134	.502
M.M.	.004	.235	.263	.027	.048	.004
EQIPMT	.004	.018	.033	.014	.003	.003
CHEMIC	.095	.023	.030	.198	.082	.029
CMGLWD	.003	.013	.005	.011	.026	.003
FOODCL	.040	.002	.002	.034	.015	.056
ELECTR	.002	.023	.012	.016	.022	.014
TRANS	.005	.150	.071	.099	.068	.050
CONSTR	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	.049	.033	.132	.032	.090	.055
SUM	.209	.498	.558	.479	.488	.715

	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 TRADAG
AG.PL.	0.	0.	.035	0.	.035	.079
M.M.	.131	.037	.118	.005	.001	.000
EQIPMT	0.	0.	.013	0.	0.	0.
CHEMIC	.028	.202	.006	0.	.003	.010
CMGLWD	0.	0.	.180	.015	0.	.000
FOODCL	0.	0.	0.	0.	.001	.008
ELECTR	0.	.004	0.	0.	.001	.001
TRANS	.118	.043	.018	.007	.021	.007
CONSTR	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	.068	.018	.090	.045	0.	.005
SUM	.346	.304	.459	.071	.061	.110

TABLE 5-4

INPUT - OUTPUT COEFFICIENTS MATRIX FOR PERIOD AFTER 1972-73

	1 INCAGR	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL
AG.PL.	.007	.000	.010	.048	.134	.477
M.M.	.004	.246	.449	.025	.048	.004
EQIPMT	.004	.018	.059	.008	.003	.000
CHEMIC	.095	.022	.046	.161	.082	.026
CMGLWD	.003	.013	.008	.011	.026	.004
FOODCL	.040	.002	.002	.034	.015	.058
ELECTR	.002	.033	.020	.031	.022	.014
TRANS	.005	.150	.071	.099	.068	.050
CONSTR	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	.049	.033	.132	.032	.090	.055
SUM	.209	.517	.797	.448	.488	.687

	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 TRADAG
AG.PL.	0.	0.	.034	0.	.035	.079
M.M.	.097	.022	.134	.005	.001	.000
EQIPMT	0.	0.	.043	0.	0.	0.
CHEMIC	.032	.196	.011	0.	.003	.010
CMGLWD	0.	0.	.177	.015	0.	.000
FOODCL	0.	0.	0.	0.	.001	.008
ELECTR	0.	.015	0.	0.	.001	.001
TRANS	.118	.043	.018	.007	.021	.007
CONSTR	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	.068	.018	.090	.045	0.	.005
SUM	.316	.293	.507	.071	.061	.110

TABLE 5-5

AGGREGATE CAPITAL-OUTPUT COEFFICIENTS

1	INCAGR	.943370
2	M.M.	.825580
3	EQIPMT	.318220
4	CHEMIC	.351880
5	CMGLWC	.287290
6	FOODCL	.185790
7	ELECTR	2.086300
8	TRANS	1.443000
9	CONSTR	.051000
10	HOUS.	3.333333
11	OTHMAR	.052170
12	TRADAG	.503230

TABLE 5-6

CAPITAL PROPORTIONS MATRIX, p

	1 INCAGR	2 M.M.	3 EQIPMT	4 CHEMIC	5 CMGLWD	6 FOODCL
AG.PL.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.
EQIPMT	.368	.503	.515	.471	.444	.629
CHEMIC	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.
CONSTR	.627	.432	.418	.468	.498	.289
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	.005	.065	.067	.061	.058	.082
SUM	1.000	1.000	1.000	1.000	1.000	1.000

	7 ELECTR	8 TRANS	9 CONSTR	10 HOUS.	11 OTHMAR	12 TRADAG
AG.PL.	0.	0.	0.	0.	0.	0.
M.M.	0.	0.	0.	0.	0.	0.
EQIPMT	.404	.444	.654	0.	.319	.138
CHEMIC	0.	0.	0.	0.	0.	0.
CMGLWD	0.	0.	0.	0.	0.	0.
FOODCL	0.	0.	0.	0.	0.	0.
ELECTR	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.
CONSTR	.543	.498	.261	1.000	.639	.844
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	.053	.058	.085	0.	.042	.018
SUM	1.000	1.000	1.000	1.000	1.000	1.000

TABLE 5-7

AGGREGATE INVENTORY-OUTPUT COEFFICIENTS, $s_j(t)$

	1966-69	69-72	72-75	75-78	78-81	81-84
INCAGR	·092	·092	·092	·092	·092	·092
M.P.	·079	[illegible]	·074	[illegible]	[illegible]	[illegible]
EQUIPMT	·128	[illegible]	[illegible]	·117	·113	[illegible]
CHEMIC	·176	[illegible]	[illegible]	[illegible]	·156	[illegible]
CMCLWD	·079	·076	[illegible]	·072	·070	[illegible]
FOODCL	·120	[illegible]	[illegible]	[illegible]	·106	[illegible]
ELECTR	·043	[illegible]	[illegible]	·039	·038	[illegible]
TRANS	·006	[illegible]	[illegible]	·006	[illegible]	[illegible]
CONSTR	·022	[illegible]	[illegible]	·021	[illegible]	[illegible]
FCUS.	0.	0.	0.	0.	0.	0.
OTHMAR	·003	·003	[illegible]	·002	[illegible]	[illegible]
TRADAG						

Table 5-8

DEPRECIATED CAPITAL, D
(Rupees Crores, in 1959-60 prices)

	INCAGR	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR	TRADAG	SUM
1966-69													
Total	0.	216.0	48.0	157.0	43.0	99.4	133.0	780.6	4.2	613.3	440.4	471.6	3,006.8
Proportion of EQIPMT	0.	.538	.568	.519	.549	.679	.311	.314	.812	0.	.308	.265	
CONSTR	0.	.391	.357	.413	.379	.231	.648	.644	.080	1.000	.652	.700	
OTHMAR	0.	.071	.075	.068	.072	.090	.041	.041	.109	0.	.041	.035	
1969-72													
Total	0.	229.1	59.5	169.0	50.4	107.1	150.0	843.1	4.7	641.3	497.3	522.3	3,273.9
Proportion of EQIPMT	0.	.542	.618	.529	.586	.685	.353	.332	.819	0.	.350	.304	
CONSTR	0.	.386	.301	.402	.337	.225	.601	.624	.073	1.000	.603	.661	
OTHMAR	0.	.071	.081	.069	.077	.090	.046	.044	.108	0.	.046	.035	
1972-75													
Total	0.	241.2	79.5	182.8	62.6	115.8	176.5	925.2	5.6	670.6	487.0	598.8	3,645.5
Proportion of EQIPMT	0.	.545	.676	.541	.633	.692	.412	.359	.829	0.	.411	.363	
CONSTR	0.	.384	.235	.389	.284	.217	.534	.594	.064	1.000	.535	.603	
OTHMAR	0.	.072	.089	.071	.083	.091	.054	.047	.107	0.	.054	.035	
1975-78													
Total	0.	445.2	112.3	209.8	77.1	151.4	243.2	1,108.5	6.9	701.2	632.8	629.4	4,317.9
Proportion of EQIPMT	0.	.692	.730	.571	.671	.731	.526	.426	.836	0.	.426	.366	
CONSTR	0.	.217	.174	.354	.241	.174	.405	.519	.055	1.000	.519	.599	
OTHMAR	0.	.090	.095	.075	.088	.096	.069	.056	.110	0.	.056	.035	

(Table Cont'd.)

Table 5-8 Cont'd.

