Chapter VI :

THE TREND AND GROWTH PATTERN OF CAPITAL EXPENDITURE

The capital expenditure is of much importance since it is essential for the rapid economic development of the country. Richard M.Bird says that, "For a poor country to begin to grow at a respectable rate a good deal of additional capital investment is usually required".[1] In an era of Planning and development Capital expenditure assumes a great deal of significance. It has also got its economic effects depending on whether the projects financed by capital expenditure are quick yielding or slow yielding in economic benefits.

A. Nature of Capital Expenditure

In these circumstances different questions arise as to the nature of the expenditures that has to be charged to capital account. What expenditure on the part of public authorities should be incurred out of Capital and what expenditure should be incurred from revenue?

Different opinions have been expressed as to the nature of expenditure chargeable to capital account. Some writers on

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1 Richard M. Bird : The Growth of Government Spending in Canada. (Canadian Tax Foundation, Toronto), 1970, p.142.

public finance feel that to charge to revenue what should be charged to capital is a great injustice to the tax payer. German writers of the middle and latter half of nineteenth century, such as, Dietzel, Umpfenbach, Stein, Wagner, Schaffle, Nasse and Schanz were of the opinion that all extra-ordinary expenditures should be met from loans because of their nature. Dietzel, for example, held that, "pure governmental functions are as productive as industry, and the capital required may be supplied by borrowing quite as legitimately as in the field of industry. Expenditure on public works are for future as well as for the present benefits. Therefore the cost should be spread over the entire period, and public debt do not impose unfair burdens upon coming generations."[2]

On the other hand, there are others who hold that all extra-ordinary expenditures, if unproductive, should be met from income and unless it can thus be met should not be incurred. Bastable, in his Public Finance holds that, "actual purchase of productive property or creation of revenue yielding works may fairly be defrayed by loans ... This concession to the policy of borrowing should not be stretched to include the cost of works or other State action that yields no revenue. Non-economic expenditure is primarily to be met out of income and unless it can be so dealt with ought not to be incurred".[3]

2 G. Findlay Shirras - The Science of Public Finance. (Macmillan & Co.,London), Vol.I, 1963, p.159.
3 Ibid, p.160.

G. Findlay Shirras maintained that expenditure chargeable to capital account is justified in four instance :

i) For permanent production investment, viz., for the construction of public works such as irrigation works, railways etc. and also certain works, civil and quasi-military, which give the prospect of a return on capital over a long series of years;

ii) in an extra-ordinary emergency like war;

iii) in case of temporary necessity - a casual deficits and wasting assets, and

iv) non-revenue producing public works and the participation of governments and local authorities in economic activities in certain circumstances.[4]

Richard A. Musgrave and Peggy B. Musgrave maintained that, "Loan finance of current expenditures on the other hand places an undue burden on the future and tax finance of capital outlays gives it an undue benefit. This is the rationale for the use of a capital budget and for the use of foreign borrowing in the case of development finance."[5]

In his book, "State Finances in India - A case study of Rajasthan', L.S. Porwal points out that, "the expenditure which

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4 Ibid, p.162.

5 Richard A. Musgrave and Peggy B. Musgrave: Public Finance in Theory and Practice (McGraw-Hill, Kogakusha Ltd., New Delhi), 1976, p.608.

is met usually from borrowed funds with the object either of increasing concrete assets of a material character or of reducing recurring liabilities, such as those for future pensions, by payment of capitalised value is treated in the Government accounts as capital expenditure".[6] He further adds that, "theoretically, the expenditure incurred need not be on the creation of concrete assets of a material character alone. Even the expenditure incurred on creation of financial assets such as investment in shares of commercial concerns or granting loans to local bodies may be regarded as expenditure on Capital accounts. The investment in financial assets ultimately leads to the formation of physical assets".[6]

A.1 Reclassification of State Governments' Capital Expenditure.

On practical considerations, we follow the system of classifying capital expenditure into developmental and non-developmental as adopted by the Reserve Bank of India Bulletin since 1974. The method of classifying capital expenditure into developmental and non-developmental was different prior to 1974-75. For instance, expenditures on Government Trading and Miscellaneous schemes were included under non-developmental capital outlay before 1974-75.

6 L.S. Porwal: State Finances in India - A Case Study of Rajasthan. (Sultan Chand & Sons, New Delhi), 1971, p.161.

In the new accounting precedure introduced in 1974-75 the major expenditure Heads State Trading and Other Works had been deleted and the expenditures incurred under these heads are now directly booked under the respective major and minor functional heads. Hence to bring them to a comparable form the expenditures met under State Trading and Other Works from 1957-58 to 1974-75 had been reclassified and included under the respective functional categories. The details regarding the classification of these two categories are given in the Appendix I to this chapter.

In the new accounting procedure compensation to landlords on the abolition of Zamindary system has been clubbed with General Economic Services.We, also, have done accordingly.

B. Growth Trend of Capital Outlay.

Capital expenditures of the State Governments other than developmental and non-developmental expenditures, comprise mainly loan repayments to the centre and other autonomous bodies, repayments of their own market loans and State governments' loan assistance to third parties. Here we analyse the growth trend of capital outlay, viz., developmental and non-developmental outlays.

Table VI.1 shows the broad trends in capital expenditure of the state governments.

Table VI.1

Growth of Capital Outlay at Current Prices

(Total outlay in Lakhs of Rs.; Percapita outlay in Rs.)

