CHAPTER 3

INFRASTRUCTURE

The performance of the key infrastructure sectors in 1983-84 was somewhat mixed initially, but there was steady improvement in the course of the year. Power generation was unavoidably affected by a decline in hydel generation caused by the drought in 1982 and the consequent depletion of reservoirs and also on account of a fall in thermal capacity utilisation caused by forced outages of several thermal power stations for long durations. However, there was considerable improvement in power generation since the third quarter of the year. Coal production also improved significantly in the later months and total coal production in the year also may not fall far short of the target during 1983-84. The railways have shown relatively low growth of freight traffic in the course of 1983-84 but this was mainly because of continuing slack in demand for bulk traffic rather than to supply constraints arising out of railway performance. The traffic handled at the major ports continued to show an upward trend despite the fall in iron ore export resulting from the global recession in the steel sector.

TABLE 3.1

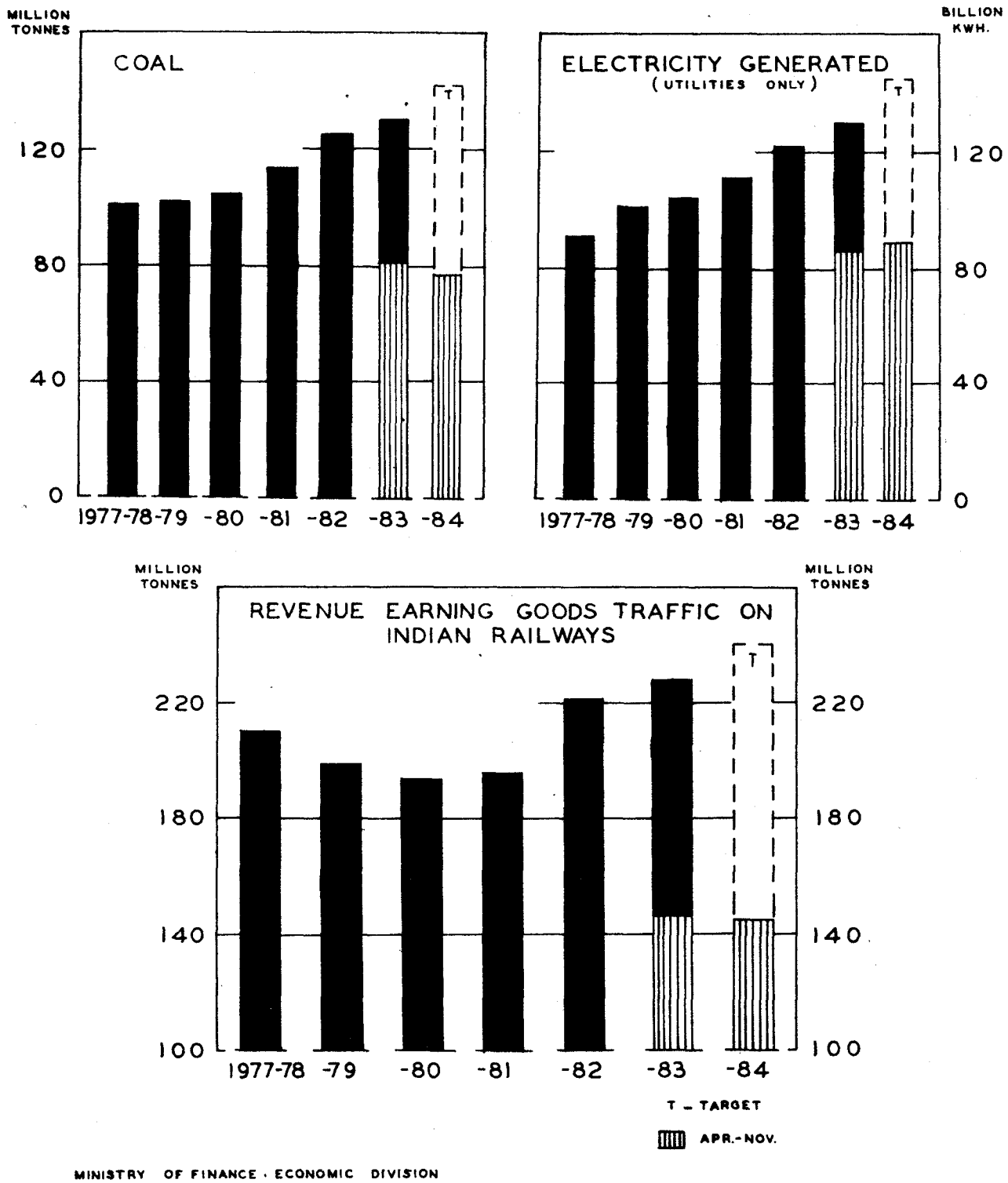
Trends in the Performance of Infrastructure Sectors