	INCAGR	M.M.	EQIPMT	CHEMIC	CMGLWD	FOODCL	ELECTR	TRANS	CONSTR	HOUS.	OTHMAR	TRADAG	SUM
1978-81													
Total	0.	549.5	129.2	225.1	84.8	169.9	278.9	1,213.9	7.6	733.2	663.5	653.8	4,709.4
Proportion of EQIPMT	0.	.722	.745	.579	.682	.741	.558	.446	.837	0.	.427	.362	
CONSTR	0.	.184	.158	.345	.229	.162	.369	.495	.052	1.000	.517	.603	
OTHMAR	0.	.094	.097	.076	.089	.097	.073	.058	.111	0.	.045	.035	
1981-84													
Total	0.	621.2	251.7	332.0	109.3	211.2	428.9	1,268.5	9.5	766.7	819.6	749.6	5,568.2
Proportion of EQIPMT	0.	.734	.810	.666	.720	.764	.662	.446	.846	0.	.497	.412	
CONSTR	0.	.170	.085	.245	.186	.136	.251	.496	.043	1.000	.438	.550	
OTHMAR	0.	.096	.105	.089	.094	.100	.086	.058	.110	0.	.065	.038	

TABLE 5-9

GOVERNMENT CONSUMPTION, G

(Rupees Crores, in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
AG.PL.	0.	0.	0.	0.	0.	0.
N.M.	0.	0.	0.	0.	0.	0.
EQIPMT	638.436	743.789	905.193	1078.088	1283.997	1529.233
CHEMIC	185.797	216.457	263.429	313.745	373.669	445.037
CMGLWD	0.	0.	0.	0.	0.	0.
FOODCL	713.816	831.609	1012.070	1205.379	1435.600	1709.791
ELECTR	32.205	37.519	45.661	54.383	64.769	77.140
TRANS	0.	0.	0.	0.	0.	0.
CONSTR	707.800	824.600	1003.540	1195.220	1423.500	1695.380
HOUS.	0.	0.	0.	0.	0.	0.
ETHMAR	1260.946	1469.025	1787.806	2129.284	2535.965	3020.319
SUM	3539.000	4123.000	5017.700	5976.100	7117.500	8476.900

TABLE 5-10

EXPORTS, E

(Rupees Crores, in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
AG.PL.	696.130	766.680	888.980	1017.760	1121.880	1236.650
M.M.	383.760	609.220	824.830	1074.560	1353.630	1705.200
EQIPMT	183.260	246.700	367.320	539.900	758.520	1065.670
CHEMIC	64.660	176.900	273.470	387.680	530.220	725.130
CMCLWD	7.510	24.920	46.150	76.390	116.190	176.710
FCCCCL	1337.640	1403.080	1632.380	1876.180	2050.150	2240.250
ELECTR	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.
OTHMAR	414.610	481.720	593.260	718.770	832.070	963.220
SUM	3087.570	3709.220	4626.390	5691.240	6762.660	8112.830

TABLE 5-11

NON-COMPETITIVE IMPORT COEFFICIENTS, m'

	ACTIVITY	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
1	INCAGR	.016000	.012000	.008000	.004500	.001000	.001000
2	M.N.	.145000	.105000	.070000	.050000	.030000	.020000
3	EQIPMT	.235000	.175000	.115000	.080000	.050000	.040000
4	CHEMIC	.261000	.218000	.175000	.150000	.125000	.100000
5	CMCLWD	.004000	.003000	.002000	.001500	.001000	.001000
6	FOODCL	.000080	.000060	.000040	.000030	.000020	.000015
7	ELECTR	0.	0.	0.	0.	0.	0.
8	TRANS	0.	0.	0.	0.	0.	0.
9	CONSTR	0.	0.	0.	0.	0.	0.
10	HOUS.	0.	0.	0.	0.	0.	0.
11	CTHMAR	0.	0.	0.	0.	0.	0.
12	TRADAG	.016000	.012000	.008000	.004500	.001000	.001000

TABLE 5-12

CONSUMPTION EXPENDITURE ELASTICITIES, η
and
INITIAL CONSUMPTION COEFFICIENTS, c(0)

SECTOR	c(0)	η
1 AG.FL.	.388	.7500
2 M.M.	.000	.8000
3 EQIPMT	.024	2.0000
4 CHEMIC	.030	1.3000
5 CMGLWD	.006	1.3000
6 FCCCCL	.143	1.0000
7 ELECTR	.001	1.1000
8 TRANS	.018	1.2000
9 CONSTR	0.	0.
10 FOLS.	.046	.9000
11 OTHAR	.344	1.1837

INITIAL LEVEL OF CONSUMPTION= 44100 Rs. Crores per period

RATE OF GROWTH OF POPULATION

1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
·0646	·0646	·0646	·0534	·0534	·0534

TABLE 5-13

INITIAL AND TERMINAL CONDITIONS

INITIAL CAPACITIES, K(1)
(Rupees Crores, in 1959-60 prices)

ACTIVITY	K(1)[1]	K(1)[2]
INCAGR	0.	0.
M.M.	3775.8811	3987.8173
EQIPMT	2470.3059	3184.6245
CHEMIC	2174.4238	2360.4467
CMGLWD	851.6380	917.7837
FOODCL	1919.6773	1993.6696
ELECTR	1855.3786	2074.5130
TRANS	6827.8694	6882.3491
CONSTR	578.7373	577.6784
HOUS.	8026.5325	8057.2538
OTHMAR	1616.8052	1640.9384
TRADAG	14652.1378	14652.1378

[1] Projected from 1965-66 output estimates adjusted on 11 sector basis
[2] Projected from 1965-66 output estimates adjusted on 32 sector basis

POST-TERMINAL GROWTH RATES

PRIVATE CONSUMPTION	Varies with solution
GOVERNMENT CONSUMPTION	6.0 % per year (19.1 % per period)
EXPORTS	5.5 % per year (17.4 % per period)
IMPORTS	5.5 % per year (17.4 % per period)
REPLACEMENT	At the same rate as consumption
TRADITIONAL AGRICULTURE	0.5 % per year (1.51 % per period)

OUTPUT LEVEL OF TRADITIONAL AGRICULTURE IN PERIOD T+1 = 31851 Rs. Crores

Table 5-14

Values of Private Consumption in Alternative Guidepath-I Solutions
(in Rs. crores, 1959-60 prices)

Solution Constraints[1]	Period 1 1965-69	2 1969-72	3 1972-75	4 1975-78	5 1978-81	6 1981-84	7 1984-87
G.1 Minimum Growth Rate of Consumption in period t, $\rho(t) = 0.0\%$ Post terminal Growth Rate of Consumption, $\phi = 12.5\%$ per year	51,051	51,051	51,051	127,935	149,215	149,215	212,456
G.2 C(6) has a weight of 4.0 in Objective $\rho(t) = 0$, $\phi = 12.5\%$ per yr.	51,051	51,051	51,051	66,151	110,758	185,866	264,487
G.3 Social Discount Rate 10%, $\phi = 12.5\%$ No monotonicity requirements.	51,474	52,590	42,328	131,447	199,486	116,953	166,424
G.4 Social Discount Rate 20%, $\phi = 12.5\%$ No monotonicity requirements	52,291	67,927	92,927	112,074	123,737	40,135	57,112
G.5 Social Discount Rate 30%, $\phi = 12.5\%$ No monotonicity requirements	52,539	68,705	101,219	102,330	103,996	27,315	38.891
G.6 $\rho(t) = 5\%, 6\%, 7\%, 8\%, 9\%$ per year successively $\phi = 12.5\%$ per year.	51,051	59,097	70,386	88,497	121,455	157,287	223,948
G.7 $\rho(t) = 6\%, 7\%, 8\%, 9\%, 10\%$ per year successively $\phi = 10\%$ per year	51,051	60,803	74,486	93,831	124,493	165,701	220,547
G.8 $\rho(t) = 0$; $\phi = 12.5\%$; 10 period plan	51,440	51,440	51,440	51,440	51,440	51,440	442,218

8 1987-90	9 1990-93	10 1993-96	11 1996-99
742,148	742,148	742,148	1,056,077

(Table Cont'd.)

Table 5-14 Cont'd.