States	1957-58		1962-63		1967-68		1972-73		1977-78		TC % increase over 1957-58	PC % increase over 1957-58
	TC	PC	TC	PC	TC	PC	TC	PC	TC	PC		
AndhraPradesh	2507	7.34	3415	9.25	2705	6.70	4214	9.45	20539	42.24	719	475
Assam	647	5.85	647	5.06	1033	7.18	1874	12.06	4792	26.91	641	360
Bihar	2184	5.00	3540	7.42	4806	9.14	6160	10.68	15216	24.27	597	385
Gujarat	2239*	11.00	1636	7.66	3901	16.07	5297	19.23	12657	40.92	465	272
Haryana					939	10.25	2544	24.65	5042	44.15	437	331
Jammu & Kashmir	232	5.90	1080	29.67	2106	51.49	2940	62.15	9771	187.18	4112	3073
Karnataka	1482	6.71	3180	13.09	3840	14.22	-1940	- 6.45	10201	30.89	588	360
Kerala	793	5.07	1263	7.22	1661	8.47	3424	15.58	7291	29.91	819	490
MadhyaPradesh	1807	6.03	2333	6.97	2369	6.24	5572	12.97	13590	28.18	652	367
Maharashtra	2850	5.11	2683	6.56	7931	17.24	9223	17.80	20909	36.41	634	607
Orissa	2039	12.37	2225	12.31	2176	10.78	3207	14.24	7843	31.54	285	155
Punjab	3279	18.97	2540	13.05	2348	18.59	2563	18.47	3697	24.27	13	28
Rajasthan	715	3.84	2614	12.52	1259	5.33	5269	19.86	10195	34.45	1326	797
Tamil Nadu	1474	4.54	1895	5.50	3001	7.95	3816	9.03	4053	8.80	175	94
UttarPradesh	3395	4.85	2955	3.91	4912	5.95	12039	13.34	23098	23.72	580	389
West Bengal	2817	8.92	3444	9.54	3156	7.74	4432	9.72	7751	15.23	175	71

Source: Appendix Table A.30.

Notes : TC - Total Capital Outlay.
PC - Percapita Capital Outlay.
* - Belongs to 1960-61.

The percapita capital outlay in money terms was highest at Rs.18.97 in Punjab in 1957-58. During the subsequent years it was at the top level in Jammu & Kashmir at Rs.29.67 in 1962-63, Rs.51.49 in 1967-68, Rs.62.15 in 1972-73 and at Rs.187.18 in 1977-78. Tamil Nadu came down to last rank in 1977-78.

One may observe that the states Assam, Bihar, Kerala, Madhya Pradesh, Tamil Nadu and Uttar Pradesh had spent less than all state average all along the period from 1957-58. West Bengal edged above the all state average percapita level only in 1957-58.

The percapita capital outlay showed an upsurge in all the states by 1977-78 over 1957-58. In money terms the percentage increase in percapita capital outlay was faster in Jammu & Kashmir and slower in Punjab. It increased by 3072% in Jammu & Kashmir whereas the increase was only 28% in Punjab in real terms it declined in Orissa, Punjab, Tamil Nadu and West Bengal during the same period.

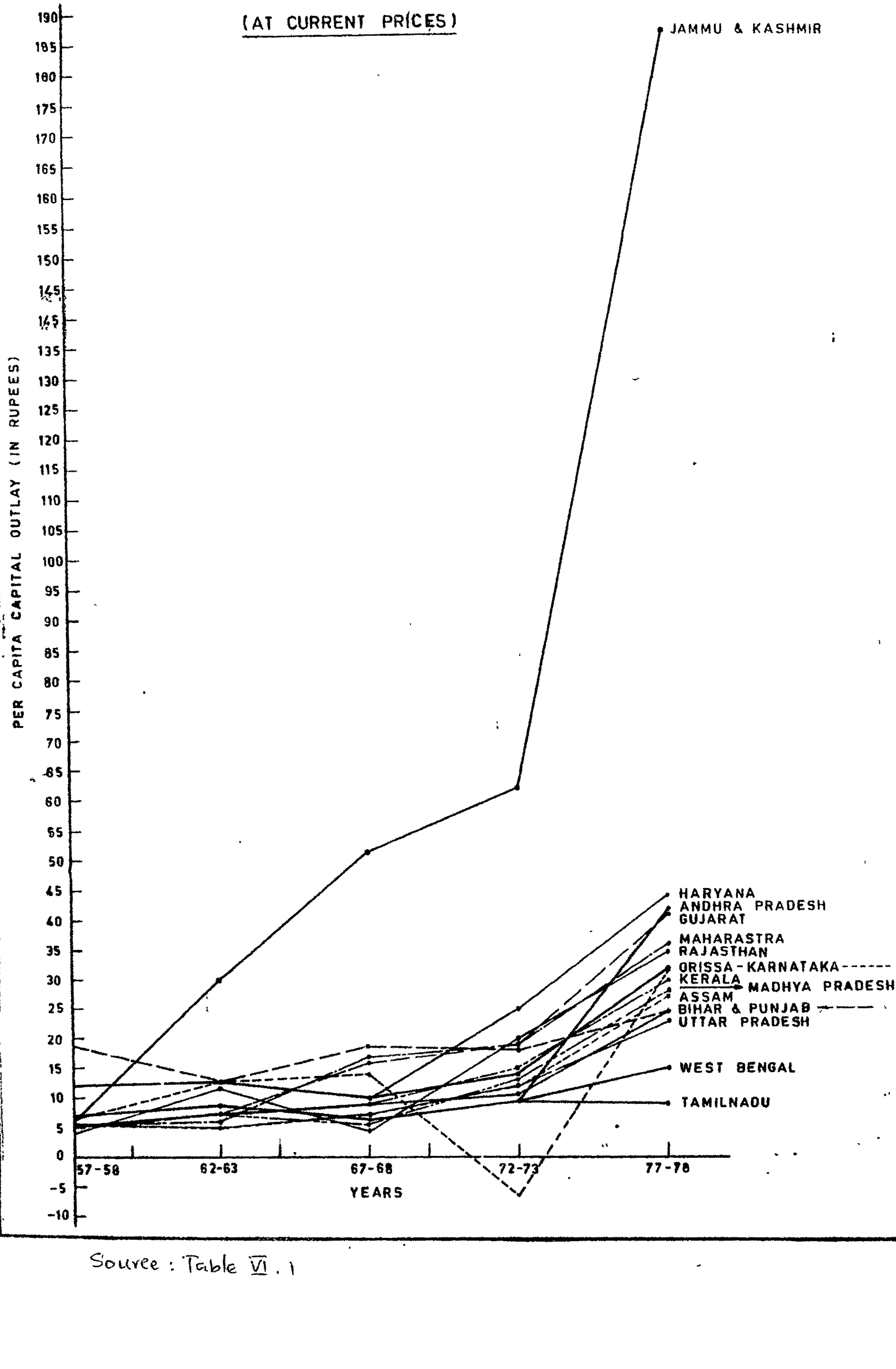
As revealed by Table VI.2 at constant prices the percapita capital outlay increased at a slower rate over the twenty one years.