Item	Unit	1980-81	1981-82	1982-83*	April-December*		Percentage change		
					1982-83	1983-84	1981-82 over 1980-81	1982-83 over 1981-82	1983-84 over 1982-83 (Apr.—Dec.)
1. Coal Production . . .	Mn. Tonnes	114.0	124.2	130.6	90.8	95.2	+8.9	+5.2	+4.8
2. Electricity Generated**. .	Mn. Kwh.	110844	122010	130111	97344	102260	+10.1	+6.6	+5.1
(i) Hydel	-do-	46542	49597	48210	38297	38062	+6.6	—2.8	—0.6
(ii) Thermal (incl. nuclear)	-do-	64302	72413	81901	59047	64198	+12.6	+13.1	+8.7
3 Railways									
(i) Revenue Earning Tonnes Originating . . .	Millions	195.9	221.2	228.8	166.4	166.0	+12.9	+3.4	—0.2
(ii) Average Daily Coal Loading on Railways (In terms of 4 wheelers) .	Wagons/day	8987	10207	11022	10742	11342	+13.6	+7.8	+5. 6
4. Cargo Handled at Major Ports	Mn. tonnes	81.32	88.06	96.12	69.47	72.25	+8.3	+9.2	+4.0

*Provisional.

**Utilities only.

PERFORMANCE OF INFRASTRUCTURE SECTORS



MINISTRY OF FINANCE · ECONOMIC DIVISION

GMG/MRND-PLW-668/1/Fin/83-84...Chart 4

Coal

3.2 In 1982-83, coal production had increased by 5.2 per cent to the level of 130.6 million tonnes from 124.2 million tonnes in the previous year. This was a deceleration from the growth rate of 8.9 per cent recorded in 1981-82, nevertheless there was no shortage of coal in the economy. Slack demand facing industry in 1982-83, was reflected in a lower demand for coal. Besides coal stocks were high at the start of the year and the gradual increase in demand for coal from consumers resulted in a step up in offtake and reduction in pithead stocks. On the supply side, the deceleration in production in 1982-83 reflected the performance in the Eastern Coalfields Ltd. (ECL) and the Bharat Coking Coal Ltd. (BCCL). The production of the ECL declined by 3.4 per cent due to severe power shortages in the coal belt and also on account of labour unrest and absenteeism. Production in the BCCL grew by 4.3 per cent, a deceleration compared with the growth of 7.5 per cent in the previous year. However, the performance of the Western Coalfields Ltd. (WCL) and the Central Coalfields Ltd. (CCL) continued to be good with growth of 8.5 per cent and 10.0 per cent, respectively compared with 9.7 per cent and 9.5 per cent in the previous year. Overall, the growth in production of the Coal India Ltd. (CIL) decelerated to 5.4 per cent in 1982-83 from 7.9 per cent in the previous year. The Singareni Collieries Company Ltd. (SCCL) also showed considerable deceleration in growth from 19.8 per cent in 1981-82 to 1.7 per cent in 1982-83. This was partly because of a prolonged strike in November and December, 1982.

TABLE 3.2

Coal Production

(Mn. Tonnes)

Company	1980-81	1981-82	1982-83*	April-December*		Percentage change		
				1982-83	1983-84	1981-82 / 1980-81	1982-83 / 1981-82	1983-84* / 1982-83 (April-Dec.)
E.C.L.	22.6	23.5	22.7	15.9	15.5	+4.0	—3.4	—2.5
B.C.C.L.	21.4	23.0	24.0	16.3	15.4	+7.5	+4.3	—5.5
C.C.L	27.5	30.1	33.1	22.4	24.4	+9.5	+10.0	+8.9
W.C.L.	28.8	31.6	34.3	24.4	27.4	+9.7	+8.5	+12.3
N.E.C.	0.6	0.7	0.7	0.5	0.5	+16.7	No ch.	No ch.
Coal India	100.9	108.9	114.8	79.5	83.3	+7.9	+5.4	+4.8
S.C.C.L.	10.1	12.1	12.3	8.9	9.1	+19.8	+1.7	+2.2
Others	3.0	3.2	3.5	2.4	2.8	+6.7	+9.4	+16.7
TOTAL	114.0	124.2	130.6	90.8	95.2	+8.9	+5.2	+4.8

*Provisional.

