IV. TRADE POLICIES BY SECTOR

(1) Overview

1. Prior to the initiation of reform, India's agricultural and manufacturing sectors had traditionally been heavily protected from international competition. Strict import licensing requirements were applied to encourage the development of certain industries considered important for India's economic development. Pricing and distribution controls were applied to agriculture to ensure steady and affordable food supplies to the urban areas. Because agricultural prices were kept artificially low, the Government had to provide subsidized inputs, such as fertilizer, water for irrigation, power and credit, to farmers to ensure low-price and steady farm output.

2. The bias that was created against agriculture has been difficult to change; efforts to reform this sector have so far been piecemeal, including abolition of informal controls on the movement of grain during harvest periods, and periodic adjustments in administered prices to keep pace with market prices. In some cases there appears even to have been a reversal of previous policy as in the case of subsidies provided for decontrolled fertilizers. A large proportion of agricultural products (around 55 per cent according to the definition given by the WTO Agreement on Agriculture) remain subject to import licensing, thereby protecting the sector from international competition. Credit controls stipulate that Indian commercial banks lend 18 per cent of their deposit liabilities to the agricultural sector. The agricultural sector is also the single largest recipient of subsidies (including fertilizer and irrigation). Reforms in the sector remain constrained largely because of the Government's commitment to the Public Distribution System, although a more targeted system may allow greater flexibility with regard to policy reform.

3. The manufacturing sector has reacted positively to the economic reforms initiated in 1991. Since 1993, the Government has further reduced the list of industries requiring compulsory industrial licensing, from 18 to nine at present. The number of sectors eligible under automatic approval for up to 51 per cent foreign equity participation has been expanded from 34 in 1993 to 48 in 1997 and approval is automatic for up to 74 per cent foreign holdings of equity in an additional nine sectors. Price control reforms have also continued, although at a slower pace, with reforms since 1993 taking place within sectors such as pharmaceuticals, rather than a reduction of the number of broad sectors subject to price controls. In a number of industries - notably paper and paper products, printing and publishing; wood and wood products; and food, beverages and tobacco - tariff escalation remains significant, as tariffs on raw materials are substantially lower than those on final products. For some important sectors, such as textiles and clothing, and automobiles, the impact of a reduction in tariffs has not been felt because of the continued use of import licensing restrictions. Since its previous Review, India has increased its usage of anti-dumping measures, notably in the chemicals industry.

4. In the services area, a number of transport services - notably ports, power and roads - are becoming critical bottlenecks to trade and growth. In 1996/97 India's 11 major ports handled 227 million tonnes of sea-borne traffic despite having a total capacity of 215 million tonnes. Policy statements explicitly speak of a need for supplementing public efforts since the investment needs are beyond the resources available to the Government. Some efforts have been made to reduce port congestion by allowing the private sector to develop port facilities. Recent projects include a container terminal project at the Jawaharlal Port in Mumbai with P&O, Australia, and a container terminal at the Port of Tuticorin with the Port of Singapore. To facilitate further privatization in this sector, port privatization guidelines were approved by the Cabinet in October 1996. In telecommunications, foreign equity participation is limited to 49 per cent, while the railways remain one of the six sectors reserved for the public sector.

In financial services a process of liberalization has been initiated in the banking sector, while the insurance sector is still monopolized by the Government.

5. However, notwithstanding the recent liberalization of the foreign direct investment regime, formal restrictions on these investments remain an impediment to market access. Moreover, as indicated by the growing gap between approvals and actual foreign investments taking place, the restrictions facing investors in practice may be even more difficult. One explanation may be that although many sectors are formally open to foreign investment, sectoral policies at the State level and the regulatory framework may not be adequate to support the increased approvals of foreign direct investment.

(2) Agriculture and fisheries

6. The agricultural sector, including forestry and fishing, provides direct employment to around 314 million people. The sector accounts for about 29 per cent of GDP, down from about 33 per cent in 1990 and almost 40 per cent in 1980. Around 43 per cent of India's geographical area is used for agricultural cultivation, up by about 36 per cent over the last four decades, while the total yield has risen by around 120 per cent during the same period. The higher yield reflects better inputs and improved farming methods, technology and irrigation. However, Indian agriculture remains mostly rainfed and output, therefore, can vary substantially from year to year. Thus, a 2.2 per cent decline in agricultural production in 1991/92 was followed by growth of over 6 per cent in 1992/93; since then output has grown at an average of 3.5 per cent a year, helped by normal monsoons, and is expected to have been about 3 per cent in 1996/97.[1]

(i) Agriculture

7. India's major food crops are rice and wheat, whose production in 1996/97 is estimated at 81.2 million and 68.7 million tonnes, respectively. Non-cereal crops such as sugar cane and cotton are also important. Sugar cane output is estimated to have been around 276.7 million tonnes in 1996/97 and cotton production is estimated at almost 14.3 million tonnes (Table IV.1).

8. Agricultural products formed some 17 per cent of India's total merchandise exports in 1996/97. The removal of export restrictions, especially on rice in 1994, has been a factor in the growth of cereal exports, which in 1995/96 accounted for almost 27 per cent of total agricultural exports, compared to 12 per cent in 1991/92. The loss of markets in the ex-Soviet Union was one of the causes of an overall decline in exports of traditional products, such as tea and coffee, which slipped from over 25 per cent of total agricultural exports in 1991/92 to 16 per cent by 1995/96. Less traditional products such as horticultural crops, including fruits and vegetables, have come to take a larger portion of India's agricultural exports, although they face storage and transport difficulties.

9. Imports of agricultural products into India are subject, by and large, to quantitative restrictions. According to the authorities 737 lines according to the ITC HS eight-digit classification contain restrictions on at least one agricultural product. Nevertheless agricultural imports have grown in share of total imports, from 4 per cent in 1991/92 to 5 per cent in 1995/96. The largest category is edible oils, which have grown from almost 19 to over 40 per cent of agricultural imports over the last five years (Chart IV.1).

[1]Government of India (1997c); more recent estimates from the Reserve Bank of India, however show growth rates in 1996/97 to be 5 per cent (Reserve Bank of India, 1997).

Table IV.1
Overview of Indian agricultural output, 1991-97
(Million tonnes and per cent)

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97[a]
Rice	74.7 (0.5)[b]	72.9 (-2.4)	80.3 (10.2)	81.8 (1.9)	79.6 (-2.7)	81.2 (2.0)
Wheat	55.7 (1.1)	57.2 (2.7)	59.8 (4.5)	65.8 (10.0)	62.6 (-4.9)	68.7 9.7
Coarse Cereals	26 (-20.5)	36.6 (40.8)	30.8 (15.8)	29.9 (-2.9)	29.6 (-1.0)	34.4 16.2
Pulses	12.0 (-16.1)	12.8 (6.7)	13.3 (3.9)	14.0 (5.3)	13.2 (-5.7)	14.6 10.6
Foodgrains	168.4 (-4.5)	179.5 (6.6)	184.3 (2.7)	191.5 (3.9)	185.0 (-3.4)	199.0 (7.5)
Kharif	91.6 (-7.8)	101.5 (10.8)	100.4 (-1.1)	101 (0.6)	98.2 (-2.8)	105.2 (7.1)
Rabi	76.8 (-0.3)	78 (1.6)	83.9 (7.6)	90.4 (7.7)	86.8 (-3.9)	93.8 (8.1)
Oilseeds	18.6 (0.0)	20.1 (8.1)	21.5 (7.0)	21.3 (-0.9)	22.4 (5.2)	25.2 (12.5)
Sugar cane	254 (5.4)	228 (-10.2)	229.7 (0.7)	275.5 (19.9)	283.0 (2.7)	276.7 (-2.2)
Cotton[c]	9.7 (-1.0)	11.4 (17.5)	10.7 (-6.1)	11.9 (11.2)	13.1 (10.1)	14.3 (9.1)
Jute and mesta[d]	10.3 (12.0)	8.6 (-16.5)	8.4 (-2.3)	9.1 (8.3)	8.9 (-2.2)	11.0 23.6

a Expected.
b Figures in parenthesis refer to per cent change over previous year.
c Million bales of 170 kg. each.
d Million bales of 180 kg. each.

Source: Government of India (1997c), Economic Survey, 1996/97, Ministry of Finance, New Delhi, February; and Reserve Bank of India (1997) Annual Report 1996/97, Mumbai, September.

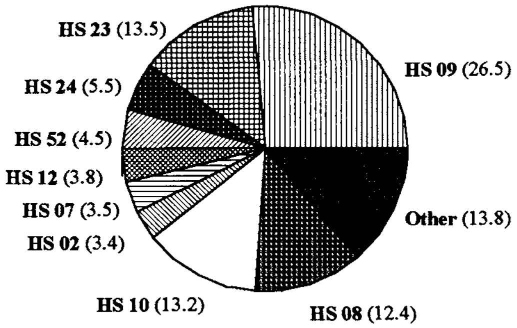
10. The most significant change in the direction of agricultural trade since India's last Trade Policy Review in 1993 is the expansion of trade with Asia. Over the period 1991/92 to 1995/96 the share of imports from other Asian countries went up from 41 to 54 per cent of total agricultural imports, while that of Europe declined from 13 to 6 per cent (Chart IV.2). Similarly, in exports the share of other Asian countries grew from some 45 to 52 per cent and that of Europe dropped from over 41 to 29 per cent.

11. Under the WTO Agreement on Agriculture, India has bound all its agricultural tariffs, and capped its export subsidies and domestic support spending. India's tariff bindings in agriculture range from zero per cent for primary products to 150 per cent for processed products and 300 per cent for edible oils. In the case of a number of cereals, most of which are on the negative list of imports, India has bound rates of zero per cent. India is presently renegotiating its tariff bindings for some of the products it has bound at zero or low rates of duty. The average effective (applied m.f.n.) tariff on India's imports of agricultural products (including forestry and fisheries) is almost 26 per cent, compared to 43 per cent in 1993/94 (Table III.1).

Chart IV.1
Trade in agricultural products, 1991/92 and 1995/96
US$ billion and per cent

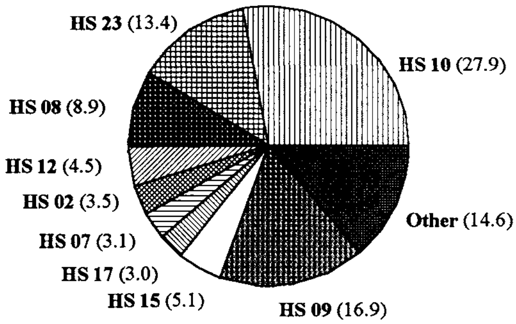
(a) Exports

1991/92



US$2.8 bn

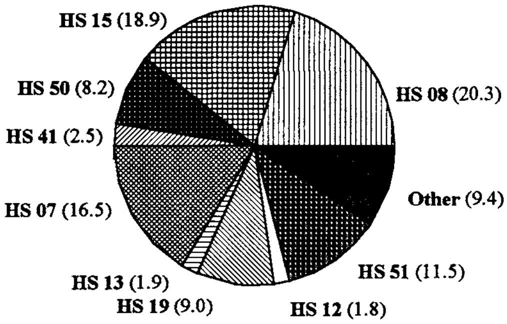
1995/96



US$5.3 bn

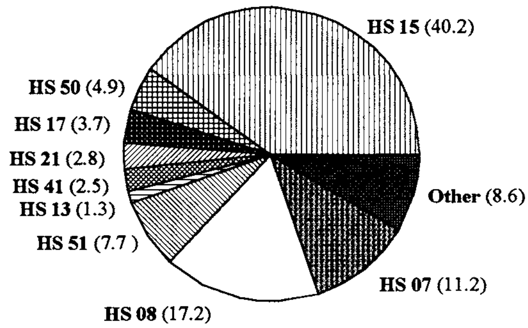
(b) Imports

1991/92



US$0.7 bn

1995/96



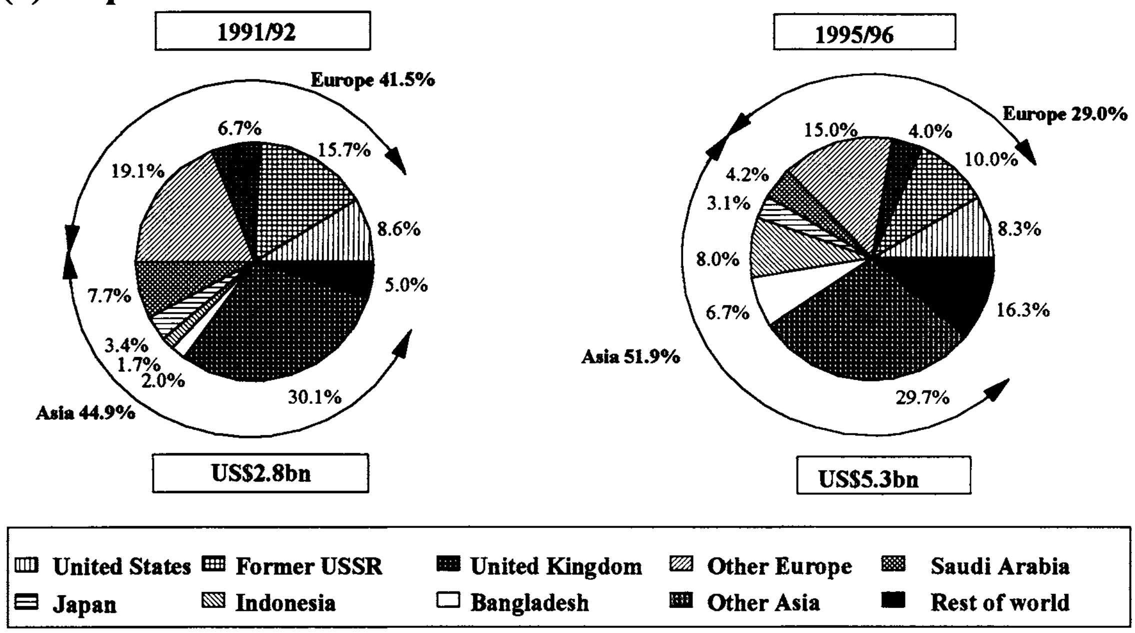
US$1.9 bn

HS 01 - Live animals
HS 02 - Meat and edible meat offal
HS 04 - Dairy prod; birds; eggs; natural honey; edible prod nes
HS 05 - Products of animal origin, nes or included
HS 07 - Edible vegetables and certain roots and tubers
HS 08 - Edible fruit and nuts
HS 09 - Coffee, tea, mate and spices
HS 10 - Cereals
HS 11 - Prod mill indust; malt; starches; inulin; wheat gluten
HS 12 - Oilseeds and oleaginous fruits, misc. grains, etc.
HS 13 - Lac; gums, resins & other vegetable saps & extracts
HS 15 - Animal or vegetable fats and oils (excl. 1504)
HS 17 - Sugars and sugar confectionery
HS 19 - Prep of cereal, flour, starch/milk; pastrycooks prod
HS 23 - Residues and waste from the food industries, prepared animal fodder (excl. 230120)
HS 24 - Tobacco and manufactured tobacco substitutes
HS 41 - Raw hides and skins (incl. 4101, 4102 and 4103 only)
HS 50 - Silk (incl. 5001, 5002 and 5003 only)
HS 51 - Wool, fine/coarse animal hair, horsehair yarn and fabric (incl. 5101, 5102 and 5103 only)
HS 52 - Cotton (incl. 5201, 5202 and 5203 only)

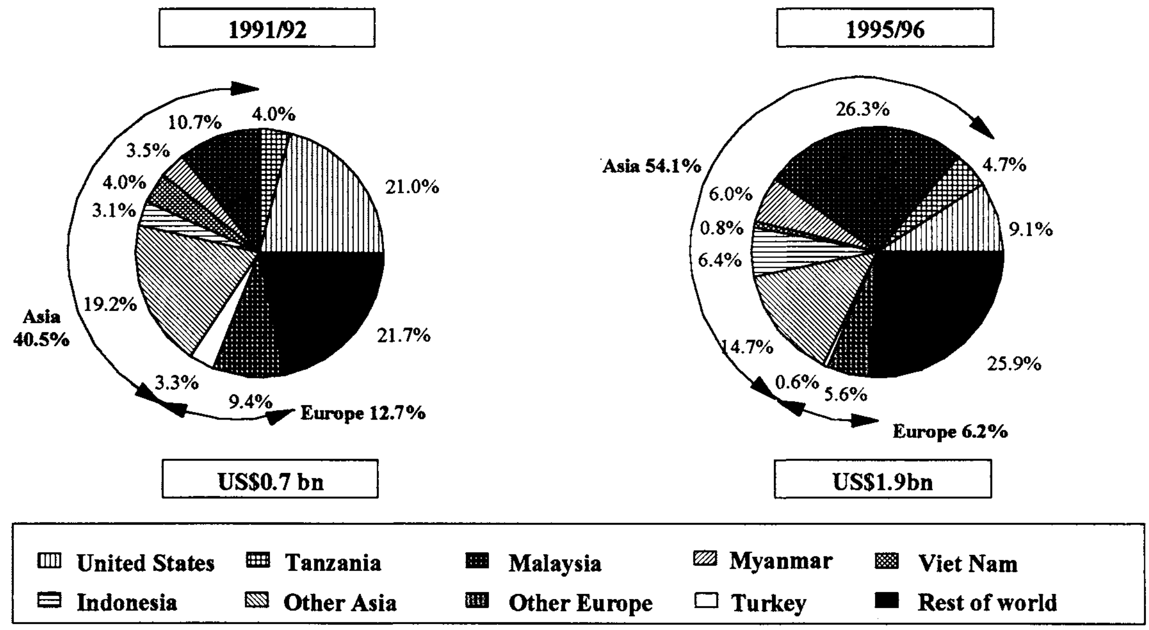
Note: Data based on the definition of agriculture as used in the Uruguay Round.
<u>Source</u>: UNSD, Comtrade database.

Chart IV.2
Trade in agricultural products, by trading partner, 1991/92 and 1995/96
US$ billion and per cent

(a) Exports



(b) Imports



Note: Data based on the definition of agriculture as used in the Uruguay Round.

Source: UNSD, Comtrade database.

12. Direct domestic support for agricultural products in India is provided through price and market support programmes. India presently provides market support for 24 products, including rice, maize, wheat, cotton and sugar cane. In the 1986-88 base period for the determination of commitments under the Agreement on Agriculture, India's aggregate measurement of support (AMS) for each of 19 products was below the 10 per cent de minimis level.[2] Therefore India has no total AMS reduction commitment under the Agreement.[3] However, support to specific products must be kept at less than 10 per cent of the value of production of the products concerned and non-product-specific support cannot exceed 10 per cent of the total value of agricultural production. According to the authorities, because domestic prices are significantly below international prices, India's total (product-specific) AMS is negative (Table IV.2).

Table IV.2
India's aggregate measure of support, 1995/96[a]
(US$ million)

Support	1995/96
Product specific AMS	-29,518.00 (-38.47%)
- Rice	-7,577.00
- Wheat	-9,625.00
- Coarse cereals[b]	-4,530.00
- Pulses[c]	-1,706.00
- Groundnuts	-1,809.00
- Rapeseed and mustard Toria	-1,689.00
- Cotton	-2,106.00
- Soya beans	-192.00
- Tobacco	-181.00
- Jute	-388.00
- Sugar cane	285.00
Non-product specific AMS	5,772.06 (7.52%)
- Fertilizer subsidy	1,864.14
- Credit subsidy	101.95
- Electricity subsidy	2,436.64
- Irrigation subsidy	1,345.41
- Seed subsidy	23.92
Total product and non-product specific AMS	-23,745.94

a Fiscal year 1 April to 31 March.
b Including bajra, jawar, maize and barley.
c Including gram, urad, moong and tur.

Exchange rate: 1995/96 - US$ 1 = Rs 33.447
1986/87 - 1988/89 average - US$ 1 = Rs 13.409

Source: Government of India.

[2]These products are rice, wheat, bajra, jawar, maize, barley, gram, groundnut, rapeseed, toria, cotton, soyabean, urad, moong, tur, tobacco, jute, sugarcane and mustard.

[3]AMS calculations are made in accordance with the provisions of Annex 3 of the Agreement on Agriculture. Since the minimum support price set by the Government for basic commodities is much lower than international prices, this implies that India provides negative subsidies to these products.

13. With respect to direct export subsidies, India provides income tax exemptions for profits from agricultural exports under Section 80 HHC of the Income Tax Act. In addition the authorities state that their "Green Box" measures include buffer stock operations for food security and sales to consumers through the Public Distribution System at relatively low and stable prices, crop insurance schemes, relief measures, and investment aid for dry land farming, reclamation of alkaline soils, and environmental programmes. Under the WTO Agreement on Agriculture, developing countries are not required to reduce indirect support of this latter kind.[4] India is nevertheless required to make regular notifications to the WTO on its domestic AMS and also its direct export subsidies every two years. As of February 1998, India had not yet notified its subsidies for 1995/96.

(ii) The policy framework

(a) Domestic policies

Price Controls

14. With much of the population dependent on the rural economy and a large number of landless labourers and small-scale farmers with little, if any, marketable surplus[5], the Government maintains a price policy for agricultural commodities in order to ensure "a balanced and integrated price structure". At the beginning of each growing season, the Government announces minimum support prices (MSPs) for the main agricultural food crops, including rice, wheat and maize (Table IV.3). These prices are based on recommendations by the Commission for Agricultural Costs and Prices (CACP). The principal implementing agency is the Food Corporation of India (FCI) for cereals and the National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) for pulses and oilseeds. MSPs are also calculated by the CACP for non-food crops, including cotton, jute, sugar cane and tobacco, and are administered by agencies such as the Jute Corporation of India, the Cotton Corporation of India and the NAFED.[6] The FCI for cereals and these latter agencies for the crops under their purview intervene and procure in the market to support the MSPs; the Central Government bears the cost of such intervention. For agricultural crops not covered under the MSP scheme, the Government operates a Market Intervention Scheme (MIS), the cost of which is shared equally between Central and State Governments.

[4]Provided these are not applied in a manner that would circumvent commitments.

[5]Bhuleshkar (1995).

[6]Government of India (1996l).

Table IV.3
Procurement/minimum support prices in India, 1992-98
(Rs per quintal)

Commodity	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98[a]	Percentage increase in 1997/98 over 1996/97
Paddy							
Common	270	310	340	360	380	415	9.2
Fine	280	330	360	375	395	...	...
Super fine	290	350	380	395	415	...	...
Coarse cereals (Jowar, bajra and ragi)	240	260	280	300	320	360	16.1
Maize	245	265	290	310	320	360	12.5
Wheat	330	350	360	380	415	455	9.6
Barley	260	275	285	295	305	350	14.8
Gram	600	640	670	700	740	815	10.1
Arhar	640	700	760	800	840	900	7.1
Moong	640	700	760	800	840	900	7.1
Urad	640	700	760	800	840	900	7.1
Sugar cane[b]	31	34.5	39.2	42.5	45.9	48.5	5.6
Cotton							
F-414/H-777	800	900	1,000	1,150	1,180	1,330	12.7
H-4	950	1,050	1,200	1,350	1,380	1,530	10.9
Groundnut-in-shell	750	800	860	900	920	980	6.5
Jute TD-5 Grade	400	450	470	490	510	570	11.8
Rapeseed/mustard	760	810	830	860	890	940	5.6
Sunflower seed	800	850	900	950	960	1,000	4.2
Soya bean							
Black	475	525	570	600	620	670	8.1
Yellow	525	580	650	680	700	750	7.1
Safflower	720	760	780	800	830	910	9.6
Toria	725	780	800	825	...	...	...
Tobacco (Rs per kg)							
Black soil (F2 Grade)	1,600	1,800	1,850	1,900	1,900	2,050	7.9
Light soil (L2 Grade)	1,750	2,000	2,100	2,150	2,200	2,350	6.8
Copra (calendar year)							
Milling	n.a.	2,150	2,350	2,500	2,500	2,700	8.0
Ball	n.a.	2,350	2,575	2,725	2,725	2,925	7.3
Sesamum	...	...	...	850	870	950	9.2
Nigerseed	...	...	...	700	720	800	11.1

... Not available.
a Provisional.
b Statutory minimum price for a basic recovery of 8.5 per cent.

Source: Government of India (1996l) Economic Survey 1995/96; and Government of India (1997c), Economic Survey 1996/97.

15. During the pre-reform period, increases in MSPs tended to be marginal, in keeping with the general policy to maintain stability in farming incomes. Following a relatively weak agricultural performance in 1991/92, however, market prices rose substantially resulting in the need for an increase in the MSP, in keeping with the new policy to align MSPs more closely with market prices. Thus, the MSP for wheat was raised by 20 per cent and for rice by 17 per cent in 1992/93.[7] Further adjustments were made in 1993/94; periodic changes have been made to MSPs since this time to ensure that farmers receive prices that are more closely aligned with prevailing market rates. Despite this, however, in 1997 the FCI had considerable difficulty in procuring stocks from farmers at MSPs which were below the market rates.[8]

16. In order to ensure that procurement agencies such as the FCI could obtain their annual supplies of foodgrain in an orderly fashion, restrictions used to be maintained on the movement of paddy by State Governments, during the harvest season. In March 1993 the Central Government requested the removal of these controls; with the exception of Andhra Pradesh, West Bengal and Jammu and Kashmir, all other States have removed these restrictions.

