IV. TRADE POLICIES BY SELECTED SECTOR

(1) INTRODUCTION

1. Agriculture accounts for 22% of India's GDP. The share of agricultural products in total export earnings is substantial, albeit decreasing in recent years, while agricultural imports constitute only a small proportion of the country's total merchandise imports (4%-7%). Policy in this sector has been driven mainly by self-sufficiency; import and export controls, together with domestic support, have been used to ensure that domestic demands are met largely by domestic supplies. The agriculture sector has traditionally been shielded from foreign competition by tariffs and non-tariff barriers, including quantitative restrictions, import licensing, price controls (on inputs and final goods), and marketing restrictions. One important result of these policies has been an accumulation of large surplus grain stocks, which has contributed to meeting India's goals of self-sufficiency in food supplies; however, the food stocks now pose problems of storage and higher food subsidy costs. Since the last Review of India, the major changes in agricultural policy have been the removal of quantitative restrictions on imports, and a removal of licensing and distribution restrictions on some products.

2. In the manufacturing sector, the main changes that have taken place since the previous Review include, a removal of quantitative restrictions on imports, a reduction in the number of industries requiring industrial licences and those reserved for the small-scale sector, and limited progress in privatizing state-owned companies. In the textiles and clothing sector, which accounts for around 20% of industrial output, and for nearly 30% of export earnings in 1999/00, some progress has been made in improving competitiveness including by removing small-scale sector restrictions and reducing restrictions on foreign investment. Although restrictions on imports were removed recently, the sector remains protected by relatively high tariffs. Barriers to imports also remain relatively high in other major manufacturing activities, including motor vehicles and steel.

3. Services currently account for nearly half of India's GDP. Since the early 1990s reforms have been pursued in several sectors including banking, telecommunications and electricity, with varying degrees of success. Recent banking reforms have concentrated on improving competition and corporate governance; private sector investment was permitted in the insurance sector in 1999. However, banking and insurance continue to be dominated by state-owned companies, some of which face financial problems, including a relatively high level of non-performing assets. Several changes have taken place in telecommunications, including the strengthening of the role of the regulator and establishment of a tribunal to settle disputes. Private participation in all basic and value-added services, with varying levels of FDI, is now permitted. As a result, there has been a significant improvement in the telecommunications infrastructure, and a reduction in tariffs. Improvements in the provision of telecommunication services are also likely to be beneficial to key sectors such as software, which accounts for some 13% of total exports. The success of software may be attributed in part to India's relatively large pool of skilled and low cost labour. The sector has also faced few regulatory barriers, setting it apart from other sectors

4. Private investment is now permitted in electricity distribution as well as in generation; in addition, regulatory bodies have been established to reform the tariff structure and address the problems of the state electricity boards. Efforts are also being made to improve infrastructure such as roads, railways, and ports, including through private sector participation.

(2) AGRICULTURE

(i) Overview

5. Agriculture and allied activities make the second largest contribution to GDP and are a major source of employment (Table I.1, Chapter I). Moreover, the share of agricultural products in total export earnings is substantial, albeit decreasing in recent years, and many industries (e.g. food processing and textiles and clothing) still depend on the agriculture sector for raw materials. With the sector accounting for almost one quarter of GDP and nearly two thirds of the total work force (formal and informal), however, labour productivity is little more than one third of the national average.[1] This relatively low level of labour productivity reflects, among other things, low levels of capital per unit of labour and total factor productivity; the latter is the consequence of, *inter alia*, lack of scale economies and the use of inefficient techniques. Low productivity is also due to the sector's protection from foreign competition by an array of policy instruments.

6. Policy in this sector has been driven largely by the need to eradicate hunger and ensure that domestic supplies are sufficient to meet this need. Given the size of its rural population, India also places emphasis on maintaining flexibility in its policy in order to provide for food and livelihood security and to promote rural development. Thus, in addition to price supports to ensure remunerative prices for farmers, the Government has put in place procurement and distribution measures to ensure supply of essential foods to the population through the public distribution system (PDS). Import and export controls have been used largely to ensure that domestic demands are met. Few changes were made to these controls until recently. These include, the removal of quantitative restrictions under a WTO dispute settlement body ruling; and an Order issued by the Ministry of Consumer Affairs, Food and Public Distribution removing internal distribution and purchase restrictions on wheat, rice, coarse grains, sugar, edible oilseeds, and edible oils.[2] In addition, in his 2002/03 Budget Speech, the Minister of Finance indicated amendments to the Milk and Milk Products Control Order, which would remove restrictions on new milk processing capacity, a phasing out of remaining controls on export of agricultural products, and a discontinuation of exports through state trading companies.[3]

7. Growth in the sector has slackened since 1998/99 (Table I.2). According to the authorities, agricultural output increased in the 1990s because of higher support prices for output and input subsidies.[4] However, the distortions created by these policies have recently become more evident; subsidies have continued to grow and are considered to be fiscally unsustainable; food stocks have increased because of the high support prices for producers; and misuse of inputs (water and fertilizer), due to distorted price signals, have led to environmental problems (land degradation, water-logging, depletion of groundwater resources, etc.).[5]

8. Agriculture has been characterized not just by low levels of productivity but also by uneven development across regions and crops, and degradation of natural resources in some areas. Capital inadequacy, lack of infrastructural support and demand-side constraints, such as controls on movement, storage, and sale of agricultural products, etc., have continued to impair the economic viability of the sector.[6] Productivity has also been compromised because of the food processing industry's inclusion in the list of items reserved for the small-scale industry (SSI) sector. The

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[1] Planning Commission (1997), Volume II.

[2] Ministry of Consumer Affairs, Food and Public Distribution (Department of Consumer Affairs), Order, 15 February 2002.

[3] Ministry of Finance (2002b).

[4] Planning Commission (2001c).

[5] Planning Commission (1997), Volume II.

[6] Department of Agriculture and Co-operation (undated (a)).

authorities have recognized the need to remove the SSI reservation and other licensing requirements. For instance, the efficiency of processing both wheat and rice is about 10-30% below international levels.[7] Proper implementation of land laws and policies (e.g. the recognition of tenants' rights) is essential in order to restructure the agrarian economy so as to increase productivity.[8] Higher investment in agriculture and rural infrastructure, instead of the provision of subsidies, is a necessary condition for the sector to grow and for productivity to increase.[9]

9. The National Policy on Agriculture, announced on 28 July 2000, aims to attain growth of over 4% per year by 2005, through a combination of measures including structural, institutional, and tax reforms (Box IV.1).[10] Trade policy in agriculture is aimed not only at protecting farmers from foreign competition, but also at ensuring "adequate" essential foods at "reasonable" prices.[11] However, according to the Planning Commission, various rules and regulations that govern agricultural trade distort market signals and are frequently contrary to the interest of farmers, hence the need to reconsider them.[12]

(ii) Import policy

10. Agricultural products constitute only a small proportion of the country's total imports, 9.8% in 1999/00.[13] During 1996/97 to 1999/00, agri-imports were in the range of 4%-7% of total merchandise imports. The agriculture sector has been shielded from foreign competition by tariffs and non-tariff barriers including quantitative restrictions, import licensing, and marketing restrictions. Imports have been controlled/regulated, keeping in view domestic supply and demand, export potential, and the balance-of-payment situation.[14]

(a) Tariffs

11. The simple average applied tariff on agriculture (WTO definition) increased from 35% in 1997/98 to 41% in 2001/02. During 2000, tariffs for many agricultural and allied products, such as rice, wheat, millet, sugar, milk powder, apple, chicken, edible oils, etc. were increased.[15] In fact, agricultural tariffs for all except 231 tariff lines at the HS six-digit level have increased since 1997. Tariffs on agricultural products are *ad valorem* with two exceptions[16], and range from 0%-210%, with the highest tariffs (i.e. tariffs above 50%) borne by beverages and spirits, oil seeds, fats, edible oils and their products, and grains (Chart IV.1). As a result partly of the reduction of "peak rate" tariffs from 35% to 30% and despite increases in a few tariff rates, it is estimated that the overall average tariff for agriculture will decline to 37.5% in 2002/03.[17]

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[7] Planning Commission (2001c). Other food industries reserved for exclusive manufacture in the small-scale sector are: rice and dal milling, pickles and chutneys; bread, biscuits, pastries and confectionery; rapeseed, mustard, sesame and ground-nut oil, and ground and processed spices (List of Items Reserved for Exclusive Manufacture in Small Scale Sector, 31 March 1994).

[8] Department of Agriculture and Co-operation (undated (a)); and Planning Commission (1997).

[9] Planning Commission (1997).

[10] Department of Agriculture and Co-operation (undated (a)).

[11] Department of Agriculture and Co-operation (undated (b)).

[12] Planning Commission (2001c).

[13] UNSD, Comtrade database (SITC Rev.3).

[14] Department of Agriculture and Co-operation (undated (b)).

[15] Ministry of Finance (2001a).

[16] Specific rates are applied on imports of shelled and non-shelled almonds (HS 0802.11 and HS 0802.12).

[17] Tariff increases are proposed on tea and coffee to 100%; on natural rubber, poppy seeds, pepper cloves and cardamom to 70%, and on pulses from 5% to 10%.

Box IV.1: National Agriculture Policy, 2000

The focus of the National Agricultural Policy is on:

- Efficient use of resources and technology, adequate availability of credit to farmers, while protecting them from seasonal and price fluctuations.
- Private sector participation would be promoted through contracts and land leasing arrangements.
- Private sector investment in agriculture would be encouraged, particularly in areas such as agricultural research, human resource development, post harvest management, and marketing.
- In view of dismantling of quantitative restrictions (QRs) on imports, the policy recommends formulation of commodity wise strategies and arrangements to protect farmers from adverse impact of undue price fluctuations in the world market and promote exports.
- The Government would enlarge coverage of futures markets to minimize the wide fluctuations in commodity prices and also hedge risks.
- The restrictions on the movement of agricultural commodities throughout the country would be progressively dismantled.
- The structure of taxes on foodgrains and other commercial crops would be reviewed.
- The excise duties on materials such as farm machinery and implements and fertilizers used as inputs in agricultural production, post harvest storage and processing would be reviewed.
- Rural electrification would be given high priority as a prime requirement for agricultural development.
- The use of new and renewable sources of energy for irrigation and other agricultural purposes would be encouraged.
- Progressive institutionalization of rural and farm credit would be continued to provide timely and adequate credit to farmers.
- The provision of an insurance policy for the farmers, which covers the whole growing season (i.e. from sowing of crops to post-harvest operations) and risks of price fluctuations, will be designed.

Source: Ministry of Finance (2001a), *Economic Survey 2000-2001*, New Delhi.

12. India has bound all its agricultural tariffs; its bindings in agriculture range from 0% for primary products to 150% for processed products, and up to 300% for edible oils. For a number of cereals, most of which were subject to quantitative restrictions, India had bound tariffs at 0%. However, India has recently renegotiated some of these bindings. As a result, on 20 April 2000, India submitted rectifications and modifications of its Schedule under Article XXVIII:1 of the GATT, 1994.[18] As the results of the Article XXVIII:1 renegotiations have not been certified, it appears that in some instances (e.g. dairy products, grains, and edible oils), MFN rates for agricultural goods seem to be higher than the final bound rate (Chapter III(iii)).

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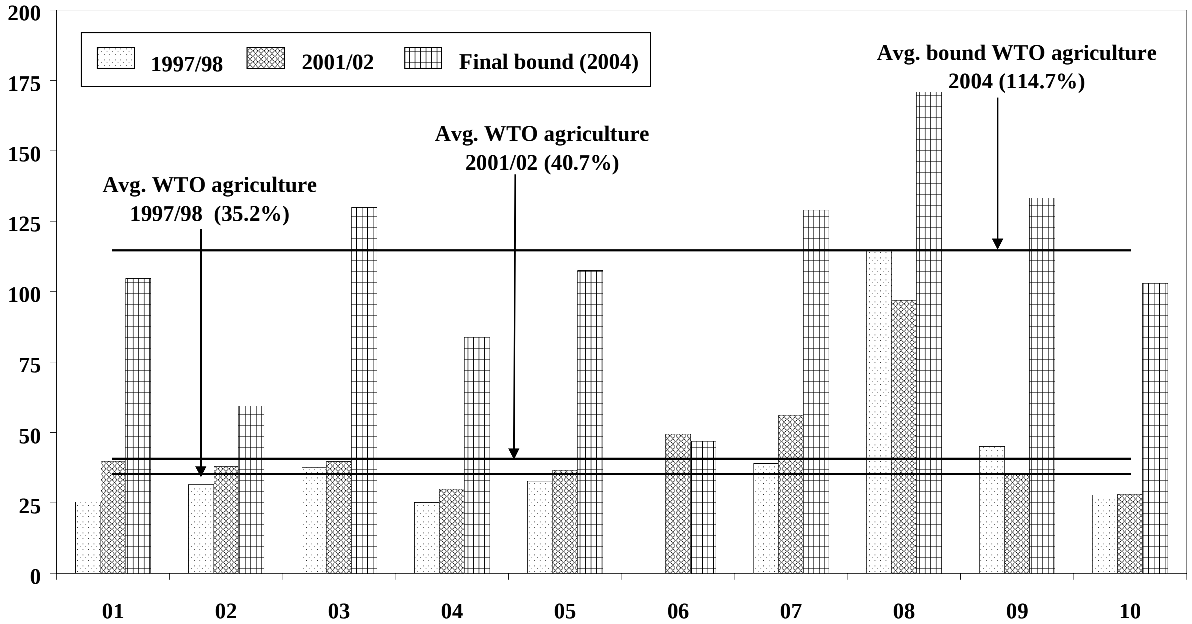
[18] At the same time India negotiated tariff quotas for some products including dairy products (HS 0402.10), maize (HS 1005.90), and some edible oil (HS 1514.90).

Chart IV.1

MFN and bound tariff rates on agricultural products, 1997/98, 2001/02, and 2004

Per cent



01	Animals and products thereof	06	Grains
02	Dairy products	07	Oils seeds, fats and oils and their products
03	Coffee and tea, cocoa, sugar, etc.	08	Beverages and spirits
04	Cut flowers, plants	09	Tobacco
05	Fruit and vegetables	10	Other agricultural products, n.e.s.

Note: Calculations exclude specific duties and include the *ad valorem* part of alternate and compound rates.

***Source*: WTO Secretariat calculations, based on data provided by the Indian authorities.**

(b) Import restrictions

13. Import restrictions have diminished since the previous Trade Policy Review of India in 1998. Quantitative restrictions on 416 agricultural goods at HS six-digit level have been removed in order to implement a WTO panel decision.[19] The authorities noted that in order to protect the interests of farmers, appropriate tariff protection would instead be provided.[20] Hence, tariffs have been increased in 37.5% of the cases in which quantitative restrictions were removed. Tariff quotas are maintained on several products including some edible oils (1512.11 and 1514.90), maize, and milk powder.

14. Prohibitions apply to imports of certain fats, oils of animal origin, and beef.[21]

15. The number of agricultural products imported by state trading companies has diminished since the previous Review; they comprise mainly edible oils. Goods still subject to state trading

[19] Secretariat calculations, based on data provided by the Indian authorities.
[20] Department of Agriculture and Co-operation (undated (a)).
[21] Ministry of Commerce and Industry, Notification No. 29 (RE-2000)/1997-2002, 1 August 2000.

include: coconut oil and other oils (HS 151311.00 and HS 151319.00), copra (HS 120300.00)[22], and some cereals (wheat, rye, oats, maize, rice, grain sorghum, buckwheat, millet, canary seed, jawar, bajra, ragi, and other cereals).[23] Some of these products are also subject to minimum support prices.