3.3 The target for coal production in 1983-84 was set at 142 million tonnes against an estimated consumption demand of 147 million tonnes. The gap of five million tonnes was proposed to be met by drawing down the accumulated pithead stocks by four million tonnes and importing one million tonnes of coking coal. In 1982-83, there was an import of about 1.4 million tonnes of coking coal. The production target implied a growth rate of 8.7 per cent over the previous year. In the first half of 1983-84, performance was below expectation and coal production was only 1.9 per cent higher than in the first half of 1982-83. However, there has been an improvement in performance after September 1983. Coal production during the first nine months of 1983-84 has been 95.2 million tonnes which is 4.8 per cent higher than in the same period last year. The growth in the third quarter was much higher at 10.0 per cent compared with 1.9 per cent

in the first half of the year. Both, the WCL and the CCL have achieved remarkable increases during the third quarter (23.5 per cent and 17.2 per cent respectively). However, production in the ECL during April—December, 1983-84 declined by 2.5 per cent which is particularly disquieting coming in the wake of a decline of 3.4 per cent in the previous year. Output of the BCCL also declined by 5.5 per cent during the first nine months of 1983-84 in contrast to 4.3 per cent growth in the previous year.

3.4 The main factors underlying the shortfall in coal output in April—Septmeber, 1983 compared with the stipulated target were shortages of power in the Eastern Region, high rates of absenteeism and other labour problems. There was a shortfall in power supply by the Damodar Valley Corporation (DVC) to the coal mines. The shortage was further aggravated by the failure of the Bihar State Electricity Board (BSEB) to pass on to the DVC the power transferred from the Northern Grid by way or assistance for the coal mines and steel plants in the Eastern Region. Illegal strikes and go-slow by workers were also responsible for considerable loss of production.

3.5 Despite the slow growth in production, coal availability has not posed a major problem in 1983-84. This is partly because the estimated demand on which the target was based, did not materialise at least in the first half of the year reflecting the continuation of slack demand conditions in industry. Moreover, the stock position was comfortable with pithead stocks at a high level of 23.4 million tonnes at the start of 1983-84. They were drawn down by 6.7 million tonnes at the end of September, 1983 adding considerably to the availability in this period.

3.6 Efforts were made to improve performance in the coal sector and increase production in the second half of the year so as to make up the shortfall in production in the initial months. To meet this objective, the CIL launched a multi-pronged drive of which the key elements were : disciplinary measures against illegal strikes and absenteeism among workers, introduction of incentives for higher production, improved stock-taking methods and measures for increasing the operating efficiency of mining and allied workers. Punitive steps have been taken to counter absenteeism among workers (e.g. strict enforcement of the rule authorising deduction of nine days' wages if a worker resorts to illegal strikes). Simultaneously, the Third National Coal Wage Agreement has been signed entitling the coal miners to better pay and allowances, and thereby providing a stimulus for higher production. The cost of the agreement is estimated to be Rs. 225 crores. Steps have been initiated to rationalise the deployment of labour for increasing productivity. Modern equipment as also new techniques have been introduced although this will take time to yield results as the workers would have to adjust to the new mining methods. Steps have been taken to meet the problem of power deficit through temporary diversion of the DVC power from the steel quota to coal. As a result of these steps a sharp improvement in performance was evident in November and December, 1983 when coal production was 13.9 per cent and 14.5 per cent higher than in the same months of the previous year. From the latest trends, it seems that coal output during 1983-84 may not fall far short of the target.

3.7 Expansion of the production base of coal in the country must have high priority in future if the total energy requirements have to be met without excessive dependence on petroleum. A major factor slowing down the feasible rate of expansion is slippages in the implementation of coal projects. Special measures have been taken recently to guard against slippages and to minimise their adverse impact. The monitoring system has been strengthened and the progress of each major project is now being reviewed once every three months. Some of the major reasons identified as responsible for the slippages in project implementation are : inadequate technical study to back up the project formulation and lack of sufficient data on geomining parameters. The quality of project feasibility reports is sought to be improved with the help of the Central Mine Planning and Design Institute Ltd. (CMPDIL), Ranchi. A number of steps have also been taken recently by the CMPDIL for improving the collection of geological data.