Downward trend is seen in the growth of percapita capital outlay in Orissa, Punjab, Tamil Nadu and West Bengal.

FIG. VI-1

PER CAPITA CAPITAL OUTLAY

(AT CURRENT PRICES)



Source : Table VI.1

Table VI.2

Growth Trend of Capital Outlay at Constant Price

(Total outlay in lakhs of Rs.; Percapita outlay in Rs.)

States	1957-58		1962-63		1967-68		1972-73		1977-78		TC % increase over 1957-58	PC % increase over 1957-58
	TC	PC	TC	PC	TC	PC	TC	PC	TC	PC		
AndhraPradesh	2696	7.89	3252	8.81	1591	3.94	2026	4.54	6779	13.94	151	77
Assam	696	6.29	616	4.82	608	4.22	901	5.80	1582	8.88	127	41
Bihar	2348	5.38	3371	7.06	2827	5.37	2962	5.13	5022	8.01	113	49
Gujarat	2239*	11.00	1558	7.29	2295	9.46	2547	9.24	4177	13.50	87	23
Haryana					552	6.02	1223	11.85	1664	14.57	201	142
Jammu & Kashmir	249	6.33	1029	28.26	1239	30.29	1413	29.87	3225	61.78	1195	876
Karnataka	1594	7.22	3029	12.47	2259	8.36	-933	-3.10	3367	10.20	111	41
Kerala	853	5.45	1203	6.88	977	4.98	1646	7.49	2406	9.87	182	81
MadhyaPradesh	1943	6.49	2222	6.64	1394	3.67	2679	6.23	4485	9.30	131	43
Maharashtra	3065	5.50	2555	6.25	4665	10.14	4434	8.55	6900	12.01	125	118
Orissa	2192	13.30	2119	11.72	1280	6.34	1542	6.84	2588	10.41	18	-22
Punjab	3526	20.40	2419	12.43	1381	10.93	1232	8.88	1220	8.01	-65	-61
Rajasthan	769	4.13	2490	11.93	741	3.14	2533	9.54	3365	11.37	338	175
TamilNadu	1585	4.88	1805	5.24	1765	4.67	1835	4.34	1338	2.90	-16	41
UttarPradesh	3651	5.22	2814	3.73	2889	3.50	5788	6.41	7623	7.83	109	50
West Bengal	3029	9.60	3280	9.09	1856	4.55	2131	4.67	2558	5.03	-16	48

Source: Appendix Table A.31

Notes: 1. TC - Total capital outlay.
PC - Percapita outlay.

2. * - Belongs to 1960.

B.1 Developmental and Non-developmental Outlays.

The dominant part of total capital outlay is developmental outlays. Non-developmental outlays are almost insignificant. Developmental outlays includes outlays on social and community services and Economic Services. Non-developmental outlay comprises expenditures on Public Works, Administrative Services and Stationary and Printing.

One could observe from Table VI.3 that in all states the proportion of developmental outlay to total Capitaloutlay is roughtly 98% and that of non-developmental outlay is about 2% in all the states.

B.2 Growth Pattern of Developmental Outlay.

Table VI.4 shows that a large chunk of developmental outlay was incurred on economic services. Roughly 75 to 90% of the developmental outlay had been absorbed by Economic services.

In 1957-58 Kerala and Madhya Pradesh had spent higher percentage on Social and Community Services than the other states. In this year Kerala had incurred higher level of expenditure on Public Health and Madhya Pradesh had spent more on Housing. In 1967-68 because of an increase in the expenditure on Public Health the share of social and Community services went up in Rajasthan.

Table VI.3

Distribution of Capital Outlay

(In lakhs of Rs.)

States	1957-58 DO	1957-58 NDO	1977-78 DO	1977-78 NDO	DO % increase over 1957-58	NDO % increase over 1957-58
Andhra Pradesh	2461 (98.16)	46 (1.84)	20422 (99.43)	117 (0.57)	730	154
Assam	405 (62.59)	242 (37.41)	4666 (97.37)	126 (2.63)	1052	-48
Bihar	2184 (100)	-	15040 (98.84)	176 (1.16)	589	-
Gujarat	2181 (97.41)	58 (2.59)	12509 (98.83)	148 (1.17)	684	270
Haryana	1237	-298	4859 (96.37)	183 (3.63)	293	
Jammu & Kashmir	223 (96.12)	9 (3.88)	9597 (98.22)	174 (1.78)	4204	1833
Karnataka	1443 (97.36)	39 (2.64)	10054 (98.56)	147 (1.44)	597	277
Kerala	738 (93.06)	55 (6.94)	7144 (97.98)	147 (2.02)	868	167
Madhya Pradesh	1714 (94.85)	93 (5.15)	13515 (99.45)	75 (0.55)	689	-19
Maharashtra	2756 (96.70)	94 (3.30)	20546 (98.26)	363 (1.74)	646	286
Orissa	1985 (97.35)	54 (2.65)	7701 (98.19)	142 (0.81)	288	163
Punjab	3281 (100)	-2	3564 (96.40)	133 (3.60)	9	
Rajasthan	715 (100)	-	10053 (98.61)	142 (1.39)	1306	-
Tamil Nadu	1389 (94.23)	85 (5.77)	3934 (97.06)	119 (2.94)	183	40
Uttar Pradesh	3418 (100)	-23	23372 (96.86)	726 (3.14)	555	
West Bengal	2625 (93.18)	192 (6.82)	7446 (96.07)	305 (3.93)	184	59

Source: 1. For 1957-58, 1960-61 and 1967-68 - Combined Finance & Reserve Accounts of Union and State Governments in India-Volumes for the respective year.
2. For 1977-78 - Reserve Bank of India Bulletin, Sept.-Oct.1979.