(iii) Export policy

(a) Overview

16. Major agriculture exports include cereals (mostly rice), spices, cashew nuts, oil cake/meals, tobacco, tea, coffee, and marine products. Agricultural products as a whole have traditionally been an important contributor to the country's exports. However, agricultural exports as a share of total exports have been decreasing in recent years, from 20% in 1996-97 to some 14% in 2000/01 (Table AI.2).[24]

17. India's agricultural exports face several constraints that arise from conflicting domestic policies relating to production, storage, distribution, food security, and pricing concerns.[25] Higher domestic prices in comparison with international prices of exportables such as sugar, wheat, rice, etc. make Indian exports less competitive in the international market.[26] There is also a lack of adequate post-harvest infrastructure like refrigerated transport, storage, and packaging, and of adequate facilities at airports, sea ports, etc.[27]

18. A number of policy changes have been introduced to overcome these supply and other constraints. Import duties on capital goods to be used in agriculture have been lowered and credit availability for exports has increased. The measures liberalizing exports include reduction in products subject to state-trading, relaxation of export quotas, and the abolition of minimum export prices (MEPs) (see below). In addition, to encourage exports of agricultural products, the Government established agricultural export zones in the Export Import Policy, 2001.[28] India provides income tax exemptions for profits from agricultural exports under Section 80 HHC of the Income Tax Act, although, these are to be phased out.[29]

(b) Export restrictions

19. Exports of agricultural goods have been restricted through prohibitions, licences, quotas, and marketing controls, although these controls are gradually being lifted. The Ministry of Commerce, through the Director General of Foreign Trade, notifies the imposition or elimination of these restrictions when pertinent (they could be changed several times per year). These measures are put in place (or removed) with a view to maximizing agricultural exports earnings, while ensuring an "adequate" supply of essential commodities (particularly for mass consumption) to the domestic

[22] These products are traded by State Trading Corporation of India Limited and Hindustan and State Trading Corporation of India Limited (Ministry of Commerce and Industry, Notification No. 34 (RE-2001)/1997-2000, 15 October 2001.

[23] These products are traded by the Food Corporation of India.

[24] UNSD Comtrade database, SITC Rev.3.

[25] For example, the practice followed by state governments of announcing state advised prices (SAPs) for sugar, which are generally much higher than the Statutory minimum prices announced by the Central Government, the small size of processing plants, and obsolete machinery, are the main factors contributing to the high cost of sugar production.

[26] Ministry of Finance (2001a).

[27] Planning Commission (1997).

[28] Ministry of Commerce (2001b).

[29] WTO (1998).

consumers at "reasonable" prices. Hence, it is difficult at any point in time to identify which commodities are subject to which restrictions.

20. Exports of beef and tallow fat and/or oil of animal origin, excluding fish oil, are prohibited (Chapter III(3)(v)(a)). Export licences are still required for goods such as cattle, milk, cereals, edible oils, and pulses (Table AIII.1). Exporters of all categories of semi-processed hides and skins, and wet blue hides and skins must register with the Council for Leather Exports (indicating price, quantity to be exported etc.) before the products may be exported.[30] At present, it appears that export quotas are maintained for: onions[31]; whole and infant milk, pure milk, and butter except when exported as branded products in consumer packs not exceeding 5 kg. in weight[32]; wheat and wheat products[33]; coarse grains[34]; brown seaweed and agarophytes, excluding G-adulis of Tamil Nadu coast origin in processed form; and sandalwood oil.[35] Some goods (e.g. maize, niger seeds, and onions) are still subject to state-trading.[36]

21. India may also impose minimum export prices (MEPs). Exports of onions are subject to state-trading, and MEPs for onions appear to be set by the state trading agencies (Chapter III).

(iv) Internal policies

22. Domestic support in India continues to be provided mainly through support prices for final goods and subsidized inputs. 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 product was below the 10% de minimis level.[37] Therefore, India has no total AMS reduction commitment under the Agreement. India is nevertheless required to make regular annual notifications to the WTO on its domestic AMS, and on its direct export subsidies.[38] India's most recent notification for export subsidies was made in March 2002, covering the marketing years 1996/97, 1997/98, 1999/00 and 2000/01.[39]

(a) Support to agricultural goods

23. Basic staples in India continue to be subject to Minimum Support Prices (MSP).[40] The objectives of the agricultural price policy are to ensure remunerative prices to the farmers, even out

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[30] Ministry of Commerce, Notification No. 45(RE-99)/1997-2002.

[31] Ministry of Commerce, Notification No. 32(RE-2001)/1997-2002.

[32] Ministry of Commerce, Policy Circular No. 15/98-99.

[33] Ministry of Commerce, Policy Circular No. 12(RE-99)/99-2000.

[34] Director General of Foreign Trade, Policy Circular No. 25(RE-98), 98-99.

[35] Exceptionally, and on request, export quotas may also be established for exports to a specific destination; in 1998-99 a quota of 20,000 tonnes was applied to exports of wheat to the Maldives. Director General of Foreign Trade, Policy Circular No. 26(RE-98), 98-99.

[36] Director General of Foreign Trade, Notification No. 10(RE-99), 1997-2000; Notification No. 20(RE-99), 1997-2000; and Notification No. 32(RE-2001), 1997-2002.

[37] WTO (1998).

[38] 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 (WTO, 1998).

[39] WTO document G/AG/N/IND/3, 1 March 2002.

[40] Minimum support prices are fixed for paddy, wheat, coarse cereals, maize, barley, pulses (i.e. gram, arthar moong, urad), sugarcane, cotton, groundnuts, jute, rapeseed/mustard, sunflower, soyabean, safflower, toria, tobacco, copra, sesamum, and niger seed (Ministry of Finance, 2001a).

effects of seasonality, and promote agricultural diversification.[41] This pricing policy is to be continued under the National Agricultural Policy, 2000.[42]

24. Minimum Support Prices (MSP) for rice, wheat, oil seeds, etc. are announced by the Government after taking into account recommendations made by the Commission for Agricultural Costs and Prices.[43] The price of rice and wheat are determined on the basis of cost of production studies and the actual accounting principles of farm management. Price support for pulses, oilseeds and other products is under the responsibility of the National Agricultural Federation (NAFED). Farmers are free to sell to private traders in the event that they receive prices higher than the MSPs.

25. There is also a Market Intervention Scheme (MIS), an *ad hoc* measure that applies to horticultural and other agricultural commodities not covered by the MSP scheme. The objective of the scheme is to help farmers avoid distress sales of their produce. Under the MIS, if the price of a commodity falls below a specific "economic" level the Central Government intervenes at the request of the State Government by purchasing the product at market intervention prices that do not exceed the cost of production.[44] The loss incurred, if any, in implementing the MIS is shared equally between the state and central governments.[45] Since 1998, the MIS has been used to support a number of horticultural products, including oranges, coriander seed, apples, oil palm, potatoes, red chillies, areca nut, ginger, and onions.

26. Wheat, rice, sugar, and edible oils are procured by the Government and provided to consumers through the Public Distribution System (PDS) through a network of outlets or Fair Price Shops (FPS). The PDS is operated under the joint responsibility of the central and state governments. The Central Government bears the responsibility for procurement, storage, transportation, and bulk allocation of foodgrains, rice and wheat at subsidized prices, while the responsibility for distribution to consumers through the FPS rests with the state governments.[46] The Food Corporation of India (FCI) purchases foodgrains at fixed procurement prices (also called minimum support prices) announced by the Department of Agriculture and Co-operation. The subsidy is the difference between the "economic cost" and the central issue price at which food grain is issued by the FCI to the states for sale under the PDS. The PDS, which is aimed at ensuring food security, has been criticized for its failure to serve effectively the poorest segments of the population and its urban bias. To address these concerns a Targeted Public Distribution System (TPDS) was introduced in 1997. Under the TPDS, a two-tier subsidized pricing system has been introduced to benefit families below the estimated poverty line (BPL families), which receive foodgrains at highly subsidized rates; families above the poverty line (APL families) continue to receive a subsidy but to a lesser degree.[47]

27. Sharp increases in MSPs in recent years have been a major reason for a large increase in procurement volumes, which has led to the accumulation of huge surplus stocks much above the minimum buffer stock norms required for food security; for example, in January 2002, the FCI stock

[41] Ministry of Finance (2001a).

[42] Department of Agriculture and Co-operation (undated (a)).

[43] In calculating the MSPs the CACP considers a number of factors, including input/output price parity, trends in market prices, demand and supply, inter-crop price parity, effect on industrial cost structure, effect on general prices, cost of living, international market prices, the terms of trade.

[44] Market intervention prices fixed under the MIS, according to the authorities, do not exceed the cost of production as assessed by state agricultural universities or other similar institutions.

[45] For the north-eastern states, the loss is shared on a 25:75 basis between the state and central governments.

[46] Ministry of Finance (2001a).

[47] In December 2000, in order to make the subsidy even more targeted, 10 million poor families were identified; they receive 25 kg. of foodgrains per family per month at a price of Rs 2/kg. for wheat and Rs 3/kg. for rice (Ministry of Finance, 2001a).

of wheat and rice was 58.1 million tonnes compared with the minimum buffer norm of 16.8 million tonnes.[48] In addition, along with good grain production in recent years, the central issue price for APL families was raised, thereby reducing their consumption of these subsidized products. The outcome is that the associated food subsidy bill increased from Rs 28.5 billion in 1991/92 to Rs 120 billion in 2000/01. For 2001/02 the food subsidy is estimated at Rs 136.7 billion, of which Rs 56.8 billion accounts for buffer stock subsidy or the carrying cost of the public stock of foodgrains.[49] Several steps have been taken recently to address the problem of stocks. These include: increased allocation of food through the PDS for BPL families; a food for work programme launched under the Sampoorna Grameen Rozgar Yojana (SGRY) in September 2001; provision of 3 million tonnes of free foodgrains to states for areas affected by natural calamities, such as the Gujarat earthquake; increased open-market (including export) sales of foodgrains at prices much below economic cost (3 million tonnes compared with 550,000 tonnes in the previous year); and incentives for food exports.[50] In the longer run, however, the Government acknowledges that "open-ended procurement by the FCI at a high price and disposal at a heavily subsidized price is not sustainable" and the report of a High Level Committee on Long Term Grain Policy is awaited before formulating a long-term plan for India's food management policy.[51] In the meantime, one of the measures envisaged to reduce public grain stocks involves the decentralization of procurement with private traders being encouraged to play a greater role. Such a system has been introduced in three states (Uttar Pradesh, Madhya Pradesh, and West Bengal), and others are being encouraged to do so.[52]

28. The pricing and distribution of sugar are also in the process of being liberalized gradually. As of January 2000, the levy obligation on sugar factories (a fixed percentage of sugar procured for PDS) was reduced from 40% to 30% of output; this was further reduced to 15% as of February 2001.[53] These reductions have been accompanied by further targeting of the PDS. Presently, supplies through the PDS are available only to BPL families with the exception of the special category states, hill states, and the two island union territories, where sugar is available under the PDS to BPL and non-BPL families. This procurement system could continue even after the complete liberalization of the sugar market[54] although, according to the authorities, the Government has made no decision on the matter of whether the supply of sugar through the PDS will continue; the authorities also point out that after full decontrol there will be no levy obligation, and procurement will have to take place on the open market.[55]

(b) Support to inputs

29. Agricultural policy has focussed on securing increased production through subsidies of inputs such as power, water, and fertilizer rather than through increasing investment in irrigation, power, and rural infrastructure. The policy had some success in terms of increased output and food security.

[48] See Ministry of Finance (2002a), p. 11.

[49] According to the CAG the cost of the food subsidy has risen quickly because of increased costs incurred by the FCI for storing, handling, and transporting foodgrains. The CAG's Reports No. 2 and 3 of 2000, conclude that this subsidy should be redesigned (CAG, undated, "Report of the CAG on the Union Government for the year ended March 2000" [Online]. Available at: http://www.cagindia.org/reports/civil/2001_book1/index.htm [25.07.2001]).

[50] Ministry of Finance (2002b), Part A, paragraphs 27-28.

[51] Ministry of Finance (2002b), Part A, paragraphs 27-28.

[52] Ministry of Finance (2002a), p. 11.

[53] The price of levy sugar is based on: the minimum price, if any, fixed for sugarcane by the Central Government; the cost of manufacturing sugar; taxes; and a reasonable rate of return on capital employed in the manufacturing process.

[54] Ministry of Finance (2002b), Part A.

[55] It is assumed that the difference between the open market price for sugar and the central issue price for sugar supplied through the PDS will be subsidized by the Government.

However, it has run into difficulties. Deteriorating states' finances have meant that subsidies have crowded-out public investment in agriculture, including roads, irrigation, and technical upgrading. In recent years, subsidies have increased and now seem to be financially unsustainable. Some of the subsidies, e.g. the fertilizer subsidy, and under-pricing of power and irrigation, have also become environmentally harmful.[56] According to the authorities, electricity subsidies for agriculture were estimated at Rs 75.7 billion and Rs 48 billion in 1998/99 and 1999/2000, respectively. The Government is gradually moving towards a more deregulated regime while emphasizing the need for investment in irrigation, power and rural infrastructure. In his Budget speech 2002/03, the Minister of Finance highlighted, *inter alia*: an increased allocation of resources for rural roads (Rs 25 billion in addition to Rs 50 billion provided thus far); irrigation and credit; electrification of villages (Rs 1.6 billion for the Accelerated Rural Electrification Programme); rural employment, including through payment in the form of foodgrain; as well as measures to improve diversification of crops.[57]

30. At present, urea (nitrogenous fertilizer) is the only fertilizer subject to price and distribution controls. However, to make fertilizers available to farmers at affordable prices and to encourage a balanced use of all fertilizers, the Central Government continues to provide a concession for de-controlled phosphatic and potassic fertilizers.[58]

31. The major objective of the Retention Price cum-Subsidy (RPS) scheme for fertilizer, introduced in 1977 was to insulate farmers from rising prices and to ensure the availability of this input, which was considered essential to improve agricultural productivity. The scheme was also aimed at assuring a reasonable return on investment to indigenous manufacturers and to attract further investment in fertilizer. Originally nitrogenous, phosphatic, and potassic (NPK) fertilizers were included under the scheme. However, phosphatic and potassic fertilizers were decontrolled on 25 August 1992, and their prices increased sharply; this led to a fall in their consumption, and prompted the Government to introduce a concession (subsidy) scheme from 1992/93 to ensure a more balanced use of the three kinds of fertilizer. The amount spent on the concession scheme has increased significantly in recent years; budgetary provision for the subsidy on decontrolled fertilizers for 2001/02 was US$1.26 billion, up 80% from 1997/98.[59] The RPS scheme costs the Government some Rs 4,600 per tonne sold to farmers. The difference between the "retention price" ("normal" cost of production of urea as determined by the Government plus 12% post tax return on net worth) and the "notified sales price" minus the distribution margin is paid as a subsidy to individual manufacturing units.[60] A freight subsidy is also paid to the individual units to cover the cost of transportation of fertilizer from the production points to the consumptions centres. Since there is a uniform issue price for both indigenous and imported controlled fertilizer, the difference between the delivery cost of imported fertilizer and the issue price (reduced by the distribution margin) is borne by the Government. The total cost of the subsidy is estimated at Rs 84.6 billion in the 2000/01 budget.[61]

32. A long-term policy has been under review with the aim of deregulating the three types of fertilizers; this review would take into account the recommendations made by the High Powered

[56] Planning Commission (2001c).