3.8 Investment in coal mining has been stepped up progressively in recognition of the vital role of coal in meeting domestic fuel requirements. The public sector outlay in coal mining, including lignite, has been increased from Rs. 443.4 crores in 1980-81 to Rs. 578.0 crores in 1981-82 and Rs. 877.0 crores in 1982-83 (all at current prices). The outlay envisaged for 1983-84 is Rs. 1,086.2 crores. The price of coal was also stepped up in keeping with the increased cost of production so as to make the coal companies viable. In January, 1984 the average pithead price per tonne was set at Rs. 183 (CIL), Rs. 192 (SCCL) and Rs. 175 (Soft coke), respectively.

3.9 Coal production had exceeded the target in the first two years of the Sixth Plan. Actual production in 1980-81 was 114 million tonnes against the target of 113.5 million tonnes. In 1981-82, production went up to the level of 124 million tonnes against the target of 121 million tonnes. There was a small shortfall in 1982-83, the actual production being 130.6 million tonnes against the target of 133 million tonnes. Coal output in 1984-85 is envisaged at around 154 million tonnes. This, along with timely adjustments from pithead stocks and imports of low ash coking coal, is expected to meet the estimated requirements adequately in the final year of the Sixth Plan.

Power

3.10 The power sector faced acute difficulty in 1982-83 with reservoirs depleted by drought and consequent decline in hydel generation. Nevertheless, total power generation from the utilities amounted to 130.1 billion kwh, an increase of 6.6 per cent over

the level of 122.0 billion kwh in the previous year. This increase was contributed entirely by a rise of 13.1 per cent in the thermal (including nuclear) generation while hydel generation declined by 2.8 per cent.

TABLE 3.3

*Trends in Power Generation**

(Percentage change)

Electricity Generated (Utilities)	1982-83					1983-84			
	1981-82					1982-83			
	Quarter				Full Year	Quarter			April-Dec.
	I	II	III	IV		I	II	III	
Hydel	+7.6	+2.5	—7.0	—13.3	—2.8	—15.2	+0.3	+12.3	—0.6
Thermal (incl. nuclear)	+4.9	+14.5	+15.1	+18.6	+13.1	+12.9	+5.3	+7.7	+8.7
Total	+5.9	+8.9	+5.9	+6.5	+6.6	+2.4	+3.1	+9.4	+5.1

*Provisional

3.11 The impressive rise in thermal (including nuclear) power generation (13.1 per cent) during 1982-83, was on account of a large increase in installed capacity and also the improvement registered in capacity utilisation of thermal plants. About 2,137 MW of new capacity was added during 1982-83 representing an increase of about 11.1 per cent over the installed capacity at the start of the year. Equally important, the average plant load factor (PLF) of thermal plants increased from 46.8 per cent in 1981-82 to 49.4 per cent in 1982-83.

3.12 The target for electricity generation (utilities) for 1983-84, was set at 144.3 billion kwh representing an increase of 11 per cent over the generation level achieved in 1982-83. The power generation during the first half of 1983-84 was estimated at 66.2 billion kwh which came to 45.9 per cent of the target and was only 2.8 per cent above the level in the first half of 1982-83. Power generation during April-September 1983 was below target in both hydel and thermal power generation. However, the situation improved in the third quarter when total power generation was 9.4 per cent above the third quarter of 1982-83. For the first nine months of 1983-84, power generation showed a growth of 5.1 per cent over the previous year.

3.13 Inspite of increases in power generation, supply continues to lag behind demand. The deficit in power supply in relation to estimated requirements had declined from 12.6 per cent of the requirement in 1980-81 to 10.8 per cent in 1981-82 and was estimated at about 9.2 per cent during 1982-83. In the period April—January, 1983-84 the deficit was estimated at 11.5 per cent, but the power situation has been improving and the deficit for the year as a whole will be lower. The impact of short supply of power was felt more acutely by some industries and in some regions than in others. The stringent power supply situation had adversely affected industries such as coal, steel, fertilisers, cement, aluminium, etc., during 1982-83. These problems have continued through 1983-84. In 1982-83, the percentage of power deficit was above the all-India average in Maharashtra (including Goa), Tamil Nadu, Bihar, West Bengal, Orissa and Rajasthan while in the remaining States there was either a surplus or the extent of deficit was below the all-India average. The short fall in power supply by 5.3 per cent in Kerala during 1982-83 was unusual. This was in contrast to a surplus of 9.2 per cent in the previous year. Because of Kerala's own shortage, adjoining Tamil Nadu did not receive its usual power quota from Kerala. In 1983-84, the deficit in the Eastern Region continued to be large. The Southern Region experienced a larger deficit than in 1982-83 because of the shortfall in hydel generation.