Solution Constraints[1]	Period 1 1965-69	2 1969-72	3 1972-75	4 1975-78	5 1978-81	6 1981-84	7 1985-87
G.9 $\zeta(t)$ = 5%, 6%, 7%, 8%, 9%, 10%, 11%, 12%, 12.5% successively, ϕ = 12.5%. 10 period plan	51,051	59,098	70,387	86,226	108,620	173,238	280,194
	8 1987-90	9 1990-93	10 1993-96	11 1996-99			
	383,201	538,367	766,538	1,091,411			
G.10.0 Reference Solution ϕ = 12.5% per year ζ = 5%, 6%, 7%, 8% and 9% per year in successive periods. X(0) adjusted on 11 sector basis	51,051	59,098	70,386	86,226	143,291	185,564	264,210
G.10.1 Net Foreign Capital Inflow. NFCI doubled to Rs.1000 crorer per year for 4 periods then zero	51,051	59,098	70,386	115,924	157,572	204,059	290,543
G.10.2 Net Foreign Capital Inflow (NFCI) continued at Rs.500 crores per year for 6 periods	51,051	59,098	70,386	86,226	145,482	188,402	268,251
G.11.0 ϕ = 12.5% per year ζ = 5%, 6%, 7%, 8% and 9% per year in successive periods X(0) adjusted on 32 sector basis	51,051	59,098	70,386	86,226	156,922	203,217	289,344
G.11.1 Net Foreign Capital Inflow (NFCI) doubled to Rs.1000 crores per year four periods, then zero	51,051	59,098	70,386	127,877	161,088	208,613	297,027
G.11.2 Net Foreign Capital Inflow (NFCI) continued at Rs.500 crores per year for six periods	51,051	59,098	70,386	86,226	159,115	206,057	293,388

(Table Cont'd.)

Table 5-14 Cont'd.

Solution Constraints[1]	Period 1 1965-69	2 1969-72	3 1972-75	4 1975-78	5 1978-81	6 1981-84	7 1985-87
G.12.0 ϕ = 12.5% per year γ = 3%, 6%, 7%, 8%, 9% per year in successive periods. X(0) on 11 sectors K/O in Modern Agriculture changes from 2.5 to 4.0	51,051	55,785	66,441	81,392	109,406	141,683	201,731

[1]Unless otherwise indicated all solutions had the following constraints

(a) Post terminal annual growth rates of

Government consumption	6.0 percent
Exports	5.5 "
Imports	5.5 "
Replacement at ϕ, the same rate as consumption	

(b) Net Foreign Capital Inflow is set at Rs.500 crores per year for first 12 year, i.e. four periods, then at zero.

TABLE 5.15

NATIONAL INCOME ACCOUNTS FOR SOLUTION G-6
(Rupees crores in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
CONSUMPTION	51051.3	59093.0	70386.3	88496.5	121455.1	157236.8
INVENTORIES CHANGE	243.1	2291.8	2396.4	3638.5	4820.0	7892.4
FIXED INVESTMENT	16320.4	17722.6	31208.5	45811.6	62359.0	94949.8
TOTAL INVESTMENT	19410.1	23176.4	36579.8	53768.0	71888.4	108410.4
GOVERNMENT EXPENDITURE	3539.0	4123.0	5017.7	5976.1	7117.5	8476.9
VALUE ADDED BY GOVT.	5885.8	6857.1	8345.1	9939.0	11837.3	14098.2
EXPORTS	3087.6	3709.2	4626.4	5691.2	6762.7	8112.8
IMPORTS	4587.6	5209.2	6126.4	7191.2	6762.7	8112.8
GROSS NATIONAL PRODUCT	78386.2	91754.5	118828.9	156679.6	212298.3	298272.3
REPLACEMENT	2846.6	3162.0	2974.9	4317.9	4709.4	5568.2
NET NATIONAL PRODUCT	75539.6	88592.4	115853.9	152361.7	207588.9	282704.1
SAVINGS	17910.1	21676.4	35079.8	52268.0	71888.4	108410.4
GROSS NATIONAL OUTPUT	**101732.3**	**120437.3**	**171187.0**	**231859.3**	**319285.5**	**443778.4**
INTERMEDIATE PRODUCT	29231.9	35539.9	60703.2	85118.7	118824.5	169604.3
CONS./GROSS NAT. PROD.	0.65129	0.64409	0.59233	0.56482	0.57210	0.54562
TOTAL INVST/GR.NAT.PR.	0.24762	0.25259	0.30784	0.34317	0.33362	0.37607
SAVINGS/GR. NAT. PROD.	0.22849	0.23624	0.29521	0.33360	0.33862	0.37607
MARGINAL SAVINGS RATE		.2817	.4000	.4540	.3527	.4807

TABLE 5-16

NATIONAL INCOME ACCOUNTS FOR SOLUTION G-9
(Rupees crores in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
CONSUMPTION	51051.3	59098.2	70386.6	86226.4	108620.2	173237.8
INVENTORIES CHANGE	240.9	2289.6	2266.4	3890.2	5563.3	8678.3
FIXED INVESTMENT	16939.8	17698.0	30961.7	45050.8	74972.0	95589.8
TOTAL INVESTMENT	19414.0	23149.6	36203.1	53258.8	84511.5	109504.6
GOVERNMENT EXPENDITURE	3539.0	4123.0	5017.7	5976.1	7117.5	8476.9
VALUE ADDED BY GOVT.	5885.8	6857.1	8345.1	9939.0	11837.3	14098.2
EXPORTS	3087.6	3709.2	4626.4	5691.2	6762.7	8112.8
IMPORTS	4587.6	5209.2	6126.4	7191.2	6762.7	8112.8
GROSS NATIONAL PRODUCT	78390.1	91727.9	118452.4	153900.3	212086.5	305317.5
REPLACEMENT	2233.3	3162.0	2974.9	4317.9	3976.2	5236.6
NET NATIONAL PRODUCT	76156.7	88565.8	115477.5	149582.4	208110.3	300080.9
SAVINGS	17914.0	21649.6	34703.1	51758.8	84511.5	109504.6
GROSS NATIONAL OUTPUT	101738.6	120391.9	170614.8	227910.7	325869.7	466057.0
INTERMEDIATE PRODUCT	29234.3	35521.1	60507.5	83949.4	125620.5	174837.7
CONS./GROSS NAT. PROD.	0.65125	0.64428	0.59422	0.56027	0.51215	0.56740
TOTAL INVST/GR.NAT.PR.	0.24766	0.25237	0.30563	0.34606	0.39848	0.35866
SAVINGS/GR. NAT. PROD.	0.22852	0.23602	0.29297	0.33631	0.39848	0.35866

	1984-87	1987-1990	1990-1993	1993-1996
CONSUMPTION	280193.7	383201.2	538367.1	766537.8
INVENTORIES CHANGE	11981.1	20567.9	-11627.3	48436.4
FIXED INVESTMENT	151740.9	242424.8	508840.4	0.
TOTAL INVESTMENT	169126.1	269232.4	505225.5	48436.4
GOVERNMENT EXPENDITURE	10049.3	11967.4	14067.4	16348.7
VALUE ADDED BY GOVT.	16713.3	19903.3	23395.9	27190.0
EXPORTS	9777.2	11440.6	13351.3	15612.7
IMPORTS	9777.2	11440.6	13351.3	15612.7
GROSS NATIONAL PRODUCT	476082.3	684304.3	1081055.8	858512.9
REPLACEMENT	5404.0	6239.7	8012.3	0.
NET NATIONAL PRODUCT	470678.3	678064.7	1073043.5	858512.9
SAVINGS	169126.1	269232.4	505225.5	48436.4
GROSS NATIONAL OUTPUT	690612.9	1010893.0	1642291.3	1153167.3
INTERMEDIATE PRODUCT	231243.9	346492.0	584631.4	321844.4
CONS./GROSS NAT. PROD.	0.58854	0.55999	0.49800	0.89287
TOTAL INVST/GR.NAT.PR.	0.35525	0.39344	0.46734	0.05642
SAVINGS/GR. NAT. PROD.	0.35525	0.39344	0.46734	0.05642