[57] To encourage farmers to upgrade their machines, the Budget also proposes a reduction in import duty on agricultural machinery and implements from 25% to 15% (Ministry of Finance, 2002b), Part A, paragraphs 20-26, and Part B, paragraph 143.

[58] Ministry of Finance (2001a).

[59] Ministry of Finance (2001a).

[60] Subsidy = ["normal" cost (1 + 0.12)] – ["notified sales price" – distribution margin]. The cost of production of individual units is calculated by taking into account the variable cost, the conversion cost and capital related changes.

[61] Ministry of Finance (2001a).

Fertilizer Policy Review Committee and Expenditure Reforms Commission (2000).[62] The Commission recommended the complete decontrol of urea by 1 April 2006 and the phasing out of the existing RPS scheme.[63]

33. The CAG's Reports No. 2 and 3 refer to the costs incurred as a result of the fertilizer and food subsidy programmes. According to the CAG the fertilizer subsidy through the price retention system ensures a common (guaranteed/fixed) rate of return on capital whether the producer/plant is old or new, efficient or not efficient. It suggests that the Government needs to consider redesigning this subsidy.[64]

34. In order to make seeds available at "reasonable" prices and in time for the sowing season, the costs of transporting seeds is subsidized in some states.[65] This, according to the authorities, is to ensure that farmers in underdeveloped and remote areas of the country have access to seeds at approximately the same cost as farmers elsewhere in the country.

35. To ensure an adequate flow of credit, another important input to the sector, 18% of net bank credit of all commercial banks is earmarked for agriculture. The National Bank for Agriculture and Rural Development (NABARD), the major supplier of rural credit, has taken several initiatives to facilitate the flow of credit to the sector. [66] The initiatives include: recapitalization of regional rural banks (RRBs); and preparation of Development Action Plans (DAPs) and Memoranda of Understanding (MoUS) to strengthen Cooperative Banks and RRBs. The RBI has also advised banks to prepare an annual action plan for disbursement of credit to agriculture; accordingly, each bank is preparing a Special Agricultural Credit Plan (SACP). As per RBI guidelines, banks are obliged to increase credit by 25% every year. [67]

(3) MANUFACTURING

(i) Introduction

36. The manufacturing sector in India accounted for around 17% of GDP in 2000/01 and some 6.6% of employment in 1999/00. The main exports are textiles and clothing (28% of merchandise exports). Since the early 1990s, India has liberalized the sector significantly, including reducing industrial licensing requirements, public and small-scale sector reservations, and tariffs. Steps have also been taken to "disinvest" in public sector companies, and to remove quantitative restrictions. Notwithstanding these efforts, barriers to international competition remain high. The overall simple average tariff for manufactured products (ISIC 3) is 32.5%, down from 36.1% in 1997/98; preliminary estimates for 2002/03 (as proposed by the Budget) indicate a further reduction to 29.3%. For certain sectors, however, the average has increased. For example, the simple average for steel (ISIC 371) appears to have increased from 33.8% in 2001/02 (relatively unchanged from 33.5% in 1997/98) to 36.8% as a result of changes to the tariff proposed in the Budget of 2002/03. To curb "excess" and cheap imports, moreover, India has increasingly resorted to contingency and other measures, such as the imposition of price floors on steel imports (Chapter III(2)(ix)). However, the

[62] Ministry of Finance (2001a).
[63] Ministry of Finance (2001c).
[64] CAG (undated) "Report of the CAG on the Union Government for the year ended March 2000" [Online]. Available at: http://www.cagindia.org/reports/civil/2001_book1/index.htm [25 July 2001].
[65] The subsidy is provided in: the Eastern States, Sikkim, Himachal Pradesh, Jammu and Kashmir, Uttaramcjal and the Hill Areas of West Bengal (Department of Agricultural and Co-operation [Online]. Available at: http://agricoop.nic.in/2seeds.htm [21 November 2001]).
[66] Ministry of Finance (2001a).
[67] Ministry of Finance (2001a).

domestic steel industry still appears to be at a disadvantage in part because of high excise duties and other levies imposed on the industry.

37. Border protection for other manufactured goods has, in general, declined over the years. In the automobile sector**,** which was developed behind high tariff barriers and import restrictions, average tariffs have increased, currently 44.2% (ISIC 3843), compared to 40.4% in 1997/98[68]; changes proposed in the Budget of 2002/03 would bring the average down to 40.5%. A relaxation of foreign investment restrictions has allowed foreign automobile manufacturers to "jump" tariffs and invest in India; there are currently nine joint ventures with varying levels of foreign equity in India; eight others have been sold to their domestic partners. In addition, with the removal of quantitative restrictions maintained for balance-of-payments reasons as of 1 April 2001, the market has been further exposed to international competition. More recent efforts to liberalize the sector include: permitting FDI of up to 100% through the automatic route as of February 2000; discontinuation of the requirement of dividend balancing in July 2000; and discontinuation of requirements for indigenization and neutralization of imports by exports in September 2001. A new automobile policy has also recently been approved by Cabinet and is due to be introduced in Parliament.[69]

38. Manufacturers of automobiles have also had some export success, particularly to Middle Eastern and some European countries. However, it has been suggested that domestic demand remains sluggish in part because of the high prices of cars, due to domestic taxes[70]; and also perhaps due to the emergence of a market for second-hand cars.[71] The Government appears to have responded to the latter by banning the import of second-hand cars over three years old and subjecting imported cars of less than three years to the Central Motor Vehicles Rules (Chapter III(2)(viii)); in addition, tariffs on imports of second-hand cars (under three years) were raised from 35% to 105% in the 2001/02 Budget.

39. One major sector that presents an important test of India's ability to liberalize and compete internationally is textiles and clothing. Although presently protected under the Agreement on Textiles and Clothing (ATC), the sector is due to be exposed to international competition in 2004 when the ATC comes to an end. Section (ii) therefore looks in detail at policy measures taken recently by India to prepare producers and exporters for this liberalization.

(ii) Textiles and clothing

(a) Introduction

40. Textiles and clothing is the largest manufacturing sector in India. In 2000, it accounted for 4% of GDP and 20% of industrial output, which suggests that labour productivity may be considerably higher than the national average. Providing employment to 38 million people, it is the largest employer after agriculture.[72] It is also an important source of foreign exchange earnings,

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[68] This appears to be mainly due to the fact that "peak" tariffs have increased from 45% in 1997/98 to 105% in 2001/02.

[69] Full details of the new policy are not as yet available. However, press reports suggest that the new policy will reduce minimum investment requirements and emphasize the development and export of small cars (*Economic Times,* 7 March 2002 and 11 March 2002).

[70] It has been suggested that domestic taxes raise the cost of cars by some 75% of average manufacturing cost (Baig (undated)). Based on data provided by the Automobile Association of India, the authorities suggest that the figure is lower, at around 65%.

[71] Economist Intelligence Unit (2001), p. 24.

[72] Ministry of Textiles (2001a).

accounting for nearly 30% of total export earnings in 1999/00.[73] The most important markets for India's textile and clothing exports continue to be the European Union and the United States, which together accounted for more than 40% of India's exports in 1999/00.[74] However, there has been some diversification towards smaller markets since 1997/98, when these two markets absorbed almost 60% of India's exports.[75] India's utilization of quotas for some items in these two markets has been low in some instances.[76] This may be partly due to India's high production costs.[77] The authorities suggest that the diversion of exports to other markets may be in part because Indian exports face market access problems owing to tighter rules of origin on textiles, and the growth of preferential trading agreements. They also argue that the ATC has reduced market access: the compounded annual growth of textiles and clothing fell from 10.7% before 1995 to 2.5% after 1995. It follows that these and other barriers may have prevented a restructuring of the Indian textiles and clothing industry in favour of products for which it has a comparative advantage and could therefore fill its quotas on a more regular basis. Imports of textiles and clothing are minimal, accounting for just over 1% of total imports in 1999/00, compared to just under 1% in 1995/96.[78] This is partly because until recently this sector was highly protected both by tariff and non-tariff barriers (i.e. quantitative restrictions).

41. Although foreign direct investment (FDI) is permitted in nearly all textile subsectors (with some exceptions in knitting and knitwear), it seems to be quite low (FDI approvals between August 1991 and August 2001 were around Rs 34 billion, although actual investment may be considerably lower); this may also be because the textile and clothing sector was, until recently, subject to small-scale sector (SSI) reservation and hence to a limit of 24% foreign equity participation. The New Textile Policy 2000 "de-reserved" the clothing sector from SSI and allowed 100% FDI through the automatic route; the limit on SSI investment was also raised from Rs 10 million to Rs 50 million (with some exceptions).[79] The Budget for 2002/03 announced further de-reservations for items of knitwear.[80]

42. The Indian textile industry comprises two sectors: the "organized" mill sector; and the "decentralized" sector, including powerloom and handloom units.[81] The handloom and powerloom industries benefit from various tax exemptions and energy and water subsidies, which ensure that fabrics produced in these sectors are price competitive relative to those of the "organized" mill sector.[82] In addition, in order to safeguard the interests of handloom weavers the Hank Yarn Obligation Order and Handlooms (Reservation of Articles for Production) Act, 1985 remain in place to ensure that they are supplied with yarn suitable for use in the manufacture of fabrics on handlooms at favourable prices.

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[73] UNSD Comtrade Database, SITC Rev.3.

[74] UNSD Comtrade Database, SITC Rev.3.

[75] UNSD Comtrade Database, SITC Rev.3.

[76] For example, in 2001, India's quota utilization rates for exports of some cotton textiles to the United States ranged from 25% to 53% (categories 218-219, 313-315, and 317). U.S. Customs Service online information. Available at: www.customs.ustreas.gov/quotas/2001/intextrpt.htm [15 February 2002].

[77] Panagariya (2002), pp. 279-284. It follows that India may not necessarily be able to expand exports in line with any future relaxation of quotas under the ATC.

[78] UNSD Comtrade Database, SITC Rev.3.

[79] Ministry of Textiles (2001b).

[80] Ministry of Finance (2002b).

[81] Ministry of Textiles (2001b).

[82] The handloom industry is an integral part of rural life in India. Although it has high production costs and low productivity, it is known for its unique products, which have helped it develop a niche in global markets. The powerloom industry accounts for 60% of fabric production and is the primary supplier of fabrics to domestic apparel producers and consumers (United States International Trade Commission, 2001).

43. The textile and clothing sector has several competitive strengths. India is the world's second largest textiles producer (after China), and is capable of producing a wide variety of textiles. The industry benefits from a large pool of skilled and inexpensive labour and competent technical and managerial personnel. On the other hand, there are many weaknesses that the Government has tried to address in its New Textile Policy (see below). The SSI reservation for clothing production resulted in the establishment of a large number of small independent units in the spinning, weaving, and processing sectors, restricting the entry of large-scale units and discouraging new investment in the industry. As a result, most producers in the sector did not benefit from economies of scale. Moreover, India's textile industry continues to depend heavily on domestically produced cotton; imports account for some 1.5% of total cotton available (compared to 0.2% a few years ago). Almost two thirds of domestic cotton production is rain fed, which results in wide weather-related fluctuations in cotton production. The high cost of energy and capital together with the multiple taxation contribute to high production costs. As a result, studies show that India's textile and clothing products are less competitive in the international market than those from China and other developing countries.[83]

44. Efforts have been made to address these problems, notably through the removal of the clothing industry from SSI reservation and raising the limits on investment in knitwear production from Rs 10 million to Rs 50 million as of September 2001; in addition the amount of cotton imported has increased from some 0.4 million to 2.2 million bales over the last three years. The Government also issued a New Textile Policy, 2000, aimed at preparing the industry for the new challenges of global competition. The thrust of the Policy includes upgrading firms' technology, improving the quality of raw material and end-products, diversifying production, human resource development, promoting exports, and adopting innovative marketing strategies, and financing arrangements.[84] The 2000 Policy also proposes the setting up of Apparel Parks with good infrastructure facilities, and the replacement of old shuttle looms with shuttleless looms with assistance granted through the Technology Upgradation Fund Scheme (TUFS). Another scheme aimed at strengthening the weaving and processing sector involves the setting up of 25-30 modern process houses with state-of-the-art technologies in the Apparel Parks.[85]

45. The Policy also acknowledges that protection of terminally "sick" industrial units is not conducive to efficient allocation of resources nor to the generation of employment. Hence, emphasis will be placed on adopting an appropriate exit policy, with adequate protection of employees' interests, including the continued implementation of the Textile Workers' Rehabilitation Fund Scheme to mitigate the problems of displaced workers.

46. In the Budget for 2002/03, further incentives for the sector were outlined, to prepare the industry for the removal of quotas maintained under the ATC. These include granting exemptions from payment of excise duties for specified machinery to help in technological upgrading, and reducing anomalies in excise duty rates and exemptions to prevent misuse.[86]

(b) Import measures

47. India has historically protected its textile and clothing industry from foreign competition through tariffs and quantitative restrictions. Tariffs on textiles and clothing (WTO definition) range

[83] See Aggarval (2001), pp. 3886-3888; and United States International Trade Commission (2001).
[84] Ministry of Textiles (2001c); and Ministry of Textiles (2001d).
[85] Ministry of Textiles (2001e). The Union Budget gives detailed information on the allocation of resources for each of these schemes (Ministry of Finance, 2002b, Part A).
[86] Ministry of Finance (2002b), Part A, paragraphs 112-119.

from 15-35%[87], resulting in average tariff protection of 31%; the 2002/03 Budget proposes to reduce average protection further to 29%. Tariff protection of finished products is higher as a consequence of tariff escalation. As a result of the removal of quantitative restrictions on 596 items (at the HS six-digit level), India replaced the existing *ad valorem* tariffs with alternate rates for 271 tariff lines (so that 33% of all tariffs on textiles and clothing involve alternate rates).[88] Average tariff protection seems to have decreased since 1997/98 when it stood at 43.7% (Table III.2). However, this is because the specific duties could not be taken into account in calculating the average tariff for 2000/01 and only the *ad valorem* part of the tariff was used. Insofar as specific rates conceal relatively high *ad valorem* equivalents, the average level of tariff protection may be underestimated. Moreover, due to the use of alternate rates, protection to textiles and clothing is now less predictable. Imports of textiles and clothing are also subject to additional duties. Preferential tariffs and tariff quotas are applied to imports of textiles and fabrics from Sri Lanka (section (e) below).

48. India submitted rectifications and modifications of its Schedule under Article XXVIII:1 of the GATT, 1994. Since its previous Review in 1998 India has increased the number of bindings affecting textiles and clothing, and has fully bound 61.7% of tariff lines at the HS six-digit level and partially bound 4.3% on textiles and clothing. Some 40% of the fully bound tariff lines were bound at alternate rates.[89] In general, it appears that applied MFN rates are at current (up to 28 February 2002) bound rates.

49. Since 1997/98, India has removed quantitative restrictions on 596 textiles and clothing items (at the HS six-digit level). India notified the WTO that all restrictions previously maintained because of balance-of-payment difficulties (under Article XVIII:B) were removed as of 1 April 2001 (Chapter III(2)(vii)).