3.14 There was a sharp fall in the generation of hydel power in the first half of 1983-84, particularly in the Southern Region because of poor rainfall in Kerala and insufficient, delayed and erratic monsoon conditions in Karnataka and Tamil Nadu. During April-September, 1983 generation of hydel power fell by 40.4 per cent in Kerala, by 55.8 per cent in Tamil Nadu and by 4.1 per cent in Karnataka. With a good monsoon this year, it is expected that hydel generation may reach the target of 49 billion kwh envisaged for 1983-84. Hydel power generation has already registered noticeable improvement after September 1983. Generation of hydel power registered an increase of 12.3 per cent in the third quarter of the current year over the level in the corresponding period of 1982-83.

3.15 Thermal (including nuclear) power generation showed an increase of 8.7 per cent in April-December, 1983 over the level in the same period last year. The growth in thermal (including nuclear) generation which was much higher at 12.9 per cent in the first quarter of the year, decelerated to 5.3 per cent in the second quarter and then picked up again to 7.7 per cent in the third quarter. The deceleration was because of a sharp decline in utilisation of capacity in the thermal plants in the second quarter. As shown below, the PLF, which had risen to 53.3 per cent in the last quarter of 1982-83, declined to about 50 per cent in the first quarter of 1983-84 and then fell precipitately to about 41 per cent in the second quarter. This decline was largely because a

number of major thermal units had suffered long duration of forced outages, particularly in the Northern and Eastern Regions. Some other units which were put on planned maintenance/capital maintenance programmes had a longer period of outages than were originally envisaged. Several of these units have since been recommissioned. The PLF improved significantly in the third quarter. The PLF level for December 1983 was 52 per cent which is close to the average level achieved in the last quarter of 1982-83.

TABLE 3.4

*Plant Load Factor (PLF) for Thermal Plants**

Quarter	1982-83	1983-84
First	50.4	49.6
Second	45.1	41.3
Third	48.5	47.4
Fourth	53.3	..
Total	49.4	

*Provisional

3.16 The PLF levels in 1982-83, and in 1983-84 (except for the second quarter) represent an improvement over the low levels prevailing in the earlier years. The average PLF in 1980-81 was 44.6 per cent. This increased to 46.8 per cent in 1981-82 and further to an average of 49.4 per cent in 1982-83. The average for the first nine months of 1983-84 was 46.1 per cent but the level of 1983-84 will be higher if the high level of PLF achieved in December 1983, is maintained. The observed improvement in PLF reflects the considerable improvement in the performance of 200/210 MW units. The average PLF of these units was raised from the low level of 41.1 per cent during 1981-82 to nearly 52 per cent during 1982-83 through stabilisation and completion of renovation works. Most of the recently installed 210 MW units have stabilised within a period of one year.

3.17 Recognising the urgency of raising the level of utilisation of capacity of the thermal plants already installed, the Government has recently instituted a scheme of incentive rewards. The scheme is designed to reward employees of power stations on the operating as well as on the maintenance side for meritorious performance. The quantum of reward will be higher for sustained good performance and will be shared by all employees in proportion to their emoluments. Cash rewards ranging from Rs. 15 to 30 lakhs (per 100 MW of installed capacity) will be given to SEB/Corporation, having a total installed capacity of at least 50 MW if their PLF were above 50 per cent in 1982-83. Measures initiated for raising the capacity utilisation of thermal plants include improvement in the quality of coal supply, a statutory schedule of preventive maintenance for avoiding unscheduled outages, better management of spare parts, provision of adequate funds, betterment of operational standards and renovation/modernisation of some of the existing smaller capacity units, and suitable training of power station personnel.

3.18 One of the factors underlying the low level of PLF in thermal plants is coal quality in terms of both high ash content and variability in quality. As regards the high ash content of coal, the Bharat Heavy Electricals Ltd., (BHEL) have initiated steps for the design of boilers to suit the specification of coal supplied to the customers. One of the problems faced is the need for more coal to be pulverised because of the lower calorific value of coal containing high percentage of ash or moisture. The BHEL has, therefore, started to design higher capacity mills to meet future requirements. But the replacement of existing ones may be too expensive and can be resorted to only in selected cases. Long-term linkages of mines with the power plants have to be rationalised to deal with the problems of both quantity and quality of coal supply. In October, 1983 the Special Linkage Committee has rationalised coal linkages by linking power stations to particular coal projects keeping in view the quantity and quality of coal required by the power stations.