GUIDEPATH-I REFERENCE SOLUTION

TABLE 5-17

NATIONAL INCOME ACCOUNTS
(Rupees crores, in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
CONSUMPTION	51051.3	59.98.0	7[illegible]356.3	86226.0	143291.3	185564.4
INVENTORIES CHANGE	1781.7	2[illegible]39.6	3[illegible]91.1	4632.5	5744.4	9238.7
FIXED INVESTMENT	14412.5	26599.4	36794.2	62556.9	73355.4	111956.4
TOTAL INVESTMENT	17780.4	31321.6	42860.2	70756.1	83076.0	125996.6
GOVERNMENT EXPENDITURE	3539.0	4123.0	5017.7	5976.1	7117.5	8476.9
VALUE ADDED BY GOVT.	5885.8	6857.1	8345.1	9939.0	11837.3	14098.2
EXPORTS	3987.6	3709.2	4626.4	5691.2	6762.7	8112.8
IMPORTS	4587.6	5209.2	6126.4	7191.2	6762.7	8112.8
GROSS NATIONAL PRODUCT	76756.5	99899.7	125109.2	171397.2	245321.6	334136.1
REPLACEMENT	2286.2	2632.6	2974.9	3616.7	3976.2	4801.5
NET NATIONAL PRODUCT	74470.3	97267.0	122134.3	167780.4	241345.4	329334.6
SAVINGS	16280.4	29321.6	41360.2	69256.1	83076.0	125996.6
GROSS NATIONAL OUTPUT	96569.0	134614.7	181872.1	260401.5	369916.4	516244.1
INTERMEDIATE PRODUCT	27984.5	41572.1	651[illegible]8.0	98943.3	136432.1	196206.2
CONS./GROSS NAT. PROD.	0.66511	0.59157	0.56260	0.5[illegible]38	0.58439	0.55536
TOTAL INVST/GR.NAT.PR.	0.23165	0.31353	0.34259	0.41282	0.33864	0.37708
SAVINGS/GR.NAT. PROD.	0.21210	0.29852	0.33059	0.40407	0.33864	0.37708
MARGINAL GROSS SAVINGS RATES	0.585	0.457	0.603	0.167	0.483	
ANNUAL RATE OF GROWTH OF GNP	9.2%	7.8%	11.0%	12.7%	10.9%	

GUIDEPATH-1 REFERENCE SOLUTION

TABLE 5-18

GROSS DOMESTIC OUTPUTS
(Rupees crores in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCAGR	[illegible]	4168.48	9658.55	18651.67	42352.9[illegible]	62961.8[illegible]	98834.39
M.M.	4573.61	8923.57	17775.23	27812.92	38603.7[illegible]	57[illegible]20.9[illegible]	81507.84
EQIPMT	7620.75	13407.56	20389.9[illegible]	31292.31	42959.62	62995.84	89282.52
CHEMIC	3944.11	6062.62	9161.96	14[illegible]84.69	22054.52	32259.16	47752.91
CMGLWD	2466.24	3915.23	5449.98	9[illegible]8[illegible].13	16876.25	16295.89	23415.44
FCOOCL	11332.52	12279.68	14951.76	18853.48	29295.54	38[illegible]78.75	53547.02
ELECTR	614.26	912.12	1941.51	2896.95	4142.40	5945.70	8509.97
TRANS	4359.74	6376.80	9521.25	13964.95	20248.59	28788.77	41253.62
CONSTR	10074.98	16713.76	22440.13	4[illegible]162.25	43689.69	66998.56	96385.37
HOUS.	2338.10	2686.47	317[illegible].44	3841.76	6226.79	7997.95	11281.27
OTHMAR	23524.75	29613.24	37411.7[illegible]	49313.[illegible]1	78554.72	105522.72	151118.10
TRADAG	29116.18	29555.11	3[illegible].6[illegible]	31452.91	30911.99	31377.99	31851.01

GUIDEPATH-I REFERENCE SOLUTION

Table 5-19

ANNUAL SECTORAL GROWTH RATES OF OUTPUT

Sector	Annual Growth Rate (in percent) Between Periods					
	1-2	2-3	3-4	4-5	5-6	6-7
1 AG.PL.	5.1	5.5	7.4	14.3	8.8	11.5
2 M.M.	25.0	26.0	16.1	11.5	13.9	12.7
3 EQIPMT	21.0	15.0	15.3	11.1	13.6	12.3
4 CHEMIC	15.4	14.8	15.4	16.1	13.5	14.0
5 CMGLWD	16.8	11.6	18.5	6.2	14.4	12.8
6 FOODCL	5.9	6.8	8.0	15.8	9.2	12.0
7 ELECTR	14.1	29.0	14.2	12.7	12.8	12.7
8 TRANS	13.5	14.3	13.6	13.2	12.4	12.7
9 CONSTR	18.5	10.3	21.2	2.8	15.3	12.9
10 HOUS.	4.7	5.7	6.6	17.5	8.7	12.2
11 OTHMAR	8.0	8.1	9.6	16.8	10.3	12.7

GUIDEPATH-I REFERENCE SOLUTION

TABLE 5-20

SHADOW PRICES ON OUTPUT
(Rupees crores in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
AG.PL.	0.	7.64	3.46	1.83	0.94	0.49
M.M.	45.22	11.32	5.29	2.80	1.45	0.75
ECIPMT	19.58	9.41	4.99	2.57	1.33	0.69
CHEMIC	14.56	7.97	3.60	1.84	0.94	0.52
CMGLWD	4.92	5.70	2.73	1.42	0.74	0.38
FOODCL	45.22	6.47	3.3[illegible]	1.73	0.89	0.46
ELECTR	6.92	15.61	7.1[illegible]	3.93	1.99	1.03
TRANS	4.85	11.28	5.3[illegible]	2.94	1.47	0.77
CONSTR	6.68	3.68	1.95	1.02	0.53	0.27
HOUS.	0.35	10.25	5.91	3.16	1.67	0.86
OTHMAR	0.22	0.79	0.39	0.21	0.11	0.86

GUIDEPATH-I REFERENCE SOLUTION

TABLE 5-21

IMPORTS (Rupees crores, in 1959-60 prices)

NON-COMPETITIVE IMPORTS

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCAGR	0.	50.02	77.27	93.93	42.35	62.96	93.83
M.M.	663.17	936.97	1244.27	1390.65	1158.11	1140.42	1630.16
EQIPMT	1790.88	2346.32	2344.84	2503.42	2147.98	2519.83	3571.30
CHEMIC	1029.41	1321.65	1663.34	2112.70	2756.81	3225.92	4775.29
CMGLWD	9.86	11.75	10.9[illegible]	13.62	10.88	16.30	23.42
FCODCL	0.83	0.74	0.6[illegible]	0.57	0.59	0.57	0.80
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.
TRADAG	465.86	354.66	24[illegible].1	137.[illegible]4	3[illegible].91	31.33	31.35

COMPETITIVE IMPORTS

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
AG.PL.	0.	0.	0.	0.	0.	0.	-19.91
M.M.	495.21	187.10	635.17	949.31	615.03	1115.46	1018.78
EQIPMT	0.	0.	0.	0.	0.	0.	-612.41
CHEMIC	0.	0.	0.	0.	0.	0.	-987.29
CMGLWD	0.	0.	0.	0.	0.	0.	-4.28
FCODCL	132.35	0.	0.	0.	0.	0.	-0.13
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.

SHADOW PRICE ON FOREIGN EXCHANGE BALANCE CONSTRAINT

45.22	11.82	5.29	2.80	1.45	1.90

GUIDEPATH-I REFERENCE SOLUTION

TABLE 5-22

PRIVATE CONSUMPTION AND SHADOW PRICES ON CONSUMPTION GROWTH CONS
(Rupees crores in 1959-60 Prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
AG.PL.	19405.01	22040.18	25637.42	30521.24	47413.19	60017.53	83219.81
M.M.	23.61	26.92	31.47	37.69	59.43	75.62	105.50
EQIPMT	1332.50	1648.02	2115.45	2812.15	5497.18	7463.63	11183.52
CHEMIC	1571.97	1858.06	2269.93	2863.08	5065.32	6688.31	9730.66
CMGLWD	307.94	364.19	444.92	561.18	992.84	1310.95	1907.27
FCODCL	7309.52	8461.65	10077.91	12345.84	20516.37	26569.11	37829.63
ELECTR	53.01	61.81	74.27	91.92	156.27	203.84	292.60
TRANS	908.79	1067.33	1293.34	1616.40	2805.64	3683.34	5325.15
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS.	2338.10	2686.47	3170.44	3841.75	6226.79	7997.95	11281.27
OTHMAR	17801.72	20883.32	25271.12	31534.73	54557.75	71554.12	103334.89
SUM	51051.26	59097.96	70386.26	86225.98	143290.76	185564.40	264210.3