Public Distribution

17. A food distribution system, the Public Distribution System (PDS), was established in India just after Independence to ensure that all consumers had access to essential goods. Commodities such as grains, sugar and kerosene are procured and distributed across India each year by the procurement agencies (Box IV.1).[9] Despite extensive coverage across India, the PDS has been unable to reach as many of the poor as thought desirable. The need for a more targeted PDS has been debated for a number of years and the Eighth Plan called for greater effort to reach the relatively poorer sections of the population.[10] In consequence, the Government announced new policy measures for a Targeted PDS (TPDS) in December 1996.[11] The TPDS began in June 1997 and it is estimated that some 320 million people living below the poverty line will be helped, at an expected cost of around Rs 76 billion per year depending upon the level of stocks purchased; this compares to the 1996/97 cost of Rs 51.66 billion under the present PDS.[12] The additional subsidy burden will, however, only become apparent once the amount of additional stocks purchased becomes known.

---

[7]Government of India (1993).

[8]Rice prices were raised by another 14.8 per cent in 1993/94 whereas the increase in wheat prices was more modest at 6.1 per cent. MSP rises in 1996/97 for these crops are estimated as 9.2 per cent for wheat and 5.3 per cent for rice; Government of India (1996l); and Government of India (1997c). In 1997, however, the Government had to raise MSPs for wheat reportedly because of resistance from farmers to sell their grain at the lower rates to the FCI (section (iii)(a)).

[9]The six commodities included in the PDS are: wheat, rice, sugar, edible oils, kerosene and soft coke.

[10]Government of India (1992).

[11]Another recommendation of the Eighth Plan that the PDS should be discontinued for richer segments of the population is not part of the TPDS, implying greater subsidy costs for the Government.

[12]Of this amount, around Rs 20 billion is expected to be utilized to replenish FCI buffer stocks of grain during 1997/98 (Economic Times, 14 March and 3 June 1997).

Box IV.1: The Public Distribution System (PDS)

The goal of the PDS is to ensure an equitable distribution of essential goods, such as rice, wheat, edible oils, sugar and kerosene, through Fair Price Shops (FPSs), each serving a population of about 2,000. The number of FPSs has risen by 7.5 per cent since 1992, to over 430,000 by 1997, of which the number operating in rural areas rose from 300,000 to 350,000.

Food supplies for the PDS are sold monthly by the Central Government to the States from Central stocks. The price charged is the Central Issue Price (CIP), which is fixed by the Central Government each year. Prices charged by the Fair Price Shops may vary from State to State because of additional costs such as storage and transportation. All Indian residents are eligible for essential foods under the PDS.

The Revamped Public Distribution Scheme (RPDS)

In June 1992, the Revamped Public Distribution Scheme (RPDS) started to provide items not included in the PDS, such as tea, soap, pulses and iodized salt, to tribal, hill and arid area populations. The retail price at RPDS shops was generally set to be not more than 25 paise higher than the CIP; foodgrains were priced at Rs 50 per quintal lower than the CIP for the PDS. The RPDS has been discontinued since the introduction of the TPDS.

The Targeted PDS (TPDS)

Targeted PDS was introduced in June 1997 to provide extra assistance to those families living below the poverty line. The States have been requested to identify such families, who will be issued 10 kg. of foodgrain/kg. per month. For 1997/98, the price of wheat and rice for these families will be Rs 2.50 and Rs 3.50 per kg.

The allocation of foodgrain to States is based on their past consumption averages under the PDS. Subsidized foodgrain will also be made available to all beneficiaries under the Employment Assurance Scheme and Jawahar Rozgar Yojana schemes at the rate of 1 kg. per day's work.

For those families whose incomes are above the poverty line, the PDS will be available at the CIP set at Rs 4.50 per kg. of wheat, and Rs 6.50 and Rs 7.50 per kg. respectively, for fine and superfine varieties of rice.

Around 17.5 million tonnes of wheat and rice is expected to go to the TPDS in 1997/98.

Source: Government of India, Economic Survey, various issues.

Subsidies

18. The main subsidies provided to the agricultural sector include those for fertilizer production, irrigation, power and the food subsidy for the PDS. In addition, credit subsidies are provided by way of preferential priority sector lending, some of which takes place at concessional rates of interest. Of the four direct subsidies, the fertilizer and food subsidies are financed by the Central Government and those for irrigation and power are provided by the State Governments.

19. The food subsidy increased by around 37 per cent in real terms between 1990/91 and 1995/96, rising from Rs 21.42 billion to Rs 49.6 billion. While the minimum support and procurement prices for wheat and rice were raised each year, the Government's Central Issue Price (CIP) for the PDS remained unchanged between 1994 and the introduction of TPDS in June 1997. Subsequent increases in MSPs to align them more closely with market prices have added to the cost of the subsidy.

The Government recently allowed the FCI to sell small quantities of rice and wheat for export purposes. Also, the retail issue price for sugar was recently raised, for the first time since 1994, to reduce the food subsidy burden on the Central Government.[13] With the introduction of the TPDS, however, it is not clear whether the increases in CIPs for the PDS and retail prices will be sufficient to reduce the cost of the total food subsidy.

20. The production and import of fertilizers is subsidized through direct subsidies to producers and importers for urea under the Retention Price Scheme and a fertilizer price support programme (Table IV.4). Subsidies on urea, provided by the Central Government, increased from Rs 43.8 billion in 1990/91 to Rs 59 billion in 1996/97. The 1997/98 Budget raises this direct subsidy to Rs 71.9 billion. An additional subsidy is provided for the sale of decontrolled fertilizers to farmers, the cost of which has risen from Rs 16.7 billion in 1996/97 to Rs 20 billion budgeted for 1997/98. The total of these fertilizer subsidies has thus continued to rise despite the removal of subsidies on phosphatic and potassic fertilizers in August 1992 and may rise further as a result of the recent decision to remove price controls on a number of petroleum products; the price of naphtha, an input for urea, has already risen significantly.

[13]It is estimated that the sugar subsidy costs the Central Government more than Rs 6 billion per year. Recent reports indicate that the Finance Ministry is in favour of phasing out the sugar subsidy altogether although this proposal has not been approved by the Cabinet. An alternative that has been suggested by a Committee of Secretaries, examining the cost of supporting the distribution of sugar, is to gradually phase out the subsidy by raising the CIP of sugar (Economic Times, 10 February, 1997).

Table IV.4
Direct and indirect support measures for Indian agriculture

Subsidies	Price Controls	Other
Fertilizers The fertilizer subsidy is based on the difference between the price of the fertilizer to the farmer and the cost of production, minus the distribution margin; in the case of decontrolled phosporic and potassic fertilizers, the subsidy is the difference between the cost of production or import and concessional prices to farmers plus the distribution margin. Government policies consist of three components: (a) direct subsidy for production and import of nitrogenous fertilizers; (b) subsidy for concessional sales of all potassic and phospate based fertilizers; and (c) controlled prices for urea. Additional subsidies are also provided for concessional sales of fertilizers to farmers. **Food** The Central Government's food subsidy, which is administered by the Food Corporation of India (FCI), is the difference between the cost of procuring commodities such as rice, wheat and sugar from farmers and the Central Issue Price (CIP) charged in the Fair Price Shops of the PDS. The intention of the subsidy is to ensure a minimum support price for essential foods, adequate foodstocks to ensure food security, the provision of essential food to all Indians through the PDS and to protect vulnerable sections of society from sudden changes in the price of essential foods. **Power** The power subsidy is measured as the unit cost of supplying electricity to all customers and the tariff charged to agricultural customers, the latter in general being considerably lower than the former. Independent Regulatory Commissions are being planned at the State level to rationalize electricity tariffs. **Irrigation** The irrigation subsidy is calculated as the difference between the operation and maintainance costs, annual depreciation and interest costs of the irrigation infrastructure and the water charges recovered.	Procurement/minimum support prices (MSPs) are provided to farmers to ensure that they receive remunerative prices for their output and to protect them from fluctuations in market prices of their crops. The prices are announced at the beginning of each growing season. MSPs are calculated for 24 important crops. MSPs traditionally were maintained at a level lower than market prices, to ensure low costs of food procurement. Reforms initiated in 1991, however, have raised these prices to levels substantially closer to marked rates. For agricultural crops not covered by MSPs a Market Intervention Scheme (MIS) is operated by the Government to provide support to farmers. Reform in the support scheme has been difficult due to the Government's commitment to the Public Distribution System. Central Issue Prices (CIPs) for goods available through the PDS are fixed by the Central Government from time to time, to ensure access by all consumers to basic food supplies at relatively low and stable prices. Minimum export prices were lifted in 1994 for rice, durum wheat, coarse grains and vegetable oils.	Priority sector lending targets for agriculture require that 18 per cent of net bank credit has to be made to the agricultural sector. Credit to the agricultural sector is provided by a large network of commercial, regional and rural banks and cooperatives; interest rates for regional and rural bank and cooperative bank lending have been deregulated.[a] In the case of commercial banks, loans of below Rs 25,000 carry an annual interest rate of 12 per cent, whereas loans between Rs 25,000 and Rs 200,000 must be made at an interest rate of 13.5 per year. Most of the funding is of a short-term nature; in 1996/97 advances by cooperatives accounted for 55 per cent of the total, followed by commercial banks at 39 per cent and regional and rural banks with 6 per cent. Medium term credit for investment purposes is provided mainly by commercial banks. There have been widespread defaults on loans, threatening the economic viability of lending institutions, prompting recent reforms; an improvement in the recovery of loans has been recorded as a result.

a Cooperate banks are, in addition, subject to a minimum lending requirement of 12 per cent per year.

Source: Based on information provided by the authorities; and World Bank (1996b) India Country Economic Memorandum, Five Years of Stabilization and Reform: The Challenges Ahead.

21. The Government also provides a price subsidy for indigenously produced urea under the Retention Price-cum-Subsidy Scheme (RPS); until recently, this subsidy applied to all fertilizers.[14] On the basis of the calculation of this subsidy, the Government sets an issue price for fertilizers, normally once every three years. The price of fertilizer remained almost unchanged for farmers between July 1981 and July 1991; subsequently it was raised by 30 per cent. The prices of phosphate and potassium based fertilizers were freed in August 1992.[15] Today, urea, which constitutes around 60 per cent of total fertilizer consumption in India, is the only fertilizer under statutory price control. Its price was raised by the Government, by 30 per cent in August 1991, reduced by 10 per cent in August 1992 and then raised by another 20 per cent in June 1994; however the price of urea remains one of the lowest in the region. Freight subsidy costs for transporting urea are also borne by the Central Government.[16] Urea imports were canalized through the Metals and Minerals Trading Corporation (MMTC) until October 1996. Since then the State Trading Corporation (STC) and the Indian Potash Limited (IL) are also authorized to import urea.

22. Subsidies for fertilizer production have been criticized as not "tangibly progressive" in a recent White Paper submitted to Parliament by the Finance Ministry. Not only has the emphasis on the subsidization of urea resulted in an unsustainable mix of fertilizer used by farmers, but almost half of the total subsidy reportedly goes to fertilizer producers rather than farmers.[17] The Government's response has been to introduce special price concessions on decontrolled phosphatic and potassic fertilizers to encourage the balanced use of plant nutrients.

23. In order to address some of these issues, a High Powered Fertilizer Pricing Policy Review Committee has been formed. Some of the issues it will examine include the present system of urea subsidization and the pricing of controlled and decontrolled fertilizers; the goal of the Committee will be to suggest an alternative broad-based scientific and transparent methodology with a view to achieving an agronomically desirable use of fertilizers while keeping the overall fertilizer subsidy at a reasonable level.

24. Irrigation and power subsidies, provided by the States, amounted to around 56 per cent of all agriculture related subsidies in 1994/95.[18] State Electricity Boards make annual losses as a result of subsidized power; in 1995/96 this loss was Rs 132 billion. The growth in total farming area under irrigation has increased from 62.67 million hectares in 1990/91 to approximately 70.64 million hectares by 1996/97[19], primarily through the development of canal irrigation systems and new dam construction. The 1997/98 Budget proposed additional funding through an Accelerated Irrigation Benefit Programme

---

[14]The RPS is measured as the difference between the normative cost of production of the unit as determined by the Government plus a 12 per cent post-tax return on net worth and the notified sale prices minus the distribution margin (Gulati and Sharma, 1994). For imported fertilizers, the difference between the import and sale prices is borne by the Government.

[15]The Government has, however, introduced a price subsidy to encourage the use of these fertilizers.

[16]The Department of Agriculture and Cooperation makes allocations to State Governments to cover the cost of the freight subsidy.

[17]Economic Times, 7 May, 1997; Times of India, 7 May 1997.

[18]World Bank (1995b).

[19]The irrigation potential increased from 78.74 million hectares at the end of 1990/91 to 91.07 million hectares (provisional) at the end of 1996/97.

for large and medium irrigation and multi-purpose projects. The programme will provide loan assistance to State Governments for projects at an advanced stage but which the State Governments are unable to complete. Loan assistance of Rs 5 billion was provided by the Central Government in 1996/97 and an additional Rs 13 billion has been budgeted for 1997/98.

25. Priority sector lending targets require that 18 per cent of net Indian bank lending has to be made to the agricultural sector each year (Chapter III(4)(i)). Total credit to the agricultural sector as part of this lending requirement increased from Rs 112 billion in 1991/92 to Rs 287 billion in 1996/97 and estimated to be Rs 343 billion in 1997/98.

26. Lending to the sector is also provided by a large network of rural and cooperative banks across India. The National Bank for Agriculture and Rural Development (NABARD), established with the primary objective of providing credit for the promotion of agriculture, small-scale industries and other village crafts and activities is the main lending agency providing refinance assistance to commercial and cooperative banks. Total refinance credit provided by NABARD during the year ending March 1995 was Rs 147 billion, and Rs 161 billion during the year ending March 1996. Widespread defaults on agricultural loans, however, led to reforms including a reduction in the targeted group for lending by the regional rural banks; greater freedom for banks to rationalize their branches; and allowing urban cooperative banks to lend to rural borrowers in contiguous areas. In addition, a new Rural Infrastructure Development Fund (RIDF) was established within the NABARD in April 1995, with an initial funding of Rs 20 billion for 1995/96. Around Rs 25 billion each were provided under RIDF II in 1996/97 and RIDF III in 1997/98.

(b) Export policies

27. Before the reforms of 1991, exports of most agricultural products were on the restricted list of exports or were canalized and subject to minimum export prices. This was especially true of products considered essential, notably cereals, including wheat and rice, oilseeds, sugar, and important industrial inputs such as raw cotton. For those crops regarded as export crops, such as tea, coffee, spices and jute, commodity boards were established to develop and market the products. More recently, agro-industrial exports have been growing, although no specific incentives are provided for exports.

28. As part of the reform process some liberalization has taken place, with rice being moved onto the list of freely exportable goods[20], and minimum export prices (MEPs) on a number of crops including durum wheat and rice, removed in 1994, although the Government may re-impose both quantiative ceilings and MEPs when it deems necessary. Subject to these provisions, the export trade in durum wheat was opened to the private sector in 1993/94 (Chapter III(3)(iv)).[21] Wheat exports in 1996/97 were restricted under quantitative ceilings of 500,000 tonnes a year in the case of durum wheat and 2.5 million tonnes a year for non-durum wheat; in December 1997 the Government allowed the export of 0.5 million tonnes of wheat products; similar constraints apply to exports of pulses and to coarse grains such as jowar[22], bajra, ragi, maize and barley, with limits of 50,000 tonnes a year.[23] Raw cotton

[20]Initially, long grain Basmati rice was placed on the list of freely exportable goods in the late 1980s. However, since 1993 other varieties of rice have also been placed on this list. In October 1994 all rice varieties were placed on the free list and the minimum export price removed from all rice varieties.

[21]Rice millers exporting non-Basmati rice are still subject to a levy.

[22]The export of hybrid jowar is allowed freely.

exports are allowed subject to a certificate obtained from the Textile Commissioner. Sugar exports are restricted; the export of pulses in packs up to to 5 kg. has been free since December 1997, while other pulses exports are subject to licensing. The Government reserves the right to impose export bans on crops in the case of annual shortfalls, as recently for wheat exports (section (iii)(a)).

(c) Import policies

29. Import restrictions in Indian agriculture are extensive although some liberalization has occurred in the last few years including in 1997. Pre-reform policies exerted tight control on the quantity and kinds of goods that could be imported. Many agricultural products, especially those classified as essential, were subject to quantitative restrictions and their import was only allowed in the case of a shortfall in domestic production. Since 1993/94 effective tariffs in agriculture (ISIC 111) have declined from a simple average of 52 per cent to 29 per cent in 1997/98 (Table AIV.1). India also bound its agricultural tariffs in the Uruguay Round, at ceiling levels ranging up to 300 per cent. The phase-out programmes agreed by India with its major trading partners (except the United States) also cover imports of agricultural products. A large percentage of cereals, which form around 40 per cent of Indian agricultural output, remain canalized through the FCI, as do some edible oils and cloves, cinnamon and cassia.[24]

(iii) Trade policies by major product

(a) Cereals

30. India's market for cereals has been kept tightly controlled, for food security reasons, according to the authorities. The inter-State movement of some cereals during harvest periods is still restricted in some States. Price controls have sought to ensure a basic return to the farmer but have also been maintained to keep the cost of the Government's food subsidy programme low. In recent years, however, the Government has faced pressure to raise minimum support prices in the face of difficulties in procuring grain, especially wheat, thus potentially increasing Government spending for the food subsidy.[25]

31. Imports of cereal products, except feed-grade maize, are canalized through the Food Corporation of India (FCI), which procures and markets cereals and other essential items for the PDS. Imports take place whenever required to replenish stocks; for example the Government imported 0.5 million tonnes of wheat and 56,000 tonnes of rice in 1993/94, 0.80 million tonnes of wheat in 1996/97 and an expected 1.9 million tonnes of wheat in 1997/98. There has been a faster pace of reform in exports. Thus, Basmati, or long-grain, high quality rice has been exportable since the 1980s, subject initially

[23](...continued)
[23]The export of processed pulses from the export-processing zones or the duty exemption scheme is allowed freely.

[24]Imports of common and coarse varieties of rice with 50 per cent or more "brokens" were freed as of 27 May 1997; the import of wheat by other flour mills on an actual-user basis and on condition that the flour produced is sold domestically is permitted following registration with Agriculture and Processed Food Products Exports Development Authority.

[25]Minimum support prices for wheat were recently raised by the Government from Rs 415 per quintal to Rs 475 per quintal, reportedly because of resistance from farmers in the major wheat producing States to sell their grain at the lower prices. (Economic Times, 5 April 1997) However, this price still appears to be below market rates and farmers in several States are reported to have refused to sell their grain to procurement agencies (Economic Times, 8 April 1997).

to a minimum export price (MEP). In January 1993, further liberalization brought other long-grain varieties of rice onto the list of freely exportable goods, subject to MEPs. In October 1994, all controls on rice were lifted.[26] Despite these changes, however, there remain a number of bottlenecks, namely in the internal movement of rice, storage and transport, which continue to restrict trade (Table IV.5).[27] Wheat exports before 1991 were restricted through MEPs and export quotas. In 1993/94, the private sector was allowed to export durum wheat, comprising around 15 per cent of total wheat production, subject to quantitative ceilings and MEPs. Both these quantitative ceilings and MEPs were removed in October 1994, although the Government can reimpose them when it deems it necessary. Significant shortfalls in Central stocks of wheat prompted the Government in December 1996 to ban wheat exports indefinitely although 0.5 million tonnes of wheat products were allowed to be exported in December 1997.

Table IV.5
Policies in main agricultural sectors

Sector	Main characteristics	Policy instruments	Policy constraints
Cereals			
Rice	One of two main staple crops. Largest cereal crop. India is mostly self-sufficient in rice production, exporting limited quantities, especially of high-quality Basmati rice in recent years. Rice imports are minimal.	Minimum support prices (MSPs) for farmers. Imports canalized through the FCI which also procures grain for the PDS; some varieties of rice imported without restrictions since May 1997. Restrictions on procurement prices and movement of crops for this purpose although some reforms have been undertaken on latter.	Food security issues which have been reiterated by successive Governments.
Wheat	Staple crop of growing importance and may overtake rice production. Mainly produced in northern States of Punjab, Haryana and Uttar Pradesh. Some exports in recent years. Imports in 1996/97 valued at Rs 4 billion.	MSPs for farmers and procurement for the PDS. Wheat and wheat flour imports canalized through FCI; some free imports of wheat by roller flow mills allowed recently. Minimum export prices and export quotas removed in 1994 although exports banned recently because of shortfalls in Central stocks.	Food security. MSPs and procurement prices that are below market rates, raising problems recently in procuring grain from farmers.
Commercial crops			
Sugar cane	World's second largest producer of sugar cane; largest consumer of sugar.	Government announces statutory minimum prices (SMPs) for farmers. Procurement prices for 40 per cent of annual output which must be sold on the PDS. Rest can be sold on market. Sugar imports recently de-licensed. Exports no longer canalized and Sugar Export Promotion Act repealed allowing free export of sugar in theory. However, restrictions maintained on amount of sugar that can be exported.	Licensing requirements for establishing sugar refineries which have recently been eased. Procurement for PDS restricts free market sales of sugar both domestically and for export.

Table IV.5 (cont'd)

[26]Pursell (1996). However, the levy on exports of non-Basmati rice exports was reimposed in the face of shortfalls in domestic wheat production in 1996.

[27]Government of India (1997c).

Sector	Main characteristics	Policy instruments	Policy constraints
Edible oils	Nine major oilseeds. Production meets nearly entire domestic requirements.	MSP/procurement prices for all oilseeds except linseed and castor oil. Large Central and State Government subsidies for improving productivity. Imports of coconut oil, palm kernel oil, RBD palm oil and RBD palm stearin oil canalized through the Hindustan Vegetable Oils Corp. Ltd. Exports of most edible oils licensed and exports of nigerseeds canalized.	Self-sufficiency goals. Demand growing at a more rapid rate than output, potentially requiring larger imports in the future.
Cotton and jute	Major source of raw material for the textile and clothing industry. Cotton production rose by 10 per cent in 1995/96.	MSPs for farmers. Cotton exports restricted through annual quotas because of need to supply domestic textile industry. Imports free. No export restrictions in place for jute; imports of jute are no longer subject to canalisation and face an import duty of zero.	Yarn requirements of the Indian textiles and clothing industry. Likely to become more constraining because of lifting of import controls on textiles products.
Floriculture and horticulture	Rapidly growing sector with horticultural products accounting for almost 25 per cent of total agricultural exports.	Financial assistance of Rs 25 million for investment in production infrastructure given during 8th Plan.	
Other crops (tea, coffee, spices)	Tea largest of the traditional exports. Domestic demand has been rising more rapidly than production, placing pressure on exports.	Internal and external trade of tea through the Tea Board of India. Trade in coffee deregulated in 1996 and it can now be freely traded. Decaffeinated and roasted coffee placed on the list of freely exportable goods. Imports of cloves, cinammon and cassia canalized through Spices Board of India; moved to the SIL list in April 1997.	Domestic demand for tea growing more rapidly than production. Production of important spices such as cardamon are declining.

Source: WTO Secretariat, based on information provided by the Indian authorities.

(b) Sugar cane and Sugar

32. India is the world's second largest producer of sugar cane with production estimated at 276.7 million tonnes in 1996/97, slightly lower than the 283 million tonnes produced in 1995/96. Sugar production was an estimated 16.4 million tonnes in 1995/96, and provisionally 12.8 million in 1996/97.[28] The sugar industry remains subject to compulsory industrial licensing and a dual pricing-control system; 40 per cent of mill output is sold to government agencies such as the FCI under a fixed price system for the Public Distribution System subject to some exemptions under an incentive scheme, while the rest can be sold at market prices or exported.

33. Domestically, the Government announces Statutory Minimum Prices (SMPs)[29] at which sugar cane can be sold to the sugar factories (producers of raw sugar) by farmers. State Governments can include local costs such as taxes and transport in their final calculation of State Advised Prices (SAPs) for sugar cane which are higher than SMPs; as a result there is considerable variation between States on the final price paid by the refineries to farmers.[30]

[28]The sugar year is measured from October to September.

[29]SMPs are distinct from minimum support prices in that they relate only to minimum prices to be paid by sugar factories for purchasing sugar cane from farmers in their command areas.

[30]Government of India (1996p).

34. Imports of sugar were subject to import duties of 85 per cent until 1993/94. In March 1994, sugar imports were de-licensed and import duties reduced to zero. Imports have been small, falling from 1.96 million tonnes in 1994/95, to 0.2 million tonnes in 1995/96 and negligible amounts in 1996/97. Indian exports of sugar were decanalized in January 1997, implying that sugar can now be exported by private individuals. Exports, however, remain subject to quantitative restrictions, as are sales in the domestic market, which are subject to monthly releases under a statutory distribution control mechanism. Exports of sugar can only take place from the non-PDS free sale quota, which comprises 60 per cent of total production. Exporters, moreover, are required to register with the Agricultural and Processed Food Products Exports Development Authority (APEDA), enabling the Directorate General of Foreign Trade to ensure that the quantity of sugar being exported each year remains within the quantitative ceilings notified annually.