Notes : 1. DO - Development outlay; NDO - Non-developmental outlay.
2. Figures under the column for the year 1957-58 for Gujarat and Haryana pertain to 1960-61 and 1967-68 respectively.
3. Figures in brackets indicate percentage to total Capital Outlay.

Table VI.4

Growth Pattern of Developmental Outlay at Current Prices

(In lakhs of Rs.)

States	1957-58 S&C	1957-58 ES	1977-78 S&C	1977-78 ES	S&C % increase over 1957-58	ES % increase over 1957-58
Andhra Pradesh	203 (8.24)	2258 (91.76)	1215 (5.95)	19207 (94.05)	489	751
Assam	21 (5.19)	384 (94.81)	430 (9.22)	4236 (90.78)	1948	1003
Bihar	- (	2184 (100)	1187 (7.89)	13863 (92.11)	-	534
Gujarat	484 (22.19)	1697 (77.81)	1839 (14.70)	10670 (85.30)	627	694
Haryana	251 (20.29)	986 (79.71)	382 (7.86)	4477 (92.14)	52	354
Jammu & Kashmir	32 (14.35)	191 (85.65)	2116 (22.05)	7481 (77.95)	6513	3817
Karnataka	79 (5.47)	1364 (94.53)	649 (6.46)	9405 (93.45)	722	590
Kerala	303 (41.06)	435 (58.94)	1402 (19.62)	5742 (80.38)	363	1220
Madhya Pradesh	496 (28.94)	1218 (71.06)	742 (5.49)	12773 (94.51)	50	949
Maharashtra	448 (16.26)	2308 (83.74)	2065 (10.05)	18481 (89.95)	361	701
Orissa	115 (5.79)	1870 (94.21)	651 (8.45)	7050 (91.55)	466	277
Punjab	341 (10.39)	2940 (89.61)	779 (21.86)	2785 (78.14)	128	- 5
Rajasthan	186 (26.01)	529 (73.99)	1306 (12.99)	8747 (87.01)	602	1554
Tamil Nadu	219 (15.77)	1170 (84.23)	543 (13.80)	3391 (86.20)	148	190
Uttar Pradesh	326 (9.54)	3092 (90.46)	700 (3.13)	21672 (96.87)	115	601
West Bengal	319 (12.15)	2306 (87.85)	1236 (16.60)	6210 (83.40)	287	169

Source: Appendix Tables A.32 and A.33.

Notes : 1. S&C - Social and Community Services
ES - Economic Services.

2. Figures in brackets indicate percentage to total Developmental outlay.

3. Figures under the column for the year 1957-58 for Gujarat and Haryana belongs to 1960-61 and 1967-68 respectively.

Though there were slight shifts in the relative shares of social and community services and Economic services the overall trend was in favour of Economic services during the period under our review. However during the twenty-one years the relative shares of these two services in developmental outlay almost remained unchanged in most of the states. This means that though the quantum of capital outlay had increased tremendously the basic structural change in expenditure composition or pattern is not significant during this period. In all the states importance had been given to the development of physical capital than to human capital. IS this trend desirable? It may be appropriate to point out the view of Gerhard Colm and Peter Wagner in this Context. Arguing against the introduction of a separate capital budget they spelt out that, "the existence of such a separate Capital Budget might distort Federal expenditures in such a way that may not always be most desirable. It may well result in a preference for expenditures on physical assets rather than greater spending for intangibles such as Health and Education."[7] But James A. Maxwell and Richard J. Aronson pointed out that, "State and local governments have failed to place" investment in human resources" in Capital budgets, not so much because of a

7 Gerhard Colm and Peter Wagner: "Some observations on the Budget concept" in Public Finance and Fiscal Policy, edited by Joseph Scherer and James A.Papke (Houghton Mifflin Co., Boston), 1966, p.45.

"prejudice in favour of expenditures on hardware" as because of a complete inability to measure the effects of such investment on that part of the economy they can reach by taxes".[8] Since state governments in India aim at the formation of physical assets with the borrowed funds the above view holds good in our context also.

B.3 Inter-State Variations in Capital Expenditure.

Having seen the growth pattern of capital outlay defrayed by the state governments we shall see the extent of inter-state variation in the percapita Capital outlay.

Table VI.5

Measures of Inter-State Variation in the Percapita Capital Outlay

I. Ratio between lowest and highest percapita capital outlay.

1957-58	1:4.94
1962-63	1:7.58
1967-68	1:9.66
1972-73	1:6.88
1977-78	1:21.27

8 James A. Maxwell and RichardJ. Aronson. Financing State and Local Governments. (The Brooking Institution, Washington, D.C.), 1977, p.242.

Table VI.5 (contd.