3.19 Another important factor affecting thermal plant efficiency is the lack of effective maintenance procedures. If proper maintenance of expensive power equipment has to be ensured, attention must be given to intensive training of the operation and maintenance personnel, strict pursuit of maintenance schedules and procedures recommended by the manufacturers, advance planning for the supply of spares to enable a programmed over-haul so as to minimise forced/unplanned outages, proper installation of sensitive equipment in dust-free/air-conditioned atmosphere, etc.

3.20 In view of the high cost of creating additional generating capacity it is as important in the longer run to try to conserve electricity as to increase its generation. There is considerable scope for reducing transmission losses and saving electricity in major uses like operation of irrigation pump-sets, steel manufacture, etc. A series of steps to reduce transmission losses from the present level of about 20 per cent have been initiated. These include the setting up of the National Power Grid by construction of 400 KV lines inter-connecting regional grid system and inter-regional linking of the different regions. For this purpose, HVDC transmission technology is proposed to be imported in the absence of indigenous know-how at present. This would help to reduce transmission losses and to ensure optimal utilisation/distribution of the energy sources. Measures have also been initiated for saving electricity in agriculture, industry, transport sectors, etc. Some of the steps initiated for this purpose include replacement of undersized GI pipes by PVC pipes and of high resistance footvalves, etc., in irrigation pumpsets, reduction of electricity input in steel industry in areas like re-heating furnaces, steel making and so on through a shop-wise energy conservation approach by the integrated steel plants, advocation of co-generation technology to the extent feasible in power intensive industries like rayon, pulp and paper, chemical processing, etc.

3.21 An Advisory Board on Energy was set up in March, 1983 to review the energy situation in the country continuously in the global context and formulate an integrated energy policy covering commercial and non-commercial sources. The Board will suggest optimal demand and supply management

approach keeping in view the technology options in industry and transport, etc., and the need to conserve resources as well as the environment. It has also been entrusted with the task of formulating pricing policies for all forms of energy keeping in view their *inter se* availability, opportunity costs and the need for conservation.

3.22 Capital outlays in the power generating sector had been significantly stepped up in recent years having regard to its importance in the national economy. The public sector outlay in power at current prices, which was Rs. 2,653.3 crores in 1980-81, was increased to Rs. 3,144.5 crores in 1981-82 and further to Rs. 3,821.4 crores in 1982-83. An outlay of Rs. 4,532.2 crores has been earmarked for 1983-84. To promote research and development activities particularly those aimed at conservation of energy, a provision of Rs. 4.15 crores has been made in the Budget for 1983-84. In addition, a Plan provision of Rs. 2.54 crores as grants-in-aid to the Central Power Research Institute (CPRI) and Rs. 80 lakhs as grants-in-aid to the Central Board of Irrigation and Power (CBI&P) have been made in the Budget for 1983-84.

3.23 In the first three years of the Sixth Plan, aditional capacity of 7,058 MW was installed in the power generating sector. During 1983-84, upto December, 1983 a further addition of 2,273 MW has been made. Total addition to capacity during the current year is likely to reach 3,800 MW. The total installed capacity for power generation in the country is expected to go up to about 43,000 MW at the end of the Sixth Plan, compared with 28,450 MW at the commencement of the Plan.

Railways

3.24 During 1982-83, movement of revenue earning freight traffic by the railways increased by 3.4 per cent over the level in 1981-82 (228.8 million tonnes as against 221.2 million tonnes). The target for the year was 230 million tonnes. The lower realisation as compared with the target was primarily because of poor off-take of steel by user industries, especially the engineering industries, and the world recessionary conditions which had adversely affected the traffic in iron ore meant for export. There was 8.6 per cent increase in coal traffic, 18.1 per cent increase in cement and 14.9 per cent in foodgrains. Howevet, the traffic in a few important commodities declined significantly : iron ore for export by 11.4 per cent, fertilisers by 11 per cent, pig iron and finished steel from steel plants by 2.5 per cent, raw materials for steel plants by 2.5 per cent and other miscellaneous goods by 4.1 per cent.