35. Despite the decanalization of sugar exports and the repeal of the Sugar Export Promotion Act, private exports have not increased greatly, essentially for two reasons. First, as the Government still maintains a degree of control over the total amount of sugar that can be exported each year, through the quota system and the PDS allocation, the stocks available for export have been relatively small. Second, Indian retail prices of sugar tend to be higher than international market prices, thus making exports unviable.[31] As a result, exports of sugar have grown fairly slowly from 0.3 million tonnes in 1981/82 to 0.9 million tonnes in 1995/96.

(c) Oilseeds and edible oils

36. India produces nine oilseeds of which the most significant are groundnuts and rapeseed/mustard, accounting jointly for 62 per cent of total oilseed production in 1996/97. In response to government efforts to increase production, oilseed output has grown from 18.61 million tonnes in 1990/91 to an estimated 25.16 million tonnes in 1996/97. The total land area under oilseed cultivation increased from 24.15 million hectares to 26.79 million hectares during the same period. Imports declined from 1.97 million in 1987/88, to 0.35 million tonnes in 1994/95 rising subsequently to 1.29 million tonnes in 1996/97 as a result of growing demand and a reduction in tariffs and non-tariff restrictions.

37. Government policy in the sector has emphasized self-sufficiency in the production of edible oils. A wide variety of programmes, including the Technology Mission on Oilseeds and the Oilseed Production Programme (OPP), cost some Rs 1.2 billion in 1996/97, which was funded both by Central and State Governments.

38. Exports of vegetable oils are only permitted under licence issued by the Directorate General of Foreign Trade; all edible oil exports (except groundnut oil) in packs of up to 5 kg. are unrestricted. Controls on some oilseeds, notably sunflower and rape/mustard seeds were removed in 1995 although the Export Import Policy 1997/98-2001/02 reimposed export restrictions on all oilseeds.[32] Exports of nigerseed remain canalized through the National Dairy Development Board (NDDB), Madhya Pradesh State Cooperative Oilseed Grower's Federation Limited, NAFED, and the Tribal Cooperative Marketing

[31]At the time when sugar exports were canalized, exports were taking place at heavy losses which were funded by the sugar industry under the provisions of the Sugar Export Promotion Act. (Economic Times, 6 May, 1997).

[32]The Government subsequently allowed exports of HPS-groundnut and sesame seed not subject to any restraints in 1997/98, while maintaining restrictions on other oilseeds.

Federation of India (TRIFED). There are also restrictions on imports of oilseeds, which remain canalized through the State Trading Corporation (STC) and the Hindustan Vegetable Oils Corporation Limited. Restrictions on edible oil imports were first partially lifted in April 1994 when edible vegetable palmolein was decanalized and moved to the list of freely importable goods at 65 per cent import duty. In March 1995, all edible oils except coconut oil, palm kernel oil, RBD palm oil and RBD pal stearin oil were moved to the list of freely importable goods. Import duties on all edible oils except for the few mentioned above are now subject to 25 per cent import duty. Average import tariffs on oilseeds range up to 35 per cent, down from 85 per cent since India's previous Review. India's tariff bindings on oilseeds are a uniform 150 per cent; bindings for edible oils range to 300 per cent.

(d) Cotton

39. Exports of cotton have traditionally have been controlled so as to ensure an adequate supply to the local textile and clothing sector, including handloom weavers. Annual export quotas are announced by the Commissioner of Textiles. The level of these quotas varies, depending on the size of the crop and demand from the textile industry. Around 0.5 million bales of cotton are usually released at the beginning of the cotton season with further quotas being released once final estimates of production are confirmed. The Ministry of Agriculture announces MSPs for two basic varieties of cotton, based on recommendations made by the Commission for Agricultural Costs and Prices. The MSPs for other cotton varieties are fixed and announced by the Textile Commissioner based on MSPs for the two basic varieties and price differentials with other varieties. Procurement activities of the Cotton Corporation of India ensure that cotton prices do not fall below their MSPs.

40. Imports of cotton were decanalized in 1991 and can now be imported freely. The tariff on raw cotton is zero per cent, compared to 45 per cent in 1992/93. Imports of cotton, however, remain minimal, falling from 0.58 million bales of 170 kg. in 1994/95 to 0.05 million in 1996/97.

(iv) Fisheries

41. India is the world's seventh largest producer of fish products, accounting for about 5 per cent of world output. Fishing and production of processed products takes place mainly in the small-scale sector. Total marine and inland fish production grew from 3.84 million tonnes in 1990/91 to 5.28 million tonnes in 1996/97.[33] Around 55 per cent of this output is from marine fishing, mostly (up to 80 per cent) from inshore fishing. The largest growth areas include freshwater and saltwater aquaculture, especially of prawns and other shellfish.

42. Exports of fish and fish products grew from Rs 13.74 billion in 1991/92 to Rs 35 billion in 1995/96, an average growth of around 38 per cent a year (Table IV.6).

Table IV.6
Overview of Indian fisheries production, 1991-97
(Thousand tonnes)

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97
Marine	2,447	2,576	2,649	2,692	2,707	2,873
Inland	1,710	1,789	1,995	2,027	2,242	2,355
Total	4,157	4,365	4,644	4,789	4,949	5,228
Total exports	171.8	208.6	244	307.3	296.2	378.2
As per cent of total production	4.1	4.8	5.3	6.4	6.0	7.2

Source: Information provided by the Indian authorities.

[33]Government of India (1997c).

43. All marine and inland fish are on the negative list of imports. As part of the trade reforms, however, a number of crustacean products were moved to the SIL and freely importable lists in 1997.[34] Tariffs on imports in the fisheries sector average 15 per cent within this category, up from an average of 8 per cent at the time of India's previous Review. The tariff range has declined from 0 to 85 per cent in 1993/94 to 0 to 45 per cent in 1997/98 (Table AIV.1).[35] Export policies are relatively liberal, with few licensing restrictions on exports of fish or fish products.[36]

44. Primary responsibility for the development of the fisheries sector lies with the State Governments; the Central Government provides assistance to the States and Union Territories in this respect. Although marine output accounts for the major portion of India's production, an increasing emphasis is being placed on developing inland fisheries. Government assistance is provided through the Fish Farmers Development Agencies (FFDAs), and Brackish Water Fish Farmers' Development Agencies (BFDAs) which subsidize fish and shellfish aquaculture. The agencies also provide training and technical support. The total subsidy provided through the FFDAs has increased steadily from Rs 12,000 per hectare in 1992/93 to Rs 20,000 per hectare in 1996/97. Total Central Government expenditure on inland fishing development has also increased, from Rs 169.9 million in 1992/93 to a projected Rs 218.6 million in 1997/98.

45. Although most of India's fish production is by the small-scale sector, the Deep Sea Fishing Policy announced in 1991 permits Indian companies to establish joint ventures with foreign companies (with foreign equity up to 51 per cent) and lease and operate foreign fishing vessels for short periods of time for test fishing. In the face of opposition from Indian fishing communities, however, the Government appointed a committee to review the Policy. Based on the recommendations of the committee, the policy has been made more restrictive although projects already approved will continue to receive funding. An updated Fishing Policy for deep sea fishing is presently being formulated.

(3) Food products[37]

46. The food products industry broadly comprises primary food processors, the unorganized and cottage industries, and organized food industries. The primary food processing industry includes rice hullers, flour, lentil and oil millers. The unorganized and cottage sector includes bakeries, pasta units, traditional food units, fruit, vegetable and spices processing units, and a number of dehydration and processing units in rural and unorganized areas. The organized food industry, the largest group, includes

[34]As part of the Government's notification to the WTO Committee on Balance-of-Payments Restrictrions in May 1997, at the HS six-digit level, eight items from HS 306 were freed while three were moved to the SIL list, and four items from HS 307 were freed while five were moved to the SIL list (WT/BOP/N/24, May 1997).

[35]All fish and crustacean products covered by Chapter III of the Customs Tariff were made exempt from import duties in 1993/94; the exemption has since been removed.

[36]Exports restricted through licensing include bêche-de-mer and silver pomfrets below certain sizes and some shells and seaweeds.

[37]This section mainly discusses the food manufacturing sector (ISIC categories 311-312). Reference is also made to beverage industries (ISIC category 313) and tobacco manufactures (ISIC category 314), although data are not available for these sectors.

a range of processed food producers such as meat and fish processing units, solvent extraction units for edible oils, chocolate and confectionary manufacturing units, wheat processing and the manufacture of biscuits, manufacturers of dairy products and beverages, as well as horticultural products such as canned and processed fruit and vegetables. Processed fruit and vegetables have been the fastest growing element of the horticulture industry having grown at an average rate of 22 per cent between 1992 and 1996 (Table IV.7). The share of food product exports in India's total exports between 1992 and 1994 has been around 13 per cent.

Table IV.7
Evolution of Indian food products, 1991-97
(Per cent change and US$ million)

Production	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97[a]
			Annual percentage change			
Processed fruits and vegetables	28.57	30.28	19.19	20.93	25.74	12.94
Milk products	-1.17	8.63	4.06	10.17	4.02	5.28
Fish products[b]	4.63	8.33	5.04	6.18	3.02	3.76
Exports			US$ million[c]			
Processed fruits and vegetables	78.4	91.2	107.0	130.2	140.5	...
Milk products	4.5	2.9	3.7	12.8	8.0	...
Fish products[b]	556.4	613.0	798.1	1,138.8	1,037.1	...
Exports of food products as percent of total exports	3.6	3.4	4.1	4.9	3.7	...

... Not available.

a Projected.
b Financial year.
c WTO Secretariat, based on data provided by the Indian authorities.

Source: Government of India (1997c), Economic Survey 1997/98; and WTO Secretariat.

47. Liberalization of parts of the food products sector began in 1990, when the 1990/91 Budget eliminated the Central excise duty on fruit and vegetable products. Since then import tariffs on most agro-processing equipment and spare parts have been reduced to 2-5 per cent, and no licensing is required for establishing food processing units, except for those items on the compulsory licensing list, such as the brewing and distillation of alcoholic drinks, and those reserved for the small-scale sector. Excise duties were reduced in the 1997/98 budget, from 10 per cent to 8 per cent for malt, biscuits, waffles and wafers; from 20 per cent to 18 per cent for cocoa powder, cocoa butter, chocolates, chewing gum, and malt extracts; from 15 per cent to 13 per cent for pasta products and from 40 per cent to 30 per cent for air conditioning machines. In addition, excise duties on milking machines and dairying machines have been removed, while the value of imports of agricultural equipment that can be imported at zero rates of duty was lowered from Rs 200 million to Rs 50 million.

48. India's effective average m.f.n. tariffs in 1997/98 on imports of food products vary from between 29 and 39 per cent for food manufactures, 134 per cent for beverages and 45 per cent for tobacco products.[38] Tariff dispersion by stage of processing for food products is considerable; rates range to 53.5 per cent for processed food items and to 71 per cent on some beverages. In addition, a number of products such as alcoholic beverage concentrates, wines, cereals and processed fruit and vegetables are on the restricted list of imports. Exports of tallow, animal fats and oils are on the prohibited export list, while coconut seedlings, milk, processed pulses and vegetable oils, when exported in bulk, are on the restricted list of exports.

[38]ISIC categories 311-312 for food manufactures, 313 for beverages and 314 for tobacco.

49. Equity participation for foreign direct investment (FDI) into the food products sector is normally limited to 51 per cent. Exemptions to this limit are that: non-resident Indians may hold up to 100 per cent of equities; foreigners may hold more than 51 per cent with the approval of the Foreign Investment Promotion Board (Chapter II(7)(i)(b)); FDI is limited to 24 per cent equity participation in the small-scale sector of food processing; and in the case of malted food, beer and alcoholic beverages, FIPB approval is required for all levels of investment. Subject to the limits, FDI into food processing is generally eligible for automatic approval.[39] Since the sector was opened to foreign investment in 1997, the Government has approved FDI proposals to a value of around US$ 2.2 billion.

50. Policies relating to the food products sector are implemented by the Ministry of Food Processing. The Ministry oversees a number of industries including fruit and vegetable processing, foodgrain milling, dairy products, processed poultry, eggs and meat, fish processing, bread, oilseeds, biscuits and confectionary, beer and other non-molasses-based alcoholic drinks, soft drinks and specialized packaging for food processing industries. It also provides technical assistance, supports infrastructure development and technology upgrading, and administers quality standards.

51. Despite an impressive growth rate in recent years, the sector faces a number of infrastructural constraints. It is estimated that as much as 25 to 30 per cent of India's production of fruit and vegetables is wasted every year because of inadequate storage, handling and marketing infrastructure. Commercial processing of fruit and vegetables also remains low, at about 1.8 per cent of India's total annual production of fruit and vegetables.

(4) Mining and Petroleum Products

(i) Mining

52. Since India's last Trade Policy Review, the mining of 13 minerals has become subject to automatic approval for equity participation of up to 50 per cent by foreign capital; these include iron, manganese, bauxite, copper, lead and zinc. This change was announced in January 1997. Equity participation up to 74 per cent is permissible in services for the mining industry, except for precious metals and minerals and in certain metallurgical industries. Foreign equity participation in the mining of these minerals of above 50 per cent and all foreign equity participation in precious metals, including gold, silver and diamonds, is considered on a case-by-case basis by the Foreign Investment Promotion Board. Airborne Surveys may now be carried out by a single company up to 10,000 square kilometres.[40] In addition, the Coal Mines (Nationalization) Act of 1973 was amended in 1993, allowing operation of coal mines by private companies involved in the manufacture of iron, steel, washing of coal and power generation.[41]

53. Trade policy reforms have reduced the average tariff for non-ferrous ores from 46 per cent in 1993/94 to 10 per cent in 1997/98 and for iron ore from 20 per cent in 1993/94 to 10 per cent in 1997/98. Coal has been moved to the freely importable list and import tariffs have been reduced from 65 per cent in 1993/94, to 13 per cent in 1997/98 (including the 5 per cent surcharge)

---

[39] Automatic approval for FDI is restricted in the case of some sectors such as milk and dairy products. Dividend balancing is required for FDI into some 22 industries (Table AII.1).

[40] Limits of 5,000 square kilometres per block apply. Permission granted for such exploration is accompanied by specific physical and financial committments that must be met.

[41] A number of companies now prefer to use the option of generating their own power because of the severe power shortages that they face (Business India, May 5-18, 1997).

(Table AIV.1). In the hydrocarbon sector efforts have been made to increase participation by the private sector.

(ii) Petroleum products

54. Crude oil production for 1996/97 was 32.9 million tonnes, compared to 35.17 million tonnes in the previous year. Oil and Natural Gas Corporation Limited (ONGC) produced around 87 per cent of the total, with the rest produced by Oil India Limited (OIL) and other private companies. Imports of petroleum products have been declining as a share of total imports, although at almost 21 per cent in 1996/97, this share remains high. India's m.f.n. tariff rates for crude petroleum and gas have declined from 80 per cent in 1993/94 to 27 per cent in 1997/98 including a special duty of 2 per cent.

55. Consumption of petroleum products grew at an average rate of 6 per cent between 1995/96 and 1996/97. The pricing of petroleum products is still administered, giving rise to an increasing fiscal burden. In order to address this problem, the Government has partially reformed the sector, allowing decanalized imports of kerosene, liquified petroleum gas (LPG) and low sulphur high sulphide (LSHS) gas; it has also set up a parallel marketing system to allow the private sector to import and market these products through their own networks at market prices.

56. The Government has also periodically raised prices of petroleum products, to address the "oil pool" deficit due to subsidized prices. In July 1996, the price of petroleum was raised. This was accompanied by a rise in prices of other petroleum products, such as non-fertilizer naphtha, by 10 to 25 per cent. Despite this, estimates put the 1996/97 oil subsidy at around Rs 184 million, compared to the Rs 100 million initially anticipated.[42]

57. In September 1997, the Government announced new reforms in the sector, including immediate increases in the price of petrol, diesel and LPG.[43] The price of diesel, which accounts for a little below half of petroleum product consumption in India, has been linked to prices of imported diesel. Its domestic price will be announced every month based on the price of diesel imported by the canalizing agency, Indian Oil Corporation (IOC).[44] The price of LPG is also to be announced on a monthly basis and prices of petroleum products including paraffin wax, bitumen, naphtha and LSHS will be decontrolled on 1 April 1998.

58. On recommendations of an Export Technical Group, the Government in November 1997 announced a phase-out of the administered pricing mechanism for the sector from 1998/99. As part of the programme consumer prices of major petroleum products will be moved towards import parity; imports and exports of most petroleum products will be decanalized gradually; imports of crude oil by the private sector will be allowed under a system of actual user licences, and import tariffs on petroleum products will be gradually adjusted with the objective of providing "reasonable tariff protection" for investments in the refining sector. Marketing rights for major transportation fuels are, under the policy, to be made conditional on certain levels of investment or production. In addition, subsidies to the sector, including for domestic LPG, will be reduced gradually in order to reduce the oil pool deficit.

---

[42]Government of India (1997c).

[43]Financial Times, 3 September 1997.

[44]Economic Times, 4 September 1997.

59. In the longer run, the Government feels that India's dependence on oil imports needs to be reduced through increased domestic production. For this, a New Exploration Licensing Policy (NELP) was announced in the 1997/98 Budget; NELP offers companies international prices for oil in return for new discoveries, as well as investment incentives such as half rate royalty payments for seven years and tax holidays. Oil refineries will also be allowed to import capital goods during the Ninth Plan at concessional rates of duty.[45]

(5) Manufacturing

(i) Recent developments

60. The manufacturing sector has responded well to the economic liberalization programme initiated in 1991, growing at an average real rate of 6 per cent between 1992/93 and 1994/95 and 14 per cent in 1995/96. Manufacturing accounted for around 22 per cent of India's GDP in 1995/96. Growth has mainly been led by heavy industries and consumer goods, which have responded to lower import restrictions on primary and intermediate goods.

61. Exports registered an average annual increase of 20 per cent between 1993/94 and 1995/96 with a slow-down to 4 per cent in 1996/97. The share of individual sectors in international trade has remained relatively unchanged since the early 1990s, with textiles and clothing still forming the bulk of Indian exports. India's major imports continue to be industrial chemicals, petroleum products and non-electrical machinery (Chart IV.3).

62. During 1996/97, however, a slow-down in manufacturing and, more generally, in economic growth was recorded. The economy grew at an annual rate of 5.0 per cent in April to November 1997, compared to 12.8 and 9.2 per cent, respectively, during the same period in 1995 and 1996.[46] Key industries such as steel, automobiles and cement experienced a slump in demand in 1996/97, after rapid growth during 1995/96. The slump, according to the authorities, is temporary and caused partly by a decline in foreign and domestic demand. Nevertheless, it is apparent that a lack of adequate infrastructure, including transport, storage and power, is also becoming an impediment to economic growth.

63. In contrast to the licensing and trade restrictions that characterized India's manufacturing industries during previous decades, a number of sectors have been liberalized and import restrictions on capital and intermediate goods have been lowered significantly. Presently imports of 1,977 tariff lines at the HS eight-digit level in the manufacturing and mining sectors are restricted by India.[47] Effective rates of protection, based on applied tariffs, have fallen from the extremely high levels during the 1980s for almost all industries in the manufacturing sector (Table AIV.3)[48].

---

[45]Government of India (1997b).

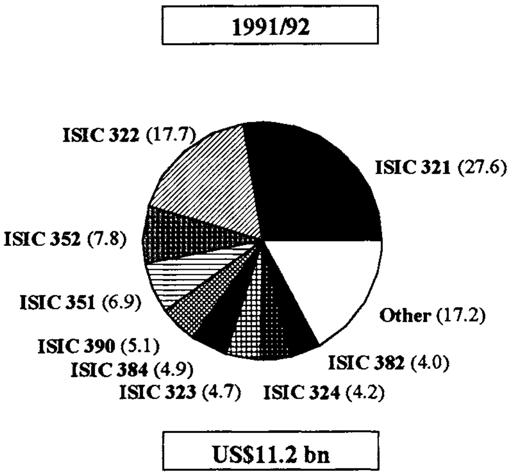
[46]Economist Intelligence Unit (1997); and Central Statistical Organization (1997).

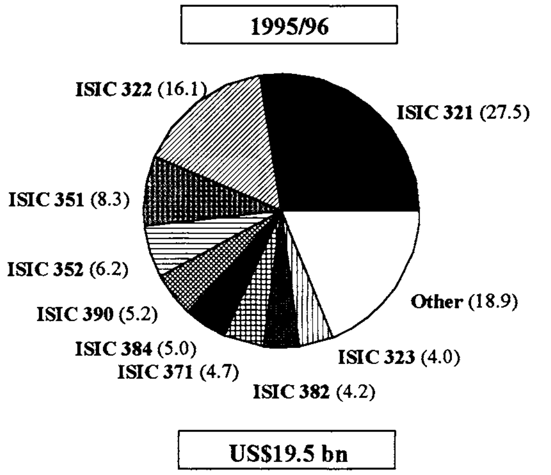
[47]This includes items that are canalized and on the Special Import License (SIL) List.

[48]Effective protection measurements conducted after the reforms of 1991 show some decline in ERPs with one study arriving at a fall in average rates from 78 per cent in 1989/90 to 55 per cent in 1993/94. Individual industries, notably fertilizers, cement, automobiles and jute textiles continue to be highly protected, although protection has declined during the reform period.

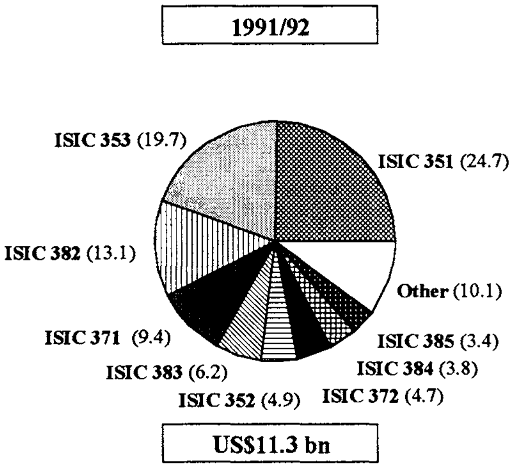
Chart IV.3
Trade in manufactures, by ISIC category, 1991/92 and 1995/96
US$ billion and per cent

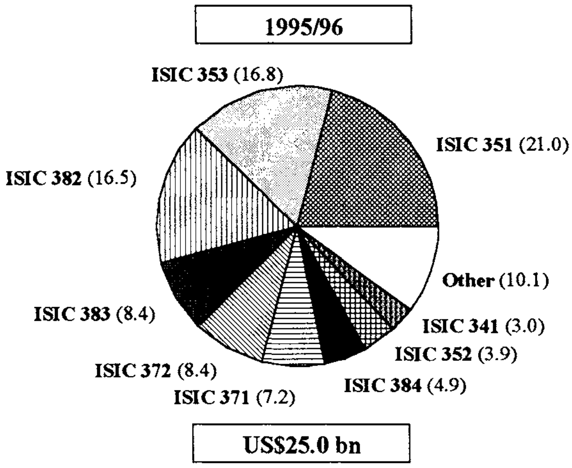
(a) Exports





(b) Imports





ISIC 321 - Textiles
ISIC 322 - Clothing
ISIC 323 - Leather products
ISIC 324 - Footwear
ISIC 351 - Industrial chemicals
ISIC 352 - Other chemicals, including pharmceuticals
ISIC 353 - Petroleum refineries
ISIC 371 - Iron and steel
ISIC 372 - Non-ferrous metals
ISIC 382 - Non electrical machinery including computers
ISIC 383 - Electrical machinery
ISIC 384 - Transport equipment
ISIC 385 - Professional and scientific equipment

Source: UNSD, Comtrade database.