II

Years	Mean (In Rs.)	Standard deviation	Coefficient of variation(In %)
1957-58	7.1785	4.0286	56.1203
1958-59	6.6942	2.5036	37.3995
1959-60	7.4185	3.026	40.7899
1960-61	8.0146	5.2011	64.8953
1961-62	9.3533	6.6077	70.6456
1962-63	9.982	6.2153	62.265
1963-64	9.3226	5.5339	59.36
1964-65	10.6106	6.4238	60.5413
1965-66	14.4066	12.8212	88.9953
1966-67	9.4843	10.1575	107.098
1967-68	12.7056	11.161	87.8431
1968-69	13.3925	13.2182	98.6985
1969-70	13.1156	15.2102	115.9702
1970-71	14.05	12.2959	87.5153
1971-72	17.0943	16.405	95.9559
1972-73	16.4237	13.9874	85.1659
1973-74	22.0262	17.2582	78.353
1974-75	24.1737	22.3118	92.2978
1975-76	31.2975	30.6074	97.7951
1976-77	34.875	26.0519	74.7007
1977-78	39.3131	40.5272	103.0882

III Rank Correlation between 1957-58 percapita Capital Outlay and the absolute variationin thepercapita expenditure levels.

1957-58 and 1962-63	-0.4647
1957-58 and 1967-68	-0.5764*
1957-58 and 1972-73	-0.5852*
1957-58 and 1977-78	-0.0529

* Significant at 5% level.

IV Rank correlation between 1957-58 percapita capital outlay and percentage variation in the percapita expenditure level.

1957-58 and 1962-63	-0.4794
1957-58 and 1967-68	-0.5735*
1957-58 and 1972-73	-0.6676**
1957-58 and 1977-78	-0.5279*

** Significant at 1% level

* Significant at 5% level

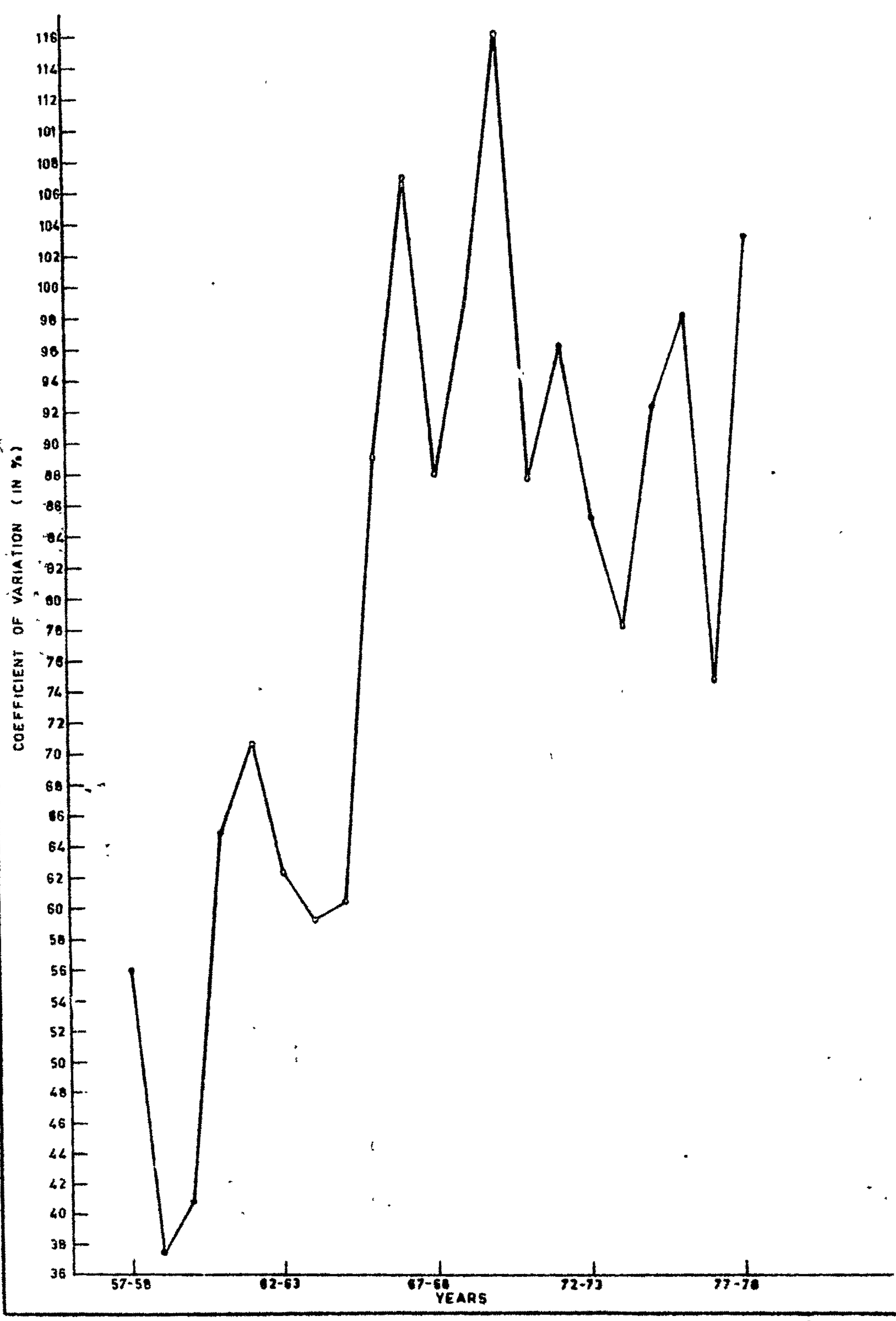
Source: Derived from Table VI.1

It can be seen from the above table that the variation in the percapita outlay is very high and has increased during the period under our analysis. The relative rankingsof the states by the magnitude of their percapita outlay significantly changed as shown in Table VI.6.

The weaker states Assam, Bihar,Madhya Pradesh, Uttar Pradesh and the developed statesPunjab, and West Bengal expanded their percapita outlay at a slower pace. While Gujarat, Haryana, Jammu & Kashmir and Maharashtra enhanced their outlays fastly. Tamil Nadu continued to stay at the lower end. Hence a diverging trend emerged in the levels of percapita outlay among the states.