3.25 The target for 1983-84 in terms of revenue earning originating traffic was set at 241 million tonnes, an increase of 5.3 per cent over the level achieved in the previous year. However, actual offering of goods traffic was lower in the first half of 1983-84 as compared with the first half of 1982-83 but an improvement was evident in the third quarter. Freight traffic by rail increased by 3.0 per cent in November, 1983 and 6.2 per cent in December, 1983. The volume of revenue earning traffic carried by the railways in the first nine months of 1983-84 was 166.0 million tonnes, which was 0.2 per cent lower than the level in the first nine months of 1982-83. Provisional estimates of freight traffic carried in January, 1984 also show positive growth over the same month of the previous year. As in 1982-83, traffic in coal, foodgrains, cement and petroleum products continued to register increases, but movement of iron ore for export, fertilisers, pig iron and finished steel from steel plants, raw material for steel plants and other miscellaneous goods has declined in varying degrees. The decline in traffic has been the sharpest in the case of raw materials for steel plants (18.1 per cent) followed by fertilisers (16.5 per cent), iron ore for export (12.3 per cent), pig iron and finished steel from steel plants (11.8 per cent) and other miscellaneous goods (8.1 per cent).

3.26 Part of the explanation for slow growth in traffic of the railways is sluggishness of demand facing industry and the consequent low levels of production, especially in the case of steel and iron ore for export. In the case of fertilisers, sluggishness of output as well as lower imports have caused lower offerings of traffic. The railways are facing competition from the roadways in the transport of general cargo traffic. The railways have initiated several measures such as quoting special station-to-station rates and launching a plan to attract traffic by offering the Freight Forwarder Scheme.

3.27 The slack in freight loading during the first half of 1983-84, was reflected in a slight deterioration in one of the efficiency indicators of the railways. Wagon turn-round time in terms of days on the broad gauge increased marginally to 13.1 days during April—December, 1983-84 compared with 12.9 days during the comparable period of the previous year. The other commonly used efficiency indicator, *viz*, net tonne kms. per wagon per day has, however, shown an improvement. This had reached a level of 1,123 during 1982-83, moving up from 986 in 1980-81 and 1,112 during 1981-82. During the first half of 1983-84, the daily net tonne kms. per wagon on broad gauge has increased to the level of 1,219 from 1,185 in the same period of the previous year. It may be noted that the overall efficiency of the railways in 1983-84 remained fairly high inspite of slack demand.

3.28 The railways have continued with their efforts for the rehabilitation of over-aged assets and for modernisation of railways operations in order to improve efficiency as well as to better the safety standards. However, the renewal of sick railway tracks has not kept pace with requirements. Because of severe resource constraints, the railways have not been able to get over the heavy backlog of track renewals. Against 14,000 kms. of track renewals envisaged during the Sixth Plan period, in the first three years renewals of only 4,500 kms. have been carried out. A length of 2,300 kms. of track renewals

was envisaged during 1983-84 but actual achievement may be somewhat lower due to the increase in the material prices. Electrification of track was carried out for 875 kms. of track during the first three years of the Plan period.

3.29 The public sector outlay on the railways, which was Rs. 973 crores during 1980-81 was raised to Rs. 1,209 crores in 1981-82 and further to Rs. 1,332 crores in 1982-83. Almost the same level of outlay (Rs. 1,342.2 crores) has been envisaged for 1983-84. An aditional amount of Rs. 160 crores was provided during the course of 1983-84, since reduced to Rs. 100 crores.

Shipping and Port Facilities

3.30 Total tonnage handled at the major ports during the current financial year increased compared with the previous year but the growth rate decelerated. The tonnage handled had reached an all time high level of 96.1 million tonnes in 1982-83 crossing the target of 95 million tonnes envisaged for 1982-83 and showing a growth rate of 9.2 per cent over the previous year. A target of 105 million tonnes was set for 1983-84 representing an increase of 9.3 per cent over 1982-83. Against this, the tonnage handled by the major ports during April—December, 1983 was 72.25 million tonnes shewing an increase of 4 per cent over the corresponding period of the previous year. The performance was affected by a strike at Bombay port for 18 days in October-November, 1983. The year is, however, expected to close with about 103 million tonnes representing an increase of 7 per cent over the previous year. The traffic growth would have been higher but for the fall in export of iron ore resulting from global recession in the steel sector.