(c) Export measures

50. Exports of textiles and clothing (not including handicrafts, coir, and jute) decreased slightly during 1997/98–1999/00 from 15% to 13.9%.[90] In addition, Indian exports have had difficulty competing with goods originating in other markets (e.g. China, Mexico, and the Caribbean).[91] For India to improve its performance in the international market, it would be necessary to improve technology, productivity and output quality, while minimizing government regulations (such as reservations for the SSI, and trade restrictions).

51. The Government provides assistance to exporters of textile and clothing through a number of schemes including: the export promotion capital goods scheme (EPCG)[92]; advance licensing scheme; duty exemption pass book scheme (DEPB); export oriented units (EOU)/free trade zones Scheme

[87] Taking only the *ad valorem* parts of alternate rates into consideration.

[88] WTO Secretariat calculations, based on data provided by the Indian authorities. Alternate rates contain both an *ad valorem* and specific rate component with the higher of the two rates being used; calculations used by the Secretariat exclude specific duties and include only the *ad valorem* component of the alternate rates.

[89] WTO Secretariat calculations, based on WTO document G/MA/TAR/RS/63/Rev.1, 17 October 2000.

[90] Ministry of Textiles (2001b).

[91] Agrawal (2001).

[92] The Export Import Policy for the year 2000-01 stipulated that all capital goods to be used in the textile sector would be covered under the Export Promotion Capital Goods Scheme (i.e. they would be subject to a 5% customs duty and exempt of all other duties). Earlier only specific textile machinery was covered under the EPCG Scheme (Ministry of Textiles, 2001b).

(FTZ)[93]; and the duty drawback scheme.[94] The objective of these schemes is to neutralize the incidence of duties on the inputs used in products exported (Chapter III(3)(viii) and (x)).

52. Tariff concessions are also available to clothing exporters. Imports of trimmings and embellishments (e.g. labels, tags, stickers, buttons, printed bags, belts, hangers, lining and inter-lining materials) may be imported duty free. In 2000, this concession was extended to 13 other items subject to a value cap of 3% of the f.o.b. value of textile or leather clothing exported during the preceding financial year; the authorities note, however, that the value of goods imported under this scheme was relatively insignificant in 2000/01 (Rs 160 million or US$3.33 million).[95] In addition, machinery (159 items) to make clothing may be imported at a concessional rate of 5%.

53. To encourage exports of diversified jute products, the External Market Assistance (EMA) Scheme was introduced in February 1989 covering eight products; the current scheme is valid up to 31 March 2002.[96]

54. India's exports in a number of categories of textiles and clothing are restricted under the Agreement on Textiles and Clothing (ATC) in Canada, the United States, and the European Union. The New Garments and Knitwear Export Entitlement (Quota) Policy 2000-2004, operated by the Ministry of Textiles, was announced in November 1999 to allocate export quotas for textiles and clothing under the ATC to the United States, European Union, and Canada.[97] Some features of this policy include: phased utilization of quotas (50% of quota utilization by 31 May)[98]; the linking of quotas for new investors with Technology Upgradation Fund Scheme (TUFS) requirements. It also made quotas granted to new investors non-transferable.[99]

55. The Executive Director of the Cotton Textiles Export Promotion Council (TEXPROCIL) is in charge of allocating entitlements of yarn, fabric, and made-up items, except for European Union categories 3/3a and 23, which are allocated by the Executive Director of the Synthetic and Rayon Textiles Export Promotion Council (SRTEPC). Quota entitlements for exports to Canada of Category 31(a) are alloted by the Executive Director of Wool and Woollen Export Promotion Council (WWEPC).[100] The Apparel Export Promotion Council (AEPC) implements the export quota entitlements for clothing and knitwear[101]; however, a small portion of clothing and knitwear quotas are also managed by WWEPC.

56. Quotas are distributed through various systems of allocation (Table IV.1 and Box IV.2).[102]

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[93] There are now more than 300 EOUs manufacturing textiles, including yarn and clothing. Relaxation from domestic cotton use restrictions to 100% EOUs producing cotton yarn have been extended for the year 2000 (Ministry of Textiles, 2001b).

[94] Ministry of Textiles (2001b).

[95] Notification dated 19 April 2000.

[96] The products covered are: jute or jute blended/union fabrics; jute/blended/union carpets/mats/matting; jute yarn/jute blended/covered yarn; jute handicrafts; jute wall hangings; jute or jute blended garments and made-ups; food grade jute products; and geo textiles, with the exception of jute yarn/jute blended/covered yarn and geo textiles.

[97] This policy can be amended as required via notifications; for instance, during 2000-01 four notifications were issued to modify the Garments and Knitwear Export Entitlement (Quota) Policy 2000-2004. (For more details see Ministry of Textiles.)

[98] This ensures according to the authorities, that exporters do not hoard quotas.

[99] Ministry of Textiles (2001b).

[100] Notification No1/129/99 Exports-I, Ministry of Textiles, 12 November, 1999.

[101] Ministry of Textiles (2001b).

[102] Ministry of Textiles (2001b).

Table IV.1
Quota allocation
(Per cent)

System of allotment	Yarn and fabrics (Cat. 3, 3a/EU, 31a, 32a/Canada)	Fabrics (other than Cat. 3, 3a/EU, 31a, 32a/Canada)	Made-ups (Mill-made/ powerlooms)	Made-ups (handlooms)	Readymade garments
	Percentage of annual level				
Past Performance Entitlement (PPE)	55	55	55	55	70[a]
Manufacturer Exporters' Entitlement (MEE)	15	15	15	-	-
Ready Goods Entitlement (RGE)	30	15	15	45	-
Non-Quota Entitlement (NQE)	-	-	-	-	5
Powerlooms Exporters' Entitlement (PEE)	-	15	15	-	-
New Investors' Entitlement (NIE)	-	-	-	-	15
First-Come-First Served (FCFS)	-	-	-	-	10

a Of which High Value Entitlement, 5%.

Source: Ministry of Textiles, *Annual Report 2000-2001*.

57. Export quotas seem to be fixed in each calendar year for cotton yarn in order to ensure an adequate supply of this input for the domestic textile industry. For instance, for the calendar year 2000 the Government fixed a ceiling of 500 million kg. on cotton yarn exports; the ceiling, however, was never reached and was subsequently removed. In addition, the pre-condition of fulfilling the Hank Yarn Obligation for cotton yarn exports was temporarily removed.[103]

(d) Internal measures

58. The textile and clothing industry in India has benefited from various types of support. Production of textiles and clothing has been reserved for the small-scale sector (SSI) which benefits from special assistance. However, this has inhibited the development of an efficient textile and clothing industry as *inter alia*, these small firms have been unable to maintain consistent quality, or export delivery schedules; furthermore they have lagged behind technologically; and many are economically inefficient, partly because they have been unable to exploit economies of scale.[104] Until 2001, foreign equity participation in the SSI was limited to 24%. Thus the sector has been unable to attract FDI, a source of new technology, and thereby access to international markets. With the exception of knitwear, all clothing was "de-reserved" from the SSI list in 2001 with the aim of attracting more investments and to take advantage of economies of scale, enabling the sector to compete both in domestic and foreign markets.[105]; the Budget 2002/03 states that knitwear will also be de-reserved shortly. This also means that the limit of 24% foreign equity participation, which has significantly constrained growth in the sector, has been removed. The Government allowed up to 100% foreign equity participation in the clothing sector, through the automatic route, with certain exceptions.[106]

[103] Ministry of Textiles (2001b).
[104] Agrawal (2001).
[105] Ministry of Textiles (2001e).
[106] Ministry of Textiles (2001b).

Box IV.2

Past Performance Entitlement System (PPE) including the High Value Entitlement (HVE) System[a]

Quotas are allocated according to applicant's average annual export performance during the base year.[b]

New Investors Entitlement System (NIE)[a]

Only exporters who have invested a minimum of Rs 5 million in new machinery (in accordance with TUFS criteria) are eligible to obtain a quota under this system. Quotas will be distributed on the basis of the production capacity of the applicant.

Non Quota Entitlement System (NQE)[a]

Exporters of garments to non-quota countries, and non-quota garments to quota countries are eligible to obtain a quota under this system provided the payment is received in "free currency", and that their exports amounted to a minimum of Rs 2 million during the base year. Quotas will be distributed on the basis of the applicant's annual export performance (in terms of value).

First Come First Served Entitlement System (FCFS)[a]

Manufacturer Exporter's Entitlement (MEE)[c]

Manufacturer-exporters' who have made improvements to their plant and machinery (in accordance with TUFS criteria) during the base period are eligible to obtain a quota under this system. Quotas will be distributed on the basis of the production capacity of the applicant.[d]

Powerlooms Exporter' Entitlement (PEE)[c]

The Textile Commissioner will notify detailed guidelines to obtain a quota under the PEE System once these are approved by the Ministry of Textiles.[d]

Ready Goods Entitlement (RGE)[c]

Quantities shall be allotted against applications, and on a day when available quantities are oversubscribed, eligibility shall be decided on the basis of unit value obtained among the applications received on that day.

Source: [a] Ministry of Textiles, Notification No. 1/128/99 Exports-I, Garments and Knitwear Export Entitlement (Quota) Policy (2000-2004), 12 November 1999.

[b] Base year means the calendar year preceding the year immediately before the allotment year. For example, for the allotment year *2000*, the base year shall be *1998*.

[c] Ministry of Textiles, Notification No. 1/129/99 Exports-I, YARN, Fabrics & Made-up Export Entitlement (Quota) Policy for 2000-2004, 12 November 1999.

[d] Detailed guidelines for allotment of export quotas under MEE and PEE can be found at Ministry of Textiles online information. Available at: http://texmin.nic.in/quota.htm.

59. The Ministry of Textiles has acknowledged that, because of the high cost of capital, most of the Indian textile and jute industry has become technologically obsolete. Thus, on 1 April 1999, the Ministry launched the Technology Upgradation Fund Scheme (TUFS) for the textile, jute, and cotton ginning and pressing industries. The scheme will be operational for a five-year period and provide a reimbursement of five percentage points on the interest charged by financial institutions on loans to upgrade the firms' technology.[107]

60. The Indian textile industry and exports are predominantly cotton based. Cotton, is one of the major crops cultivated in India, and accounts for more than 75% of the total fibre consumption in the

[107] The scope of this scheme, eligibility criteria and operational parameters are defined in: Resolution No. 28/1/99-CTI of the Ministry of Textiles, 24 March 1999.

spinning mills and for more than 58% of the total fibre consumption in the textile sector. A Minimum Support Price (MSP) is fixed by the Government to ensure that farmers obtain a "remunerative" price and produce an "adequate" quantity of cotton at a "reasonable" price for the domestic textile industry. The domestic price of cotton is also managed through "appropriate" export-import intervention as and when necessary.[108]

61. The quality and productivity of cotton is low. Thus, the Technology Mission on Cotton (TMC) was launched in February 2000 with the objectives of disseminating technology to farmers, improving marketing, and modernizing the ginning and pressing factories. The TMC is expected to improve the availability of quality cotton for the production of value-added yarn, fabrics, and clothing exports.[109]

62. The handloom sector continues to receive most support within the textile and clothing industry; this is mainly through the Hank Yarn Obligation Order and Handlooms (Reservation of Articles for Production) Act, 1985, aimed at safeguarding the interests of handloom weavers. An additional scheme (Deen Dayal Hatkargha Protsahan Yojana) was implemented on 1 April 2000 to further assist this sector. The scheme involves grants by the central and state governments and a credit facility to weavers through State Co-operative Banks and other financial institutions[110], in addition to support for, *inter alia*, product development, improving infrastructure, marketing assistance, and a transport subsidy.[111]

63. The handloom industry also benefited from "non-plan" subsidies. These seem to have decreased substantially since 1997/98 when they amounted to Rs 635 million; the budget allocation for 2001/02 is of Rs 10 million. The decrease appears to be partly due to the discontinuation of certain subsidy schemes.[112]

(e) Bilateral agreements

64. In December 1994, India signed two separate bilateral textiles agreements (MoUs), with the European Union and the United States.[113] These MoUs involve, *inter alia*, India binding its tariffs on textiles and removing quantitative restrictions in return for the EU and United States easing their quantitative restrictions on India's exports of certain products. Furthermore, under the India–Sri Lanka Free Trade Agreement signed on 28 December 1998, India applies preferential tariffs to imports of textiles (HS chapters 61 and 62) from Sri Lanka, tariff quotas are also applied: in 2000, a tariff quota of 6.67 million pieces was set, of which a minimum of 5 million pieces is to be manufactured in Sri Lanka using Indian fabrics, while exports of each product category from Sri Lanka may not exceed 1.5 million pieces.[114] According to the authorities, however, imports under this quota have been negligible.

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[108] Ministry of Textiles (2001b).

[109] Ministry of Textiles (2001b).

[110] Ministry of Textiles (2001c); and Ministry of Textiles (2001d).

[111] The scheme is intended to be in operation until the end of the Tenth Five Year Plan. Financial assistance under the scheme would be shared between central and state governments in the ratio of 50:50. However, in the case of North Eastern States including Sikkim, Jammu, and Kashmir, the ratio would be 90:10 (Ministry of Textiles, 2001c; and Ministry of Textiles, 2001d).

[112] For a detailed description of support, see Ministry of Textiles online information: "Notes on Demands for Grants, 2001-2002", Ministry of Textiles, Demand No. 76 [Online]. Available: indiabudget.nic.in [16 November 2001].

[113] WTO (1998).

[114] Ministry of Textiles (2001b).