(ii) Textiles and Clothing

(a) Introduction

64. Textiles and clothing is the largest manufacturing sector in India, accounting for around 20 per cent of industrial output. It provides employment to 20 million people and accounts for nearly 27 per cent of the total value of exports. The sector is predominantly cotton based; in 1995/96 approximately 65 per cent of the raw materials used by the sector was cotton. A number of products, notably knitted fabrics and knitted and woven garments, are reserved for production by the small-scale sector. Production is mainly by the decentralized sector followed by the organized sector and the handloom sector. Cloth is produced by all three sub-sectors, while yarn is almost completely produced by the organized mill sector. Of India's cloth output, some 7 per cent is produced by the mill sector, 70 per cent by the powerloom sector, 21 per cent by the handloom sector, and the rest by the hosiery sector. The recent rapid growth of these latter sectors is largely attributable to the fact that they are relatively protected, as part of the small-scale sector, and use labour from the informal labour market which, in general, is cheaper and non-unionized (Table IV.8).[49]

Table IV.8
The evolution of the textiles and clothing industry, 1991-96

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97[a]
Production						
Yarn (million kg.)	1,806	1,895	2,067	2,090	2,319	1,125
cotton	1,450	1,523	1,622	1,586	1,738	892
blends	234	247	305[b]	504[b]	581[b]	293[b]
100% non-cotton	122	125				
Fabrics (million sq metres)	22,588	25,045	27,472	27,975	30,151	15,298
mills	2,367	2,000	1,990	2,271[c]	2,036[c]	982[c]
powerlooms	16,089	17,826	19,631	19,523	21,095	10,748
handlooms	4,123	5,219	5,851	6,180	7,020	3,569
Exports[d] (US$ million)						
Total	5,060.8	6,036.4	5,893.5	7,541.3	8,481.9	8,578.60
	(28.3)	(29.2)	(26.5)	(28.7)	(26.7)	(25.9)
Textiles	2,334.5	2,677.9	2,639.5	3,447.3	4,048.8	4,833.66
Textile yarn and thread	540.8	649.6	654.7	1,050.3	1.34	...
Cotton fabrics, woven	622.7	689.0	683.3	913.3	9.0	...
Woven textiles, noncotton	464.8	487.8	473.0	631.0	959.8	...
Floor cover, tapestry, etc.	523.2	630.5	604.8	611.1	691.7	...
					624.9	
Clothing	2,726.3	3,358.5	3,254.0	4,094.0	4,433.1	3,744.94
	(15.25)	(16.24)	(14.65)	(15.56)	(14.0)	(11.3)
Imports[d] (US$ million)						
Total	135.5	168.3	230	327.7	349.3	...
	(0.7)	(0.7)	(1.0)	(1.2)	(0.9)	
Textiles	133.9	164.6	226.8	324.2	343.9	...
Clothing	1.6	3.7	3.2	3.5	5.4	...

... Not available.
a Provisional (April-September 1996).
b Including 100 per cent non-cotton yarn.
c Including non-SSI units.
d Figures in parenthesis refer to exports as a per cent of India's total exports and imports as a per cent of total imports.

Source: Government of India.

65. The handloom sector is the most vulnerable and most protected, with 11 articles reserved exclusively for production in this sector under the Handloom (Reservation of Articles for Production)

[49]Kumar and Khanna (1990).

Act, 1985.[50] The sector receives assistance from the Government, mainly in the form of hank-yarn obligations, a scheme for the supply of yarn to handloom weavers at mill-gate prices, and loan assistance through the National Cooperatives Development Corporation (NCDC).

66. The organized mill sector consists of nearly 1,500 units[51], and directly employs around 1 million workers. The mill sector's production of cloth fell from 2.7 billion square metres in 1989/90 to below 2 billion square metres in 1995/96. By contrast, production of cloth in the decentralized sector, which consists of the powerloom and hosiery and knitting branches, grew from 14 billion square metres to around 23 billion square metres in 1996/97.

67. India's exports of textiles and clothing were some 27 per cent of its total exports in 1996/97. Since 1991/92 textile exports have remained at around 13 per cent of the total while clothing exports have fluctuated at between 14 and 16 per cent of the total. India's main markets for its textiles and clothing exports are the European Union and the United States. Exports of textiles to other Asian countries increased between 1991/92 and 1995/96, while clothing exports to Asia declined during the same period (Chart IV.4).

68. Imports of textiles and clothing into India remain negligible, mainly due to the quantitative restrictions maintained by India. Imports of textiles have grown from 0.5 per cent of total imports in 1980/81 to 1.2 per cent in 1994/95; imports of clothing were US$3 million in 1994/95, equivalent to some 0.01 per cent of total imports in that year. In 1996, some textiles and clothing products were moved onto the SIL list but imports remain highly restricted. As a result of recent consultations, however, India has agreed to remove all remaining import restrictions in the sector in a phased manner.

69. Under India's Export-Import Policy, 1997/98-2001/2, cotton, wool, silk, man-made and blended fabrics are classified as consumer goods and can therefore only be imported against a licence. As part of agreements signed with the United States and the EU in 1994, however, a number of fabrics and made-up items have been moved from the SIL list to the list of freely importable goods (section (c) below). Tariffs tend to be high although they have been reduced in the last few years; average m.f.n. rates on textiles declined from 77 per cent in 1993/94 to 43 per cent in 1996/97, and for clothing from 85 per cent in 1993/94 to 45 per cent in 1996/97. Tariff rates, and other forms of protection, are expected to decline further as India implements the ATC.

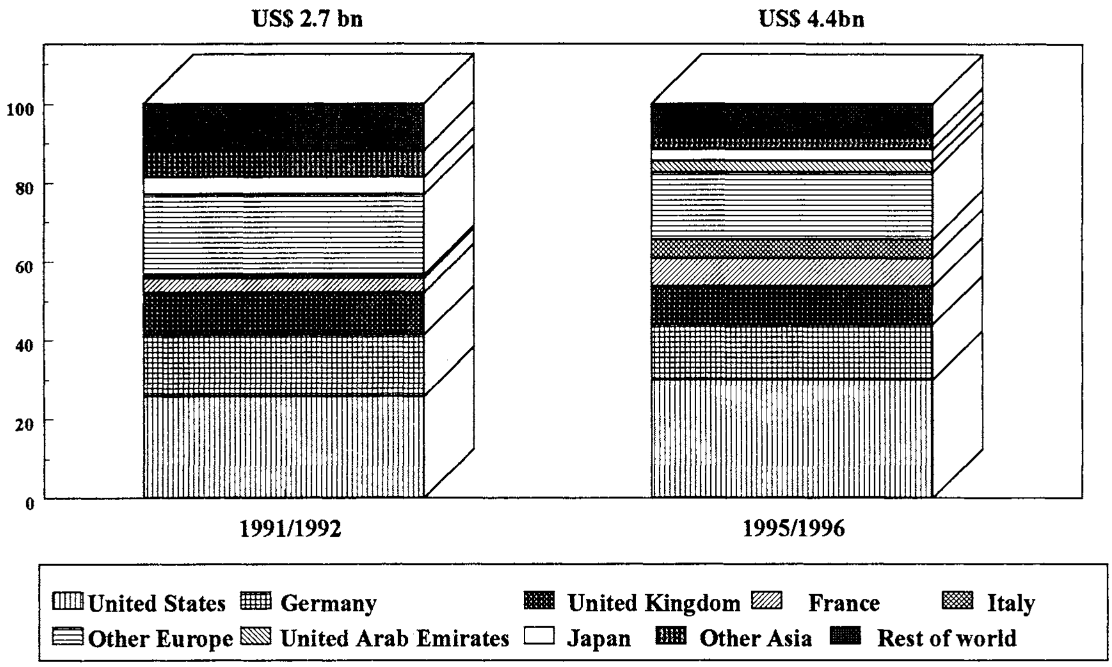
[50] The reserved items include saris, dhoti, towel, gamcha and angarvastram, lungi, khes, bedsheets, bedcovers, counterpanes, furnishings (including tapestries and upholstery), Jamakkalam Durry or Durret, dress material, barrack blankets, kambal or kamblies, shawls and mufflers, woollen tweed, and chaddar and Mehala/Phanek.

[51] Of which 12.75 per cent are public sector mills, 10 per cent are cooperatives and 77.5 per cent are in the private sector (Government of India, 1996u).

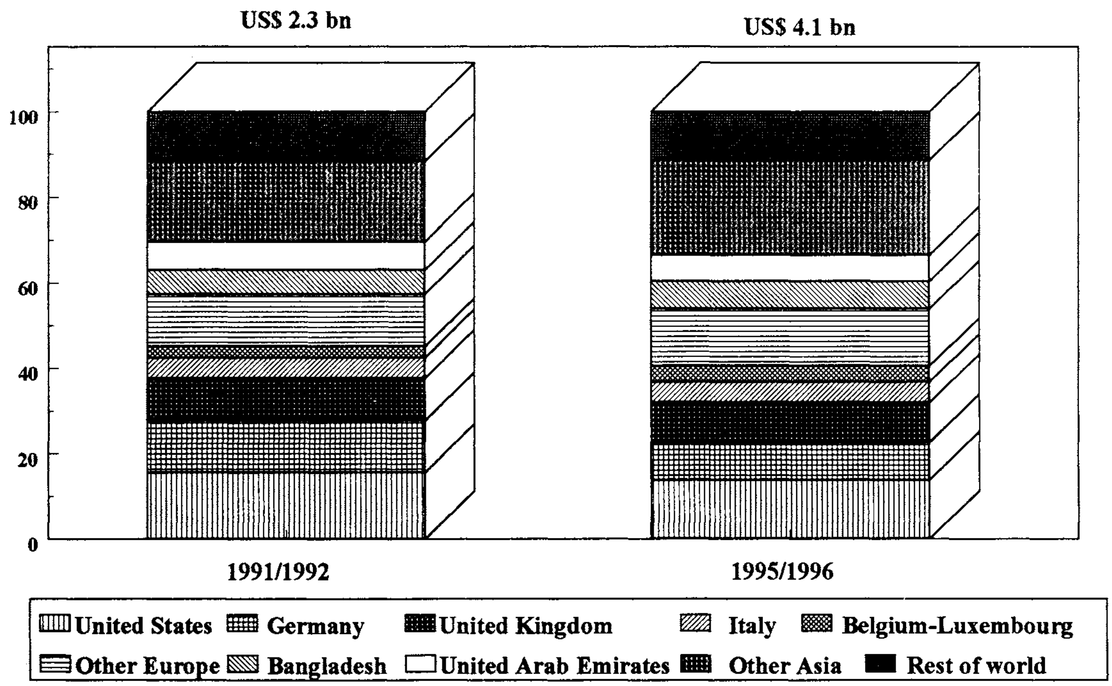
Chart IV.4
Exports of clothing and textiles, by destination, 1991/92 and 1995/96

Per cent and US$ billion

(a) Clothing



(b) Textiles



Source: UNSD, Comtrade database.

(b) Domestic policies

70. The Textile Policy Statement of 1985 is the basis of India's textiles and clothing policy, which is aimed at providing affordable, good quality clothing to Indian consumers and developing of the sector's export potential. The Statement promises remunerative prices to producers of raw cotton, through minimum support prices (MSPs) for farmers, as well as a guaranteed supply of low price cotton for the Indian spinning industry. The main implementing agency is the Cotton Corporation of India (CCI), which procures cotton from farmers.[52] Policy is also aimed at providing employment, which may in effect constrain efforts to streamline India's textiles and clothing mills.

71. Since 1993 there have been a number of reforms to make the industry more competitive. Compulsory licensing, which was required for setting up mills in the powerloom sector under the 1986 Textiles (Control) Order, was abolished by the 1993 Textiles (Development and Regulation) Order. The only restriction on powerlooms is the requirement that owners file an "information memorandum" with the relevant State Government, and the Textile Commissioner, Mumbai, upon installation of machines; similarly for installing a powerloom in the non-small-scale sector an information Memorandum must be filed with the Textile Commissioner within 30 days of installation.[53]

72. Foreign direct investment (FDI) has recently been somewhat liberalized. In January 1997 automatic approval was extended for up to 51 per cent of foreign equity participation in spinning, weaving and processing of cotton, wool, silk and man-made fibres in integrated mills, the spinning of staple fibres and weaving of synthetic textile fabrics in mills, and the manufacture of water-proof textile fabrics. The FIPB will also allow, on a case-by-case basis, higher foreign equity participation. For the small-scale sector, FDI is permitted up to a 24 per cent share of equity, but permission must be obtained from the Ministry of Industry; foreign equity participation above 24 per cent is only allowed if the unit forgoes its status as a small-scale unit.[54]

73. Government subsidies to the textiles and clothing industry under various schemes, primarily for the handloom sector, totalled Rs 425 million in 1996/97. The Government provided a subsidy of Rs 11.72 million in 1996/97, used mainly for the supply of yarn at mill-gate prices to the handloom sector. The Hank Yarn Subsidy Scheme of Rs 20 per kg. to suppliers of yarn in this form was discontinued on 1 April 1996.[55] Direct subsidies for cloth produced by the handloom sector are provided under the Janata Cloth Scheme, which subsidized around 200 million square metres of cloth production in the handloom sector in 1994/95, at a cost of Rs 683 million. Training and technology upgrading activities in the handloom sector are also supported by the Government and are mainly implemented by 24 Weavers Service Centres (WSCs) and four Indian Institutes of Handloom Technology (IITHs) operating under the Development Commissioner (Handlooms).

---

[52]Government of India (1996u).

[53]This is applicable to units not requiring industrial licensing.

[54]The recently completed report of the Abid Hussain Committee on the Small Scale Industry Sector has recommended that the small-scale sector be de-reserved and the restriction of 24 per cent be raised. The Government has responded by removing 14 items from the list of products reserved for small-scale units but no action has been taken on other recommendations.

[55]Under the Hank Yarn Obligation Order, all producers of yarn for civil consumption are required to pack at least 50 per cent as hank yarn provided that at least 80 per cent of yarn thus packed shall be of 40 counts or below.

74. Growth of the powerloom sector, which is more competitive than the mill sector, has resulted in declining production in the mill sector and to increased "sickness" among industrial units. As a result several "sick" units have been referred to the Board for Industrial and Financial Restructuring; the legal requirements have, however, led to significant delays in closing down unviable units (Chapter III(4)(i)). Because of the substantial number of people who are dependent on this sector for employment, and would be displaced with the closure of mills, the Government established the Textile Workers' Rehabilitation Fund Scheme (TWRFS) in 1986. Total financial assistance disbursed under the TWRFS through end 1995 was Rs 806 million, involving 28 textile units and a total of nearly 41,000 employees.[56]

(c) Trade policies

75. Exports of cotton yarn have traditionally been subject to annual quantitative ceilings. The objective, according to the authorities, is to ensure sufficient supply of yarn at reasonable prices to weavers in the handloom and powerloom sectors.[57] Exports of cotton yarn therefore must be accompanied by a certificate from the Cotton Textiles Export Promotion Council (Texprocil). As part of the emphasis on promoting exports, the Government has relaxed the reservation of garment production for the small-scale sector. Policy changes made in 1997 allow large-scale units (with an investment up to Rs 30 million) to enter the garment industry if they undertake to export a minimum of 50 per cent of their output of which 25 per cent has to go to non-quota countries. In the case of knitted fabrics and knitted and woven garments, there is an export obligation of 30 per cent if capital investment is between Rs 6 million and Rs 7.5 million, 50 per cent in the case of investments between Rs 7.5 million and Rs 30 million, and 75 per cent if capital investment is above this amount.

76. Exports of textiles and clothing items are subject to the provisions of the Export Entitlement and Distribution Policy, more commonly known as the quota policy, implemented initially as part of the Multifibre Arrangement (MFA) and presently as part of the Agreement on Textiles and Clothing (ATC). India has bilateral agreements with Canada, the European Union, Norway and the United States, covering around 64 per cent of its total exports of textiles and clothing.[58] Quota policies are announced by the Ministry of Textiles for a period of three years. The institutions responsible for quota allocation are Texprocil and the Synthetics and Rayon Export Promotion Council for textiles and the Apparel Export Promotion Council (AEPC) for clothing. Quotas are allocated on the basis of the applicants' export performance over the base period, or on a first come first served basis (Table IV.9). The allocation between open and closed quotas has, in the past, created excess demand for quotas under the open system, with firms often submitting multiple applications for the same order under different, sometimes non-existent names. Under the closed system, quotas are further divided into sub-categories, often creating bureaucratic problems for firms and sometimes leaving quota sub-categories unfilled[59]; firms are allocated quotas on the basis of past performance, although studies

[56]Government of India (1996u).

[57]Exemptions from this restriction on cotton yarn exports have been granted in certain cases including for exports by 100 per cent export oriented units, exports of cotton yarn above size 40S counts, exports under the Advance Licensing and the EPCG Scheme, exports to quota countries and exports of processed yarn.

[58]Government of India (1996u).

[59]Kumar and Khanna (1990).

found that many are unable to fill their quota throughout the year, prompting a number of reforms in the late 1980s.[60]

Table IV.9
India's textile and garment quota policies

Textile quota policy (1.1.1997 - 31.12.1999)		Garment quota policy (1.1.1996 - 31.12.1998)	
System	**Per cent of annual levels**	**System**	**Per cent of annual levels**
Past performance entitlement (PPE)	55	Past performance entitlement (PPE)	75
- (of which high value entitlement)	(15)	- of which high value entitlement)	(5)
Manufacturers-exporters entitlement (MEE)	15	First come first served (FCFS)	10
		New investors entitlement (NIE)	10
Non-quota exporters entitlement (NQE)	5	Non-quota exporters entitlement (NQE)	5
- (of which NQE for handloom textiles)	(3)		
Ready goods exporters entitlement (RGE)[b]			
- Fabrics (other than Cat. 3.3a/EU) and made-ups	15		
Powerloom exporters entitlement (PEE)[c] (only for fabrics other than Cat. 3.3a/EU) and made-ups	10		
TOTAL	100	TOTAL	100

a New investors entitlement (NIE) is a separate window that has been provided for new investments; investors who have invested a minimum amount of Rs 5 million in new machinery during the base period qualify for this quota system.
b RGE quotas are 25 per cent for yarn and fabrics for Cat.3 and 3a/EU.
c Only applicable to fabrics (other than Cat. 3.3a/EU) and made-ups.

Source: Government of India.

77. India's quota utilization rates, according to the authorities, were high during the 1980s and 1990s. This was especially true of its garment exports in categories relating to blouses and shirts, ladies' dresses, skirts and trousers.[61] In these categories, Indian exporters appear to have nearly always filled their quotas. During the last two years, according to the authorities, there has been a gradual decline in exports to quota countries, while exports to several non-quota countries have improved.[62]

78. India provides textile and clothing export incentives, including low or zero duty rates for imports of raw materials and intermediates. Textiles and clothing exporters are entitled to schemes such as the Export Promotion Capital Goods Scheme (EPCG), which allows the import of capital goods at concessional duties of 10 per cent against an export obligation of four times the c.i.f. value of imports

[60]In response to these problems, the system was changed slightly in 1988, requiring firms unable to use their past performance quotas by the end of each sub-period, and especially that sub-period ending in September, to surrender their quotas to the AEPC. This has presumably increased trading in quotas between firms. (Kumar and Khanna, 1990).

[61]These include U.S. textile and apparel categories 335, 336, 338-342 and 347-350, which correspond to HS chapters 6102-6110, 6112-6114, 6116-6117, 6202-6204, 6205-6208, 6210-6211 and 6217 (Government of the United States, 1992).

[62]This may partly be due to the newly implemented 25 per cent export requirement to non-quota countries as a condition for allowing large-scale units to invest in the garment industry as well as changes in demand patterns.

within a five-year period, and advance licences under the Duty Exemption Scheme for importing inputs.[63] In order to provide more flexibility and competitiveness for exporters, the Government has removed minimum floor prices for garment exports. Other incentives include the removal of licensing requirements for the import of certain second-hand machinery, and the Duty Drawback Scheme which allows a refund of central excise and customs duty once the final good has been exported. The basic import duty for textile machinery was lowered from 85 per cent in 1993/94, to 25 per cent in the 1997/98 Budget, with rates of 15 per cent applicable in several categories including special duty rates of 2 and 3 per cent. In the 1997/98 Budget, a number of additional processing machines were added to this list, for which import duties on components were reduced to 15 per cent. The duty on woollen and flax fibres was also reduced in the 1997/98 Budget to between 20 and 25 per cent. Trimmings and other garment accessories have been moved to the list of freely importable goods in the Export-Import Policy 1997/98-2001/02.

79. On 31 December 1994, India signed the WTO Agreement on Textiles and Clothing (ATC). The Agreement became effective on 1 January 1995. The sector will be integrated in GATT 1994 in four stages. Each member can choose which products to integrate at each of the four stages, provided that they cover at least one product from each of the following groupings: tops and yarns, fabrics, made-ups and clothing.

80. In its bilateral agreements with the United States and the European Union (EU), India has agreed to provide greater market access to imports by phasing out its import restrictions over seven years. This is to be done on an MFN basis (Table IV.10). The Indian Government moved cotton and wool yarn, polyester staple fibre and 20 other industrial fabrics onto the list of freely importable goods in 1995; in 1998 some fibres and made-ups were moved to this list. Minimum export prices were abolished in 1995. Tariffs are expected to decline to between 20 and 40 per cent by the year 2000 although, since import restrictions on several products are due to be phased out only by 2003 under the agreements with the United States and the EU, a reduction in tariff rates before 2003 will have minor implications for imports.

81. The phase-out of restrictions under the ATC is expected to bring significant gains to Indian exporters, especially of cotton made-up clothing exports to the United States, and handloom and cottage industry exports to the EU. In the case of the United States, the Market Access Agreement is expected to remove restraints on approximately 20 per cent of all quotas imposed on India, primarily in garment exports. This is likely to increase exports of garments, especially in those categories where Indian exporters tend to fill their quotas rapidly; exports from the powerloom sector will also be allowed to expand considerably because of a removal of restrictions on some fabrics and yarns. The agreement with the EU removes all restraints on Indian exports of handloom and cottage industry products immediately; there is also additional flexibility for annual quota increases. According to the authorities, an increase of the overall quota levels within the phase-out period is expected to increase Indian textiles exports to the EU by approximately Rs 3 billion annually although the real benefits can only be assessed once the kinds of items for which import restraints are to be removed becomes apparent.[64]

Table IV.10
Access to the Indian market under bilateral agreements
(Per cent)

[63]Import duties for textile machinery are zero per cent if the c.i.f. value is Rs 0.2 billion or more, against an export obligation of six times the c.i.f. value over eight years. In the case of silk, import duties for inputs are zero per cent in case of c.i.f. values being Rs 50 million or more against an export obligation of six times the c.i.f. value over six years. Actual-user conditions apply until the export obligation is completed.

[64]Government of India (1995c).

Item	Tariff offer (per cent)				
	1.1.1995	1.1.1998	1.1.1999	1.1.2000	1.1.2002
Fibres	65	35	35	20	20
Yarns	65	40	20	20	20
Industrial fabrics	65	40	40	25	25
Priority fabrics	65 (SIL)	40 (Free)	30 (Free)	30 (Free)	30 (Free)
All other fabrics	65 (SIL)	45 (SIL)	45 (SIL)	40 (Free)	35 (Free)
Made-ups (incl. carpets and priority)	65(SIL)	40 (Free)	35 (Free)	35 (Free)	35 (Free)
All other made-ups	65 (SIL)	40 (SIL)	40 (SIL)	35 (Free)	35 (Free)
Clothing (1st priority)	70 (SIL)	50 (SIL)	50 (SIL)	35 (Free)	35 (Free)
Clothing (all others)	70 (SIL)	50 (SIL)	50 (SIL)	40 (SIL)	(Free)

Notes in parenthesis refer to any quantitative restrictions on imports; SIL refers to Special Import License. All other items are freely importable.

Source: WTO Secretariat from the "Memorandum of Understanding between the Government of the United States and the Government of India", Washington D.C., December 1994.

82. Under the ATC's Safeguard Clause, if the integration process in the EU and the United States does not proceed according to the Agreement or is inconsistent with it, Indian tariffs will revert to levels prevailing on 1 January 1990.

83. Despite the expected benefits from the removal of EU and U.S. restrictions, it is not entirely clear how the Indian textiles and clothing industry will respond to changes in the international trading environment. To some extent the industry has been protected from international competition through a guaranteed export quota each year. As noted, the domestic industry is also heavily protected and the phasing out of quantitative restrictions has raised the fear that the Indian market will be flooded by imports. There are problems regarding the upgrading of technology especially in the mill sector, and the handloom industry suffers from disadvantages relating to size. Moreover, the legal framework restricts the closure of sick industries, especially in the mill sector. According to the authorities, however, technology upgrading, stimulation for investment, and infrastructure development are some of the issues being addressed to help industry to adapt to the new environment.

84. India's exports of textiles may also be affected by new rules of origin in the United States, where, under rules effective from 1 July 1996, the country of origin for printed fabrics is defined as the country where the fabric is manufactured. Thus, grey fabrics or silk exported from India to the EU and further processed in the EU and exported to the United States, would still be registered as originating from India and are therefore be counted against India's textile quota, thus cutting into export potential.[65] Anti-dumping cases involving Indian garment and textiles exports are also on the rise, according to the authorities. India is also concerned about the incidence of anti-dumping investigations against its exports to the EU.

(iii) Pharmaceutical products

[65]The EU requested consultations with the United States in May 1997 (WT/DS85-1). Requests to join the consultations were made by Switzerland, Honduras, Hong Kong, China, Pakistan, India, Japan and the Dominican Republic. The EU suspended its consultations in August 1997, following a guarantee from the United States of no further disruption to European textile exports and an agreement to amend the appending legislation. The United States has confirmed that this agreement will apply on an m.f.n. basis (WTO document, 1997, G/C/M/26).