FIG VI·2

INTERSTATE DISPARITY IN PER CAPITA CAPITAL OUTLAY



Souree : Table VI. 5

Table VI.6

Matrix of Rank Correlations Among the Rankings of Percapita Capital Outlay in Selected Years

Years	1957-58	1962-63	1967-68	1972-73	1977-78
1957-58	1	0.5411*	0.3911	0.0147	0.2294
1962-63		1	0.4794	0.3323	0.5176*
1967-68			1	0.3617	0.3529
1972-73				1	0.4147
1977-78					1

** Significant at 5% level
* Significant at 1% level
Source: Derived from Table VI.1

It is surprising to note that the developed states like TamilNadu and West Bengal had percapita Capital outlay lower than the weaker states. An analysis of the total capital outlay at disaggregate level will account for this tendency.

C. Capital Outlay on Economic Services.

As outlays on non-developmental services and social and community services received smaller shares they are set aside. We take up only capital outlay on economic services. Under Economic Services the State Governments have invested under the heads co-operative institutions, Industries and Minerals, Agriculture and Allied Services, Water and Power Development and Transport and Communications. We shall analyse the investments in these functions individually.

C.1 Co-operation: The state governments have invested in the shares of co-operative banks and other co-operative organisations. Table VI.7 provides the informations about the rate of return on State Governments' investment in the share capital of co-operative institutions.

One could observe that the cumulative total capital outlay on co-operative institutions is highest in Maharashtra followed by Uttar Pradesh and Karnataka. But the rate of return is very low in all the states. The investments of state governments are not yielding sufficient returns to enhance the financial position of the state governments.

Table VI.7

Rate of Return on State Governments' Investment in Share Capital of Co-operative Institutions in 1976-77. (Rs, in lakhs)

States	Share capital upto the end of 1976-77	Dividend in 1976-77	Rate of return in 1976-77
1	2	3	4
Andhra Pradesh	7330	8	0.11
Assam	878	1	0.11
Bihar	2565	20	0.78
Gujarat	3854	145	3.76
Haryana	2545	58	2.28
Jammu & Kashmir	215	-	-
Karnataka	7728	38	0.49
Kerala	2029	18	0.89
Madhya Pradesh	4956	96	1.94
Maharashtra	12182	86	0.71
Orissa	2695	3	0.11
Punjab	3377	34	1.01
Rajasthan	2836	-	-
Tamil Nadu	6240	33	0.53
Uttar Pradesh	8636	262	3.03
West Bengal	2274	9	0.40

Source: Report of the Finance Commission, 1978, Appendix Table 24 (vi), p.96.

C.2 Industry and Minerals.

The capital outlay on Industry and Minerals comprises investment on Industrial Research and Development, Village and Small-Scale Industries, Machinery and Engineering industries, Consumer Industries and others, The Seventh Finance Commission classified the investment on these organisations as investment in three kinds of enterprises namely financial institutions, promotional enterprises and others.The first includes the state financial corporations set-up under the State Financial Corporation Act, 1951, as well as enterprises held eligible for refinance facilities by Industrial Development Bank of India. The promotional category includes enterprises which are engaged mainly in promoting the developmental and other industries of all regions through providing infra-structural facilities, financial and managerial assistance, technical know-how etc., as well as through works of development for backward areas or the weaker sections of the population. This category, therefore, includes small industries development corporations, industrial development corporations, handicrafts or handloom development corporations, export corporations, area development corporations etc.

Table VI.8 shows that the rate of return is very poor in all states except Gujarat. Considering the poor performance of the Seventh Finance Commission stipulated that the State Governments should earn a returnof 5 per cent on the equity Capital invested by them.

Table VI.8

Rate of Return on State Government Share Capital to State Public Enterprises in 1975-76 and 1976-77.

States	Percentage	
	1975-76	1976-77
Andhra Pradesh	8.4	-4.5
Assam	-0.3	7.2
Bihar	-11.6	4.7
Gujarat	7.3	8.9
Haryana	0.9	6.4
Jammu & Kashmir	-0.7	1.5
Karnataka	2.2	1.8
Kerala	-10.4	-9.8
Madhya Pradesh	- 0.9	6.4
Maharashtra	0.7	8.5
Orissa	1.1	8.2
Punjab	-3.6	-3.4
Rajasthan	1.3	4.4
Tamil Nadu	-6.2	-2.8
Uttar Pradesh	-7.8	-2.5
West Bengal	-18.1	-4.1

Source: Report of the Finance Commission, 1978, Appendix I, Table 24 (iv), p.94.

C.3 Water and Power Development.

Table VI.9 presents the capital outlay on water and power development. We could observe that this function claimed the major chunk of the Capital outlay. Irrigation and power have been given prominence as they are inevitable for the

Table VI.9

Capital Expenditure on Water and Power Development Services

(Total Outlay in Lakhs of Rs.; Percapita outlay in Rs.)

States	1957-58 TC	1957-58 PC	1962-63 TC	1962-63 PC	1967-68 TC	1967-68 PC	1972-73 TC	1972-73 PC	1977-78 TC	1977-78 PC	TC % increase over 1957-58	PC % increase ocer 1957-58
1	2	3	4	5	6	7	8	9	10	11	12	13
Andhra Pradesh	1976 (78.81)	5.78	2087 (61.11)	5.65	2806	6.95	2564 (60.84)	5.75	14424 (70.22)	29.66	629	413
Assam	176 (27.20)	1.59	167 (25.81)	1.30	473 (45.78)	3.28	739 (39.43)	4.75	1912 (39.89)	10.73	986	574
Bihar	1646 (75.36)	3.77	1881 (53.13)	3.94	2850 (59.30)	5.42	3987 (64.89)	6.91	9521 (62.57)	15.18	478	302
Gujarat*	843 (37.65)	4.14	949 (58.00)	4.56	1664 (42.65)	6.85	3752 (70.81)	13.62	7991 (63.13)	25.83	848	524
Haryana					304 (32.37)	3.31	2840	27.51	4521 (89.66)	39.58	1387	1095
Jammu & Kashmir	87 (37.50)	2.21	354 (32.77)	9.88	723 (34.33)	17.67	1479 (50.30)	31.26	3324 (34.01)	63.67	3720	2780
Karnataka	927 (62.55)	4.20	2078 (65.34)	8.55	2399 (62.47)	8.88	-4040	-13.44	6821 (66.86)	20.65	635	391
Kerala	207 (26.10)	1.32	242 (19.16)	1.38	414 (24.92)	2.11	950 (27.74)	4.32	3654 (50.11)	14.98	1665	1034
MadhyaPradesh	398 (22.02)	1.32	951 (40.76)	2.84	1245 (52.55)	3.28	23332 (41.85)	5.42	7064 (51.98)	14.64	1675	1009
Maharashtra	1608 (56.42)	2.88	1672 (62.31)	4.09	2864 (36.11)	6.22	5248 (56.90)	10.12	14015 (67.02)	24.40	771	747