Implementation of Indo–EU MoUs[115]

65. Under the Indo-EU MoU, India was to bind tariffs on textiles and remove quantitative restrictions; the European Union was to remove all restrictions on India's exports of handloom and cottage industries products. In addition, India was to be given "exceptional flexibilities" in addition to the existing ones; 7,000 tonnes per year for 1995-97 and 8,000 tonnes per year for 1998-04.[116]

66. However, a number of differences have arisen over the actual implementation of the MoU, particularly with regard to the granting of exceptional flexibility by the European Union and the tariff binding notification by India. The European Union denied "exceptional flexibilities" during 1997-99 on the grounds that India had not bound its tariffs in accordance with the MoU. Consultations were held with the European Union in July 2000 and the implementation issues were resolved. Pursuant to the consultations, India notified its revised tariff bindings to the WTO, while the European Union released 8,000 tonnes of "exceptional flexibilities" for 2000. The European Union also agreed to release 8,000 tonnes of "exceptional flexibilities" until 2004.[117]

Implementation of Indo–US MoUs[118]

67. Under the Indo–US MoU signed in December 1994, the United States extended the following provisions to India: the specific limit on other cotton made-ups (Cat. 369-O) was removed; the base levels for the specific categories were increased by 5%[119]; additional 5% quotas have been given for clothing made 100% of handloom fabrics in categories 334/634 (men's and boys coats) and 351/651 (pyjamas and nightwear); in other categories, "additional flexibilities" (i.e. swing, special swings, etc.) have been provided; and all issues relating to the export of "ghagras" (skirts) have been resolved.[120]

68. In turn, India agreed to liberalize tariffs for certain textile items and to bind its tariffs in respect of 385 HS lines annexed to the MoU, within a period of 60 days from the commencement of WTO (1 January 1995). India notified its tariff bindings to the WTO on 15 June 2000. However, the United States expressed certain objections to the tariff bindings and requested consultations to resolve the differences. Consultations were held with the United States in August and September 2000 in which an understanding was reached. In pursuance of the agreements reached with United States (in September 2000) and with the European Union (in May 2000), a revised combined tariff binding notification was filed with the WTO and the applicable rates brought in conformity with the two agreements.[121]

(4) SERVICES

(i) Introduction

69. In 2000/01 India's services sector accounted for around 49% of GDP and employed around 19% of the total workforce (in 1999/00) (Table I.1), which suggest that the sector's labour productivity may be considerably higher than the national average. Other infrastructure services, such

[115] Ministry of Textiles (2001b).
[116] Ministry of Textiles (2001b).
[117] Ministry of Textiles (2001b).
[118] Ministry of Textiles (2001b).
[119] These categories are: 218 (Yarn Dyed Fabrics), 219 (Duck Fabrics), 313 (Cotton Sheeting), 342/642 (Cotton and MMF Skirts), 347/348 (Trousers/Slacks & Shorts) and Group II.
[120] Ministry of Textiles (2001b).
[121] Ministry of Textiles (2001b).

as electricity, gas and water, accounted for 2.5% of GDP. As a significant and growing contributor to the economy, an efficient services sector is crucial for economic growth. Recognizing this, the Prime Minister's Economic Advisory Council (EAC), in a recent report, has noted that the quality of infrastructure services such as power, telecommunications and transport is not what it might be. Inefficient transportation, notably roads, maritime services, and ports, constrain trade and add to the overall costs of doing business. In addition, the power sector has become a major bottleneck to economic activity. The Council also noted that India's infrastructure required both a massive increase in investment and greater efficiency in order to support economic growth.[122]

70. Reform in infrastructure and other services has been undertaken since the early 1990s with varying degrees of success.[123] In several services, including banking and electricity, liberalization began in the early 1990s. The authorities have noted that although the decision to invite private investment was frequently accompanied by regulatory reforms, teething problems became impediments to attracting private investment. In the case of electricity, for example, although private sector investment has been encouraged since the early 1990s, a major problem identified was the lack of accompanying regulatory changes, notably to restructure the existing State Electricity Boards (SEBs) and to pricing of electricity tariffs (section (iii) below).[124] Partly as a result, private investment in the sector has not been as high as expected.[125]

71. By contrast, progress in the telecommunications sector has been more rapid in recent years, with the sector being opened to private investment. As a result, the telecommunications infrastructure has been greatly expanded and tariffs have been reduced significantly (section (v) below). Reform in other key infrastructure sectors, including civil aviation, maritime services, and ports has been slower, although steps have been taken to allow private sector investment in ports in recent years to develop capacity and improve efficiency (section (vi)). The overall efficiency of these sectors remains low, however, and inadequate for India's infrastructure needs. Moreover, as public sector investment in infrastructure becomes increasingly constrained due to budgetary considerations (Chapter I), the need to create a competitive and regulatory environment in which private sector investment can take place becomes increasingly urgent.

(ii) General Agreement on Trade in Services (GATS)

72. India scheduled commitments across a range of services under the General Agreement on Trade in Services. These are: business services, communication services, construction and related engineering services, financial services, health and social services, and tourism and travel related services. MFN exemptions were scheduled for: communication services (audiovisual services and telecommunication services); recreational services; and transport services (shipping services). These commitments are unchanged since the previous Review of India.

73. India signed the Fourth and Fifth Protocols in 1997 and 1998, respectively. Under the Fourth Protocol, India scheduled commitments in voice telephony and cellular mobile telephony as well as value-added services, such as circuit switched data transmission services, facsimile services, and private leased circuit services. In general, India's current policy is more liberal than its scheduled bindings. For voice and mobile telephone services, commercial presence may be established through incorporation in India and a licence from the designated authority; total foreign equity in the

[122] Prime Minister's Economic Advisory Council (2001).

[123] The Mohan Committee report on infrastructure services, which was published in 1996, suggested the need for a mix of private and public support to develop infrastructure services (Mohan Committee, 1996).

[124] Ministry of Finance (2001a).

[125] The problems faced by private investors have also been partly because the SEBs do not have the means to pay for the electricity generated by private sector generators.

company is scheduled not to exceed 25%, although the current policy allows foreign equity ownership of up to 49% for these services. India also declared that it would examine the issue of allowing competition from the private sector in international long-distance telecommunication services in 2004[126]; this date was brought forward to 2002.

74. Under the Fifth Protocol, India raised the limitation on licences for new and existing banks from 5 to 12 per year; in addition, banks would be allowed to install automatic teller machines (ATMs) at branches and at other places identified by them (ATMs installed in premises other than branches are treated as new premises and would therefore require new licences). New commitments were also scheduled in stockbroking and financial consultancy services.[127]

(iii) Electricity

75. Urgent reform is needed in India's power sector, which currently operates under three laws: the Indian Electricity Act, 1910; the Electricity Supply Act, 1948, which brought all new power generation, transmission, and distribution facilities under state control; and the Electricity Regulatory Commission Act, 1988.

76. The State Electricity Boards (SEBs), originally set up under the Electricity Supply Act, 1948, to operate commercially (achieving a minimum 3% return on capital), have become a major source of inefficiency in the sector as well as a major drain on public finances.[128] According to the Planning Commission, no SEB is recovering the full cost of power supplied with the result that they incur continuous losses on their total operations; SEBs' total losses in 2000 were Rs 240 billion, or roughly 1% of GDP. These losses cannot be made good from state budgets, which are themselves under financial strain. Consequently, the SEBs are starved of resources to fund expansion, and typically end up even neglecting maintenance, which has resulted in power shortages of the order of 13% at peak hours. In order to escape blackouts and prices that are among the highest in the world, many companies have set up their own power generation plants, which now account for nearly one third of electricity used by industry.[129]

77. There are various causes for SEBs huge losses. First, electricity tariffs do not cover costs because some segments, especially agriculture, but also household consumers, are charged very low tariffs (in some states power is provided free of charge to agricultural producers), while industry and commercial users are overcharged (although these high charges are not necessarily paid).[130] For example, it is estimated that on average agricultural consumers pay Rs 0.21 per KWh, compared with Rs 0.91 per KWh for industrial consumers.[131] This cross-subsidization of agriculture and household consumers is the consequence of political pressure. A related problem is transmission and distribution (T&D) losses, which have been estimated at some 25%[132]; although when a more precise calculation was attempted by states undertaking power sector reforms, estimates were considerably higher, at 45-50% of total output. According to the Planning Commission, these losses are in part due to theft, typically with the connivance of staff in the distribution segment, the fact that 80% of the electricity charges billed are actually collected, and lack of metering of electricity use. Furthermore, political

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[126] WTO document GATS/SC/42/Suppl.3, 11 April 1997.
[127] WTO document GATS/SC/42/Suppl.4, 26 February 1998.
[128] See for example, Dubash, and Rajan (2001), pp. 3367-3390.
[129] Planning Commission (2001c), p. 41.
[130] Planning Commission (2001c), p. 41.
[131] See for example, World Bank (2000), Chapter 5, p. 59.
[132] On average, T&D losses have been estimated at 25.6% in 1998/99, rising from 24.8% the year before (Ministry of Finance, 2002a).

interference in the management of SEBs has become the norm in most states, making it difficult to ensure high levels of management efficiency. In addition, overstaffing is rampant.[133]

78. Recognition that the public sector may not be able to invest adequately in power generation prompted the Government to encourage private investment. However, it became evident that significant amounts of private investment could not be attracted in an environment where the independent power producer is expected to sell power to a public sector distributor, who may not be in a position to pay for it.[134] As a result, the inflow of private investment, including FDI, has been much below target.

79. The reform process has also required significant coordination between the central and state governments, as electricity is defined as a concurrent subject in the Indian Constitution. Despite these difficulties, steps are currently being taken to address the problems in this sector, including through the formation of central and state regulators to restructure electricity tariffs, and increased investment to improve infrastructure. It has been suggested that reform of electricity could add 1-2% to GDP almost instantly.[135]

80. In 1998, Parliament enacted the Electricity Regulatory Commission Act, which envisaged the creation of an independent regulator, the Central Electricity Regulatory Commission (CERC), to regulate electricity tariffs. Since then 18 States have established State Electricity Regulatory Commissions (SERCs); 11 of these have also issued their first tariff orders. The authorities expect that, over time, tariffs will be rationalized, reducing the need for annual subsidies to the SEBs and will also address the problem of cross-subsidization between industrial and other tariffs. The Ministry of Power has also signed memoranda of understanding with 20 states to carry out reform in a time-bound manner. At the same time, the Central Government has provided financial assistance to facilitate reform in the states through the Accelerated Power Development Programme (APDP), which commenced in 2000/01; the scheme will assist the states in renovation and modernization of the sector, strengthening sub-transmission, distribution systems, and metering, the latter being one of the causes of transmission losses. In addition, regular Chief Ministers/Power Ministers Conferences have taken place; the most recent, held in March 2001, agreed that there was an urgent need to depoliticize power-sector reforms and speed up their implementation. In order to encourage private investment, the Government has also developed guidelines for investment in transmission, and foreign investment limits were raised from 74% to 100% (based on automatic approval) in May 1998. The authorities estimate that as a result of reforms already undertaken, peak shortages of electricity in the country have declined from over 20% in 1992/93 to 12.5% in 2001/02.

81. To consolidate the reforms carried out thus far under one law, the Electricity Bill was introduced in Parliament in 2001; this aims to make reform in the states mandatory. The Bill appears to introduce far-reaching changes including: de-licensing generation and freely permitting so-called captive generation; allowing open access to transmission; permitting licenced generators to provide transmission, and licenced transmitters to provide generation; and making the establishment of a State Electricity Regulatory Commission mandatory. However, the Bill has been criticized because it appears not to require the restructuring of the SEBs and fails to impose deterrent punishment for theft, and non-payment of bills, etc.[136] In particular, the need for the restructuring of the SEBs, according to

[133] Planning Commission (2001c), p. 41.

[134] Several foreign investors have also withdrawn from the Indian market due in part to the SEBs' inability to pay for electricity ("A Survey of India's Economy", *The Economist*, 2 June 2001, p. 8).

[135] "A Survey of India's Economy", *The Economist*, 2 June 2001, pp. 7-9.

[136] Rao (2000), pp. 3608-3613.

the Government, remains critical and a major cause of the shortfall of private investment in the sector.[137]

(iv) Banking and insurance

82. An efficient financial services sector, capable of mobilizing savings and channelling them into the most productive uses is essential for India's successful economic restructuring and long-term development. Although efforts have been made to introduce competition in the sector, with banking reforms commencing in the early 1990s, banking and insurance are dominated by state-owned enterprises, some of which continue to face financial problems. The sector is thus in need of further restructuring. In addition, there is a need to bring regulation and supervision closer to international best practices.

(a) Banking

Introduction

83. India's banking sector is dominated by state-owned banks, 27 in 2001, unchanged since the previous Review.[138] India's policy of nationalizing banks and requiring them to provide services to more remote parts of the country has resulted in a large network of bank branches, with some 50% based in rural areas. All commercial (local and foreign) banks are also required to fulfil priority sector lending requirements.[139] In the early 1990s, along with liberalization policies, the Indian Government began gradually introducing competition in the banking sector. As a result, the number of private banks increased from 46 in 1990 to 73 in 2001. The public sector, however, controls some 80% of total bank assets (2001). In the Export-Import Policy 2002-2007, the Government announced that it would be permitting overseas banking units (OBUs) in the special economic zones; these banks would be exempt from prudential requirements such as minimum capital asset ratios and statutory lending requirements.[140]

84. Although the state-owned banks have been successful in servicing the more remote parts of the country, their problems include a high percentage of non-performing assets (NPAs) (some 6.7% of net advances in 2000/01, compared with 5.4% and 1.9% for domestic private and foreign banks, respectively).[141] In addition, three public-sector banks were identified as facing problems and in need of restructuring (Box IV.3). The number of public sector banks unable to meet the minimum capital asset ratio (CAR) of 9% has fallen, however, from 14 in 1994/95 (minimum CAR was 8% at the time) to two as of March 2001, suggesting some success in prudential measures taken by the Reserve Bank of India (RBI). Given the large share of banking assets controlled by the public-sector banks, it has

[137] Planning Commission (undated).

[138] In addition, there are some 31 domestic private banks and 42 foreign bank branches.

[139] For domestic banks, this requirement is 40% of total lending, of which 18% must be made in agriculture, 10% to weaker sections, and the rest to the small-scale sector (of which 4.8% must be lent to the "tiny sector"). Domestic commercial banks are also required to provide 12% of total loans for exports. For foreign commercial banks, the target is 32% (10% each for exports, small-scale sector, and weaker sections). As part of the Information Technology Action Plan the Government has included information technology and software and service industries on the list of priority sectors for five years (Ministry of Information Technology, 1999).

[140] Ministry of Commerce (2002).

[141] Non-performing assets (NPAs) are defined by the Reserve Bank of India as credit facilities for which interest/instalment remains overdue for more than 180 days in respect of a term loan and the account remains "out of order" for a period of more than 180 days in respect of an overdraft/cash credit. According to the authorities the high level of NPAs is in part because banks did not have the possibility to exit loans, for example, through securitization, and, until 30 March 2001, no possibility of rescheduling or restructuring loans.

been recognized by the authorities that restructuring and strengthening weak public-sector banks is crucial for the stability of the Indian financial system. Steps taken recently to address this problem include the establishment of a Working Group by the RBI to identify and suggest ways to restructure weak banks (Box IV.3).

Box IV.3: Restructuring weak public-sector banks

The structural problems of public-sector banks have been acknowledged in successive government budgets. Various schemes have been used to try and assist banks in their restructuring efforts, including the use of debt recovery tribunals and settlement advisory committees to help banks recover some of their loans, as well as the possibility of tax deductibility for provisioning. In the 2000/01 Budget, the Government announced that it planned to reduce its minimum shareholdings in nationalized banks from 51% to 33% (as suggested by the Narasimham Committee on Banking Sector Reforms 1998), without "changing the public sector character of these banks". Their public-sector character would be maintained as their operations continue to be governed by the provisions of the Banking Companies (Acquisition and Transfer of Undertakings) Act 1970/1980, under which the Government retains power to give directions and maintains control over management. To this end, the Banking Companies (Acquisition and Transfer of Undertakings) and Financial Institutions Laws (Amendment) Bill, 2000 was introduced in Parliament. The Budget also announced the establishment of a Financial Restructuring Authority (FRA) to address the problems of weak banks.

The RBI has also taken steps to assist banks in their restructuring efforts, most recently by establishing a Working Group, which submitted its report in October 1999. The Report (Verma Report) suggested the use of seven parameters to identify weak banks on which basis it identified three that should be restructured (Indian Bank, UCO Bank, and the United Bank of India); a further six banks were also identified, as facing problems.

The parameters suggested by the Verma Report were:

- the capital adequacy ratio;
- the coverage ratio (ratio of equity capital and loan-loss provisions less non-performing loans to total assets);
- the rate of return on assets;
- the net interest margin;
- the ratio of operating profit to average working funds;
- the ratio of costs to income; and
- the ratio of staff costs to income.