85. India produces almost 70 per cent of its requirements of bulk drugs and almost 100 per cent of all formulations. It is a net exporter of pharmaceutical products, with bulk drugs comprising around 47 per cent of total pharmaceutical exports and formulations the rest (Table IV.11).[66]

Table IV.11
Production, export and import of pharmaceuticals
(Rs billion and US$ million)

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97[a]
Production (Rs billion)	45.70	57.00	71.50	82.20	94.53	109.47	126.80
Exports (US$ million)	437.50	497.80	489.20	574.20	695.80	698.40	1,152.20
	(3.0)	(2.8)	(2.4)	(2.6)	(2.6)	(2.2)	(...)
Imports (US$ million)	227.40	224.30	217.80	239.40	313.50	...	...
	(0.9)	(1.1)	(0.9)	(1.0)	(1.1)	(...)	(...)

... Not available.

a Estimates from the 9th Five Year Plan Working Group Report on Drugs and Pharmaceuticals.

Note: Figures in parentheses refer to exports as a per cent of total exports and imports as a per cent of total imports.

Source: Government of India.

86. The core of the pharmaceutical industry is made up of around 250 large firms and 8,000 small-scale units. There are five central public sector undertakings and six joint undertakings between Central and State government enterprises. The pharmaceutical industry produces the complete range of formulations and around 350 bulk drugs.[67]

87. Pharmaceutical policy is governed by the Drugs Policy, last amended in 1994, and implemented through industrial licensing under the Industries (Development and Regulation) Act, and through price controls under the Drugs (Prices Control) Order of the Essential Commodities Act. The new Drugs Policy, 1994, essentially removed all industrial licensing for bulk drugs and their formulations and intermediates, with the exception of five drugs that remain reserved for the public sector[68], drugs involving the use of recombinant DNA technology and specific cell/tissue targeted formulations.[69] Price controls, import restrictions and restrictions on foreign investment had been relaxed as a result of previous policy reforms in the 1980s.

88. Investment policies have also been liberalized. The drugs and pharmaceutical sector is treated as a high priority sector, allowing automatic foreign equity participation of up to 51 per cent.[70] For foreign equity participation of above 51 per cent, investors have to clear projects on a case-by-case

[66]Government of India (1997c).

[67]Formulations are essentially medicines that are ready to be sold to consumers, whereas bulk drugs are chemicals that are used in the production of formulations.

[68]These are, Vitamin B1, Vitamin B2, Folic Acid, Tetracycline and Oxytetracycline. The reservation was to be reviewed in 1997.

[69]Compulsory industrial licensing for the pharmaceutical sector replaced the Delicensed Registration Scheme and the Exempted Industries Registration Scheme, which were abolished in the 1991 reforms. Prior to 1991 almost the whole sector was free of licensing controls (GATT, 1993).

[70]With the exception of bulk drugs, intermediates and formulations produced through the use of recombinant DNA techniques.

basis through the Foreign Investment Promotion Board (FIPB) in accordance with the provisions of the Drugs Policy.[71] There is no upper limit on foreign investment subject to government approval.

89. Imports of some drugs continue to be restricted through the Negative List, either because they are classified as consumer goods, or because their production is reserved for the public sector, or, in the case of a number of drug intermediates, for the small-scale sector. Pharmaceutical products requiring a special import licence include penicillin, 6-APA, tetracyline, streptomycin, rifampicin and some of its intermediates and Vitamins B1 and B2. With the exception of some selected essential drugs, which are exempt from import duty, tariffs on imports of drugs and medicines are high, averaging about 35 per cent for the whole sector with a maximum rate of 45 per cent, although there has been a considerable decline since the last Trade Policy Review, when tariff rates ranged from 15 to 85 per cent and averaged 84 per cent (Table AIV.1). There are no restrictions on the export of pharmaceutical products.

90. A notable feature of Indian policy with regard to its pharmaceutical sector is the continued use of price controls, to make essential drugs available to all Indians. According to the authorities, prices are calculated so as to ensure a "reasonable" rate of return to pharmaceutical firms; the Drugs Policy, 1994, established a new formula for calculating the price of drugs manufactured from the basic stage in India.[72] The total number of drugs under prices control was reduced from 142 under the Drugs Policy 1984 to 74, out of a total of around 500. In addition, a National Pharmaceutical Pricing Authority was established under the Drugs (Prices Control) Order 1995, to fix prices for bulk drugs and formulations, to update the list of drugs under price control and also to monitor the prices of decontrolled drugs and formulations. The Government reserves the right to reimpose price controls if prices rise too rapidly[73] (Table IV.12).

[71]Priority is being given to the manufacture of bulk drugs from the basic stage and their intermediates and bulk drugs produced through recombinant DNA technology and specific cell/tissue targeted formulations, as these are areas where investment is otherwise not easy to come by.

[72]The maximum sale price of a bulk drug takes into consideration a post-tax return of 14 per cent on net worth, or a return of 22 per cent on capital employed. In the case of a new plant, an internal rate of return of 12 per cent based on long-term marginal costing is used. In the case of production from the basic stage, the Government provides an incentive for investment by giving a post-tax return of 18 per cent on net worth or 26 per cent on capital employed (Government of India, 1995).

[73]The authority normally grants price approvals within two months for formulations and four months in the case of bulk drugs, from the date of receipt of the complete prescribed information. (Government of India, 1994c).

Table IV.12
Changes made by Drugs Policy, 1994

Licensing and industrial policy	Pricing	Foreign investment
Abolished, except for five identified bulk drugs reserved for the public sector[a], bulk drugs produced through genetic engineering and bulk drugs requiring in-vivo use of nucleic acids as the active principles. Abolished for all formulations except for specific cell/tissue targeted formulations	Abolished except for those drugs having a minimum annual turnover of Rs 40 million and drugs of popular use in which there is a monopoly situation. Drugs which have sufficient competition[c] may not be subject to price controls although their prices will be monitored.	Foreign equity participation of up to 51 per cent allowed for all bulk drugs, their intermediates and formulations.
Conditions for mandatory supply of percentage of bulk drug to non-associated formulators abolished.	Genetically engineered drugs and specific cell/tissue targeted drug formulations will not come under price controls for a period of five years from their date of manufacture in India.	Foreign equity participation above 51 per cent to be considered on a case-by-case basis.
Ratio parameters linking bulk drug and formulation production and limiting use of imported bulk drugs abolished.	Ceiling prices will be fixed for commonly marketed standard pack sizes of price-controlled formulations.	Foreign technology agreements will be given automatic approval for all bulk drugs, intermediates and formulations except for those produced with the use of recombinant DNA technology.
Locational requirements as per the new industrial policy.[b]	The National Pharmaceutical Pricing Authority will be established and will fix and revise prices. It will also update the list of drugs for which price controls apply.	

a These are Vitamin B1, Vitamin B2, Folic Acid, Tetracycline and Oxytetracycline.
b No locational restrictions except those relating to State laws.
c Defined as at least five bulk drug producers and at least ten formulation producers with none having more than a 40 per cent market share in retail trade.

Source: Government of India (1994c), Manual of Policy and Procedures Governing Industrial Approvals, Ministry of Industry; and Government of India (1996e), Modifications in Drug Policy 1986, Ministry of Chemicals and Fertilizers.

91. Despite these changes, some observers have argued that as the sector is opened to international competition, Indian companies are likely to be placed at a disadvantage vis-à-vis foreign multinationals which have greater resources to invest in research and new drug development.[74] A further liberalization in price controls may therefore be necessary to provide an incentive for Indian companies to invest in the development of new drugs and to compete internationally.

92. The pressures on Indian companies to invest in new drug development may also increase as India strengthens its patent laws. At present, India's patent law does not grant product patents in the sector and process patents are restricted to a term of either seven years from the date of filing an application, or five years from the date at which the patent is sealed, whichever is less. Having signed the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), India is to provide product patent protection and to extend its patent protection to a period of 20 years from the date of filing.[75] As a developing country, India has indicated that will make use of the ten-year

[74]It has been argued that the magnitude of resources required for new drug development is simply not available to the bulk of Indian companies (Sen Gupta, 1996).

[75]Article 27 of the TRIPS Agreement refers to the requirement that protection be conferred to all pharmaceutical products and processes except diagnostic, therapeutic and surgical methods for the treatment of humans or animals, while Article 33 extends the period of protection to 20 years from the date of filing.

transitional period for this sector which, in effect, gives it until the year 2005 to make the appropriate changes to its legislation (Chapter III(4)(vii)).

(iv) Steel

93. The Indian Steel industry is divided into two main groups, the major steel producers and the mini-steel plants, the latter having a capacity below 0.5 million tonnes per year. The major steel plants include the Steel Authority of India Limited (SAIL) along with its subsidiary, the Indian Iron and Steel Co., Rashtriya Ispat Nigam Ltd. (RINL), and the privately owned Tata Iron and Steel Co. (TISCO). There are around 184 privately owned mini-steel plants, with a production capacity of around 10 million tonnes of steel per year. Total production capacity for crude steel was 33 million tonnes in 1994/95, of which private capacity was approximately 55 per cent. India produces around 95 per cent of its domestic requirements and imports about 1.5 million tonnes of finished steel per year.

94. Steel production in India used to be protected under infant industry provisions, which led to high rates of tariffs, ranging from 20 to 85 per cent and averaging 80 per cent at the time of the previous Review of India. Quantitative restrictions ensured that imports only took place either to offset shortfalls in domestic production or if inputs were required by the industry. These rates of protection began to decline as a result of the economic reforms, and the average tariff rate for finished steel was under 34 per cent in 1997/98. Quantitative restrictions on steel imports were removed in 1992.

95. The industry initially responded sluggishly to the economic reforms. Since 1994/95, however, steel production has picked up substantially, with total saleable steel registering an average annual growth rate of 12 per cent between 1993/94 and 1995/96 and total finished steel growing by 19 per cent during the same period (Table IV.13).

96. Exports of steel have also shown steady growth. The total volume of steel exported rose from 387,000 million tonnes in 1991/92, when the economic reforms were initiated, to 1.3 billion tonnes by 1995/96. The general economic recovery in the Indian steel industry was also reflected in imports, which rose by 60 per cent during 1994/95 after remaining stagnant between 1991/92 and 1994/95. Steel imports have since stabilized around 1.5 million tonnes per year, partly because of rising domestic production. Domestic demand for steel remains high, with apparent consumption increasing by almost 22 per cent in 1994/95.[76] In 1996/97, growth in demand for steel slowed partly in response to the industrial slow-down in the country and internationally. The Ministry of Steel is however optimistic about demand for Indian steel in the long run, expecting demand for finished steel to rise to around 38 million tonnes by 2001/02 (some 32 million tonnes domestic and 6 million export).[77]

[76]Government of India (1997e).

[77]Government of India (1996s).

Table IV.13
Evolution of the iron and steel industry
(Million tonnes)

	1992/93	1993/94	1994/95	1995/96	1996/97
Production					
Finished steel	15.20	15.20	17.82	21.40	22.72
	(6.1)	(0.0)	(17.2)	(20.1)	(6.2)
- main producers	8.41	8.77	9.57	10.70	10.54
	(5.6)	(4.3)	(9.1)	(11.8)	(-0.4)
	6.79	6.43	8.25	10.81	12.18
- secondary producers	(6.5)	(-5.3)	(28.3)	(31.0)	(12.6)
Saleable pig iron	1.84	2.25	2.78	2.79	3.29
	(15.7)	(22.3)	(22.39	(0.4)	(5.3)
- main producers	1.68	1.98	2.00	1.73	1.73
	(12.8)	(17.8)	(1.0)	(-13.5)	(0.0)
	0.16	0.27	0.78	1.06	1.56
- secondary producers	(5.7)	(6.8)	(11.5)	(35.9)	(14.4)
Exports (US$ million)	24.6	53.5	45.8	58.0	62.8
Imports (US$ million)	56.9	51.1	80.8	94.9	85.7

Note: Figures in brackets indicate percentage change over the same period during the previous year.

Source: Data provided by the Indian authorities

97. Reforms in the steel sector began with the removal of price and distribution controls in January 1992 resulting in a 15 per cent increase in prices to compensate for rising input prices. Quantitative restrictions on imports were also removed and import duties were reduced from 35 to 10 per cent on steel melting scrap, from 55 to 35 per cent on pig iron and from 65 to 45 per cent on hot rolled coils.[78] Import duties were subsequently reduced from 35 to 20 per cent for pig iron. Lower duties offset the upward pressure on prices, resulting in stable prices during 1993/94. The 1994/95 Budget reduced peak import duties for steel products to 50 per cent and down further to 42 and 32 per cent respectively in the 1995/96 and 1996/97 Budgets. The 1997/98 Budget continued this reform by reducing duties on cold rolled coils from 32 per cent to 27 per cent, on pig iron from 22 per cent to 12 per cent and on ships imported for breaking from 12 per cent to 7 per cent.[79] Subsequently, these rates were raised by 3 percentage points in 1997, as part of the general increase in rates.

98. In order to increase capacity, the Government has also liberalized its licensing and foreign direct investment policies in this sector. No compulsory licensing is required unless the project proposed is within a 25 km radius of a town with a population of 1 million or more. The private sector has responded well, with 17 medium and large steel projects approved; several other projects are presently being appraised. All these plants are expected to be functioning by the year 2001. Foreign direct investment was initially allowed through the automatic route for up to 51 per cent foreign equity participation and has recently been increased to 74 per cent. Non-resident Indians (NRIs) and their international holdings can invest up to 100 per cent automatically. There is no limit on the total amount of foreign equity that can be held through the FIPB route, although thus far there are no cases of 100 per cent foreign equity participation in this sector. Of the total amount of Rs 40 billion approved for foreign investment projects by the end of 1996, the actual inflow has been Rs 12 billion, or around 30 per cent.

[78]Government of India (1993).

[79]Government of India, (1996c).

99. The main policy formulating and implementing agency in the sector is the Ministry of Steel, which was separated from the Ministry of Mines in 1991. As a result of the deregulation of the sector, the Ministry's role is now restricted to the management of government companies, the processing of proposals for establishing new steel plants or expanding capacity, and providing guidelines for the industry and facilitating the growth of iron and steel production in the private sector. In order to increase the quality of Indian steel, the Ministry also provides minor support for research and development, which amounted to Rs 6 million in 1996/97. Its activities are supported by the Office of the Development Commissioner for Iron and Steel based in Calcutta with regional offices located in Chennai, Delhi and Mumbai.

100. The main problems facing the steel industry are those of capacity expansion and productivity improvement in the face of increased competition. The authorities project that domestic production will increase by approximately 21 million tonnes within the next five years. The Government aims to increase crude steel production to approximately 45 million tonnes by the year 2001/02 from the present 24 million tonnes. The primary aim is to increase private sector participation, both Indian and foreign, in the sector. Indian steel at present appears to be competitive on the world market, judging from growing exports and relatively stable imports, although an improvement in productivity will be the key to survival in the long run. However, steel producers continue to face problems associated with low capacity utilization and bottlenecks in infrastructure. While the integrated steel-making plants have a capacity utilization rate of around 100 per cent, the electric steel mills and induction furnaces have a capacity utilization rate of 55 to 60 per cent. This is not likely to increase, according to the authorities, because of the high cost of power, raising questions about the future competitiveness of the Indian steel industry.

(v) Automobiles and auto components

101. With a population of over 900 million and only 28 vehicles per 1,000 people in 1994[80], India presents a potentially lucrative market. Although production capacity has risen by around 25 per cent since 1994/95, strong economic growth during the last few years, coupled with a growing middle class, has added to pent up demand. In response to a relaxation of restrictions on foreign investment, Indian automobile companies have formed joint ventures with most large international automobile manufacturers to increase capacity and meet this demand. Automobile production in India rose from 2.4 million units in 1990/91 to an estimated 3.5 million in 1995/96 and 3.99 million in 1996/97.[81] Automobile sales have risen from 2.8 million in 1994/95, of which 2.6 million were sold domestically and 0.2 million exported, to 3.5 million in 1995/96, of which 3.2 million were sold domestically and 0.3 million exported (Table IV.14). Signs of a slowing down, especially in domestic sales of automobiles, have been noted of late but production continued to grow at around 24 per cent in 1995/96.[82]

[80] Business India, September 9-22, 1996.

[81] Association of Indian Automobile Manufacturers (1997).

[82] Economist Intelligence Unit (1997).

Table IV.14
Evolution of the Indian automobiles sector, 1994-97
(Million units)

	1994/95	1995/96	1996/97
Production	2.80	3.50	3.99
Commercial vehicles	0.19	0.24	0.30
Passenger cars	0.26	0.33	0.41
Jeeps	0.05	0.07	0.08
Two wheelers	2.20	2.60	2.98
Tractors and other machinery	0.17	0.20	0.23
Trade[a] (US$ million)			
Exports	300.7	364.5	-
Imports	25.5	50.1	-
Auto components[b] (US$ million)			
Production	1,922	2,588	3,279
Exports	471.5	586.6	-
Imports	415.7	618.1	-

a Includes HS Chapters 8702-8705 and 8711.
b Includes HS Chapters 8407-8409, 8412, 8706-8708 and 8714.

Note: Exchange rate used by authorities: US$ 1 = Rs 35.00

Source: Association of India Automobile Manufacturers Statistics, ACMA Facts and Figures 1996/97; Indian Governement; and WTO Secretariat.

102. India's automobile sector was initially developed under conditions of strong licensing regulations and restrictions on investment and imports. Foreign investment was effectively banned and foreign technology transfers were subject to government approval. Any capacity expansion was restricted and required licences issued by the Government.[83] In 1983, a joint venture between Maruti Udyog Limited and Japan's Suzuki Limited allowed the first multinational into the Indian automobile sector and resulted in the production of small, low-cost automobiles in India. The company has been highly successful and today controls around 77 per cent of the Indian market for passenger cars.

103. In 1993 the Indian car industry was de-licensed. Foreign equity participation was initially allowed up to 51 per cent. The limit has now been raised so that while permission up to 51 per cent foreign equity participation is granted automatically, up to 100 per cent foreign equity participation is also allowed if approved by the FIPB. Restrictions on location have also been lifted, with licensing only required if the proposed project is to be set up within a 25 km radius of a town with a population of 1 million or more. In addition, a number of State Governments are providing investment incentives; for example, the southern State of Tamil Nadu offers a 14-year sales tax waiver for projects worth over Rs 15 billion.[84]

104. In response, there has been a high rate of foreign investment in the sector, with major car manufacturers such as Mitsubishi, Honda, Ford and General Motors entering the market in the 1990s. Although the option of setting up wholly owned subsidiaries in India is now open to foreign companies, most have preferred to establish joint ventures with Indian manufacturers because of their unfamiliarity

[83]Mukherjee and Sastry (1996).

[84]Business India, March 10-23, 1997. The State's investment conditions as well as the presence of a large percentage of the Indian auto components industry, has attracted a number of foreign automobile manufacturers to the State, away from traditional automobile centres such as Delhi and Bombay (Financial Times, 10 April, 1997).

with the Indian market, according to some sources[85] (Table IV.15). More recently, foreign companies such as Hyundai have also established wholly owned subsidiaries in India. There are now 17 approved joint ventures in India. The total amount of foreign direct investment (FDI) approved by the Government between August 1991 and end-December 1996 for passenger cars alone amounted to Rs 22 billion, around 2.3 per cent of the total amount of FDI approved in India during this period.[86] Total manufacturing capacity, which at present is around 350,000 cars, is expected to rise to around 1 million by the year 2000 as a result of the growing number of joint ventures with foreign companies.[87]

105. In contrast to the liberalization of foreign investment regulations in the sector, the import regime remains restrictive. Although average tariffs have declined from 77 per cent in 1993/94 to 40 per cent in 1997/98 (Table AIV.1), imports have averaged a little over 1 per cent of total imports during this period mainly because of the quantitative restrictions regulating imports in this industry. Automobiles remain on the Negative List and can only be imported with a licence.[88] Completely knocked down and semi-knocked down kits can be imported upon signing a Memorandum of Understanding (MOU) with the Ministry of Commerce.[89]

106. A related problem is that while an emphasis is being placed on increasing capacity for automobile production, India's present road and national highway network is unlikely to be able to withstand further pressure from an expanding number of vehicles. Pollution levels in India's four major cities are already high. Since April 1995 there has been a requirement that all new cars be fitted with catalytic converters and concessional customs duty rates are applied to inputs of a number of components, including catalytic converters. In addition emission standards, which were strengthened in 1996, are being reinforced for the year 2000.

---

[85]Business India, September 9-22, 1996.

[86]Government of India (1997f).

[87]Financial Times, 10 April, 1997.

[88]Imports without a licence are only permitted on fulfilment of conditions specified in a Public Notice issued in this behalf (WTO documents WT/BOP/N/11 and WT/BOP/N/24).

[89]MOUs are signed to discourage screwdriver technology and to ensure that partners in the joint venture have long-term commitments to their projects.

Table IV.15
Joint ventures in the Indian automobile industry, 1991-97

Partners	Products	Equity (per cent)	Annual capacity
Maruti - Suzuki (Japan)	Maruti 800 Maruti Omni Maruti Esteem, Zen. Gypsy	National: 50 Foreign: 50	250,000
Premier Automobiles Ltd (PAL) - Peugeot (France)	Peugeot 309	National: 50 Foreign: 50	60,000
Hindustan Motors - General Motors (US)	Opel Astra	National: 50 Foreign: 50	25,000
Telco - Mercedes Benz (Germany)	Mercedes Benz E-220	National: 24 Foreign: 76	20,000
Mahindra and Mahindra - Ford (US)	Ford Escort	National: 50 Foreign: 50	125,000
Premier Automobiles - Fiat (Italy)	Palio, Siena and 178 Station Wagons	National: 26 Foreign: 74	100,000
Kivloskar Systems Ltd. - Toyota (Japan)	Toyota cars	National: 26 Foreign: 74	50,000
Hero Cycles Ltd. - BMW (Germany)	Five new series including Land Rover and Rover cars	National: 49 Foreign: 51	10,000
DCM - Daewoo (Korea)	Cielo	National: 7 Foreign: 91.23	160,000
Volvo AB (Sweden)	Commercial vehicles	National: 0 Foreign: 100	
Sriram Industrial Enterprises Ltd. - Honda (Japan)	Honda City car (1997/98)	National: 10 Foreign: 90	30,000
Hindustan Motors - Mitsubishi Motors (Japan)	Lancer (1997/98)	National: 90 Foreign: 10	30,000
Hyundai Motor Company	Accent 1.3 (1997/98)	National: 0 Foreign: 100	100,000
Mani Amerigon Car Company - Amerigon Inc. (US) and Asian Equity (UK)	Electric cars	National: 45.75 Foreign: 54.25	1,000-6,000
Sipani Automobiles - Rover Group Ltd. (UK)	Expected to commence production in 1995/96 but has not done so.	National: 97.41 Foreign: 2.59	15,000
Overseas Concept Auto Ltd. - Concept Industrial Management Ltd. (UK)	Evanta and Concept (not commenced production)	National: 65.57 Foreign: 34.43	2,200
Kamal Sabra Motors Ltd. - JD Automotive Design (SA) and Sabrar International Corp. (US)	Not indicated	National: 0 Foreign: 100 (100% EOU)	720

... Not available.

Source: WTO Secretariat, based on information provided by the authorities..

Auto components

107. Along with expanded automobile production, the value of production of automotive components rose from Rs 33.6 million in 1990/91 to Rs 67.5 billion by 1994/95 and Rs 91 billion in 1995/96. The sector includes engine parts, electrical parts, transmission and steering parts, suspension and brake parts, equipment and other parts.

108. The components industry has traditionally been export oriented, contributing over 50 per cent of total exports from the automobile and automotive components sector. Exports in 1995/96 were estimated to be worth around 2 per cent of total exports. The sub-sector has also been relatively less insulated than the automobile industry, with import tariffs ranging from 15 per cent to 40 per cent

in 1996/97. Automobile component imports are not restricted through the Negative List and their value is around 1.7 per cent of total imports.

109. According to the authorities, the relative dependence of the sector on export markets has encouraged firms to upgrade the quality of their products. In 1996/97, 119 companies had the ISO 9000 certification, the largest number of firms in any one particular Indian industrial sector.[90] According to the authorities, the level of indigenization in the automobile sector, which is estimated to be around 90 per cent, is largely due to the performance of, and high standards maintained by the automotive components sector.[91]

(vi) Electronics and computer software

110. The Indian electronics industry has shown rapid growth since the early 1980s and its present contribution to GDP is approximately 2 per cent. Annual growth between 1980 and 1985 was 25 per cent, rising further to 34 per cent between 1985/86 and 1989/90. Between 1992/93 and 1997, growth is estimated to have been slower but still strong at around 20 per cent. Much of this growth has been export led, as the penetration of computers in the Indian economy remains low at approximately seven computers for every 1,000 persons.[92]

111. Over 3,500 units are engaged in the manufacture of electronic products, with around 350 units accounting for 70 per cent of the industry's output. The largest segments of the industry are software, computers, communications and consumer electronics. The output of consumer electronics as a share of total electronics output has declined from 28 per cent in 1993/94 to around 22 per cent in 1996/97 whereas the fastest growing sector has been software, registering an increase from just over 11 per cent of total electronics output in 1993/94 to around 23 per cent in 1996/97 (Table IV.16).