SUM OF DISCOUNTED CONSUMPTION = 595616.6328125
SUM OF UNDISCOUNTED CONSUMPTION = 595616.6328125

SHADOW PRICES ON CONSUMPTION GROWTH CONSTRAINTS

14.25	6.04	1.74	0.26	0.0	0.27	

GUIDEPATH-I REFERENCE SOLUTION

TABLE 5-23

AVAILABLE CAPITAL

(Rupees crores at 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCAGR	.	3932.42	9111.53	17595.42	39954.46	59396.27	93237.26
N.N.	3775.38	7367.12	14674.37	22961.79	3187[illegible].44	47[illegible]75.31	67291.32
EQIPNT	247[illegible].31	4266.55	6438.4[illegible]	9958.[illegible]	1367[illegible].61	2[illegible]46.34	28411.51
CHEMIC	2174.42	2133.32	3223.91	4956.12	776[illegible].54	11351.35	168[illegible]3.34
CMGLWD	851.64	1124.81	1565.72	26[illegible]8.6[illegible]	3124.64	4681.65	6726.96
FCODCL	1919.68	2281.44	2777.7[illegible]	35[illegible]2.79	5442.82	7[illegible]74.65	9948.42
ELECTR	1955.38	19[illegible]2.97	4[illegible].57	6[illegible]31.39	8642.3[illegible]	124[illegible]4.52	17754.36
TRANS	6827.87	92[illegible]1.72	13739.1[illegible]	2[illegible]151.42	29218.72	41542.2[illegible]	59528.94
CONSTR	578.74	852.4[illegible]	1144.4[illegible]	2[illegible]48.27	2228.17	3416.93	4915.74
HOUS.	[illegible]26.53	8954.9[illegible]	1[illegible]568.14	128[illegible]5.85	2[illegible]755.98	26659.84	376[illegible]4.16
OTHMAR	1616.81	1544.92	1951.77	2572.66	4[illegible]98.2[illegible]	55[illegible]5.12	7883.76
TRADAG	14652.14	14873.[illegible]2	15[illegible]97.2[illegible]	15324.82	15555.84	1579[illegible].34	16[illegible]28.38
SUM	44749.39	58435.58	84393.5[illegible]	12[illegible]517.12	102322.71	254944.71	366134.14

GUIDEPATH-I REFERENCE SOLUTION

TABLE 5-24

NEW CAPITAL (Rupees crores, 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCAGR	0.	3932.42	5179.17	8483.83	22359.04	19441.81	33840.99
M.M.	0.	3591.24	7317.78	8286.91	8908.66	15204.87	20216.01
EQIPMT	0.	1796.25	2221.93	3469.52	3712.61	6375.92	8364.98
CHEMIC	0.	0.	1090.61	1732.21	2804.42	3590.81	5451.99
CMGLWD	0.	273.17	440.92	1042.88	516.04	1557.01	2045.31
FCODCL	0.	361.77	496.26	725.09	1940.63	1631.83	2873.76
ELECTR	0.	47.59	2147.61	1980.82	2610.90	3762.22	5349.84
TRANS	0.	2373.85	4537.44	6412.26	9067.30	12323.48	17986.74
CONSTR	0.	273.66	292.05	903.83	179.90	1188.75	1498.81
HOUS.	0.	1541.63	2254.53	2908.28	8651.33	6637.10	11711.04
OTHMAR	0.	0.	406.85	620.89	1525.54	1406.92	2378.64
TRADAG	0.	220.88	224.21	227.59	231.02	234.50	238.04
SUM	0.	14412.46	26599.20	36794.09	62506.77	73355.23	111956.15

TABLE 5-25

SHADOW PRICES ON NEW CAPITAL (Rupees crores in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCAGR	0.	11.39	5.78	3.06	1.59	0.82	0.43
M.M.	0.	12.74	6.38	3.38	1.75	0.91	0.47
EQIPMT	0.	12.88	6.44	3.41	1.76	0.91	0.47
CHEMIC	0.	11.59	6.20	3.28	1.70	0.88	0.46
CMGLWD	0.	12.03	6.06	3.21	1.66	0.86	0.45
FCODCL	0.	14.27	7.15	3.73	1.93	1.00	0.52
ELECTR	0.	11.55	5.85	3.09	1.60	0.83	0.43
TRANS	0.	12.03	6.06	3.21	1.66	0.86	0.45
CONSTR	0.	14.56	7.18	3.8	1.97	1.02	0.53
HOUS.	0.	6.68	3.68	1.95	1.02	0.53	0.27
OTHMAR	0.	10.18	5.39	2.85	1.48	0.77	0.40
TRADAG	0.	8.35	4.42	2.34	1.22	0.63	0.33

GUIDEPATH-I REFERENCE SOLUTION

TABLE 5-26

RATIO OF IDLE CAPACITY TO TOTAL CAPACITY

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-8
IRCAGR	0.	0.	0.	0.	0.	0.	-0.0
N.M.	0.	0.	0.	0.	0.	0.	0.0
EQIPMT	0.02	0.	0.	0.	0.	0.	0.0
CHEMIC	0.36	0.	0.	0.	0.	0.	0.00
CNGLWD	0.17	0.	0.	0.	0.	0.	-0.0
FCODCL	0.	0.	0.	0.	0.	0.	-0.0
ELECTR	0.31	0.	0.	0.	0.	0.	0.0
TRANS	0.08	0.	0.	0.	0.	0.	-0.00
CONSTR	0.11	0.	0.	0.	0.	0.	0.0
HOUS.	0.03	0.	0.	0.	0.	0.	-0.0
OTHMAR	0.24	0.	0.	0.	0.	0.	-0.0
TRADAG	0.	0.	0.	0.	0.	0.	-0.00
SUM	0.06	0.	0.	0.	0.	0.	-0.0

TABLE 5-27

NATIONAL INCOME ACCOUNTS OF GUIDEPATH-I SOLUTION G-10.1
(Rupees crores, in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
CONSUMPTION	51051.3	59098.0	70386.3	115924.3	157572.5	204059.5
INVENTORIES CHANGE	1425.7	2646.1	3813.6	4506.4	6292.3	10113.1
FIXED INVESTMENT	16797.2	-32144.5	49560.6	60249.5	80343.6	122682.0
TOTAL INVESTMENT	20594.8	37423.2	56349.1	68372.6	90612.1	137596.6
GOVERNMENT EXPENDITURE	3539.0	4123.0	5017.7	5976.1	7117.5	8476.9
VALUE ADDED BY GOVT.	5885.8	6857.1	8345.1	9939.0	11837.3	14098.2
EXPORTS	3087.6	3709.2	4626.4	5691.2	6762.7	8112.8
IMPORTS	6087.6	6709.2	7626.4	8691.2	6762.7	8112.8
GROSS NATIONAL PRODUCT	78070.9	104501.2	137098.2	197212.0	267139.4	364231.2
REPLACEMENT	2371.9	2632.6	2974.9	3616.7	3976.2	4801.5
NET NATIONAL PRODUCT	75699.0	101868.6	134123.2	193595.3	263163.2	359429.7
SAVINGS	19094.8	35923.2	54849.1	66872.6	90612.1	137596.6
GROSS NATIONAL OUTPUT	101000.4	142663.0	205168.2	294571.3	404818.8	565080.8
INTERMEDIATE PRODUCT	28315.3	45018.9	76415.1	107298.3	149516.7	214947.8
CONS./GROSS NAT. PROD.	0.65391	0.56552	0.51340	0.58782	0.58985	0.56025
TOTAL INVST/GR.NAT.PR.	0.26380	0.35811	0.41101	0.34670	0.33919	0.37777
SAVINGS/GR. NAT. PROD.	0.24458	0.34376	0.40007	0.33909	0.33919	0.37777

