

## APPENDIX A

### METHODOLOGY ON AGGREGATION OF INPUT-OUTPUT MATRIX

The latest Input-output Table is for 1977-78 and is an 89-sector, commodity by industry matrix. Since the 89-sector matrix is unwieldy for our purpose, we have aggregated the matrix into 20 sectors, so that the multipliers will be sizeable and amenable for analysis (Table A.I). They are : (i) Food; (ii) Minerals; (iii) Edible oil; (iv) Beverages; (v) Tobacco and tobacco products; (vi) Cotton textiles; (vii) Woollen, silk, art silk textiles; (viii) Jute textiles; (ix) Wood and wood products; (x) Paper and paper products; (xi) Leather and leather products; (xii) Rubber and rubber products; (xiii) Petroleum products; (xiv) Chemicals and chemical products; (xv) Construction materials; (xvi) Metal and non-metal products; (xvii) Machinery and transport equipment excluding electrical machinery; (xviii) Electrical machinery; (xix) Gas, electricity, water supply and communications, and (xx) other services. The commodities falling in each of these 20 sectors are detailed in Table A.1.

It may be noted that the adoption of such an input-output model (be it 89-sector model or 20-sector model) involves the assumption that at the individual industry level, only one commodity is produced by each of the industries.

TABLE A.1

Details of Aggregation of Input-Output Matrix

<i>Sl. No.</i>	<i>Aggregated sector</i>	<i>Sl. No. of Input-output table</i>	<i>Commodity</i>
(1)	(2)	(3)	
1.	Food items	1.	Paddy
		2.	Wheat
		3.	Jowar
		4.	Bajra
		5.	Other cereals
		6.	Pulses
		7.	Sugarcane

TABLE A.1 (Contd.)

(1)	(2)	(3)
	8.	Jute
	9.	Cotton
	10.	Plantations
	11.	Other crops
	12.	Milk and milk products
	13.	Other animal husbandry
	14.	Forestry and logging
	15.	Fishing
	20.	Miscellaneous food products
	21.	Sugar
	22.	Gur and khandsari
2. Minerals	16.	Coal and lignite
	17.	Petroleum and natural gas
	18.	Iron ore
	19.	Other minerals
3. Edible oils	23.	Hydrogenated oil vanaspati
	24.	Edible oil excluding vanaspati
4. Beverages	25.	Tea and coffee
	26.	Other beverages
5. Tobacco and tobacco products	27.	Tobacco manufactures
6. Cotton textiles	28.	Cotton textiles excluding handloom and khadi
	29.	Cotton textiles—handloom and khadi
	33.	Readymade garment textiles
	34.	Miscellaneous textile products
7. Woollen and silk textiles	30.	Woollen and silk fabrics
	31.	Art silk fabrics
	35.	Carpet weaving
8. Jute textiles	32.	Jute textiles
9. Wood and wood products	36.	Wood products
10. Paper and paper products	37.	Paper, paper products, newsprints
	38.	Printing and publishing
11. Leather and leather products	39.	Leather and leather products
	40.	Leather footwear
12. Rubber and rubber products	41.	Rubber products
13. Petroleum products	42.	Plastics and synthetic rubbers
	43.	Petroleum products
	44.	Mineral, coal, petrol products
14. Chemicals and chemical products	45.	Inorganic heavy chemicals
	46.	Organic heavy chemicals

TABLE A.1 (Contd.)

(1)	(2)	(3)
	47.	Chemical fertilizers
	48.	Insecticides, fungicides
	49.	Drugs and pharmaceuticals
	50.	Soaps and glycerine
	51.	Cosmetics
	52.	Man-made fibres
	53.	Other chemicals
	54.	Refractories
15. Construction materials	55.	Cement
	79.	Construction
16. Metals and non-metal products	56.	Other non-metallic products
	57.	Iron and steel, ferro-alloys
	58.	Iron and steel castings and forging
	59.	Iron and steel structure
	60.	Non-ferrous metal including alloys
	61.	Metal products
17. Non-electrical machinery and transport equipments	62.	Tractors and other agricultural implements
	63.	Machine tools
	64.	Office, domestic and communication equipments
	65.	Other non-electric machinery
	72.	Ships and boats
	73.	Rail equipments
	74.	Motor vehicles
	75.	Motor-cycles and bicycles
	76.	Other transport equipments
	77.	Watches and clocks
	78.	Miscellaneous manufacturing industries
18. Electrical machinery	66.	Electrical motors
	67.	Electrical cables and wires
	68.	Batteries
	69.	Electrical household goods
	70.	Communication electronics equipments
	71.	Other electrical machinery
19. Gas, electricity, water supply and communications	80.	Gas, electricity, water supply
	83.	Communications
20. Other services	81.	Railways

TABLE A.1 (Contd.)

(1)	(2)	(3)
	82.	Other transports
	84.	Trade, storage and housing
	85.	Banking and insurance
	86.	Real estate and owner dwelling
	87.	Education
	88.	Medical health
	89.	Other services.