3.31 While the traffic handled at major ports showed substantial increase, there were occasional hold up of vessels for berths at some of the ports, particularly Bombay and Kandla. These congestions were mainly because of berthing capacity being inadequate to handle bunched arrivals, repercussions of heavy monsoon in Bombay and labour problems. At Bombay, the bunched arrival of vessels carrying cement, which was imported in large quantities under OGL contributed considerably to the hold up of vessels. The situation worsened with the arrival of other general bulk cargo vessels subsequently. Unusually heavy rains in August, 1983 aggravated the problems of hold-up of vessels at Bombay which spread to the nearby Kandla port also. With concerted efforts, the position had eased in September, 1983. Bombay port has also recently revised and improved the scheme of rationalised berth allocation aimed at achieving a better turn-round of ships.

3.32 Several schemes sanctioned during the Sixth Plan to expand the capacity of the ports particularly for handling general cargo and the growing container traffic are expected to be completed before the end of the Sixth Plan period. To cater to the growth in containerized cargo, facilities are being provided at the Bombay and Cochin ports on the Western Coast and Madras and Haldia/Calcutta ports on the Eastern Coast. At Madras, a full-fledged container terminal with computerised operations has been commissioned in December, 1983. Facilities envisaged at the different ports include the construction of general cargo berths, provision of transfer cranes, container handling equipment, high-powered tugs, and facilities to deal with traffic in specific commodities at specific ports. A scheme is under way for the improvement of drafts in the Hooghly Estuary. The scheme of deepening of the outer harbour at Madras is for facilitating the export of iron ore to Japanese steel mills. The big Nhava-Sheva port project under way is aimed at relieving the pressure at Bombay port. Three container berths, two bulk cargo berths and one service (bunkering) berth at an estimated cost of Rs. 506 crores are envisaged at Nhava-Sheva port.

3.33 The Indian shipping industry is currently facing an acute financial crisis. It has faced a number of problems in recent months arising primarily from the spell of recession in world shipping industry, further reduction in cargo availability because of cut-throat competition of foreign shipping lines and lack of modernisation, particularly related to container operations. Measures such as extension by one year of the moratorium on the repayments of loans and interests have been extended to shipping companies. With this concession, repayments which had fallen due in 1981-82 and 1982-83 were to be repaid in 1984-85 and 1985-86. Unfortunately, despite easy repayment terms and a series of concessions, the shipping industry continues to be in defaults of its obligations. It is necessary to undertake a careful assessment of the viability of different companies before any further assistance is granted to such companies through the Government Budget.

3.34 Lightening and sudden stoppages of work by certain categories of workers continued to affect the operations in some of the major ports adversely. The supervisors employed by the stevedores at Bombay port (about 1,200) suddenly struck work in October 1983 resulting from a dispute over the quantum of ex-gratia payments and the strike continued till the beginning of November, 1983. In August, 1983 Calcutta and Haldia ports faced labour problems leading to the hold up of vessels and of despatches of coal. Kandla port also suffered on account of agitation by employees of the Food Corporation of India. There was a strike at the Kidderpore Lockgate of the Calcutta port in September, 1983 disrupting the ship-movements from and to Kidderpore Docks.

3.35 There was significant improvement in the total coastal movement of cargo during 1983-84 especially of coal. Total coastal movement of coal had gone up to 13.41 lakh tonnes during April-December 1983 compared with 12.64 lakh tonnes in the same period of the previous year signifying an increase of 6.1 per cent. Coal transported through Haldia port has increasingly met the requirements of the thermal and cement plants in the Southern Region. The full potential of Coastal traffic in bulk commodities like coal and cement is planned to be exploited as one of the measures towards energy conservation.

3.36 To sum up, after an initial set back, the key infrastructure sectors have performed reasonably well so far during the year under review. Coal production is not likely to fall far short of the target of 142 million tonnes. Power generation has improved in the second half of the year. In transport, the railway should be able to meet the demand. The performance of the ports has shown improvement in recent months and the cargo handled may reach the level of 103 million tonnes during the year against the target of 105 million tonnes. In the coming years, the availability of coal should be adequate to meet the requirements. The adition to capacity in the power generating sector already made and likely to be made in the remaining period of the Plan should go a long way to reduce the gap between supply and demand. In railways, although the increase in freight traffic has been rather slow, no bottleneck in transport is anticipated. Shipping and port facilities are also being expanded considerably. The expansion should enable the economy to provide the necessary infrastructure support for higher levels of industrial activity in 1984-85.