The Committee suggested restructuring plans for the three weak banks, including operational changes, the introduction of voluntary retirement schemes, the transfer of a part of their non-performing loans (NPLs) to an asset reconstruction fund, and improved governance practices and managerial efficiency. An overall cost of Rs 55 billion over three years was estimated (Rs 3 billion for enhancing the capital of the banks, Rs 10 billion for transferring NPLs to the reconstruction fund, and the rest for staff rationalization and technology upgradation). The Government had injected some Rs 4 billion into the restructuring effort by 1998/99; no recapitalization assistance was provided to any of the weak banks during 1999/2000–2000/01. The banks submitted restructuring plans to the Government, which set up a high level group to examine them. The banks have been encouraged to raise additional capital through public share issues. Efforts have also been stepped up to allow banks to become more independent of the Government, notably through the provision of autonomous status (including in matters of creation and/or modification of ports and staff recruitment). According to the RBI, some 17 PSBs became eligible for this status by end March 1999.

Source: Reserve Bank of India (2000), *Annual Report, 1999/2000*; Ministry of Finance (2001), *Annual Report 2000/01*; and IMF (2000), *Recent Economic Developments.*

85. The response to recommendations by the Working Group includes:

- the recapitalization of weak banks to achieve prescribed capital adequacy norms (the restructuring programmes of these banks have been discussed with the RBI and assessed by a government committee in December 2000 and are currently under consideration by the Government);

- introduction of the Banking Companies (Acquisition and Transfer of Undertakings) Bill 2000 in Parliament, which, *inter alia*, proposes to establish a Financial Restructuring Authority;

- other measures, including voluntary retirement schemes, rationalization of bank networks, reduction of NPAs, and measures to increase productivity and profitability.

Recent policy changes

86. Under the Reserve Bank of India Act, 1934, and the Banking Regulation Act, 1949, the RBI is responsible for supervising the banking sector as well as non-banking financial companies (NBFCs), the latter under the provisions of the Reserve Bank of India (Amendment) Act, 1997. Other institutions supervised by the RBI include urban cooperative banks (jointly with the state and central governments), regional rural banks, state and district central cooperative banks (regulated by the RBI and supervised by NABARD and/or State and Central Governments), and development financial institutions.[142]

87. Entry requirements for banks were changed in January 2001. Among the changes made, minimum capital requirements for new banks were raised to Rs 2 billion to rise further to Rs 3 billion three years later, and a minimum capital adequacy ratio requirement of 10%.[143] Foreign direct investment of up to 49% of a bank's equity is permitted.[144] New banks are also required to open a quarter of their branches in rural/semi-urban areas.[145] In the Budget for 2002/03, changes are proposed to allow foreign banks to establish branches or subsidiaries in India.[146]

88. In order to regulate the activities of non-bank financial companies, the RBI Act (1934) was amended in 1987, so as to require NBFCs to, *inter alia*, obtain a Certificate of Registration from the RBI prior to commencing any financial operations. Foreign direct investment is allowed up to 100% of equity, depending upon initial investment.[147] Investment by foreigners, non-resident Indians, and

[142] Developments in Monetary Policy and Financial Markets: Address by Dr. Y.V. Reddy, Deputy Governor RBI at Madras Chamber of Commerce and Industry, at Chennai, 24 April 2001.

[143] At the time of the last Review, new banks were required to provide minimum capital of Rs 1 billion (WTO, 1998).

[144] Ministry of Commerce and Industry, Press Note No. 4 (2001 Series), [Online]. Available at: http://indmin.nic.in/vsindmin/policy/changes/ press4_01.htm.

[145] Ministry of Finance (2001a), p. 59.

[146] Presently, foreign banks may only operate in India as fully owned branches. If they choose under the new proposal to operate as subsidiaries, they will become subject to all banking regulations including priority sector lending requirements currently applicable to domestic banks (Budget Speech 2002-2003 – Part A, paragraph 50.)

[147] Up to 51% equity for companies investing US$0.5 million up front; between 51% and 75% for companies investing US$5 million up front; and between 75% and 100% for companies investing US$50 million (of which US$7.5 million must be invested up front with the balance to be invested within 24 months).

overseas corporate bodies (OCBs) is permitted in 18 NBFC activities.[148] Following amendments to the RBI Act in 1987, the RBI set up a regulatory framework for NBFCs in January 1998 to ensure that only financially sound and well managed NBFCs were allowed to access public deposits.[149] As of August 2001, certifications of registration had been granted to 13,815 NBFCs, of which 776 have been authorized to hold or accept public deposits (over 18,000 applications were rejected).[150]

89. India has, since 1992, been gradually introducing prudential norms, based on the 1988 Basle Accord. Partly as a result of recommendations made by the Committee on the Financial System, 1991 and the Committee on Banking Sector Reforms, 1998 (first and second Narasimham committees), a number of changes have taken place in the regulation and supervision of the sector. Most recently, the RBI implemented a number of measures in response to recommendations by the second Narasimham Committee in October 1999. These include: raising the minimum required capital to risky assets ratio from 8% to 9% by end March 2000[151]; assigning a risk weight of 2.5% to cover market risk for all securities including securities outside the statutory lending requirement (SLR) from the year ending March 2001; requiring greater disclosure from banks regarding the maturity patterns of their assets and liabilities in their annual reports; and establishing an Expert Committee to suggest amendments to bring key banking legislation into line with international financial and banking practices.[152] The Government established a Working Group on asset securitization in July 2000 to examine recommendations made by this Expert Committee; the Working Group has drafted a Bill on asset securitization, which is being considered by the Government. Strengthening of prudential accounting norms has also been pursued in order to improve the financial soundness of banks, and transparency in the financial system. Interest rates have been significantly deregulated although they remain high[153]; moreover, low inflation in recent years has resulted in high rates of real interest (see Chapter I(1)(i)).[154]

[148] Specific activities in which FDI up to 51% is permitted are: merchant banking, underwriting, portfolio management services, investment advisory services, financial consultancy, stockbroking, asset management, venture capital, custodial services, factoring, credit reference agencies, credit rating agencies, leasing and finance, housing finance, foreign exchange broking, credit card business, money changing, micro credit, and rural credit. Ministry of Commerce and Industry, SIA (2000), Annex IV.

[149] Reserve Bank of India (2001c).

[150] Reserve Bank of India (2001d). It has been suggested that a large number of NBFCs, which have, in the past, been allowed to expand, without significant controls, have dubious management and operational standards (Tarapore, 2000, pp. 2821-2826).

[151] In its Mid-term Review of Monetary and Credit Policy, 1998/99, the RBI stated that a decision about increasing the CAR to 10%, as suggested by the second Narasimham Committee, would be announced later.

[152] Reserve Bank of India (1999).

[153] The only domestic interest rates that continue to be regulated are those on savings accounts and on export credit, and interest rates governed by the Differential Rate of Interest (DRI) Scheme. The DRI scheme which is intended for the weaker sections of society, provides lending at concessional rates of interest of 4% per year to select low-income groups; banks have been asked to lend a minimum of 1% of their aggregate advances as at the end of the previous year and to route at least two thirds of these advances through their rural and semi-urban branches in order to make their loan accessible to these groups (Ministry of Finance, 2001a, p. 57). The 2002/03 Budget announced that administered interest rates would be benchmarked to the average annual yields of government securities of equivalent maturities in the secondary market and as a result most administered interest rates were reduced by 50 basis points from 1 March 2002 (Ministry of Finance, 2002b, paragraph 89).

[154] For a number of reasons, it is argued that downward flexibility in the interest rate structure of Indian banks is restricted; these include expectations of holders of fixed-term deposits of nominal interest rates in excess of the long-term rate of inflation; their preference for fixed interest rates on term deposits, giving less flexibility to banks to offer variable rates of interest on longer term deposits; the relatively heavy overhang of NPAs; government borrowing; and the high cost of funds especially for public sector banks (Reserve Bank of India, 2001d).

90. The Department of Supervision of the RBI, created in December 1993, was split into the Department of Banking Supervision (DBS) and the Department of non-banking Supervision (DNBS) in July 1997. Supervision is based both on on-site inspection (focusing on capital adequacy, asset quality, management, earnings appraisal, liquidity systems and controls), and off-site monitoring and surveillance. On-site inspection is carried out annually; newly licenced banks (during the first year of operation) and private banks displaying systemic weaknesses are subjected to quarterly monitoring. NBFCs and financial institutions are assessed on a similar basis; however, the periodicity of inspection of NBFCs is based on supervisory concerns and the amount of public deposits. Off-site monitoring was introduced in March 1996 and is based on quarterly reporting of assets, liabilities off-balance-sheet exposures, CAR, operating results, asset quality and large credit exposures for all banks based in India.[155] Off-site monitoring on the basis of periodic returns for NBFCs was introduced in January 1998 along with the new regulatory framework introduced by changes to the RBI Act in 1997.

91. Significant steps have thus been taken since the early 1990s to strengthen the banking sector. Nevertheless, as acknowledged by the RBI, challenges remain, including the high level of non-performing assets (NPAs) in the sector.[156] Restructuring of public sector banks is also key, given their importance in the Indian banking sector. For the three public banks identified thus far as being weak, the Reserve Bank has recommended additional injections of capital by the Government to help them achieve the required minimum capital adequacy ratios. These and other recommendations discussed above are currently under consideration by the Government. The RBI also emphasizes: the need for strict enforcement of prudential norms and transparency requirements; legislation to make recovery processes smoother and legal action quicker; and the increased use by banks of alternatives such as debt recovery tribunals and asset reconstruction companies.[157] Some steps have been taken to address these problems, notably the amendment of the Recovery of Debt Due to Banks and Financial Institutions Act (1993), which widened the definition of debt and increased the power of debt recovery tribunals in dealing with defaulters. The 2002/03 Budget also states that a new Bill on Banking Sector Reforms, which would strengthen creditor rights through foreclosure and enforcement of securities by banks and financial institutions, will be introduced in Parliament.[158] Fiscal measures, to allow banks to deduct up to 7.5% of their total income (previously 5%) against provisions made for bad and doubtful debts as well as to deduct up to 10% of their NPAs falling in the category of loss or doubtful assets (previously 5%) on the last day of the accounting year, were also announced.[159] As competition is introduced, the banks will themselves also need to implement stricter transparency and governance procedures, which have remained weak (Chapter III(4)(i)(d)).

(b) Insurance

92. The insurance sector is dominated by the Life Insurance Corporation (LIC) for life insurance and the General Insurance Company (GIC) for general insurance and reinsurance, both of which are state owned.[160] However, with the enactment of the Insurance Regulatory and Development authority

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[155] Reserve Bank of India (2000a).

[156] It has been pointed out that the NPAs arising out of priority sector lending and those covered by the Bureau of Industrial and Financial Restructuring (BIFR), which was set up to assist in the restructuring of public sector companies, make up some 50% of all NPAs of the banking system (Reddy, 2001).

[157] Banking and Finance in the new millennium-speech by Dr. Bimal Jalan, Governor Reserve Bank of India, at 22nd Bank Economists Conference, New Delhi, 15 January 2001.

[158] Ministry of Finance (2002b), Part A, paragraph 49.

[159] Ministry of Finance (2002b), Part B, paragraph 68.

[160] The LIC was formed as a result of nationalization in 1956, while the GIC and its four subsidiaries (National Insurance Company Ltd., the New India Assurance Company Ltd., the Oriental Insurance Company Ltd., and the United India Insurance Company Ltd.) was formed in 1973 as a result of the nationalization of the

(IRDA) Act in 1999, and amendments to the Life Insurance Corporation Act, 1956, and General Insurance Business (Nationalization) Act, 1972, the sector was opened to competition from private Indian insurance companies. The IRDA Act established a statutory body, the Insurance Regulatory and Development Authority (IRDA), on 19 April 2000. The IRDA, which has a Chairman and four full time members appointed by the Government, has the authority to: regulate and develop the insurance sector in an orderly manner, particularly in regard to socially weaker and rural sections of society; grant licences to new companies; and to oversee the functioning of the Insurance Ombudsman, established in 1998 under the Settlement of Public Grievances Scheme. In addition, a 24 member Insurance Advisory Committee was established in May 2000 to examine and approve regulations drawn up by the IRDA.[161] The Authority has thus far, in consultation with the IRDA, notified regulations relating to *inter alia:* the obligations of insurers to the rural or social sector; licensing of insurance agents; assets-liabilities and solvency margins of insurers; registration of companies; and company statements and auditors reports.

93. Amendments were also made to the Life Insurance Corporation Act, 1956, the General Insurance Business (Nationalization) Act, 1972, and related sections of the Insurance Act, 1938, to remove the exclusive monopoly operated by the LIC and the GIC in life and general insurance services, respectively. As a result of the change in legislation, by February 2001, the IRDA had issued Certificates of Registration to 17 private Indian insurance companies, of which ten are in life insurance, six provide general insurance services, and one is a reinsurer.[162]

94. Under amendments to the Insurance Act 1938, an Indian insurance company is described as: a company registered under the Companies Act, 1956; with an aggregate foreign equity participation, either by a company or through its subsidiaries or nominees, of no more than 26% of the paid-up equity capital of the Indian insurance company; and whose sole purpose is to carry on life, general or reinsurance business. In addition, no insurer is allowed, under the Act, to provide insurance services unless the company has a paid-up equity capital of Rs 1 billion; for reinsurance the minimum paid-up equity capital required is Rs 2 billion.[163] Financial sector companies, such as banks and non-banking financial companies (NBFCs), are also permitted under the new legislation to invest in the insurance sector through joint-venture companies, subject to their meeting net worth and other prudential criteria.[164] The maximum equity that may be held by banks and NBFCs in these joint-venture

general insurance business, previously comprised of 107 companies. The LIC also has subsidiaries in Bahrain and Nepal and branch operations in the United Kingdom and proposes to expand its offshore operations to Mauritius, Sri Lanka, and the United States. In addition, it has two subsidiary companies: LIC Housing Finance Limited and LIC Mutual Fund.

[161] Ministry of Finance (2001b).

[162] The companies are: HDFC Standard Life Insurance Co. Ltd.; ICICI Prudential Life Insurance Co. Ltd.; Max New York Life Insurance Co. Ltd.; Om Kotak Mahendra Life Insurance Co. Ltd.; Birla Sun Life Insurance Ltd.; SBI Life Insurance Co. Ltd; Vysya Life Insurance Company; Bajay Allianz Life Insurance Co. Ltd and Tata-AIG Life Insurance Co. Ltd. in life insurance services and Royal Sundaram Alliance Insurance Ltd.; Reliance General Insurance Co. Ltd.; IFFCO-TOKYO General Insurance Co. Ltd.; Bajay Allianz General Insurace Company; ICICI Lombard General Insurance Company Ltd; Metlife India Insurance Co. Prt. Ltd and Tata-AIG General Insurance Co. Ltd. in general insurance services; and General Insurance Corporation (reinsurance).

[163] Ministry of Finance online information, *Insurance Division.* Available at: http://finmin.nic.in/demo/ ecoinsur.htm [24 August 2001].

[164] For banks these criteria are: (i) net worth of not less than Rs 5 billion; (ii) CAR not less than 10%; (iii) a "reasonable" level of non-performing assets; (iv) net profit for the last three continuous years; and (v) a "satisfactory" performance track record of subsidiaries, if any. For NBFCs, the criteria are: (i) owned funds of not less than Rs 5 million; (ii) CAR of not less than 12% (15% for NBFCs engaged in loan and investment activities holding public deposits); (iii) net NPAs of not more than 5% of the total outstanding leased/hire purchase assets and advances taken together; (iv) net profit for the last three continuous years; (v) a satisfactory

companies is currently restricted to 50% of the paid-up capital of the insurance company.[165] Banks and registered NBFCs not eligible as joint-venture participants may invest in up to 10% of the net worth of the insurance company, or Rs 500,000, whichever is lower, to provide infrastructure and services support.