TABLE 5-26

NATIONAL INCOME ACCOUNTS OF GUIDEPATH-I SOLUTION G-10.2
(Rupees crores in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
CONSUMPTION	51051.3	59098.0	70386.3	86226.0	145482.0	188402.1
INVENTORIES CHANGE	1081.8	2090.6	3093.4	4728.8	5809.3	9346.9
FIXED INVESTMENT	14412.4	26598.8	36801.8	62603.1	74169.2	113079.6
TOTAL INVESTMENT	17780.6	31322.0	42870.2	70948.6	83954.7	127228.0
GOVERNMENT EXPENDITURE	3539.0	4123.0	5017.7	5976.1	7117.5	8476.9
VALUE ADDED BY GOVT.	5885.8	6857.1	8345.1	9939.0	11837.3	14098.2
EXPORTS	3087.6	3709.2	4626.4	5691.2	6762.7	8112.8
IMPORTS	4587.6	5209.2	6126.4	7191.2	8262.7	9612.8
GROSS NATIONAL PRODUCT	76756.6	99900.1	125119.3	171589.7	246891.5	336705.2
REPLACEMENT	2286.4	2632.6	2974.9	3616.7	3976.2	4801.5
NET NATIONAL PRODUCT	74470.3	97267.4	122144.3	167973.0	242915.3	331903.7
SAVINGS	16280.6	29822.0	41370.2	69448.6	83954.7	127228.0
GROSS NATIONAL OUTPUT	98855.4	134615.4	181888.7	260686.4	371893.1	519806.1
INTERMEDIATE PRODUCT	27984.6	41572.4	65114.5	99035.7	136838.9	197199.1
CONS./GROSS NAT. PROD.	0.66511	0.59157	0.56255	0.50251	0.58925	0.55955
TOTAL INVST/GR.NAT.PR.	0.23165	0.31353	0.34263	0.41348	0.34005	0.37786
SAVINGS/GR. NAT. PROD.	0.21211	0.29852	0.33065	0.40474	0.34005	0.37786

Table 5-29

Values of Private Consumption in Guidepath II Solution
(in Rs. Crores 1959-60 prices).

Solution[1]	Period 1 1966-69	2 1969-72	3 1972-75	4 1975-78	5 1978-81	6 1981-84	7 1984-85
5.1.0 X(0) on 11 Sectors Post-terminal Growth Rate of Consumption, ϕ = 6% per year Minimum Growth Rate of Consumption in period t, $\rho(t)$ = 5% per year Marginal Savings Rate $\leq$.20	52732	64668	74861	87064	101284	117248	139644
.1.1 NFCI doubled for 4 periods then zero	52732	68558	79365	93832	110974	128467	153006
.1.2 Net Foreign Capital Inflow Continual for 6 periods	52732	64686	74882	87172	104450	120914	144010
5.2.0 X(0) on 11 sector ϕ = 8% per year $\rho(t)$ = 5% per year Marginal Savings Rate $\leq$ .30	52732	65203	75481	87378	108339	125416	157988
.2.1 NFCI doubled for 4 periods then zero	52732	67385	78006	94179	120530	139528	175765
.2.2 NFCI continued	52732	65203	75481	87378	111173	128696	162120
.3.0 X(0) on 32 sector basis ϕ = 8% per year ρ = 5 per year Marginal Savings Rate $\leq$ .30	52954	66501	76983	89709	113230	131078	165120
.3.1 NFCI doubled for 4 periods then zero	52954	68939	79806	97041	124941	144635	182198
.3.2 NFCI continued	52954	66501	76983	89901	115924	134197	169050

Unless otherwise indicated all solutions had the following constraints:

(a) Post terminal annual growth rates of Government Consumption 6.0 percent
Exports 5.5 "
Imports 5.5 "
Replacements, at ϕ, the same rate as consumpt:

(b) Net Foreign Capital Inflow is set at Rs. 500 crores per year for first 12 years, i.e. four periods, then at zero

GUIDEPATH-II REFERENCE SOLUTION

TABLE 5.30

NATIONAL INCOME ACCOUNTS OF GUIDEPATH II SOLUTION S-1.0
(Rupees crores in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
CONSUMPTION	52732.5	64668.1	74861.4	87063.9	101283.7	117248.5
INVENTORIES CHANGE	256.9	1021.5	1046.5	1141.6	1372.2	1988.8
FIXED INVESTMENT	8410.9	10778.1	14093.8	16718.3	19561.2	23308.9
TOTAL INVESTMENT	11674.7	15071.7	18115.3	22177.8	24909.5	30099.2
GOVERNMENT EXPENDITURE	3539.0	4123.0	5017.7	5976.1	7117.5	8476.9
VALUE ADDED BY GOVT.	5885.8	6857.1	8345.1	9939.0	11837.3	14098.2
EXPORTS	3087.6	3709.2	4626.4	5691.2	6762.7	8112.8
IMPORTS	4587.6	5209.2	6126.4	7191.2	6762.7	8112.8
GROSS NATIONAL PRODUCT	72332.0	89219.8	104839.5	123656.8	145148.0	169922.8
REPLACEMENT	3006.8	3272.1	2974.9	4317.9	3976.2	4801.5
NET NATIONAL PRODUCT	69325.2	85947.7	101864.5	119338.9	141171.9	165121.3
SAVINGS	10174.7	13571.7	16615.3	20677.8	24909.5	30099.2
GROSS NATIONAL OUTPUT	91075.9	114115.4	138495.6	165056.7	194832.0	229674.5
INTERMEDIATE PRODUCT	24629.7	31752.7	42001.2	51338.9	61521.3	73849.9
CONS./GROSS NAT. PROD.	0.72903	0.72482	0.71406	0.70408	0.69780	0.69001
TOTAL INVST/GR.NAT.PR.	0.16140	0.16893	0.17279	0.17935	0.17161	0.17713
SAVINGS/GR. NAT. PROD.	0.14067	0.15212	0.15848	0.16722	0.17161	0.17713

GUIDEPATH - II REFERENCE SOLUTION

TABLE 5-31

GROSS DOMESTIC OUTPUTS
(Rupees crores in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCAGR	0.	4442.98	9912.21	15416.71	21732.28	28991.05	39033.53
[illegible]	3414.95	4573.61	5913.61	7133.03	9813.59	11769.15	14264.96
EQIPMT	4566.43	7632.67	9984.92	12973.86	15527.59	19708.10	22798.00
CHEMIC	3665.25	5477.16	7229.40	9224.05	11627.32	14651.37	18087.03
CMCEMC	2144.82	2403.36	3037.85	3680.28	4278.31	5033.81	6431.74
ECOCCL	10332.51	13043.61	15360.87	18031.07	21029.98	24487.56	29296.00
ELECTR	537.47	712.03	1195.46	1465.66	1801.39	2184.87	2633.32
TRANS	3876.13	5089.93	6291.12	7607.08	9238.89	11060.31	13342.09
CONSTR	8928.80	8972.53	11302.33	13601.27	15330.50	17460.47	23120.92
HOUSE	2407.96	2917.92	3356.40	3876.57	4481.27	5159.22	6105.20
OTHMAR	22085.42	29294.56	34910.67	41594.20	49059.10	57790.75	69637.54
TRADAG	29116.18	29555.11	30000.65	30452.91	30911.99	31377.99	31851.01

GUIDEPATH II REFERENCE SOLUTION

TABLE 5-32

SHADOW PRICES ON OUTPUT AND SAVINGS CONSTRAINTS

SHADOW PRICES ON OUTPUT

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84
AGRIC.	7.55	7.55	4.87	2.39	1.85	1.72
M.M.	7.55	7.55	6.39	3.35	2.20	1.83
EQIPMT	7.55	7.55	5.67	3.18	2.15	1.84
CHEMIC	7.55	7.55	4.41	2.46	1.89	1.90
CMELWC	7.55	7.55	3.57	2.05	1.77	1.71
ECODCL	7.55	7.55	4.16	2.39	1.86	1.72
ELECTR	7.55	7.55	10.03	4.22	2.38	1.88
TRANS	7.55	7.55	7.11	3.34	2.15	1.84
CONSTR	7.55	7.55	2.33	1.67	1.67	1.67
HOUSA	77.07	7.55	17.70	2.98	1.38	1.57
OTHMAR	7.55	7.55	0.71	0.88	1.42	1.58

SHADOW PRICES ON SAVINGS CONSTRAINTS

	7.55	7.55	0.14	0.69	1.37	1.57

GUIDEPATH II REFINING SOLUTION

TABLE 5-33

IMPORTS AND SHADOW PRICES ON FOREIGN EXCHANGE BALANCE CONSTRAINTS
(Rupees crores in 1959-60 prices)