112. The value of exports, especially software exports, has also shown steady growth, from around Rs 22 billion in 1993/94 to over Rs 63 billion by 1996/97. Software alone accounts for almost 60 per cent of India's exports of electronics products today. The software sector is most active in the supply of software products and packages (section IV(6)(vi)). In 1994/95, products and packages activities in the domestic market were around Rs 4.1 billion or 38 per cent of total domestic sales and around Rs 1.68 billion in the export market, equivalent to 11 per cent of total exports (Chart IV.5).[93]

---

[90]Government of India (1996r).

[91]This level of indigenization is also due in part to the phased manufacturing programme which was discontinued in 1994, but appears to have been replaced by a requirement that companies investing in the automobile sector in India must sign an MOU to increase the level of indigenization in their units within a certain period of time (Chapter III(2)(xiii)). The productivity of the components industry has also been questioned recently (Business India, March 10-23, 1997), with claims that a number of foreign investors are bringing their own auto components subsidiaries into India to provide them with higher quality inputs.

[92]Business India (1997), March 10-23, Bombay.

[93]www.software-india.com/overview.htm#A.

Table IV.16
Production of the electronics sector, 1993-97
(Rs billion)

Sector	1993/94	1994/95	1995/96	1996/97
Hardware				
Consumer electronics	41.50	46.65	58.00	65.00
	(2.50)	(3.21)	(4.30)	(5.35)
Industrial electronics	17.70	21.10	29.00	31.00
	(1.15)	(1.25)	(1.40)	(1.70)
Computer systems	18.20	24.50	22.25	27.40
	(4.20)	(6.00)	(7.75)	(9.32)
Communication and broadcasting equipment	31.50	32.50	26.00	30.00
	(0.58)	(1.31)	(3.10)	(4.00)
Strategic electronics	5.00	6.00	10.75	13.00
	(0.40)	(0.20)	(0.20)	(0.30)
Components	26.80	31.50	35.00	37.00
	(2.25)	(3.00)	(3.60)	(5.20)
Sub-total	140.70	162.25	181.00	203.40
	(11.08)	(14.97)	(20.35)	(25.87)
Software	17.15	26.05	42.40	63.00
	(10.20)	(15.40)	(25.50)	(37.00)
Total production	157.85	188.30	223.40	266.40
	(21.28)	(30.32)	(45.85)	(62.87)

Figures in parenthesis indicate exports in Rs billion.

Source: Government of India (1996m), Electronics India: Your Investment Opportunity 1996/97, Department of Electronics.

113. The key implementing agency of the Government's policy is the Department of Electronics (DOE), which was established in 1970. Its objectives include bringing the benefits of electronics to all sectors of the economy, and developing the international potential of the Indian electronics sector. Its functions include formulating, implementing and reviewing national policy for investment and training, and the development of infrastructure for technology development. The DOE is also responsible for standardization, testing and quality certification with respect to electronics.

114. To encourage investment in the electronics sector the Government has simplified regulations on licensing and investment. Compulsory industrial licensing was abolished in 1996 for almost all electronics-related industries, except for the manufacture of electronic aerospace and defence equipment. Companies wishing to invest in the de-licensed industries can do so after filing a memorandum with the Secretariat for Industrial Approvals (SIA) in the Ministry of Industry. No parts of the electronics industry are reserved for the public sector and there are no specific locational restrictions, except those established by State Governments for environmental or land-use purposes.

115. As part of the Government's policy to attract foreign investment, the Electronic Hardware Technology Park (EHTP) Scheme was notified in August 1992. Around 170 units have been approved for this scheme and exports from these units are expected to be at around US$8.28 billion over the next five years, yielding net foreign exchange earnings of around US$2.4 billion. In addition, seven Software Technology Parks (STPs) have been established with around 740 software units approved so far, of which 506 are operational and 337 are exporting.

116. Investment in the electronics industry is unrestricted in terms of foreign share holdings or repatriation of profits. Automatic Reserve Bank of India (RBI) approval is granted for investment proposals with up to 51 per cent foreign equity participation, provided the import of capital goods follows

guidelines laid out in the Export-Import Policy.[94] Moreover, non-resident Indians (NRIs) and overseas corporate bodies whose predominant owners are NRIs, receive automatic approval for up to 100 per cent foreign equity participation, subject to Export-Import Policy guidelines.

117. For export industries, additional incentives, such as a five-year tax holiday, tax exemption on income from exports, duty-free imports of inputs and access to some imports on the restricted list through Special Import Licenses (SILs), are also provided. There is no ceiling on the amount of foreign equity participation in the software and hardware technology parks and export-processing zones (EPZs), or in 100 per cent export oriented units. Permission for investment must be obtained from the Board of Approvals in the Ministry of Commerce in the case of EPZs, the Department of Electronics in the case of the EHTP and STP programmes and from the Secretariat for Industrial Assistance (SIA) in the Ministry of Industry for all other export oriented units. The 1997/98 Budget allowed EHTPs to sell half of the value of their products during any part of the year, in the domestic market.

118. As with the general trend of liberalizing trade restrictions, a number of items relating to the electronics sector have been moved to a list of items permissible for import against Special Import Licenses or the SIL list.[95] During 1993/94, 17 electronic items could be imported via the SIL route; this number was increased to 38 and 34 per cent, respectively, in 1996/97 and 1997/98. According to the authorities, around 80 per cent of all electronics imports are freely importable. The tariff structure has also been changed, with tariffs on capital goods falling from rates ranging between 15 and 60 per cent in 1991/92, to between 10 and 20 per cent; on most components from 90 per cent to 20 per cent; on electronic integrated circuits and micro-assemblies to 10 per cent; and from 85 to 150 per cent down to 40 per cent in the case of consumer goods. For software, import duties were reduced from 43 per cent in 1991/92 to 12 per cent in 1996/97.[96] A 2 per cent special customs duty introduced in the 1996/97 Budget on these products was raised by a further 3 per cent for some products in 1997. The 1997/98 Budget announced an exemption from duty for software imports and also reduced duties on most other components to an average of 10 per cent. At present nine electronics items, however, remain reserved for the small-scale sector, of which three are components.

119. India is a member of the recently signed Information Technology Agreement (ITA), which covers 217 items relating to information technology. The Agreement covers computers, telecommunication products, semi-conductor manufacturing equipment, software products and scientific instruments. India will eliminate tariffs by the year 2000 on 95 products, and subsequently for all other products covered by the Agreement by the year 2005. The Agreement is expected to provide a boost for Indian electronics exports, especially in the software sector where Indian companies are competitive.

---

[94]The RBI also gives automatic approval for foreign technology agreements in all the de-licensed sectors provided that: (a) the lump sum payment for the technology does not exceed US$ 2 million, and (b) royalty payments are not greater than 5 per cent of domestic sales and 8 per cent of exports (net of taxes). These payments are subject to an overall ceiling of 8 per cent of total sales over a period of ten years from the date of agreement or seven years from the commencement of commercial production (Government of India, 1996m).

[95]SILs are licences that are distributed among large established exporters, deemed exporters, exporters of electronic and telecommunication equipment, manufacturers of quality products and all other exporters with export (f.o.b.) valued at over Rs 50 million in the previous year or an annual average of Rs 20 million during the three preceding years.

[96]A countervailing duty which is equivalent to the excise duties payable for the domestic production of those items is required in addition to the import duty for all products except software items (Government of India, 1996).

120. One of the more contentious issues regarding the development of the Indian software industry has been that of intellectual property rights and software piracy. India was cited as a "priority foreign country" by the United States as a result of its weak protection of intellectual property rights. With the amendment of the Copyright Law in 1994, to bring it into conformity with India's WTO commitments, it is argued that software privacy will decline (Chapter III(4)(vii)).

(6) Services

121. As noted in Chapter I, the services sector represents about 40 per cent of India's GDP, 25 per cent of employment, and 30 per cent of export earnings. Its expansion in recent years has been driven mainly by increased activities in trade and commerce, and in the construction, transport and financial services sectors.

122. Transport services - including road, port, and air-transport - are becoming severe constraints to trade and growth. Substantial under-investment, poor maintenance and low operating efficiency, in combination with delays in establishing an appropriate transparent framework with respect to bidding procedures, and uncertainties in cost recovery and risk sharing, have contributed to these constraints.

123. In view of the sector's supportive role for a wide range of economic activities, the Government is putting emphasis on improving the provision of services. Given that India's investment needs are beyond the resources available to the Government, policy statements explicitly speak of a need for a mix of private and public support.[97]

124. Notwithstanding the recent liberalization of the foreign direct investment (FDI) regime, restrictions on these investments continue to impede market access in the services sector. Foreign equity is limited to 49 per cent in telecommunications, while in banking services it is 20 per cent. Other services areas, such as shipping, roads, ports, and air are beginning to open up, but foreign participation remains low. Railways remains one of the six areas reserved for the public sector, although some private sector participation is encouraged in some off-line activities. The insurance sector is still not open to private investors.

(i) Commitments under the General Agreement on Trade and Services (GATS)

125. The General Agreement on Trade in Services (GATS) covers a wide range of service activities.[98] India actively participated in the Uruguay Round services negotiations and its Schedule provides for specific commitments covering business, communication, construction work for civil engineering, financial, health-related and social, and tourism services (Table AIV.3). The extent of commitments vary across sectors with certain restrictions on market access and national treatment in cross-border supply, consumption abroad, commercial presence, and presence of natural persons. India has made commitments in 33 activities (compared with an average of 23 for developing countries) out of a total of 161.[99] Broadly, these commitments bind the existing policy framework; in some cases, applied policy may be more liberal than the binding commitments.

[97]Mohan (1996).

[98]The WTO Secretariat has divided these activities into 12 sectors: business services; communication services; construction and related services; distribution services; educational services; environmental services; financial services; health-related and social services; tourism and travel-related services; recreational, cultural and sporting services; transport services; and other services not included elsewhere.

[99]GATT (1994).

126. India has listed m.f.n. exemptions under Article II of the GATS, reserving the right to offer more favourable treatment to some WTO members (Table AIV.4). Among the measures exempted from m.f.n. treatment were those in the area of financial services (including banking and insurance) where favourable treatment to foreign suppliers incorporated outside India was granted on the basis of reciprocity in respect of entry and expansion. In the recently concluded financial services negotiations, India withdrew this m.f.n. exemption and increased the annual limit for foreign bank branches from eight to 12. In the area of transport services, India applies equality in freight lifting originating in the ports of Bulgaria, Pakistan, and the United Arab Emirates, and equality in freight earnings. As a member of the UN Code of Conduct for Liner Conferences, cargo sharing between the national lines of contracting States and third-country lines is at a ratio of 40:40:20 as provided in the Liner Code.

127. India has made further commitments within the framework of GATS and other relevant WTO Agreements. India participated in the negotiations on basic telecommunications services, the results of which entered into force in early 1998. The major offer made by India includes permitting one new operator, in addition to the present government-owned monopoly supplier, in each service area.[100] India has also committed to allow automatic approval of up to 25 per cent foreign equity participation (compared with the present policy of 49 per cent) in the area of voice telephone services. India is among the 43 countries that have agreed to take part in the Information Technology Agreement -covering computers, telecommunications equipment, semiconductors, semiconductor manufacturing equipment, software, and scientific instruments - and has offered zero duties on 217 tariff lines at the HS six-digit level by the year 2005. Details on India's tariffs on IT products are provided in Chapter III(2)(iii)(f).

(ii) Financial services

(a) Banking[101]

Introduction

128. The largest Indian-owned banks were nationalized in 1969 and 1980. Since then India's public sector banks (now 27 in number) have dominated the commercial banking sector, accounting now for about 80 per cent of deposits and 70 per cent of total bank branches. The nationalization policy was successful in extending banking services to remote geographical areas, and increasing mobilization of savings. The number of bank branches expanded from over 8,000 (of which 23 per cent were rural based) in 1969 to around 63,000 (of which about 52 per cent are rural based).

129. However, in other respects the banking sector faces several limitations: first, the rapid expansion of bank branches resulted in a high volume of commercially non-viable operations; second, "diverted lending" programmes, required a certain share of bank deposit liabilities to be lent to the "priority sector" (presently 40 per cent and 32 per cent of net bank credit in the case of domestic commercial

[100]For the purpose of administrating the telecommunications sector, India is divided into 20 circles (each roughly corresponding to a State) and four metro districts.

[101]This section draws on International Monetary Fund (1996c).

and foreign banks respectively).[102] Priority sector lending with large credit needs is governed by market determined interest rates. Finally, in view of the fiscal pressure, the government pre-empted an increasing proportion of bank resources through high statutory liquidity ratios (SLRs) and cash reserve requirements (CRRs) on bank deposits for scheduled commercial banks (excluding regional rural banks).[103]

Recent reforms

130. A gradual liberalization approach has been taken in the financial sector. As part of its broad economic strategy the Government initiated reforms in banking and finance. The measures included:

(i) Introduction of capital adequacy requirements as per the Basel Committee norms; different time frames were given to Indian and foreign banks to achieve this 8 per cent norm.
(ii) Prudential norms for income recognition, asset classification and provisioning, and greater balance sheet disclosure.
(iii) Consistent deregulation of interest rates, both on deposits and lending.[104]
(iv) Strengthening of public sector banks was undertaken; recapitalization and budgetary support was extended to nationalized banks to absorb the impact of provisioning and to meet capital adquacy requirements. These banks were required to sign performance agreements with the RBI, which contained annual targets for important performance parameters.
(v) Restructuring the operations of some weak banks to improve their profitability, reduce non-performing assets, and enhance productivity.
(vi) Phased reductions in reserve requirements.
(vii) Liberalization of credit norms.
(viii) Development of capital and money markets.

[102]The present statutory lending-targets for domestic commercial banks are as follows: 40 per cent to "priority sectors" which are agriculture (18 per cent), weaker sections (10 per cent), and the small-scale sector (of which 4.8 per cent to the "tiny" sector). In addition, 12 per cent (as of 31 March 1997) lending target for exports, amounting to a total lending target of 52 per cent. Foreign commercial banks are, however, subject to a lending target of 32 per cent, reflecting an exclusion of the agricultural sector sub-target (of 18 per cent) and a lower small-scale sector sub-target (10 per cent). The interest payable is 11.5 per cent and 8 per cent (five years and one year respectively). The funds are on-lent to the priority sectors. Any short-fall has to be deposited with the Rural Infrastructure and Development Fund (RIDF) for Indian banks and with the Small-Industries Development Bank for foreign banks. These shortfalls amounted to Rs 3.1 billion (or US$100 million) on 31 March 1994; Rs 1.2 billion (US$38 million) on 31 March 1995; and Rs 1.1 billion (US$31 million) on 31 March 1996.

[103]The SLR required scheduled commercial banks (excluding regional rural banks) to invest a proportion of their demand and time liabilities in approved central and state government securities, while the CRR stipulated that banks hold a certain share of their deposit liabilities in the form of cash balances at the Reserve Bank of India, which were only partially remunerated. As of October 1997, all eligible CRR balances receive interest of 4 per cent from the RBI.

[104]Significant progress has been made in liberalizing interest rates. Since October 1997, rates for term deposits of over 30 days are no longer fixed; interest rates on advances above Rs 200,000 are free. Banks may also have separate prime lending rates for advances of three years and above. Loans against FCNR(B) deposits and from FCNR(B)/NRNR pools are also free of interest rate restrictions. Interest rates on export credit have been reduced from 13 to 12 per cent; subsequently, due to developments in the foreign exchange market, interest rates on post-shipment credit for more than 180 days were restricted to 20 per cent.

(ix) Increasing competition in the banking sector by allowing new private sector banks since January 1993 and local area banking by the private sector since 1996.
(x) Enhanced supervisory capabilities with the establishment of a Separate Supervisory Board.
(xi) Emphasizing the recovery of bank dues and the establishment of debt recovery tribunals.
(xii) Improvements in technology for which loans were provided to certain public sector banks through World Bank funded projects.

131. Aided by these measures and the economy's strong recovery, the public sector bank performance has generally improved since 1992/93 (Table IV.17). Gross operating profits improved from Rs 38 billion in 1993/94 to Rs 89 billion in 1996/97. The ratio of non-performing assets (NPA) to total advances has declined (from 21 per cent in 1992/93 to 19 per cent in 1996/97), although the volume remains high (Rs 436 billion in 1996/97) reflecting the outstanding loans to priority sectors and "sick" industrial undertakings. At end-March 1997 only one public sector bank held non-performing assets over 20 per cent of its net advances, compared to 10 at end-March 1995. Substantial progress in improving their capital base has taken place. Finally, gross operating profits continued to improve, and 25 of the 27 banks had reached the 8 per cent minimum capital to risk assets ratio by end-March 1997.

Table IV.17
Public sector bank performance indicators, 1992-97

	1992/93	1993/94	1994/95	1995/96	1996/97
Capital adequacy ratio					
Number of banks > 8 per cent	8	8	13	19	25
Non-performing assets (gross)					
Billion of rupees	392.5	410.4	383.9	416.6	435.7
Per cent of total assets	...	10.8	8.7	7.7	7.8
Number of banks > 20 per cent	15	16	10	10	8
Profitability and costs					
Net operating profit (Rs billion)	-32.9	-43.5	11.6	-3.7	31.0
Net profit/total assets (per cent)	-1.0	-1.2	0.2	-0.7	0.6
Gross operating profit (Rs billion)	-31.4	37.6	55.2	75.4	89.0
Gross operating profit/total assets (per cent)	0.9	1.0	1.3	1.5	1.6

... Not available.

Note: Year beginning 1 April.

Source: Indian Government.

132. All banking activities are governed by the Banking Regulation Act, 1949 and the Foreign Exchange Regulation Act, 1973 (as amended from time to time). To promote competition in the sector, the RBI announced new guidelines in 1993 for entry of new private commercial banks.[105] The guidelines stipulate that new domestic banks must provide paid-up capital of Rs 1 billion (or about US$30 million). Non-resident Indians can hold up to 40 per cent equity in new banks, and in foreign banking or financial companies 20 per cent equity within the ceiling for NRIs. As per the Banking Regulation Act, 1949, foreign banks are only allowed to invest through branches or representative offices, i.e. subsidiaries

[105]Reserve Bank of India (1993).

are not allowed.[106] To enhance competition outside metropolitan areas, in August 1996 the RBI allowed entry of small-scale private banks (with a minimum paid-up capital of Rs 50 million) in rural areas. There are no off-shore banking zones.

133. The RBI fixes the number of licences for new banks and expansion by existing foreign banks on an annual basis; this restriction is not applicable to local banks. Foreign banks entering the Indian market are subject to the same prudential regulations as the domestic banks. However, branches of foreign banks must meet the capital requirements on the basis of locally held capital, i.e. parent capital is not taken into account. In addition, foreign banks pay the basic corporate tax of 48 per cent rather than the 35 per cent applied to local bank profits. On the other hand, as noted above, foreign banks receive better than national treatment in lower requirements for "priority sector" lending.

134. As of December 1997, there were 34 private domestic commercial banks (i.e. with no state participation) and 42 foreign commercial banks in operation. In 1995/96, a total of 15 licences for new banks and banks already in operation were granted and a further 15 licences in 1996/97, which is substantially above the level of eight licences per year originally bound under the WTO. In the recently concluded Financial Services Agreement, India raised this annual limit from eight to 12.

135. A similar process of gradual liberalization is being applied to the non-bank financial institutions providing term-lending in India. These institutions control about 36.4 per cent of assets of the financial system and act as a channel for most foreign borrowing by the private sector for investment purposes; recently, such financial institutions have also begun giving working capital loans and have been permitted to access household savings.[107]

136. Non-banking financial companies (NBFCs) have also been brought within the general supervisory framework of the financial sector.

137. Although the results of this liberalization process have been positive and have given rise to greater competition in the sector, areas that represent continuing challenges for the authorities in the banking sector include the following:

- "priority sector" lending remains high and constitutes a financial burden on the banks;
- continuation of private ownership efforts, with the long-term goal of privatization or restructuring of the public banks;
- encouragement of competition by permitting private banks more flexibility in expanding branch operations; and
- improved debt recovery by more effective bankruptcy and exit policies, as a significant proportion of non-performing assets comprises credit to sick industrial units.

---

[106]The minimum paid-up capital for foreign banks is US$25 million, which can be brought in gradually (US$10 million at the time of the opening of the first branch, another US$10 million at the time of the second branch and the balance of US$5 million at the time of the opening of the third).

[107]The main term-lending institutions are the Industrial Development Bank of India (IDBI); the Industrial Finance Corporation of India (IFIC); the Industrial Credit and Finance Corporation of India (ICICI); and the Export Import Bank of India (Eximbank).

(b) Insurance

138. The insurance sector is the only remaining public monopoly in the Indian financial sector. The life insurance sector was nationalized and consolidated into the fully government-owned Life Insurance Corporation (LIC) in 1956. Since then the LIC has been virtually a monopoly operator, responsible for providing life insurance throughout the country, particularly in the rural areas, and for mobilizing savings. The services offered by LIC include whole-life and endowment assurances; money-back plans with periodical payments on survival and lump-sum benefit on death; individual and group pension plans[108]; and term insurance with or without refund of premiums.[109] In 1973, the general insurance industry was nationalized and consolidated into the fully government-owned General Insurance Corporation (GIC) and its four subsidiaries.[110] At that time, more than 100 foreign companies were forced to discontinue their operations. The Insurance Act, 1938 does not allow any asset or property registered in India to be insured outside the country. Moreover, the act prohibits composite business in the area of insurance; insurance companies cannot offer services other than insurance.

139. The insurance industry has been fairly successful in its geographical coverage. LIC has built up a nation-wide distribution network comprising about 2,000 branch offices in urban and rural areas. Rural areas account for about 49 per cent of new policies by number and 43 per cent by sum assured (1995/96).[111] The general insurance industry, which prior to 1973 was by and large city-oriented, has grown in coverage having built up over 4,220 branch offices.

140. Insurance premiums, estimated at US$5 are low. Nevertheless, the insurance sector has made significant contributions to savings, reflected in the growth of the LIC's life fund from Rs 4.1 billion in 1956 to around Rs 1,000 billion in 1998. This has been possible partly because, despite government-mandated investment, yields on these investments have been quite steady and high and relatively protected from fluctuations in the capital market. The Insurance Act (section 27, 27A and 27B) states that 75 per cent and 45 per cent of the annual portfolio investments for the LIC and the general insurance companies respectively, are required to be invested in government securities or other approved instruments, while the remaining share can be invested in private sector equity and debt.[112] Recent reforms in group insurance and pension funds have reduced the level of mandated government investment

[108]The LIC pension plan recently introduced (announced in the 1996/97 Budget) is mainly directed at workers in the informal sector who do not have access to a formal pension plan.

[109]Life insurance coverage is also offered by the LIC in case of cancer, renal-failure, by-pass surgery and paralysis.

[110]The four subsidiaries are: the National Insurance Company Ltd.; the New India Assurance Company Ltd.; the Oriental Insurance Company Ltd.; and the United India Insurance Company Ltd.

[111]Life Insurance Corporation of India (1996).

[112]Given the difference between the long-term nature of LIC business and the short-term cover issued by general insurance companies, the former's investment rules are more stringent. For LIC, the regulated share of 75 per cent is to be invested as follows: (a) central government securities not less than 20 per cent; (b) loans to National Housing Bank inclusive of (a) above not less than 20 per cent; (c) in state government securities, including government guaranteed marketable securities, inclusive of (b) not less than 50 per cent; and (d) in socially oriented sectors, including public sector, cooperative sector, house building by policy-holders, Own Your House schemes, inclusive of (c) not less than 75 per cent. For general insurance companies the regulated share of 45 per cent is to invested as follows: (i) central government securities not less than 20 per cent; (ii) state government securities and other approved securities, inclusive of (a) above not less than 30 per cent; and (iii) loans for housing programmes, and for purchase of fire equipment not less than 15 per cent.

to 40 per cent. In addition, the scope of investment in the "socially oriented sector" has been broadened in the case of life funds and the LIC has been permitted to invest in the private sector as well. Despite these reforms, however, sizeable funds continue to be invested in Government Securities and Bonds. Hence, the funds have been a sizeable factor in the financing of the public sector deficit. In addition, high administrative cost related to high staffing levels (about 126,000 in LIC and about 86,000 in the general insurance companies as of end-March 1996) and insufficient computerization have also dampened profitability.[113] Finally, it is not clear how the operation of the insurance companies' welfare and social schemes have affected profitability. Even if the direct costs of some of these schemes are provided through the Budget, the administrative costs of the schemes would adversely affect company profits. Despite all these factors, however, the Government's share of valuation surplus for the LIC and the dividend declared by the GIC have been consistently on the rise because of yields.

141. Following nationalization, GIC became the Indian re-insurer. Currently 20 per cent of its four subsidiary companies' re-insurance obligations are obligatorily ceded to the GIC. The GIC re-insures in the international market. Re-insurance of life business is taking place at an insignificant level.

142. At present, foreign insurance companies have no direct access to the domestic insurance market except for some re-insurance (residual uncovered risk not placed with the Indian companies) and marine cargo insurance. In these cases, foreign insurers cannot set up offices or branches in India under the Insurance Act, 1938 and the General Insurance Business Naturalization Act, 1972. Re-insurance is either undertaken through direct contact of overseas offices by the GIC or by re-insurance intermediaries operating in India or abroad. In the case of marine cargo insurance, the terms of contract between India and overseas importers or exporters determine whether insurance is provided by Indian or foreign companies; as in the case of re-insurance, if the foreign company provides insurance, its overseas offices are contacted.