cont...

Table VI.9 (contd.)

1	2	3	4	5	6	7	8	9	10	11	12	13
Orissa	1269 (62.23)	7.70	887 (39.86)	4.90	1405 (64.56)	6.96	1511 (47.11)	6.70	4730 (60.30)	19.01	272	146
Punjab	2662 (81.18)	15.40	1494 (56.81)	7.68	1043 (44.42)	8.25	1208 (47.13)	8.70	3083 (83.39)	20.24	15	31
Rajasthan	493 (68.95)	2.65	1537 (58.79)	7.36	160 (12.70)	0.67	3640 (69.08)	13.72	6265 (61.45)	21.17	1170	698
Tamil Nadu	757 (51.35)	2.33	748 (39.47)	2.17	734 (24.45)	1.94	1137 (29.79)	2.69	1812 (44.70)	3.93	139	68
Uttar Pradesh	2344 (69.04)	3.35	1653 (55.93)	2.19	1875 (38.17)	2.27	5315 (44.74)	5.89	12141 (52.56)	12.46	417	271
West Bengal	1204 (42.74)	3.81	797 (23.14)	2.20	540 (19.11)	1.32	1012 (22.83)	2.22	2769 (35.72)	5.44	129	42

Sources: Appendix Table A.37.

Notes : 1. TC - Total capital outlay on water and power development.
PC - Percapita Outlay.
2. * - Belongs to 1960-61.

development of agriculture and industry. By 1977-78 the range of its claim was 34.01% in Jammu & Kashmir and 83.39% in Punjab. The distribution of Capital outlay on this function show that the states spent more on Multipurpose River Projects and Irrigation, Navigation, drainage and flood control. Only Jammu & Kashmir spared more for power projects. Punjab devoted more funds for multipurpose - River Projects because its energy resources are mainly hydel. "Punjab being devoid of coal and oil depends on hydro-electric schemes. It gets electricity from Bhakra Nangal Project and by harnessing Beas and Sutlej rivers."[9]

The upsurge of the expenditure on this function was due to the construction of irrigation projects and power projects. The power projects erected during the period of our analysis are given in Appendix VI.2.

We have cited the reasons for the variations in the percapita expenditure levels on water and Power Developmental services in the previous chapter. Here also we observe that the levels of percapita capital outlay in the developed states like Maharashtra, Punjab, Tamil Nadu and West Bengal are relatively lower than the weaker states.

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9 National Council of Applied Economic Research. <u>Techno-Economic Survey of Punjab</u>, 1962, p.64.

Why the percapita expenditure in these developed states are lower? In Maharashtra the sudden increase in the percapita expenditure in 1977-78 is due to the increase in expenditure on irrigation as already seen in the previous chapter. A look at Table VI.10 and VI.11 will give us further reasons for the low percapita expenditure in some of the developed states. The percapita electricity consumption is very high in Punjab, Gujarat, Maharashtra, Haryana, Tamil Nadu and West Bengal. Punjab and Haryana attained 100% in ruralelectrification and Tamil Nadu and Kerala have electrified 98.6% and 95.6% of their villages respectively. As Kerala, Punjab, Tamil Nadu and West Bengal have exploited their irrigation potential to the maximum and developed power potential to a greater extent their percapita capital outlay levels are lower. In the states Assam, Bihar, Madhya Pradesh and Uttar Pradesh the percapita outlay on this function is lower and their relative performances in the fields of irrigation and power are also lower. Assam might have spent more on flood control. Orissa whose percapita capital outlay is higher than other weaker states has better performance in power and irrigation.

As the bulk of Capital outlay has been invested in Irrigation and Power projects, it is essential to see their financial performance and its effects on the revenue budget of the states.

Table VI-10

Installed Capacity and Consumption of Electricity in States

States	Installed capacity (MW) in 1974-75	Percentage of villages Electrified (as on 31-3-1977)	Percapita consumption of Electricity (as on 31-3-1977)	Pump-sets energised (as on 31-3-1977) (in '000)
1	2	3	4 (in kwh)	5
Andhra Pradesh	890	49.5	77.4	307
Assam	917	9.1	33.8	1
Bihar	604	26.9	88.6	132
Gujarat	1173	38.9	192.3	138
Haryana	557	100	174.0	154
Jammu & Kashmir	94	43.5	69.4	1
Karnataka	967	54.8	148.4	242
Kerala	625	95.6	93.3	53
MadhyaPradesh	776	19.08	89.9	180
Maharashtra	2070	56.5	199.0	449
Orissa	803	27.8	112.4	5
Punjab	886	100.0	241.5	168
Rajasthan	581	25.1	83.3	108
Tamil Nadu	1654	98.6	146.5	781
Uttar Pradesh	1841	29.4	85.9	273
West Bengal	1279	28.8	125.2	17
All India		35.2		

Source: 1. Column 3, Statistical Abstract - India, 1979, p.134.
2. Columns 4,5,6 - TamilNadu - An Economic Appraisal, 1978, p.184.