NON-COMPETITIVE IMPORTS

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCAGR	0.	53.32	79.30	69.38	21.73	28.99	39.03
M.MI	495.17	480.23	413.95	356.65	294.41	235.38	285.30
EQIPMT	1073.11	1335.72	1148.27	1037.91	776.38	788.32	911.92
CHEMIC	956.63	1194.02	1265.14	1383.61	1453.41	1465.14	1808.70
CMCLWC	8.58	7.21	6.08	5.52	4.28	5.03	6.43
FCODCL	0.83	0.78	0.61	0.54	0.42	0.37	0.44
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS	0.	0.	0.	0.	0.	0.	0.
OTHMAR	0.	0.	0.	0.	0.	0.	0.
TRADAG	465.86	354.66	240.01	137.04	30.91	31.38	31.85

COMPETITIVE IMPORTS

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
AGREL	196.73	1077.10	0.	0.	0.	0.	0.00
M.MI	0.	706.18	2973.03	4200.60	4181.11	5558.21	6517.77
EQIPMT	0.	0.	0.	0.	0.	0.	13.76
CHEMIC	0.	0.	0.	0.	0.	0.	-86.28
CMCLWC	0.	0.	0.	0.	0.	0.	-0.52
FCODCL	347.31	0.	0.	0.	0.	0.	-0.01
ELECTR	0.	0.	0.	0.	0.	0.	0.
TRANS	0.	0.	0.	0.	0.	0.	0.
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUS	0.	0.	0.	0.	0.	0.	0.
OTHMAR	1043.35	0.	0.	0.	0.	0.	0.

SHADOW PRICES ON FOREIGN EXCHANGE BALANCE CONSTRAINTS

7.55	7.55	6.39	3.35	2.20	6.[illegible]	

GUIDEPATH-II REFERENCE SOLUTION

TABLE 5-34

PRIVATE CONSUMPTION AND SHADOW PRICES ON CONSUMPTION GROWTH C

(Rupees crores in 1959-60 prices)

	1966-67	1967-72	1972-76	1975-78	1978-81	1981-84	1984-87
AG.PR.	19894.13	23660.67	26939.35	30765.00	35192.28	40142.74	46980.62
M.EX	24.24	29.01	33.15	38.01	43.63	49.93	58.67
EQIPPT	1413.74	1917.17	2331.68	2852.63	3467.39	4162.61	5164.52
CHEMIC	1636.75	2075.66	2444.75	2895.81	3424.32	4019.55	4864.51
CMCEWD	320.81	406.84	479.19	567.60	671.19	787.86	953.48
ECODCL	7550.24	9259.17	10718.65	12465.80	14501.80	16787.65	19994.36
ELECTR	54.91	68.12	79.34	92.87	108.67	126.44	151.47
TRANS	944.14	1184.44	1387.43	1634.01	1922.48	2247.07	2706.29
CONSTR	0.	0.	0.	0.	0.	0.	0.
HOUSI	2407.96	2917.92	3356.40	3876.57	4481.27	5159.22	6105.20
OTHER	18485.60	23149.06	27091.45	31875.55	37470.66	43765.49	52665.79
SUM	52732.52	64668.07	74861.38	87063.85	101283.70	117248.55	139644.89

SUM OF DISCOUNTED CONSUMPTION = 497858.0390625
SUM OF UNDISCOUNTED CONSUMPTION = 497858.0390625

SHADOW PRICE ON CONSUMPTION GROWTH CONSTRAINT

GUIDEPATH - II PREPARATION SALIENT

TABLE 5-25

AVAILABLE CAPITAL

(Rupees crores in 1969-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCASR	0.	4191.38	9350.88	14543.67	20501.58	27349.28	36823.05
M.M.	3775.88	3775.88	4882.16	5888.89	8101.90	9716.38	11776.85
EQIPMT	2470.31	2470.31	3177.40	4128.54	4941.19	6271.51	7254.80
CHEMIC	2174.42	2174.42	2543.88	3245.76	4091.42	5155.52	6364.50
CMEWD	851.64	851.64	872.74	1057.31	1229.12	1446.16	1847.76
ECODCL	1919.68	2423.37	2853.90	3349.99	3907.16	4549.54	5442.90
ELECTR	1855.38	1855.38	2494.10	3057.80	3758.24	4558.30	5493.88
TRANS	6827.87	7344.77	9078.09	10977.01	13331.72	15960.02	19252.61
CONSTR	578.74	578.74	576.42	693.67	781.86	890.48	1179.18
HOUSE	8026.53	11004.61	11187.99	12921.90	15318.14	18203.00	20350.70
OTHMAR	1616.81	1616.81	1821.29	2169.97	2559.41	3014.94	3632.99
TRADAG	14652.14	14873.02	15097.23	15324.82	15555.84	15790.35	16028.38
SUM	44749.39	53160.32	63936.08	77359.31	94077.57	112905.50	135447.61

GUIDEPATH-II REFERENCE SOLUTION

TABLE 5-36

RATIO OF IDLE CAPITAL TO TOTAL CAPITAL

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCAGR	0.	0.	0.	0.	0.	0.	-0.00
MINI	0.25	0.	0.	0.	0.	0.	-0.00
EQIPMT	0.41	0.02	0.	0.	0.	0.	0.00
CHEMIC	0.41	0.11	0.	0.	0.	0.	0.00
ENGLWD	0.28	0.19	0.	0.	0.	0.	-0.00
ECCCCL	0.	0.	0.	0.	0.	0.	0.00
ELECTR	0.40	0.20	0.	0.	0.	0.	-0.00
TRANS	0.18	0.	0.	0.	0.	0.	-0.00
CONSTR	0.21	0.21	0.	0.	0.	0.	0.00
HOUS:	0.	0.12	0.	0.	0.02	0.06	0.00
OTHMAR	0.29	0.05	0.	0.	0.	0.	-0.00
TRADAG	0.	0.	0.	0.	0.	0.	-0.00
SUM	0.13	0.04	0.	0.	0.00	0.01	0.00

GUIDEPATH II REFERENCE SOLUTION

TABLE 5-37

NEW CAPITAL

(Rupees crores in 1959-60 prices)

	1966-69	1969-72	1972-75	1975-78	1978-81	1981-84	1984-87
INCAGR	0.	4191.38	5159.51	5192.78	5957.91	6847.71	9473.76
M.P.	0.	0.	1106.28	1006.72	2213.01	1614.48	2060.47
EQIPMT	0.	0.	707.10	951.14	812.65	1330.32	983.29
CHEMIC	0.	0.	369.46	701.88	845.66	1064.10	1208.97
CMELHD	0.	0.	21.11	184.56	171.81	217.05	401.60
FOODCL	0.	503.70	430.52	496.10	557.17	642.38	893.36
ELECTR	0.	0.	638.72	563.70	700.44	800.07	935.58
TRANS	0.	516.90	1733.32	1898.93	2354.71	2628.30	3292.59
CONSTR	0.	0.	0.	117.25	88.19	108.63	288.70
HOUS.	0.	2978.08	183.38	2404.48	2396.24	3618.09	2914.43
OTHMAR	0.	0.	204.48	348.68	389.44	455.53	618.04
TRADAG	0.	220.88	224.21	227.59	231.02	234.50	238.04
SUM	0.	8410.94	10773.08	14093.80	16718.25	19561.16	23308.83

GUIDEPOST SOLUTION P-1 FROM GUIDEPATH-I REFERENCE SOLUTION

TABLE 5-38

NATIONAL INCOME ACCOUNTS FOR GUIDEPOST SOLUTION P-1
(Rupees crores in 1959-60 prices).