Private sector participation

143. As part of the reform programme initiated in 1991, a set of far-reaching recommendations on reforms of the insurance sector was made in early 1994 by the Malhotra Committee.[114] The Committee recommended, *inter alia*, opening of both general and life insurance to greater competition, under the Insurance Regulatory Authority. This was set up in January 1996 as an interim body to prepare for the liberalization of the insurance market. Legislation to make the IRA a permanent statutory body with the mandate to supervise a competitive, private-sector industry was introduced into the Lower House of Parliament in 1996: however this legislation was subsequently withdrawn for political reasons and it was not possible to reintroduce it before the disolution of Parliament pending elections in early 1998 (Box IV.2).

---

[113] Recently, some steps have been taken to restrict new recruitment and to undertake computerization in the sector.

[114] Government of India (1994a).

Box IV.2: Key features of the Malhotra Committee's recommendations

The R. N. Malhotra Committee, which submitted its report in January 1994, provided recommendations on reforms of the insurance sector. The key recommendations are as follows:

- The private sector should be allowed to enter the insurance business. No single company should be allowed to transact both life and general insurance businesses. The number of new entrants should be controlled.

- If and when entry of foreign insurance companies is permitted, it should be done on a selective basis. They should be required to float an Indian company for the purpose, preferably in joint venture with an Indian partner.

- In order to avoid "mushrooming" of small private-sector companies, the minimum paid up capital for a new entrant should be Rs 1 billion (about US$30 million). However, a lower capital requirement can be prescribed for state level cooperative institutions taking up life insurance business.

- The promoter's holding in the private insurance company should not exceed 40 per cent of the total. Promoters should at no time hold less than 26 per cent of the paid up capital, so that promoters have an effective say when special resolutions are considered by the shareholders.

- Regulatory and prudential norms as well as conditions ensuring level playing fields among insurers should be finalized early so that intending entrants into the insurance business would be aware of the stipulations they would have to comply with. These conditions should aim to ensure that life insurers do not neglect the small man or the rural business and that the general insurers have balanced portfolios.

- Though nationalized insurance companies are in a position to face competition, it is essential that they quickly upgrade their technology, reorganize themselves and are enabled to operate as board-run enterprises.

- The extent of directed investments of the companies' portfolios should be reduced.

Source: Government of India (1994a), Report on the Committee on reforms in the insurance sector.

144. Meanwhile, in the 1997 Budget Speech, the Government has proposed that the LIC form joint ventures in the pensions sector, and has also invited a few companies with majority Indian ownership and control to put forward investment proposals in the health insurance sector. Insurance reform is thus linked to additional investment inflows and its associated institutional investment know-how. Breaking the monopoly and allowing private-sector participation, including foreign direct investors, would help to boost competition, increase product development, and promote an increased savings rate.

(iii) Transportation

(a) Maritime

145. Maritime freight is an important mode of transport for India, accounting for about 77 per cent of India's international trade (by value).[115] About 90 per cent of all port traffic passes through India's

[115]WTO document S/NGTMS/W/2/Add.36, 30 October 1995.

11 major ports; the 139 intermediate and minor ports are under State Governments.[116] In 1996/97, the major ports handled an aggregate of 227 million tonnes of cargo of which 20 million tonnes was containerized (Table IV.18): Vishakhapatnam handled around 34.5 million tonnes, followed by ports at Kandla, Mumbai and Chennai. The standard of facilities at the major ports varies widely. Most are operating at over 100 per cent capacity utilization, but are inefficient compared to other Asian and world ports on parameters like ship time at berth, turn-around time or productivity of labour and equipment.[117] Moreover, as capacity utilization has reached, or in some ports getting close to, its limit (increased from 90 per cent in 1990/91 to 105 per cent in 1996/97), it has become a severe constraint to future trade and growth. In the shipping sector, the share of Indian shipping in the carriage of liner cargo was about 10 per cent during 1995/96, while the overall share of Indian ships in total overseas trade is estimated at around 28 per cent.

Table IV.18
Key features of the maritime sector

Through-put of the 11 major ports (million tonnes)	277
of which: containerized	20
Number of ships[a]	432
of which: coastal	233
overseas	248
Share of privately owned ships (per cent)	61
Share of Indian ships in total world overseas trade (per cent)	28
Share of Indian shipping of total world liner cargo (per cent)	10
Share of Indian deadweight tonnes of total world deadweight tonnes (per cent)[a]	1

a Data from United Nations Conference on Trade and Development (1996), Review of Maritime Transport 1995.

Note: Year beginning 1 April.

Source: Government of India (1996t), Ministry of Surface Transport Annual Report 1995/96.

146. The maritime sector is governed by the Ministry of Surface Transport through the Director General of Shipping (DGS), Bombay. The Merchant Shipping Act, 1958 (as amended from time to time) is administered by the DGS under the powers granted therein, including all activities of shipping, such as administration, maritime safety, maritime training, examination and certification, and development. International conventions pertaining to the maritime sector are also serviced by the DGS for ratification and necessary incorporation into the national laws. All vessels are required to register with the DGS as per the provisions of the Act (section 22). Only Indian ships registered with the Registrar of Indian ships can fly the national flag (section 66 of the Act).[118] Registration is required to ensure that all statutory certificates required under the Merchant Shipping Act are kept valid: no Indian ship may leave an Indian port without a valid licence under the Act.

---

[116]Of the 11 major ports seven are located on the west coast (Bombay, Nhava, Sheva, Kandla, Mormugao, Cochin, Mangalore, and Tuticiren) and four on the east coast (Madras, Calcutta, Paradip and Vishakhapatnam).

[117]World Bank (1995a); and Business India, 27 January to 9 February 1997.

[118]Section 21 of the Merchant Shipping Act: an Indian ship is one which is owned wholly by (i) a citizen of India; (ii) by a company or body established by or under any Central or State Act which has its principal place of business in India; or (iii) a cooperative society which is registered or deemed to be registered for the first time under the Indian Co-operative Societies Act, 1912 or any other law relating to cooperative societies being in force in any State (Gill, 1994).

147. Until recently the maritime sector was heavily regulated, with emphasis on self-reliance and planned development: the Government was the single largest importer and owned the largest fleet. In 1993, the Government amended the Merchant Shipping Act providing for increased private-sector participation. Important reforms, in keeping with the general policy of market opening, include the amendment of section 21 to permit foreign companies to own and operate ships under the Indian flag. Following subsequent liberalization of the foreign direct investment regime, foreign companies are now allowed automatically to acquire up to 74 per cent of the shares of Indian carriers[119]; beyond 74 per cent, approval is granted on a case-by-case basis by the Foreign Investment Promotion Board (FIPB). Other reforms include the simplification of acquisition and disposal of ships (section 42 of the Act). Restrictive mortgage provisions (section 51 of the Act) were removed; and control of repair of ships in foreign shipyards has been relaxed.[120] The acquisition of oil-tankers and off-shore supply vessels by private companies is no longer restricted.

148. In the area of "cargo preference" measures, several factors may cause concern. First, although the Merchant Shipping Act (section 407) empowers the DGS to grant a licence to a foreign shipowner for coastal trade, licences to foreign ships for coastal trade are only granted if a suitable Indian vessel cannot be found. Nevertheless, the number of foreign licences granted for coastal trade increased from 23 in 1993/94 to 107 granted between April and December 1997. Secondly, the recently relaxed cabotage law allows foreign companies to cabotage only lash barges and container vessels. Moreover, it is only possible to cabotage goods that will be exported (i.e. cabotage between one Indian port and another is not permitted). The purpose of the liberalization of the cabotage law was to encourage mainline vessels to call at Indian ports. However, according to the authorities preliminary data indicate that this has not yet materialized.

149. In general, dry bulk cargo must be carried by an Indian ship if the goods originate in the Indian market (exports c.i.f.) or if transport is the responsibility of the Indian party (imports f.o.b.)[121]; private companies may only choose other carriers if an Indian ship is not available at a comparable rate. Similar cargo preferences are given to Indian lines for petroleum and other liquid oil cargo.[122] In the absence of suitable Indian vessels exporters and importers must apply for charter permission from the DGS to engage foreign flag vessels.

150. Unless the transport is part of a larger turn-key project (such as oil exploration or off-shore platform operations), only Indians are allowed to be recruited as shipping crew for Indian vessels.

151. The public sector shipyards (four major yards) have incurred large losses over the past years. Although concessional finance and the system of government guarantees for ship acquisition have recently been discontinued, the Government still supports the sector in a number of indirect ways, such as preferential treatment to Indian ship builders, protection from foreign competition through licensing requirements for the import of ships, shelter from exchange rate movements with respect to loans denominated in Yen, and by indirect modes of financing losses (Box IV.3). Since December 1992 companies have been allowed to keep operational revenues abroad; a substantial proportion of other earnings may be kept abroad, provided it is used for acquisition of a new ship within six months.

[119]Government of India (1997a).

[120]World Bank (1996b).

[121]In some cases where government cargo is being carried by the Shipping Corporation of India, flag waivers can be granted by TRANSCHART in the Ministry of Surface Transport enabling the cargo to be carried by a foreign ship in case of urgency or non-availability of SCI vessels.

[122]WTO document S/NGMTS/W/2/Add.36, 30 October 1995.

Consequently, several shipping companies have been successful in acquiring funds on the foreign capital market for their requirements.[123]

Box IV.3: Incentives in the shipping industry

The public sector shipyards (four of which are major shipyards) have incurred large losses over time. While the provision of loans at concessional rates has recently been discontinued, there are several other modes of support in force.

- In government procurement contracts, Indian shipyards receive a government preference of up to 30 per cent over the lowest international bid, thus placing foreign suppliers at a competive disadvantage. The subsidy is available for both domestic and export orders.

- External commercial borrowing by Indian companies wishing to purchase from public shipyards is permissable.

- The domestic industry is protected from foreign competition; the import of ships is allowed only through selective licensing.

- Fixation of price in terms of US$/Japanese Yen. The ship owners pay staged instalments to the shipyard at a rate of foreign exchange prevailing on the date of the actual payment. The date of the payment, however, is to be decided as per the contract schedule. A clause for paying liquidated damages for delays in completion of work beyond the stipulated date is incorporated into the contract.

Source: Government of India (1996t), Ministry of Surface Annual Report 1995/96.

Liner and conferences lines

152. Three national lines, Shipping Corporation of India, SCINDIA Steam Navigation Company, and India Steamship Company, have been granted permission to operate Indian vessels on liner routes. In 1992, the Government opened the liner routes to all other Indian companies in the areas in which these three lines are not operating.

153. A significant amount of India's international liner trade is served by non-conference lines and foreign flag vessels.[124] The state-owned Shipping Corporation of India (SCI) is the only active liner conference operating in the India-UK sector, the other Indian lines having discontinued service. SCI has also recently started to offer bulk services in the same sector along with Waterman.

154. Indian lines have entered into agreements with lines in several countries on liner conference trade. Among these are the India, Pakistan, Bangladesh Conference (IPBC), which caters to trade from the United Kingdom and continental Europe to India, and INDPAKCON (India, Pakistan, Bangladesh, Ceylon, and Burma Outward Freight Conference), which covers trade with U.S. Gulf and Atlantic ports. India is a member country of the UNCTAD Convention on Code of Conduct for Liner Conferences, which came into force in 1983. The convention, which provides an international regulatory framework for liner conferences, stipulates that trade between two countries should be allocated according to the 40:40:20 principle; 40 per cent of the tonnage should be reserved to the national flag lines of

[123]World Bank (1996b).

[124]Liner service is a service provided by a shipping firm whereby cargo-carrying vessels are operated between ports on a regular basis, while conference line is an association of ship-owning lines that operate on a specific route.

each country, with 20 per cent permitted for third-flag country cross-traders. A modified cargo support scheme was approved by the Government in March 1994, providing support to Indian flag vessels in a phased manner in the following three areas: (i) India-UK-continental Europe (proposed share of 30 per cent); (ii) India-Japan/Far East (20 per cent); and (iii) India-US-Atlantic/EC-Canada (25 per cent). The shares are to be gradually increased to 40 per cent in the near future. However, no legislation has been framed for the purpose of enforcing the scheme.[125] Since the scheme is voluntary there has been limited support from shipping companies. The share of Indian lines was approximately 13 per cent, 3 per cent and 1 per cent, respectively, in India-UK-continental Europe trade, India-Japan/Far East, and India-U.S. east coast trade in 1996/97.

155. In India, conferences are allowed to set their own tariffs. Furthermore, there are no institutional arrangements dealing with loyalty arrangements between conferences and shippers and agreements entered into between conferences and outsiders.

National ports

156. The major Indian ports are organized as Port Trusts, i.e. semi-autonomous statutory entities with a non-profit objective organized under the Indian Ports Act, 1908 and the Major Ports Trust Act, 1963. In addition to infrastructure planning and construction, Port Trusts have the power to operate ship and cargo handling facilities and services (such as pilotage, cargo, storage and container stations) and to frame regulations. The Port Authorities have their own budgets, and can raise dues (tariffs are set individually for each port) and incur debts subject to government approval. The financial situation of the Port Trusts is mixed, with some ports requiring financial support, such as subsidies, concessional lending for some capital expenditures, or restructuring of debts. Since the ports do not pay taxes, even on their commercial activities, they have a negative impact on the Government's fiscal position.[126]

157. Until recently there was little interaction between the private sector and the Port Trusts, with each port providing most services, especially cargo handling and storage, with their own staff and equipment.[127] But, in tandem with the overall liberalization of the economy and, given that the investment needs in the ports are beyond the resources available to the Government, the Ministry of Surface Transport issued in 1996 new guidelines to the Port Trusts for private-sector participation, opening up specified port areas to the private sector. Approval of the Central Government is needed before any agreement is signed. Automatic approval on foreign direct investment is accorded for equity participation up to 74 per cent in construction activities in the area of ports and harbours.

158. Another significant feature of the new guidelines on private-sector participation is that it opens up port development on build-operate-transfer (BOT), or similar schemes, for up to 30 years, relieving scarce public resources of the cost of financing. Financial incentives to port investors include a five-year tax holiday, a five-year tax concession period and, as an incentive to financial institutions who provide long-term finance, a deduction of taxable income derived from financing of investments provided that this amount is credited to a special reserve. Additional fiscal incentives are also being provided to encourage the development of port infrastructure. Several State Governments are going ahead with minor port projects involving the private sector. Meanwhile, the Ministry of Surface Transport has

[125]WTO document S/NGTMS/W/2/Add.36, 30 October 1995.

[126]World Bank (1995a).

[127]However, according to section 42(3) of the Major Ports Trust Act, 1963, a Port Trust has been allowed to authorize any person to perform some of its services such as landing and shipping goods, receiving and delivering cargo, pilotage, and mooring.

begun port privatization in Jawaharlal Nehru, Navi Mumbai and several other projects in all the 11 major ports.

159. There is no preferential treatment granted to national suppliers of port and auxiliary services or for maintenance and repair of vessels. However, spares required for maintenance and repairs to the equipment on vessels must be procured from the original manufacturers who are mostly foreign suppliers.[128]

Multimodal transport

160. The legal framework for developing and promoting multimodal transportation services is covered by the Multimodal Transportation of Goods Act, 1993.[129] According to the Act, any multimodal operator (MMO) has to register with DGS. The MMO should be registered under the Companies Act; partnership and proprietary firms are not eligible for registration. The registration, which is valid for one year and may be renewed for further period of one year, is outlined in section 4 of the Act.

161. Since 1993, private enterprises, including foreign companies, have been allowed to set-up and operate container freight stations (CFSs) and inland container depots (ICDs). As a result, the network of ICDs and CFSs is expanding rapidly. At end-1997 the total number of registered MMOs had increased to about 150, of which 15 were foreign companies. At the same time, the share of liner cargo which is carried by means of multimodal transport arrangements is estimated at below 25 per cent.[130] As noted by the World Bank (1996), these are positive trends since the potential for full-blown intermodal service, with all its benefits, is enormous.[131]

(b) Air transport

Regulatory framework

162. The Ministry of Civil Aviation is responsible for national policy-making in the field of civil aviation; the Director General of Civil Aviation (DGCA) is the direct regulator of the sector under the Aircraft Act, 1934 and the Aircraft Rules, 1937. The DGCA is empowered, *inter alia*, to (i) regulate air transport services to, from and within India; (ii) register civil aircraft in India; and (iii) enforce civil air regulations, air safety and airworthiness. In addition, the Government has a majority equity holding in the sole national supplier of international air services (Air India) and a domestic air carrier (Indian Airlines).

---

[128]WTO document S/NGTMS/W/2/Add.36, 30 October 1995.

[129]International multimodal transport is a process whereby goods pass from one country to another by various modes of transportation.

[130]WTO document S/NGTMS/W/2/Add.36, 30 October 1995.

[131]World Bank (1996b).

Operational side

163. In 1994, an amendment to the Air Corporation Act, 1953 broke the state monopoly of Indian Airlines in the provision of domestic services and has enabled private operators to operate without restrictions, except a requirement of operating a certain minimum of flights in specific regions.[132] Since then the sector of air transport has undergone a dramatic change, with seven private scheduled operators securing a market share of more than 40 per cent.[133] In addition, a number of private operators have been given permits for charter and non-scheduled services including "air taxi" services. As a result, the quality, overall capacity, and frequency of trunk routes have increased and the number of new destinations have been added to the routes.[134] In January 1997 a new policy was announced that would permit 40 per cent foreign investment in private domestic airlines, but only from institutions other than foreign airlines.[135]

164. Similarly, an "open-skies" policy for air cargo services has increased cargo capacity at competitive rates. The overall gains have been substantial, with cargo rates declining as much as 30 per cent between 1994 and 1997. For scheduled international passenger services, India has negotiated bilateral air services agreements with 90 countries, as at 30 November 1997. The agreements provide the legal framework within which international air services to and from India operate and include agreements on route schedules and authorization conditions. All the air services agreements signed by India provide for pre-determination of capacity, except the agreement with the United States, where no limitations have been placed on capacity.

165. The Airports Authority of India (AAI), manages and overseas the development of terminal and cargo facilities and controls the allocation of landing slots.[136] The slots are allocated according to the availability of airport capacity as per IATA scheduling procedures.

166. No special privileges are granted to the government-owned air companies, except that, as in a number of other countries, Indian civil servants are obliged to use the national carrier for official travel. According to the authorities, the national airlines receive no budgetary support or grant from the Government.

Infrastructure development

167. In construction and operation of new airports the Government is encouraging foreign and domestic private-sector participation using the build-operate-transfer (BOT) or similar schemes. Approvals have recently been given for private participation in new international airports in Bangalore and Cochin, and for provision of additional facilities at Calicut airport. As in the ports sector, a five-year tax holiday is provided to private investors. A tax paid by embarking international air passengers will be used

[132]This includes operating not less than 10 per cent of their capacity displayed in major routes in other specified sectors which have relatively less air traffic; of this 10 per cent, at least 10 per cent must be operated exclusively in certain specified remote areas.

[133]Government of India (1997c).

[134]World Bank (1996b).

[135]Times of India, 25 January 1997.

[136]AAI was created by merging the National Airports Authority and the International Airports Authority of India.

to finance the facilities at Calicut. A similar method is expected to be adopted for development of airports in other States that have potential for tourism.

(iv) Telecommunications

168. Despite impressive growth in basic telephone services, India's telephone penetration ratio remains low (Table IV.19). The number of telephone lines almost quadrupled from 1985/86 to 1996/97, from 3.2 million lines to 14.5 million, providing 1.7 lines per 100 inhabitants. Against this, the telephone penetration for the developing world is six lines per 100 inhabitants. India also has fewer lines per inhabitants compared to many other developing countries in Asia such as China (3.7), Pakistan (2) and Malaysia (13). The waiting list of a further 2.7 million customers indicates a large un-met demand, and the investment needed is well outside the Government's financing capability.

Table IV.19
The telecommunications sector 1985-97

	1985/86-91/92[a]	1992/93	1993/94	1994/95	1995/96	1996/97
Telephone lines						
Total lines (million)	5.02	6.80	8.03	9.80	...	14.54
New connections (million)	0.49	0.99	1.23	1.77	2.18	2.56
Waiting list (million)	1.80	2.85	2.50	2.15	2.28	2.89
Telephone penetration (lines per 100 inhabitants)	0.62	0.78	0.90	1.08	1.41	1.72
Overseas services						
Telephone traffic (million minutes)	...	614.20	742.82	942.00	1,117.56	1,384.93[b]
Telegrams (million words)	...	39.77	28.84	24.47	21.14	18.95[b]
Telex (million minutes)	...	38.67	30.99	24.19	20.40	17.35[b]

... Not available.

a Annual average.
b Provisional.

Note: Year beginning 1 April.

Source: WTO Secretariat based on Government of India (1996j), Department of Telecommunication Annual Report 1995/96.

169. The National Telecommunication Policy, 1994 (NTP) states that "Private investment and association of the private sector would be needed in a big way to bridge the resources gap. Private initiative would be used to complement the Departmental efforts to raise additional resources, both through increased internal generation and adopting innovative means like leasing, deferred payments, BOT (build-operate-transfer), BLT (build-lease-transfer), etc.". In line with this policy, private services providers have been extended fiscal benefits such as tax holidays, additional access to external commercial borrowing, etc. Licencees of basic, cellular, paging and VSAT services can import specified equipment at concessional duty rates. Exporters of telecommunications equipment also have import access to special restricted items (Chapter III(2)(vii)). The Government has, at February 1998, issued licences involving private operators for five Telecom Circles in respect of basic services.

The regulatory framework

170. The Telecom Regulatory Authority of India (TRAI), established by Act of Parliament in March 1997, has the responsibility and authority for regulations affecting telecommunications.[137] The responsibilities of the TRAI, include, *inter alia*: (i) recommending the terms and conditions of licences for service providers; (ii) enforcing standards; (iii) price notification; (iv) ensuring technical compatibility and effective interconnection among different service providers; (v) ensuring compliance of universal service obligations; (vi) fixing access charges; and (vii) facilitating revenue sharing arrangements between the Department of Telecommunications (DoT) and private operators. TRAI is a statutory board with a Chairperson and two or more members but not more than six.[138] The Department of Telecommunications, as a service provider, is to be under the purview of the TRAI. Broadcasting is not included within the purview of the TRAI.

Market structure and private sector participation

171. Basic services: For the purpose of administrating the telecommunications sector, the country is divided into 21 circles and four metro districts. The NTP, 1994 provides for registered private investors in the expansion of the telecommunications network to provide intra-voice telephone service in various telecommunication circles/metro districts.[139] Foreign companies are limited to 49 per cent in equity in private-sector joint ventures. In each of the telecommunication circles competition will be provided by one private operator apart from the DoT (the existing monopoly supplier of the service) on a non-exclusive basis.[140] The licences are given for a period of 15 years, with a possible extension of ten years. The companies granted a licence are required to maintain a balance in their coverage between urban and rural areas (i.e. a minimum of one phone per village and 10 per cent of the direct exchange lines in rural areas). Other conditions of operation include agreed tariff and revenue sharing arrangements.

172. Progress has so far been slow in awarding licences for basic telephone services. After three rounds of bidding, according to the authorities, licences have been signed for only five out of the 21 circles. Licensees for the five circles are expected to begin operations in 1998 (Table AIV.5).

173. The domestic long-distance (i.e. inter-circle/metro) network will continue to be provided by the monopoly DoT supplier and policy in this regard will be reviewed in 1999. The international

[137]The Telecom Regulatory Authority of India Ordinance No. 11 of 1997.

[138]The Chairperson must be or have been a Supreme Court Judge or a Chief Justice of a High Court; it has also been proposed that a TRAI member may not undertake commercial employment for a period of two years from the date (s)he ceases to hold office.

[139]In the Indian Government's law and regulations relating to telecommunications, there is no definition of basic services. However, as suggested by the Government (WTO document S/NGTMS/W/2/Add.36, 30 October 1995), basic services are here assumed to cover (i) voice telephone services; (ii) packet-switched data transmission services; (iii) circuit switched data transmission; (iv) telex services; (v) telegraph services; (vi) facsimile services; and (vii) private leased circuit services. Licensed providers are permitted to provide circuit switched data transmission, facsimile and private leased circuit services. Packet-switched data transmission, telex, and telegraph services are supplied by the monopoly DoT.

[140]At present, basic telecommunications services are provided by the DoT in all circles and metro districts except in two metro districts (Bombay and Delhi) where a government-controlled corporation, the Mahanagar Telephone Nigram (MTNL) is the provider.

long-distance network will be provided by the existing supplier, the government-controlled corporation Videsh Sanchar Nigam Limited (VSNL); policy in this regard will be reviewed in 2004.

174. According to the authorities, call-back services are not permitted by law. However, "home country direct services" provided by a number of international telecommunications companies are permitted under bilateral agreements.