95. Since their formation, the LIC and GIC have expanded their geographical coverage of the country, providing services through over 6,000 divisional branch offices. They have also made a significant contribution to savings and the financing of the public-sector deficit, partly due to mandatory requirements for investment in government and approved securities.[166] These requirements also apply to new private-sector entrants to the market under the provisions of the Insurance Act 1938 and the IRDA (Investment) Regulations, 2000. In addition, every insurer is required to cede 20% of its insurance business written in India to the GIC for reinsurance.

96. Despite the expansion of insurance services in India, insurance spending remains low, estimated at some US$6 per capita (US$5 at the time of the last Trade Policy Review of India).[167] Moreover, with a penetration rate of around 22% of the insurable population[168], it is expected that the entry of new players in the insurance sector will help increase competition and product development to the benefit of the Indian consumer. In addition, in order to ensure that remote areas continue to receive access to insurance services, the IRDA has issued a regulation requiring all new insurers to expand their services to the rural and social sectors over a period of five years.[169]

(v) Telecommunications

(a) Overview

97. India has been liberalizing its telecommunications sector since the early 1990s; nonetheless, basic telecommunication services are dominated by three enterprises. Two remain state-owned, and provide domestic services: Bharat Sanchar Nigam Limited (BSNL)[170]; and its public sector holding,

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performance track record of any subsidiaries; and (vi) compliance with regulations and requirements concerning servicing of public deposits held (Reserve Bank of India, 2000b).

[165] The Reserve Bank of India may, nevertheless, in some cases, allow banks to hold equity greater than 50% initially, subject to disinvestment of equity in excess of 26% or any other percentage prescribed under the Insurance Act, of the paid up equity capital after a period of 10 years from the date of commencement of business (Reserve Bank of India, 2000b).

[166] Under the Insurance Regulatory and Development Authority (IRDA) Investment Regulations 2000, life insurance companies must invest not less than 25% in government securities, not less than 50% in government or other approved securities, not less than 15% in infrastructure and other social sector, and not less than 15% in approved investments; pension and general annuity business must invest not less than 20% in government securities and 40% in government or other approved securities; general insurance companies must invest not less than 20% in government securities, not less than 30% in central, state and other guaranteed securities, not less than 5% in housing and loans to the State Government, and not less than 10% in infrastructure and social sector; the remainder may be invested by each group of insurance companies in investments to be determined by exposure/prudential norms specified by the IRDA.

[167] Comparative figures for other countries in the region are US$770 in Singapore and US$63 in Malaysia (*Business India*, 25 June-8 July 2001, p. 47).

[168] *Business India*, 25 June-8 July 2001, p. 47.

[169] The requirements are: 5%, 7%, 10%, 12%, and 15% of total policies in each of the five years for life insurance and 2% and 3% in the first and second years and 5% thereafter for general insurance in the rural sector; and for 5,000 to 20,000 lives over the five-year period in the social sector for all insurers (Insurance Regulatory and Development Authority, 2000).

[170] BSNL was established in October 2000 when the Department of Telecom Services (DTS) was corporatized under the Companies Act, 1956. The DTS together with the Department of Telecommunications (DOT) were the result of the splitting up of the Department of Telecommunications Services in October 1999.

the Mahanagar Telephone Nigam Limited (MTNL) for Delhi and Mumbai. [171] International telecommunications services are provided by Videsh Sanchar Nigam Limited (VSNL), in which the Government of India was a majority shareholder (53% of total equity) until 13 February 2002 when the company was privatized and management control transferred to a private operator (Table IV.2).[172]

98. Competition was allowed from the private sector in value-added telecommunication services and cellular mobile telephone services (CMTS) in 1992, followed by fixed line local telephone services in 1994[173]; the National Telecommunications Policy was announced in 1994 (NTP 94). The New Telecommunications Policy, 1999 (NTP 99), which replaced the NTP 94, sought to address some of the shortcomings of NTP 94, *inter alia:* improving efficiency by establishing a more competitive environment for the sector; strengthening R&D efforts and enabling Indian companies to become global players; and encouraging the penetration of telecommunications services, particularly in rural areas. The Government aims to achieve a penetration rate of 7% by 2005 and 15% by 2010, as well as to provide telephone services to all villages by 2002.[174] These goals would be achieved, in part, by attracting investment in basic telecommunications services, such as cellular and fixed-line telephony, and value-added services. Under the new policy, fixed-line service providers (FSPs) and cellular mobile service providers (CSMPs) will be granted non-exclusive licences for individual service areas for an initial period of 20 years, extendable by additional ten-year periods; the initial licence period under the NTP 94 was ten years. Operators may apply for licences for several service areas. [175] The new policy also allows FSPs and CSMPs to provide long-distance domestic services within their service area without the need for a new licence. Ceilings on foreign ownership in telecommunications services range from 49% to 100% depending upon the sector (Chapter II(3)).[176] Since the launch of NTP 99, further liberalization has been pursued, often ahead of schedule. Private-sector participation in domestic long-distance telephony was permitted in August 2000, followed by international long-distance voice telephony on 1 April 2002 (two years ahead of India's commitments in the GATS). As a result of these steps, all telecommunication services are now open to private participation and competition. Consequently, there has been significant improvement in private-sector participation: about 45% of additional telephones have been provided by private operators during the past year.[177]

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[171] MTNL was incorporated on 1 April 1986 under the Companies Act, 1956, and is majority owned by the Government of India, which holds 56.25% of total equity. MTNL is entrusted with the management, control, and operation of telecommunication services, except telegraph services, in the metro cities of Delhi and Mumbai. The Government had planned to reduce its share of MTNL's equity, but this was postponed in November 1999.

[172] The Government reduced its share in VSNL to 26%, with a 25% stake sold to a strategic partner and 2% of its share equity to be held by employees.

[173] The value-added services for which private sector investment was allowed in 1992 were electronic mail, voice mail, data services, audio and video-text services, video conferencing, and radio paging (National Telecom Policy, 1994 [Online]. Available at: http://www.trai.gov.in/ntp1994.htm.htm [24 August 2001]).

[174] Several aspects of the NTP 94, such as making telephones available to all villages, and on demand, by 1997, and efforts to increase private sector participation in the sector, had not been met, requiring further changes to the policy.

[175] Service areas are defined as 20 Telecom Circles and Delhi for basic services; for domestic long-distance operators (DLDOs), the service area is the entire country.

[176] Up to 100% in ISPs not providing gateways (subject to disinvestment up to 26% of equity to the Indian public within five years), of which up to 49% is automatic without the need for central government approval; up to 74% in ISPs with gateways, radio paging, and end-to-end bandwidth (49% automatic); and up to 49% (subject to central government approval) in basic, cellular, value-added services, and global mobile personal communications.

[177] Ministry of Finance (2002a), p. 218.

Table IV.2
Telecommunication service operators and policy

Service	Operators	Entry fee	Licence fee	Main policy highlights
Basic telecommunication services				
Local	**Public Sector** Bharat Sanchar Nigam Limited (BSNL) for entire country except Delhi and Mumbai Mahanagar Telephone Nigam Limited (MTNL) in Delhi and Mumbai **Private** Six operators in seven service areas are operational	Rs 10 million to Rs 1.15 billion	Annual licence fee including contribution to universal service obligation (USO) fund (5%) as a percentage of gross revenue in the following manner: Category A: 12% Category B: 10% Category C: 8%	There is no restriction on number of operators. Any applicant with a paid-up equity of Rs 20 million to Rs 1,000 million with combined net worth of promoters of Rs 200 million to Rs 10,000 million after paying an entry fee of Rs 10 million to Rs 1,150 million for various categories of service area can obtain a licence. A licence fee is a percentage of revenue varying from 8% to 12% inclusive of USO, to be paid annually. 31 licences have been given in 18 different service areas excluding BSNL & MTNL. Maximum FDI of up to 49% permitted
Domestic long-distance within India	**Public** BSNL **Private** Three licences signed. Letter of Intent (LOI) issued to fourth company	Rs 1 billion	15% of annual gross revenue inclusive of USO contribution	Market opened for private sector competition in August 2000. There is no restriction on number of operators. Any applicant with a paid up equity of Rs 2,500 million and a combined net worth of Rs 25,000 million after payment of an entry fee of Rs 1,000 million can obtain a licence. Maximum FDI of up to 49% permitted
International	**Public** Videsh Sanchar Nigam Limited (VSNL). Since 13 February 2002 management control has been transferred to a private company **Private** LOI issued to five companies. One LOI is converted into licence	Rs 250 million	15% of annual gross revenue inclusive of USO contribution	VSNL monopoly will expire on 31 March 2002. (Now stands privatized). There is no restriction on number of operators. Any applicant company with a net worth of Rs 250 million after paying an entry fee of Rs 250 million can obtain a licence. Annual licence fee is 15% of gross revenue including USO service obligation levy. At present universal obligation service levy is 5%. Maximum FDI of up to 49% permitted
Cellular services	**Public** MTNL in Delhi and Mumbai (since September 1999) **Private** Currently 27 providers are operational including BSNL for all India except Delhi & Mumbai, and MTNL for Delhi & Mumbai	Determined on the basis of layer bidding process	Annual licence fee including contribution to universal service obligation (USO) fund (5%) as a percentage of gross revenue in the following manner: Category A: 12% Category B: 10% Category C: 8%	Licensing dependent on availability of spectrum BSNL is a third operator in all service areas except Delhi & Mumbai, fourth operator licence is given to 17 service areas. Maximum FDI of up to 49% permitted

Source: Information provided by the Indian authorities.

99. As of March 2002, 80 cellular telecommunication licences had been granted to 27 operators. The subscriber base had grown to over 5.7 million by January 2002, a penetration rate of some 0.5%. According to the authorities, a major factor in this expansion was the decision taken in NTP 99 to change the licence fee for private-sector operators from a fixed value to a percentage of gross

revenues; it had been suggested that the high cost of the initial licence fee may have dissuaded more operators from bidding for licences.[178]

100. For local telecommunication services, 31 licences have been granted to seven operators; as of early 2002 private operators had begun providing local fixed-line services in seven service areas, in addition to the public-sector companies, BSNL and MTNL. In addition to VSNL, two private companies have signed licences to provide domestic long-distance services; a letter of intent has been issued to a fourth company. The presence of new operators in fixed and cellular telecommunication services has resulted in a significant rise in the penetration rate across the country. The number of fixed-line telephones increased from 14.54 million to 35.51 million (1.7% to an estimated 3.2%) between 1996/97 and January 2002 (41.44 million including cellular services), a teledensity of over 4%; the authorities believe that the teledensity is likely to exceed the 7% target of NTP 99. The waiting list for main line telephones was estimated at 2.8 million, up from 2.4 million in 1995.

101. Tariff policy, including tariff rates and cross-subsidization of tariffs, has also been addressed by the Regulator, through successive tariff orders.[179] International tariffs, in particular, have traditionally been high, partly to cross-subsidize local tariffs and rental charges.[180] The TRAI's tariff orders appear to have rationalized and reduced tariffs over the last few years[181]. The issuing of three separate tariff rebalancing orders over a period of three years has substantially reduced the extent of the cross-subsidy: the first phase, which became effective on 1 May 1999, reduced long-distance STD and ISD rates by an average 23%, followed by a reduction in STD and ISD rates by 13% and 17%, respectively, with effect from 1 October 2000.[182] Tariffs reportedly fell by 60% in January 2002, when private-sector investment was allowed in long-distance voice telephony; in addition, the removal of the monopoly on international telephony on 1 April 2002 prompted a 20% fall in the cost of calls to the United States.[183] Nonetheless, tariff rates are reported to be still high by international standards.[184] The latest tariff order was issued in March 2002 and will be valid until a further revision is announced, based on a review of the overall tariff structure.[185]

102. Other services such as radio paging were liberalized in 1992; some 137 licences have been granted, of which 76 are currently operational. Other value-added services that have been liberalized include V-SAT-based data services, electronic mail, fax on demand, and electronic data interchange.

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[178] See for example, World Markets Online, *Telecommunication Services* [Online]. Available at: www.worldmarketsonline.com/serlets/cats?ID=308&subSite=WTO&pageContent [14 September 2001]. This has been supported by the report of a working group on the telecom sector for the Tenth Five Year Plan, which suggests that the two most important changes made in NTP 99 were the change from the "unrealistic" fixed fee to revenue-based licence; and, the strengthening of the Regulator, disinvestment in VSNL, and the opening of domestic long distance telephony to private competition (p. 6).

[179] In order to maintain transparency, the TRAI consults with interest groups, including service providers, consumers, and policy makers in making its recommendations.

[180] On average, international call charge rates in India in 1999, were estimated to be around US$1.49 compared to US$1.20 in China, US$0.84 in Thailand, and US$0.16 in Australia (McKinsey and Company, 2001), exhibit 6.18.

[181] Steps taken thus far include a reduction in long-distance and international telecommunication charges and an increase in the cost of rentals and local telephone charges.

[182] Ministry of Finance (2002a), p 221.

[183] *The Economist*, 6 April 2002, p. 61.

[184] For example, according to the software industry association NASSCOM, the inadequate telecommunications infrastructure and high tariffs are major factors hindering growth in software services (section (vii) below).

[185] See for example Telecom Regulatory Authority of India, Press Release (14 March 2002) [Online]. Available at: www.trai.gov.in/Press%20Release20.htm [27 March 2002].

(b) Regulatory framework

103. The basic legislation governing the Indian telecommunications sector is the Indian Telegraph Act, 1885 and the Indian Wireless Act, 1933. As recommended by the NTP 99, however, and given the rapid convergence between telecommunication services, computers, television, and electronics, the Communication Convergence Bill was introduced in Parliament in August 2001. The Bill aims to promote, facilitate, and develop in an orderly manner, the carriage and content of communications (including broadcasting, telecommunications, and multimedia). The Bill will also establish an autonomous Communications Commission of India, to regulate the carriage of communications, and the Communications Appellate Tribunal.

104. In preparation for competition from private service providers and in anticipation of corporatization, the Department of Telecommunications, the erstwhile regulator and public-sector provider of all telecommunications services, was divided into the Department of Telecom Services (DTS) and the Department of Telecommunications (DOT) in October 1999. The DOT retains responsibility for all functions relating to policy, licensing, international relations, promotion of investment by the private sector, and research and development; the DTS, in turn, was corporatized on 1 October 2000, becoming the Bharat Sanchar Nigam Limited (BSNL), the main state-owned national telecommunication service provider.

105. Under the NTP 99, the licence issuing authority remains the Department of Telecommunications. All licence holders are required to pay a one-time entry fee as well as a licence fee, the latter being calculated as a share of revenue and determined by the Government, upon recommendations made by the Telecom Regulatory Authority of India (TRAI) (Table IV.2). Part of the licence fee is also expected to contribute to a universal service obligation fund expected to be established on 1 April 2002. As recommended by the TRAI, 5% of adjusted gross revenue will be allocated to the USO fund (Box IV.4).[186] However, as BSNL provides basic and cellular services to all parts of the country[187], including remote and rural areas, the Government will reimburse in full the licence fee paid by BSNL.[188] The question of whether the fee paid by BSNL will be reimbursed even after establishment of a Universal Service Fund is currently being examined by the Government. Licence applications for telecommunications services may be made by companies registered as Indian companies under the Companies Act 1956, which are subject to maximum foreign equity limits depending on the service. A range of incentives are also provided to encourage investment in the sector. These include amortization of licence fee, tax holidays of up to five years, rebate on subscription of shares/debentures, tax relief for financing through venture capital, and reduced rates of import duty on various telecommunications equipment.[189]

[186] Available at www.dotindia.com [9 April 2002].