	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
CONSUMPTION	15761.5	16155.5	16559.4	19128.0	21163.7	21769.0
INVENTORIES CHANGE	-41.5	225.4	558.7	683.7	410.1	830.6
FIXED INVESTMENT	4143.1	5449.2	6161.1	6638.2	8170.1	9699.3
TOTAL INVESTMENT	4385.7	5898.7	7360.0	8103.6	9549.4	11054.0
GOVERNMENT EXPENDITURE	1108.0	1177.0	1254.0	1293.0	1372.0	1458.0
VALUE ADDED BY GOVT.	1842.7	1957.5	2085.6	2150.4	2281.8	2424.8
EXPORTS	976.9	1 26.6	1084.0	1151.5	1232.0	1325.7
IMPORTS	1476.9	1526.6	1584.0	1651.5	1732.0	1825.7
GROSS NATIONAL PRODUCT	23098.0	25188.8	26759.0	30175.1	33766.9	36275.8
REPLACEMENT	784.1	724.2	640.2	781.6	969.1	1124.0
NET NATIONAL PRODUCT	22313.9	24464.6	26118.8	29393.4	32797.7	35081.8
SAVINGS	4385.7	5898.7	6860.0	7603.6	9049.4	10554.0
GROSS NATIONAL OUTPUT	30097.7	32685.3	34979.9	39807.5	45183.6	48918.9
INTERMEDIATE PRODUCT	8842.4	9454.0	10306.5	11782.8	13658.5	15137.9
CONS./GROSS NAT. PROD.	0.68238	0.64138	0.61884	0.63390	0.62380	0.60126
TOTAL INVST/GR.NAT.PR.	0.21152	0.25403	0.27505	0.26855	0.28280	0.30531
SAVINGS/GR. NAT. PROD.	0.18988	0.23418	0.25636	0.25198	0.26800	0.29150

GUIDEPOST SOLUTION P-2 FROM GUIDEPATH SOLUTION G-120

TABLE 5-2[illegible]

NATIONAL INCOME ACCOUNTS FOR GUIDEPOST SOLUTION P-2
(Rupees crores in 1959-60 prices)

	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
CONSUMPTION	15775.2	16169.6	16573.8	18535.2	19669.7	20300.8
INVENTORIES CHANGE	-44.0	226.2	454.3	603.4	449.1	714.2
FIXED INVESTMENT	4143.1	5431.2	6295.8	6801.0	8478.7	9778.4
TOTAL INVESTMENT	4883.2	6370.0	7369.6	8165.3	9897.9	11617.5
GOVERNMENT EXPENDITURE	1108.0	1177.0	1254.0	1293.0	1372.0	1458.0
VALUE ADDED BY GOVT.	1842.7	1957.5	2085.6	2150.4	2281.8	2424.8
EXPORTS	976.9	1026.6	1084.0	1151.5	1232.0	1325.7
IMPORTS	1476.9	1526.6	1584.0	1651.5	1732.0	1825.7
GROSS NATIONAL PRODUCT	23109.2	25174.1	26783.0	29643.9	32721.4	35301.1
REPLACEMENT	784.1	712.6	619.4	760.9	970.0	1124.9
NET NATIONAL PRODUCT	22325.1	24461.5	26163.6	28883.1	31751.4	34176.2
SAVINGS	4383.2	5870.0	6869.6	7665.3	9397.9	11117.5
GROSS NATIONAL OUTPUT	29772.3	32666.5	35019.9	30107.2	43862.7	47882.8
INTERMEDIATE PRODUCT	8505.8	9449.9	10322.5	11613.7	13423.1	15006.5
CONS./GROSS NAT. PROD.	0.68264	0.64231	0.61882	0.62526	0.60113	0.57507
TOTAL INVST/GR.NAT.PR.	0.21131	0.25304	0.27516	0.27545	0.30249	0.32910
SAVINGS/GR. NAT. PROD.	0.18967	0.23318	0.25649	0.25858	0.28721	0.31493

GUIDEPOST SOLUTION P-3 FROM GUIDEPATH-II REFERENCE SOLUTION

TABLE 5-40

NATIONAL INCOME ACCOUNTS FOR GUIDEPOST SOLUTION P-3

(Rupees crores in 1959-60 prices)

	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
CONSUMPTION	16304.8	17530.9	18414.3	20997.8	22067.9	23181.5
INVENTORIES CHANGE	-332.4	114.3	289.5	573.9	273.9	389.9
FIXED INVESTMENT	3858.7	3343.2	3322.3	2609.3	3876.7	4028.3
TOTAL INVESTMENT	4272.4	4079.0	4136.1	3911.1	5118.6	5559.9
GOVERNMENT EXPENDITURE	1108.0	1177.0	1254.0	1293.0	1372.0	1458.0
VALUE ADDED BY GOVT.	1842.7	1957.5	2085.6	2150.4	2281.8	2424.8
EXPORTS	976.9	1026.6	1084.0	1151.5	1232.0	1325.7
IMPORTS	1476.9	1526.6	1584.0	1651.5	1732.0	1825.7
GROSS NATIONAL PRODUCT	23027.9	24244.4	25389.9	27852.3	30340.3	32124.3
REPLACEMENT	746.1	621.5	524.3	727.9	968.0	1141.7
NET NATIONAL PRODUCT	22281.8	23622.9	24865.7	27124.4	29372.4	30982.6
SAVINGS	3772.4	3579.0	3636.1	3411.1	4618.6	5059.9
GROSS NATIONAL OUTPUT	28987.2	30596.5	32059.1	34781.2	38994.8	41387.0
INTERMEDIATE PRODUCT	7802.0	8309.6	8754.8	9079.3	10936.3	11687.5
CONS./GROSS NAT. PROD.	0.70804	0.72309	0.72526	0.75390	0.72735	0.72162
TOTAL INVST/GR.NAT.PR.	0.18553	0.16824	0.16290	0.14042	0.16871	0.17307
SAVINGS/GR. NAT. PROD.	0.16382	0.14762	0.14321	0.12247	0.15223	0.15751

Table 5-41

Values of Private Consumption in Guidepost Solution
(in Rs. Crores, 1959-60 prices)

Solution	Sum of Undis-counted Consump-tion Over 6 years	Private Consumption		Gross National Product		Gross Dom. Savings / Gross Nat. Prod.		Total Gross Investment Over Six Years
		in First Year	in Sixth Year	in First Year	in Sixth Year	First Year	Sixth Year	
P.1. Corresponds to G.10.0 the Guidepath-I Ref. Sol.	110437 (110149)[1]	15762	21769	23098	36206	.1899	.2915	47351
P.2 Corresponds to G.12.0 C/O = 4.0 in Modern Agriculture	107024 (106836)[1]	15775	20301	23109	35301	.1897	.3149	48303
P.3 Corresponds to 5.1.0 the Guidepath II Ref. Sol.	118497 (117400)[1]	16305	23182	23028	32124	.1638	.1575	27077

[1] Sum of consumption for the corresponding six years, first two periods, in the Guidepath Solution.

Table 5-42

Capital Stocks in 1971-72[1]
Guidepath Solutions

Sector	Guidepath I Solutions		Guidepath II Solutions		Adjusted Fourth Pla Targets
	G.10.0 Reference Solution	G.12.0 C/O in Mod Agr. = 4.0	S.1.0 Marginal Savings≤.20	S.2.0 Marginal Savings≤.30	
1. Mod. Agr.	5203 (.079)[2]	6285 (.096)	5483 (.098)	6519 (.113)	5840[3] (18451)
12. Trad.Agr.	14937 (.227)	14947 (.227)	14947 (.266)	14947 (.259)	14947[3]
2. M.M.	9269 (.141)	9391 (.143)	4114 (.073)	4456 (.077)	6888
3. Equipment	4907 (.075)	4935 (.075)	2686 (.048)	2987 (.052)	4803
4. Chemicals	2448 (.037)	2303 (.035)	2291 (.041)	2327 (.040)	3964
5. Cement Glass etc.	1256 (.019)	1279 (.019)	859 (.015)	886 (.015)	1465
6. Food Clothing etc.	2436 (.037)	2315 (.035)	2560 (.046)	2585 (.045)	2621
7. Electricity	2448 (.037)	2406 (.037)	2047 (.036)	2108 (.037)	3073
8. Transport	10517 (.160)	10305 (.157)	7883 (.148)	8291 (.144)	10898[3] (5464)
9. Construction	940 (.014)	980 (.015)	578 (.010)	599 (.010)	966
10. Housing	9463 (.144)	8980 (.137)	11058 (.197)	10269 (.178)	10290
11. Others & Margin	1670 (.025)	1590 (.024)	1682 (.030)	1662 (.029)	2417
SUM	65505 (1.000)	65715 (1.000)	56189 1.000)	57637 (1.000)	68172[3] (60402)

[1] Capital stocks for 1971-72 are interpolated log-linearly from the stocks in period 2 (1969-72) and perios 3 (1972-75) of Guidepath Solution

[2] Numbers in parentheses are ratios sector stock to total stock.

[3] Adjusted for different capital output ratios