175. Value-added services: In 1992, the following value-added services were opened up to private investors for the following services initially for 10 years: (i) electronic mail; (ii) voice mail; (iii) closed users group (CUG) domestic 64Kbps data service via INSAT satellite system; (iv) audiotext service; (v) public mobile radio trunked service; (vi) credit card authorization; (vii) internet; (viii) videotex; (xi) video conferencing; (x) radio paging; and (xi) cellular mobile telephone. Licences for other value-added services may also be considered on a non-exclusive basis. Foreign equity is allowed up to 51 per cent in private-sector joint ventures. Licences are normally granted for 15 years, but for domestic long-distance (inter-circle/metro) media, licences will be provided for a period of five years after which the policy will be reviewed.

176. Except for radio paging and cellular mobile telephone services, licences may be granted to Indian registered companies on a continuous, non-exclusive and first-come-first-served basis. For radio paging and cellular mobile services, licences are granted through a tendering process, considering, *inter alia*, the company's track record; its net worth; and the quality and price offered to the consumer. In the case of public mobile radio trunked services (PMRTS) operators are limited to 36 per city due to frequency limitations.

177. The Government has made significant improvements in awarding licences for cellular mobile and paging services. There are two privately owned cellular operators in each of the four main cities (Delhi, Bombay, Calcutta, and Madras).[141] In addition, the Government has issued 33 licences to 13 operators for 18 of the 20 circles since December 1995. According to the authorities, services have started in 17 circles and are likely to start in the rest soon. A maximum of two to five operators in each city and two to three operators in each circle are allowed.[142] The DoT has issued licences to more than 20 different providers of paging services throughout India. In other areas of value-added services, private-sector interest is beginning to emerge. For public mobile radio trunked services, 178 licences have been signed with 32 companies in 65 cities; 14 companies have commenced services in 18 cities. Licences have also been awarded to 16 companies for electronic mail services, 12 of which have commenced operations. In the area of voice mail/audiotext services, 41 licences have been granted to 13 companies in 17 cities; seven companies have begun providing these services in 10 cities. VSAT service licences have been granted to 13 companies and nine have started operations. Finally, for Internet services, detailed guidelines and licensing conditions are currently being framed.

178. Production: The manufacture of telecommunications equipment has been de-licensed and fully opened up to the private sector. India produces a wide range of telecommunication and electronic items matching international quality standards, of which 3-4 per cent of value-added is exported. Foreign equity up to 51 per cent in manufacturing projects is approved on an automatic basis. Foreign equity in excess of 51 per cent is also possible on a case-by-case approval.

Inter-governmental and bilateral agreements

[141]All eight licencees have commenced operations in the four cities.

[142]DoT has the right to operate as an additional operator in any of these areas.

179. Some of the intergovernmental agreements entered into by the Government are: the INTELSAT Agreement; INMARSAT Convention and Operating Agreement; Commonwealth Telecommunications Organisation Financial Agreement, 1983; ITU Radio Regulations; and ITU International Regulations. India has also entered into four bilateral agreements with, Pakistan, Nepal, Bangladesh, and Bhutan on some telecommunication services.

(v) Tourism[143]

180. The total number of visitors to India reached a record high of 2.3 million in 1996/97 (Table IV.20). The top three sources of visitors in 1996/97 were, in descending order the UK, Bangladesh and the United States. Estimated gross export earnings in 1996/97 were US$3.0 billion (or 0.9 per cent of GDP), and made the industry the third largest export earner. India has only about 0.4 per cent of the world's tourists and around 0.7 per cent of world tourism spending, indicating that it has barely tapped its potential.

Table IV.20
Development of the tourist industry, 1986-97

	1986/87-90/91[a]	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97
Tourist arrivals ('000)	1,614	1,782	1,820	1,871	1,907	2,090	2,334
(annual percentage increase)	(...)	(10.4)	(2.1)	(2.8)	(1.9)	(14.8)	(6.6)
share of total (per cent):							
Western Europe	32.8	30.9	34.1	35.1	34.5	36.7	35.5
North America	9.4	9.7	10.6	11.7	13.0	12.7	13.2
Tourist arrivals by air ('000)	1,318	1,395	1,424	1,590	1,640	1,912	2,028
Average length of stay (days)[b]	29.0	30.2	27.9	28.8	28.7	29.5	29.8
Number of rooms[c]	44,405	44,495	47,794	51,153	55,455	57,407	61,794
Gross tourism receipts (million US$)	1,456	1,977	2,098	2,222	2,365	2,714	3,064
(per cent of GDP)	(0.6)	(0.7)	(0.9)	(0.8)	(0.8)	(0.8)	(0.9)
Direct tourism employment (million)	6.1	6.4	6.6	7.0	7.8	8.5	9.1

... Not available.

a Annual average.
b Relates to calendar years.
c Includes only rooms in hotels approved by the Department of Tourism. Data for end of calendar year.

Note: Year beginning 1 April.

Source: Government of India.

181. The main constraints to growth of tourism include inadequate provision of infrastructure services, such as road and air transport facilities. Urban land ceiling legislation and other regulatory procedures, such as zoning restrictions, are said to hamper the growth of the industry and inhibit the entry of potential

[143]The tourism industry is defined by the Government to include: hotels, restaurants, resorts and other complexes providing accommodation, and/or catering and food facilities to tourists; travel agencies, tour operators and tourist transport operators; units providing facilities for cultural, adventure and wildlife experiences for tourists; surface, water and air transport facilities for tourists; leisure, entertainment, amusement, sports and health units for tourists; and convention/seminar units and organization (Government of India, 1996k).

competitors.[144] The potential for domestic tourism has grown during the last few years due to the emergence of a powerful urban middle class, some improvements in transportation facilities, and the growth of economic activity. There are no precise estimates of total domestic tourist traffic in the country, but its importance is indicated by the number of domestic tourist bed-nights, (roughly estimated at 141 million in 1996).

182. The tourism sector is not governed by any sector-specific legislation; however, the Department of Tourism has issued guidelines to facilitate the development of the sector. Though there is no clear division of responsibility between the States and the Central Government with regard to tourism, most of the delivery systems are within the purview of the State Governments. The Department of Tourism is responsible for formulating national-level policies and programmes for the development of tourism on a sustainable basis, as well as coordinating activities of various Central Government agencies, State Government, and the private sector. Several tourist-related public institutions are under the purview of the Department of Tourism.[145] The Department approves and classifies hotels, and approves travel agents, tourist transporters, etc., provided they meet the standards set by the Department. Moreover, through various institutions, it has standardized training facilities in travel, tourism and hotel management and provides training in, *inter alia*, hotel management and catering technology, skiing, mountaineering, and water sports.

183. The private sector has increased its role in the tourism sector in India over the past two decades, now being the dominant provider of services and owner of hotels (around 95 per cent of approved hotel rooms are in the private sector). There are no legal barriers to private-sector entry. Most States also have a State Tourism Development Corporation (STDC), operating car, bus, hotel and lodging facilities, supporting private sector activities.

184. As a consequence of the liberalization policies, the tourism industry has been declared a priority sector for foreign direct investment, which is eligible for automatic approval for up to 51 per cent of the equity. Higher foreign equity participation in specific cases is allowed on a case-by-case basis. Investment by non-resident Indians is allowed up to 100 per cent. Automatic approvals are given for foreign technology agreements and management contracts within specified parameters. Special incentives are offered to national and foreign investors in the tourism industry, including interest subsidy, income tax incentives, import concessions, and concessional licensing for imports of special items for the hotel industry (Box IV.4). Preferences in access to water and electricity are also extended to the industry.

---

[144]World Bank (1996b); and Business India, 16 to 29 December 1996.

[145]These include the India Tourism Development Corporation (ITDC); the Indian Institute of Tourism and Travel Management (IITTM); the National Council for Hotel Management and Catering Technologies (NCHMCT) and the institutes under its control; the National Institute for Water Sports (NIWS); and the Indian Institute for Skiing and Mountaineering (IISM).

Box IV.4: Incentives in the tourism industry

Incentives to the tourism industry provided by the Central Government include:

- An interest subsidy of 3 per cent on loans from financial institutions is available to one-, two-, and three-star categories of hotel projects outside the metropolitan cities of Bombay, Calcutta, Delhi and Madras. A subsidy of 5 per cent is available to such hotel projects if they are in the travel circuits and destinations identified for intensive development in the National Action Plan for Tourism.

- Heritage hotels are eligible for the 5 per cent interest subsidy.

- As a fiscal incentive, 50 per cent of profits derived by hotels, travel agents and tour operators in foreign exchange are exempt from income tax. The balance of profits in foreign exchange is also exempt provided it is re-invested in tourism projects.

- Import of special items for the hotel industry is permitted subject to import entitlement. Concessional customs duty is charged for imports of specified goods required for initial setting up or substantial expansion of hotels. Moreover, the tourism sector can import at a concessional rate of duty under the Export Promotion Capital Goods (EPCG) Scheme.

- Announced in the 1997/98 Budget, new hotels located in a hilly area, rural area, place of pilgrimage, or a specified place of tourist importance, receive a tax deduction of 50 per cent of profits and exemption from expenditure tax. In respect of hotels located in other places, excluding the four metropolitan cities, the tax deduction is 30 per cent of the profits.

Source: Government of India (1996k), Department of Tourism Annual Report 1995/96 and Government of India (1997b), Budget 1997/98.

(vi) Software services[146]

185. India's software services sector is perceived as one of the areas in which India has the potential to become a "global powerhouse".[147] The growth has been export led, partly explained by India's large pool of English-speaking scientific professionals available at relatively low cost. Thirty-seven software companies have acquired ISO 9000 certification, indicating the industry's high quality. The data available, which do not provide a clear distinction between software and software services, indicate that software services have in recent years outpaced the economy as a whole growing to almost 2 per cent of GDP in 1994/95. The software industry is concentrated around a few cities (Mumbai, Bangalore, and Delhi) and employs more than 125,000 people.

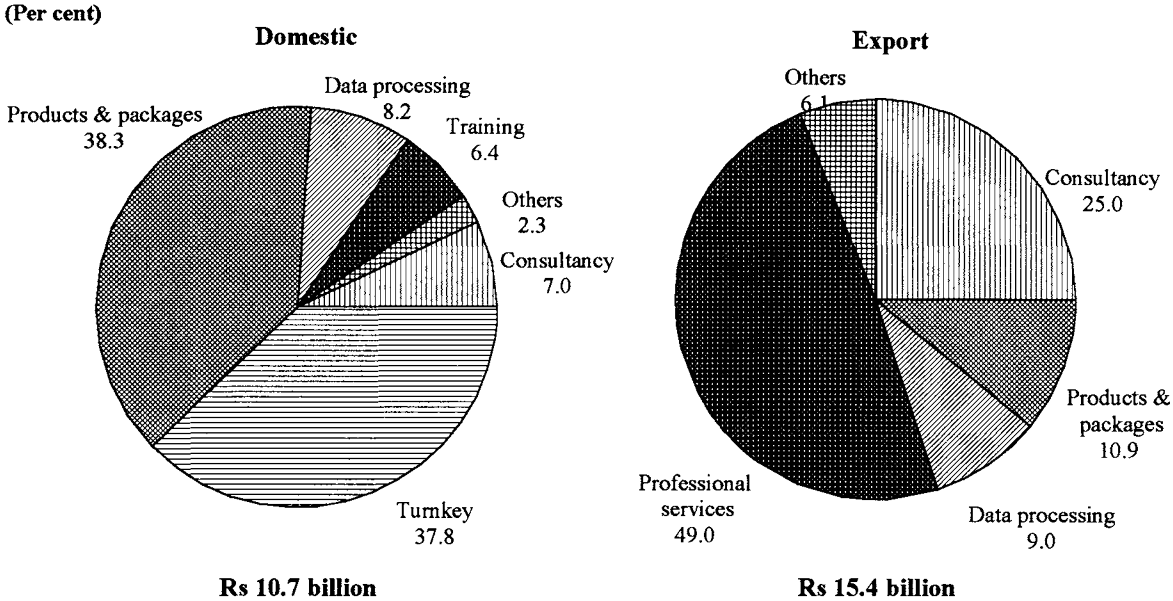
186. The software industry is dominated by services (Chart IV.5). About half of software exports consist of professional services, and an additional 25 per cent of consultancy services, while non-services (such as products and packages) account for a modest share. However, products and packages are estimated by the authorities to constitute some 47 per cent of output sold domestically.

[146]This section draws on Software-India.com's website http://www.software-india.com/, unless otherwise indicated.

[147]Sen (1995).

Chart IV.5
Composition of the software industry, 1994/95

(Per cent)



Note: **The domestic industry's revenue does not include figures on in-house development or direct import of software by end-users. Year beginning 1 April.**

Source: **Software - India.com, New Dehli (htpp://www.software-india.com).**

187. The United States accounted for 58 per cent of software export revenue in 1996/97, followed by Europe (21 per cent). Trade with Europe has grown rapidly in recent years. Of the total export value, off-shore services account for about 30 per cent and off-shore packages for 10 per cent. Off-shore services, which involve the use of high-speed data comlinks (64 kbps and above), permit, for example, U.S. companies to provide services 24 hours a day by using specialists located in India during the part of the day they are not operating. With a liberalized policy framework and faced by constraints in movement of personnel (see below), off-shore services may develop favourably.

188. The incentives provided to the software industry include zero duty on import, 100 per cent foreign equity in industries set up exclusively for exports and 51 per cent otherwise, tax holidays for exports, and access to some restricted imports. Moreover, the Government has established parks (the Software Technology Parks and Electronic Hardware Technology Park) to encourage synergy among software companies. Additional information on the policy framework is provided in the section on electronics and computer software (Section (5)(vi)).

189. A constraint to growth in the industry is, according to the authorities, restrictive visa requirements imposed on Indian computer professionals. For example, in the United States computer professionals are to obtain an H-1B visa, for which the U.S. employer must show that, *inter alia*, the employee will be paid at the rate which U.S. citizens are paid, coupled with a binding ceiling for total visas (65,000 per annum).

REFERENCES

Academy of Business Studies (1997), Easy Reference Customs Tariff 1997/98, New Delhi, March.

Association of Indian Automobile Manufacturers (1997), www.planetindia.net/aiam/prof_prod.htm.

Balasubramanyam, V. N., M. Salisu and David Sapsford (1996), "Foreign Direct Investment and Growth in EP and IS Countries", The Economic Journal Vol. 106, January, pp. 92-105.

Bhuleshkar, A. V. (1995), "Priority for Agriculture in the Sequencing of New Economic Reforms Programme: A view point" in Indian Economy Under Liberalised System: Issues and Problems (eds) A. V. Bhuleshkar and S. R. Desai, Himalaya Publishing House, New Delhi.

Brahmbhatt, Milan, T. G. Srinivasan, and Kim Murrell (1996), India in the Global Economy, World Bank Policy Research Working Paper 1681, Washington D.C., November.

Bureau of Indian Standards (1995), Annual Report 1994/95, New Delhi.

Central Statistical Organization (1997), Monthly Index of Industrial Production, update.

Chopra, Ajai, Charles Collyns, Richard Hemming and Karen Parker (1995), India - Economic Reform and Growth, IMF Occasional Paper 134, Washington D.C., December.

Dun and Bradstreet (1996), Exporters Encyclopedia 1996/97, Port City Press, Baltimore.

Economist Intelligence Unit (1997), Country Report India 1st quarter 1997, London, January.

Gang, I.N. and M. Pandey (1996), "What was Protected? Measuring India's Tariff Barriers 1968 -1992", Working Paper, Rutgers University, New Jersey, August.

GATT (1993), Trade Policy Review - India, General Agreement of Trade and Tariffs, Geneva, December.

GATT (1994), The Results of the Uruguay Round of Multilateral Trade Negotiations, General Agreement on Trade and Tariffs, Geneva, November.

Goldar. B and H Saleem (1992), India's Tariff Structures: Effective Rates of Protection of Indian Industries, Studies in Industrial Development No. 5, National Institute of Public Finance and Policy, New Delhi.

Gothoskar, S. S. (1983), "Drug Control: India", World Development, Vol. 11, No. 3, pp. 223-228.

Gouri, G. (1996), "Privatisation and Public Sector Enterprises in India: Analysis of Impact of a Non-Policy", Economic and Political Weekly, Mumbai, 30 November.

Government of India (1991), Statement of Industrial Policy, Exhibit No. 5, July.

Government of India (1992), Eighth Five Year Plan 1992/93 - 1997/98, Ministry of Finance, New Delhi.

Government of India (1993), Economic Survey 1992/93, Ministry of Finance, New Delhi.

Government of India (1994a), Report on the Committee on Reforms in the Insurance Sector, Ministry of Finance, New Delhi, January.

Government of India (1994b), National Telecommunications Policy of 1994, New Delhi, May.

Government of India (1994c), Modifications in Drug Policy, 1986, Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, New Delhi, September.

Government of India (1995a), Memorandum of Understanding between the Government of the United States and India, New Delhi, January.

Government of India (1995b), Ministry of Finance Annual Report, New Delhi.

Government of India (1995c), Press Release on the Successful conclusion of market access talks with the USA and the EC, Ministry of Textiles.

Government of India (1996a), Non Tariff Barriers by India's Major Trading Partners, Trade Policy Division, Ministry of Commerce, New Delhi, February.

Government of India (1996b), Agricultural Statistics at a Glance, Directorate of Economics and Statistics, Department of Agriculture and Cooperation, Ministry of Agriculture, New Delhi, March.

Government of India (1996c), Budget 1996/97, Ministry of Finance, New Delhi, June.

Government of India (1996d), Handbook of Industrial Policy and Statistics, Ministry of Industry, New Delhi, June.

Government of India (1996e), Manual of Policy and Procedures Governing Industrial Approvals, Secretariat for Industrial Approvals, Department of Industrial Policy and Promotion, Ministry of Industry, New Delhi, September.

Government of India (1996f), Address by his Excellency Mr H. D. Deve Gowda, Prime Minister of India at the World Food Summit, Rome, November.

Government of India (1996g), Constitution of India, Eastern Book Company, Lucknow.

Government of India (1996h), Department of Agriculture and Cooperation Annual Report, 1995/96, Ministry of Agriculture, New Delhi.

Government of India (1996i), Department of Chemicals and Petrochemicals Annual Report 1995/96, Ministry of Chemicals and Fertilizers, New Delhi.

Government of India (1996j), Department of Telecommunication Annual Report 1995/96, Department of Telecommunication, New Delhi.

Government of India (1996k), Department of Tourism Annual Report 1995/96, Department of Tourism, New Delhi.

Government of India (1996l), Economic Survey 1995/96, Ministry of Finance, New Delhi.

Government of India (1996m), Electronics India: Your Investment Opportunity 1996/97, Department of Electronics, New Delhi.

Government of India (1996n), Ministry of Civil Supplies Annual Report 1995/96, Consumer Affairs and Public Distribution, New Delhi.

Government of India (1996o), Ministry of Commerce Annual Report 1995/96, New Delhi.

Government of India (1996p), Ministry of Food Annual Report 1995/96, New Delhi.

Government of India (1996q), Ministry of Health and Family Welfare Annual Report, 1995/96, New Delhi.

Government of India (1996r), Ministry of Industry Annual Report 1995/96, New Delhi.

Government of India (1996s), Ministry of Steel Annual Report 1995/96, New Delhi.

Government of India (1996t), Ministry of Surface Transport Annual Report 1995/96, Ministry of Surface Transport, New Delhi.

Government of India (1996u), Ministry of Textiles Annual Report 1995/96, New Delhi.

Government of India (1997a), Press Note No. 2 (1997 Series), Ministry of Industry, Delhi, January.

Government of India (1997b), Budget 1997/98, Ministry of Finance, New Delhi, February.

Government of India (1997c), Economic Survey 1996/97, Ministry of Finance, New Delhi, February.

Government of India (1997d), Export and Import Policy 1997/98-2001/02, Ministry of Commerce, New Delhi, March.

Government of India (1997e), Ministry of Steel information page on the internet (www.nic.in/steel/).

Government of India (1997f), SIA Newsletter, Vol. V, No. 9, Secretariat for Industrial Assistance, Department of Industrial Policy and Promotion, Ministry of Industry, New Delhi.

Government of the Unites States (1992), Correlation: Textile and Apparel Categories with the Harmonized Tariff Schedule of the United States, International Trade Administration, US Department of Commerce, Washington D.C., November.

Gulati, A. and A. Sharma (1994), "Agriculture Under GATT: What it Holds for India", Economic and Political Weekly, Mumbai, 16 July.

International Monetary Fund (1996a), Exchange Arrangements and Exchange Restrictions - Annual Report 1996, Washington D.C., August.

International Monetary Fund (1996b), India - Recent Economic Developments, Staff Country Report No. 96/131, Washington D.C.

International Monetary Fund (1996c), India - Selected Issues, Staff Country Report No. 96/132, Washington D.C.

Jha, U.M. (1995), "Agricultural Policy in the Wake of GATT (Uruguay Round), in India's Economic Reforms and Beyond, (ed) R.K. Sinha, Anamika Publications, New Delhi.

Kaushik, K. (1995), GATT Accord: the Indian Paradigm, APH Publishing Corporation, New Delhi.

Kumar, R. and S.R. Khanna (1990), "India, the Multi-Fibre Arrangement and the Uruguay Round", in World Bank (1990), Textiles Trade and the Developing Countries: Eliminating the Multi-Fibre Arrangement in the 1990s, Carl B. Hamilton (ed), Washington D.C., February, pp. 182-212.

Life Insurance Corporation of India (1996), Annual Report 1995/96, New Delhi.

Low, Patrick (1995), Preshipment Inspection Service, World Bank Discussion Papers No. 278, Washington D.C., February.

Mehta, D. (1996), Indian Software Advantage: An adaptation of a Presentation of the Executive Director of NASSCOM at India Vision 2000, 13 June, Washington D.C. posted on the internet.

Mohan, Rakesh (1996), The Indian Infrastructure Report - Policy Imperatives for Growth and Welfare, New Delhi, June.

Muhleisen, Martin (1997), Improving India's Savings Performance, International Monetary Fund Working Paper WP/97/4, Washington D.C., January.

Mukherjee, A. and T. Sastry (1996), "Automotive Industry in Emerging Economies: A Comparison of South Korea, Brazil, China and India", Economic and Political Weekly, Mumbai, 30 November.

OECD (1996), Foreign Direct Investment in India, Organization for Economic Co-operation and Development, mimeo, Paris.

Pursell (1996), Indian Trade Policies since the 1991/92 Reforms, mimeo, Washington D.C., July.

Ramachandran, K.S. (1995), Beyond Liberalization, Westvill Publishing House, New Delhi.

Rao, S.L. (1993), "Reforming Public Enterprise" in A.V. Bhuleshkar (ed). Indian Economy in Transition: Structural Reforms, Anmol Publishers, New Delhi.

Reserve Bank of India (1993), Guidelines on Entry of New Private Sector Banks, Mumbai, January.

Reserve Bank of India (1996), Annual Report 1995/96, Mumbai, August.

Reserve Bank of India (1997), Annual Report 1996/97, Mumbai, August.

Sen, Pronab (1995), Indian Software Exports: An Assessment, Economic and Political Weekly, 18 to 25 February.

Sharma, P. and R. Mehta (1996), Trade Reforms and Changes in Effective Protection of Indian Industries, paper presented at a conference on India's Economic Reform: Structural Adjustment and Policy Requirements for Long Term Dynamic Growth, New Delhi, 12 to 14 February.

Sen Gupta, A. (1996), "Economic Reforms, Health and Pharmaceuticals: Conferring Legitimacy to the Market", Economic and Political Weekly, Mumbai, 30 November.

United Nations (1996), National Accounts Statistics: Main Aggregates and Detailed Tables, New York.

United Nations Conference on Trade and Development (1996), Review of Maritime Transport 1995, New York and Geneva, September.

United States Trade Representative (1996), Report to Congress on Section 301 Developments Required by Section 309(a)(3) of the Trade Act of 1974 (January 1995 - June 1996), Washington D.C.

United States Trade Representative (1997), National Trade Estimate Report on Foreign Trade Business: India, Washington D.C., March.

World Bank (1995a), India Port Sector Strategy Report, Infrastructure Operations Division, South Asia Region, Washington D.C., March.

World Bank (1995b), Economic Developments in India - Achievements and Challenges, Washington D.C., October.

World Bank (1996a), World Development Report 1996, Washington D.C., June.

World Bank (1996b), India Country Economic Memorandum, Five Years of Stabilization and Reform: The Challenges Ahead, Country Operations, Industry and Finance, South Asia Region, Washington D.C., August.

World Bank (1997a), India 1997 Economic Update: Sustaining Rapid Growth, Country Operations, Industry and Finance, South Asia Region, Washington D.C., May.

World Bank (1997b), World Development Report 1997, Washington D.C., June.

World Tourism Organization (various issues), Yearbook of Tourism Statistics, Madrid.

WTO (1995a), The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts, World Trade Organization, Secretariat, Geneva.

WTO (1995b), Trade Policy Review - Sri Lanka, World Trade Organization, Geneva.

WTO (1996), Trade Policy Review - United States, World Trade Organization, Geneva.

WTO (1997), Trade Policy Review - European Union, Geneva.

WTO (1998), Trade Policy Review - Australia, Geneva, forthcoming.