[187] MTNL provides basic and cellular telecom services to Delhi and Mumbai, whereas BSNL provides basic and cellular services throughout the country except in Delhi and Mumbai.

[188] The licence fees for basic telecommunication services currently range from 8% to 12% of revenue (Ministry of Communications, Notification No. 10-2/2000-BS-II*: Guidelines for issue of licence for basic service, Annex I*, Department of Telecommunications).

[189] Equity held by non-resident Indians (NRIs), OCBs or International Funding Agencies will be counted as foreign equity (Ministry of Communications, 2002, p. iv).

Box IV.4: Universal service obligation

One of the key aspects of the NPT 1999, and of the NPT 1994 before that, is the goal of providing telephone connections across the nation. A major ongoing programme is to provide a telephone in each of 607,000 villages, and low speed data service to these villages by the year 2002; internet access for all district headquarters by the year 2000; and telephone-on-demand in urban and rural areas by 2002. With an estimated penetration rate of 0.5% at present in rural areas, there is a need for a substantial increase in investment in telecommunication services to these areas to meet the NPT 1999 goal of a rural teledensity of 4% by the year 2010.

In October 2001, the Telecom Regulatory Authority of India issued its recommendations on universal service obligations (USO). The TRAI suggests two streams of universal services, one involving shared public access to telecommunication services, and the second covering individual connections.

The key recommendations include two rural community phones in each village with a population greater than 2,000, at least one phone to each village by 2002, Public Tele Info Centres (PTIC) in 35,000 villages (low speed) by 2004, and high speed PTIC in all block headquarters by 2005. PTICs will be centres providing data transmission facilities with the objective of giving the local community access to the information highway. The high speed PTICs will provide the possibility of efficient delivery of several additional tele-services such as tele-education and tele-medicine. It is expected that this will reduce the digital divide. In line with NTP 99, the TRAI suggests that a Universal Service Fund be created from the proceeds of a levy of 5% of adjusted gross revenues on all telecom operators (except value-added-service providers such as ISPs, email or voice mail providers). The Fund will provide finance to promote USO services. In addition, the TRAI has recommended the establishment of a separate universal service administrator and board to implement the policy.

Guidelines for implementing the universal service fund were issued by the Department of Telecommunications on 1 April 2002.

Source: Information provided by the authorities.

106. The Telecom Regulatory Authority of India (TRAI) was formed in January 1997, under the Telecom Regulatory Authority of India Act, 1997. The Act was further amended in 2000 in order to distinguish clearly between the TRAI's regulatory and recommendatory functions; the TRAI's dispute settlement functions were also transferred to a new body, the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) (see below). The TRAI'S goal is to provide an effective regulatory framework for operators and to ensure fair competition and protection of consumer interests, including through regulation of tariffs and terms and conditions of interconnection. It is also entrusted with recommending terms and conditions of licences, ensuring compliance with these terms and conditions, technical compatibility and standards of quality of services, and effective interconnections, the need for the introduction of new service providers, and measures to facilitate competition and promote efficiency in telecommunications services. Although the Government must seek the recommendations of the TRAI on issues relating to the need for and timing of the introduction of new service providers and the terms and conditions of licences issued, these and other recommendations are not binding upon the Government.[190] Thus, the Department of Telecommunications may decide whether or not to follow some or all of the actions recommended by the TRAI on these matters.

[190] Under the Amendment to Section 11(d), recommendations made by the authority on the need and timing of introduction of new service providers, terms and conditions of licence, revocation of licence for non-compliance, measures to facilitate competition and promotion of efficiency in telecommunications, technological improvements in services, type of equipment to be used by the provider, measures for the development of telecommunication technology and efficient management of the available spectrum, are not binding upon the Central Government. (Ministry of Law, Justice and Company Affairs, 2000).

107. To settle any disputes between a licensor and licensee, between service providers, and between service providers and consumers, the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) was established in May 2000; previously, under the TRAI Act, 1997, a much limited dispute settlement function was entrusted to the TRAI.[191] The TDSAT is also empowered to hear and dispose of appeals against any decisions, directions, or orders made by the TRAI. Furthermore, under the Act, no civil court has jurisdiction over matters to be examined by the TDSAT; it appears that an appeal against an order or decision of the TDSAT, may, however, be heard by the Supreme Court. Since its formation, the TDSAT has examined 21 cases, and reached decisions in 12 of these, relating to basic, cellular, and radio paging services. Under the new Communication Convergence Bill presently in Parliament, the role of the Regulator is expected to become more broadbased.

108. With the steps taken in the NTP 99 and subsequently, to address some of the shortcomings of NTP 94, a larger number of service providers have entered the market.[192] It appears that some of the private investment has been provided by foreign investment; the telecommunications sector has been the second largest recipient of FDI in recent years.[193] Actual inflows of FDI in the sector rose from Rs 140 million in 1994 to a peak of Rs 17.8 billion in 1998; some Rs 2.9 billion was invested in the sector in 2000. The investment appears to have been mainly in the area of cellular telephone services; basic telecommunication services accounted for 8% of total FDI in telecommunications.[194] It has been suggested by a Working Group on Telecommunications for the Tenth Plan that, despite the new regulatory environment, investment in the sector has not been as high as expected and needs to be stepped up substantially. Steps suggested to facilitate this include: appropriate interconnection arrangements between new operators and the incumbent; early positioning of the USO fund; uniform guidelines for the granting of right of way; calling-party-pays regime; incentives for provision of services to rural areas; and a smooth migration to the convergence regime.[195] According to the authorities, appropriate interconnection arrangements and guidelines for right of way are available and the USO was put in place by 1 April 2002, thereby providing incentives for the provision of services in rural areas.

(vi) Transportation

109. Road services are being improved, including through upgrading the present national highway infrastructure and developing new highways connecting major cities.[196] The National Highways Act, 1956 was amended in 1995 to allow participation by the private sector, which is being encouraged to invest through build, operate and transfer (BOT) schemes. Incentives for private-sector investment

[191] Under Chapter IV of the TRAI Act, 1997, disputes among service providers, or between service providers and consumers were to be adjudicated by a bench constituted by the Chairperson and two members.

[192] Steps taken include basing the licence fee on gross revenues rather than a fixed amount; allowing competition in all telecommunication services sectors; and the decision to reduce government equity in VSNL. It has been suggested, however, that the licence fee at some 12-17% of revenue, may still be too high (McKinsey and Company, 2001, p. 6).

[193] Ministry of Finance (2002a), p. 218.

[194] Ministry of Communications (undated), p. 29. The definition of basic telecommunication services appears to cover collection, carriage, transmission, and delivery of voice or non-voice messages in the licensee's service area, and the provision of all types of services, except those requiring a separate licence; it seems to exclude cellular telecommunication services.

[195] Ministry of Communications (undated), pp. 36-39.

[196] The National Highways Authority of India estimates that although India's national highway network is less than 2% of the country's total road network, it carries some 40% of total traffic (NHAI, "Road Network", [Online]. Available at: http://www.nhai.org/roadnetwork.htm, [4 April 2002]).

include tax holidays of up to ten years[197], and zero rates of import duty on construction equipment; FDI up to 100% is also permitted.[198]

110. In rail transport, which was identified recently as a key sector on the verge of a financial crisis[199], the Railway Budget of 2002/03 has taken initial steps to address this problem by significantly revising the tariff structure so as to reduce the cross-subsidy by freight transport of passenger transport[200]; the classification of freight transport has also been rationalized considerably.[201] Measures have also been proposed to share expenditure on rail projects with the States. Other revenue-raising measures taken in recent years include efforts to invite private investment in rail projects through, *inter alia*, the formation of joint ventures with strategic private investors, build, operate and transfer projects, development of private railway lines with ownership and asset maintenance rights, as well as the establishment of private freight terminals. According to the authorities, moreover, private funds of around Rs 30 billion are being tapped every year for the lease of rolling stock.

111. In maritime transport, port services are being improved including through the privatization of some port activities and corporatization of ports, which it is hoped will increase productivity and improve accountability and transparency in their operations.[202] The Budget of 2002/03 announced that major ports will be corporatized in a phased manner and that new private-sector ports will be set up.[203]

(vii) Software

112. The software sector, according to some estimates, accounted for some 1.2% of GDP in 1999/00, with the services segment comprising 75% of sectoral output.[204] The sector has grown rapidly with exports rising from US$734 million in 1995/96 to US$6.2 billion in 2000/01; the main destination was North America (some 62%).[205] Exports at present account for around two thirds of total annual output of the software industry, and the Government aims to raise exports to US$50 billion by 2008.[206] Various steps are being taken to try to achieve this target, including the

[197] Up to 100% for five years and 30% for the next five years, which may be availed of over a 20 year period (NHAI, "Government policy", [Online]. Available at: http://www.nhai.org/govtpolicy.htm, [4 April 2002]).

[198] Subject to total foreign equity limit of Rs 15 billion.

[199] According to the Expert Group on Indian Railways, the main causes include cross-subsidies with high freight charges subsidizing passenger services, reduced carriage of bulk commodities by rail, investment in unremunerative projects, which have escalated during the 1990s, and rising employee costs, poor productivity, and declining budgetary support.

[200] Freight transport charges are reported to be excessive and not based on economic criteria mainly as a result of political pressure to subsidize passenger travel. The Prime Minister's Economic Advisory Council has stated that the Railway Budget has been "excessively politicized" (Prime Minister's Economic Advisory Council, 2001, paragraph 5.22. As a result partly of these high freight charges, it is estimated that only around 30% of freight is transported by rail, with the rest using India's road network (NHAI, "Road Network", [Online]. Available at: http://www.nhai.org/roadnetwork.htm, [4 April 2002]).

[201] Among the measures proposed in the 2002/03 Budget are a rise in passenger fares to raise revenue and a reduction in the number of freight classes from 59 to 32.

[202] The first port to be corporatized in India was the Ennore port, in the State of Tamil Nadu, which began commercial operations in June 2001; it is expected to ease congestion at the state's main port in Chennai and will focus on container cargo (*Indian Infrastructure*, January 2002).

[203] Ministry of Finance (200b), Part A, paragraph 35.

[204] McKinsey and Company (2001).

[205] National Association of Software and Service Companies (2001).

[206] Ministry of Information Technology (2001), *Annual Report 2000/01*, pp. 10-11.

establishment of additional software technology parks, and a venture capital fund in association with the Small Industries Development Bank of India (SIDBI) and Industrial Development Bank of India (IDBI) for small and medium-sized companies. In addition, the Information Technology Act was enacted by Parliament in June 2000 and became effective in October 2000. The Act, along with the Information Technology (Certifying Authorities) Rules, 2000, provides legal recognition for transactions carried out through electronic data exchange or electronic commerce, a service segment that has grown rapidly in recent years.[207]

113. In recognition of the role played by software and related activities, such as electronic commerce, the Government established the Ministry of Communications and Information Technology (merging the Ministries of Communications and Information Technology) on 15 October 1999. Its main functions include the development and implementation of a plan to reach a software service export target of US$50 billion by 2008, all policy matters relating to information technology and the development of the sector, including electronics, the internet and electronic commerce, and related services. The ministry is assisted in these efforts by an Advisory Committee composed of well known professionals from the Indian information technology industry; the Committee was set up in January 2000 to assist the Ministry in identifying emerging areas with potential, and to assist Indian industry in realizing these potentials.

114. The success of the software sector, particularly in export growth, is in part attributed to India's relatively large pool of skilled but low-cost labour. Moreover, in contrast to other sectors, the software sector has faced relatively fewer barriers to international trade and investment. The role played by fewer barriers to imports and foreign investment in the success of software has been acknowledged by the ministry.[208] Customs duties, for example, for the software industry are zero (both for standard as well as additional and special additional duties); and computer software is not subject to excise duties. In 1999, further concessions were provided to assist the industry, including exemption of computer software services from payment of services tax, and inclusion of software services in the list of sectors that are subject to priority-sector lending for a period of five years.[209]

115. In addition, to encourage exports of software, profits derived from software exports are exempt from income tax under Section 80HHE of the Income Tax Act, although the extent of these exemptions is being reduced gradually.[210] The Government has also created software technology parks, which are administered by an autonomous society (Software Technology Parks of India, STPI) under the Department of Information Technology, Ministry of Communication and Information Technology. The STPI provides state-of-the-art high speed data communication facilities and single window services to exporters. It has set up 24 centres, including 24 international gateways across the

[207] Revenues for "IT enabled service" (remote processing, including customer interaction services, help desks, medical transcription/translation, localization services, data digitization, legal databases etc.), have been estimated at some 11% of total software revenues for 2000/01 (National Association of Software and Service Companies, 2001).

[208] In its Annual Report, for example, the MIT attributes a lack of similar growth patterns in computer hardware, partly to a distorted tariff structure, in addition to poor infrastructure and a high cost of finance (Ministry of Information Technology, undated, p. 7).

[209] Loans of up to Rs 10 million from the banking system to the software sector are eligible for inclusion under priority sector lending.

[210] Under Section 80 HHE of the Income Tax Act, computer software is defined as any computer program recorded on any disc, tape, perforated media or other information storage device or any customized electronic data or any product or service of similar nature, as notified, which is transmitted from India by any means. Exemptions under Section 80 HHE of the Income Tax Act are granted as follows: 80% of profits for the assessment year beginning 1 April 2001; 70% for the year beginning 1 April 2002; 50% for the year beginning 1 April 2003; 30% for the year beginning 1 April 2004; no deductions will be granted as of assessment year beginning 1 April 2005.

country. The parks, along with similar parks for computer hardware firms, provide infrastructure facilities, and other benefits such as exemptions from payment of income tax for a period of ten years (up to 2010) under Sections 10A and 10B of the Income Tax Act and exemption from payment of excise duties on inputs purchased in the domestic tariff area (DTA).[211] Foreign direct investment of up to 100% is permitted. All computer software companies established either in export-processing zones or as export-oriented units have the same liberal framework for imports and investment; as export-oriented companies, however, there may be certain export obligations in order to qualify for tax exemptions. As at 1 April 2001, a total of 6,652 software units were registered with the STPI Centres; software exports by these units were valued at some US$3.6 billion in 2000/01.[212]

116. Although expansion in software services has been rapid, further growth, particularly in new areas such as offshore services and IT-enabled services, may be constrained by infrastructural deficiencies. In a recent survey, the industry association NASSCOM identified inadequate telecommunications infrastructure as one of the major factors hindering growth in the sector. The telecommunication tariff structure also compares unfavourably with international standards, according to this study[213]; recent changes to telecommunications services, including opening up the sector to private competition, however, appear to have brought telecommunication costs down significantly.

[211] Firms that manufactured computer software on or after 1 April 1981 in any free-trade zone, or on or after 1 April 1994 in any software or hardware technology park, or on or after 1 April 2001 in any special economic zone, are eligible for income tax holidays up to 31 March 2010. Key infrastructure facilities provided in the software parks include high speed data communication services.

[212] Software units established under the EOU/EPZ/STP schemes may sell up to 50% of the f.o.b. value of their exports in the domestic tariff area (DTA) (Ministry of Information Technology, undated, p. 5).

[213] National Association of Software and Service Companies (2001), p. 8.

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