Table VI.11

Flood Control Physical Achievements (likely) upto the end of March 1979

States 1	Towns protected (km) 2	Length of embankment (km) 3	Length of drainage canal (km) 4	Total (4+5) 5
Andhra Pradesh	8	405	5750	6155
Assam	50	4145	772	4917
Bihar	22	2355	365	2720
Gujarat	27	208	271	479
Haryana	-	396	2547	2943
Jammu & Kashmir	2	-	-	-
Karnataka	-	-	-	-
Kerala	2	46	9	55
Madhya Pradesh	9	-	-	-
Maharashtra	15	26	-	26
Orissa	11	385	23	408
Punjab	3	810	5517	6327
Rajasthan	13	82	134	216
Tamil Nadu	-	-	19	19
Uttar Pradesh	55	1172	2634	3806
West Bengal	34	515	589	1104

Source: Report of the Finance Commission, 1978 Appendix Table 1.16, p.62.

Financial Results of Irrigation Works.

Irrigation works include bothproductive and un-productive works. The productive works are those whose revenue covers the prescribed rate of interest charges on the capital invested. All the other works are classified as unproductive.

The state governments raise revenue from irrigation projects through (i) water rates, and (ii) betterment levy.

At first we shall see the financial results of minor irrigation schemes. These schemes include flow irrigation from surface water with small storages or diversion works or river lifts. Tanks are important sources of minor irrigation in some states. The states like Tamil Nadu and Uttar Pradesh have invested in tube-wells for the exploitation of ground water resources.

As seen from Table VI.12 the receipts are not enough even to meet the expenditures. The loss is very heavy in most of the states.

Table VI.13 provides the financial results of Irrigation works (commercial).

Table VI.12

Net receipts from Minor Irrigation in 1978-79 as per budget-estimates. (Rs. in lakhs)

States	Minor Irrigation Receipts	Minor Irrigation Expenditure	Net receipts
Andhra Pradesh	24	656	-632
Assam	10	234	-224
Bihar	30	270	-240
Gujarat	27	192	-165
Haryana	-	2	- 2
Jammu & Kashmir	18	252	-234
Karnataka	161	1014	-853
Kerala	21	237	-216
Madhya Pradesh	266	264	+ 2
Maharashtra	140	146	- 5
Orissa	64	222	-158
Punjab	63	134	- 71
Rajasthan	138	354	-196
Tamil Nadu	63	149	- 86
Uttar Pradesh	1420	4179	-2759
West Bengal	193	851	-658

Source: Report of Finance Commission, 1978, Appendix Table 1.15, p.61.

Table VI-13

Financial Results of Irrigation Works (Commercial) Net Receipts (In lakhs of Rs.)

States	1958-59	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1970-71	1971-72	1972-73	1974-75	1975-76
Andhra Pradesh	- 354 (-5.89)	- 120	- 130	- 476	- 551	- 638				-1645		-1477	-1734	-2043 (-7.94)
Assam														
Bihar	- 26 (0.96)	- 14	- 14	- 32	- 41	+ 222				- 205		- 450	-	+ 153 (+22.8)
Gujarat		- 23	- 8	- 288	- 309	- 329				- [illegible]		- 624	-785	-784 (-5.72)
Haryana												- 446	-1114	-1283 (-12.34)
Jammu & Kashmir												- 62	- 119	- 131 (-5.7)
Karnataka	-125 (-1.96)	- 3	-13	-201	-364	-474				-1213		-1553	-1814	-1886 (-5.27)
Kerala	-45 (-3.78)	- 4	- 6	- 77	- 77	- 95				-158		-147	-164	-154 (-5.89)
Madhya Pradesh													+223	+345 (+7.64)
Maharashtra	-199 (-2.82)	+100	+91	-156	-199	-292				-1305		-1619	-1790	-2282 (-5.12)

cont...

Table VI.13 (contd.)

States	1958-59	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1970-71	1971-72	1972-73	1974-75	1975-76
Orissa	-24 -(5.68)	-14	-29	-35	-64	-60				-379		-450	-778	-799 (-7.66)
Punjab	- 4 (-0.10)	+264	+225	+78	+62	-71				-259		-337	-225	-20 (-0.50)
Rajasthan	+ 3 (+0.20)	+32	+29	-9	-27	-32				-438		-781	-1492	-1597 (-8.34)
Tamil Nadu	-128 (-3.01)	+55	+19	-238	-273	-286				-591		-768	-1109	-1485 (-10.04)
Uttar Pradesh	-228 (-2.14)	+178	+147	-465	-376	-374				-1150		-2053	-909	-317 (-1.85)
West Bengal	-30 (-6.21)	-18	-21	-26	-34	-17				-100		-134	-215	-235 (-5.85)

Source: 1. Combined Finance and Revenue Accounts of Union and State Governments - volumes for the respective years.

Notes : Figures in brackets indicates rate of return to Capital Outlay to the end of the year.

It is clear that the returns on the investments of these projects are negative in all the states. This leads to sizeable subsidy burdens on the state budgets and thereby impose burden on the general tax payers. The state revenue budgets suffer deficits on account of the financial burdens posed by these projects.

The poor returns from commercial irrigation undertakings are partly due to the unwillingness to levy suitable water rates and partly due to the lack of utilization of the available irrigation potential. State governments have not also been uniformly keen to levy betterment levies.

The Finance Commissions have raised concern successively on the poor return from multi-purpose, major and medium irrigation schemes. The Third Finance Commission reviewed with concern the losses on irrigation projects and the reluctance of the States to increase water rates or collect betterment levies. It also pointed out that in a state, "in real need of resources, the collection of betterment levy already introduced had to be suspended just because the neighbouring state had done so in a more prosperous contiguous area."[10]

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10 Government of India: Report of the Finance Commission, 1961, p.39.

The Fifth Finance Commission saw no reason why public sources of irrigation should not be so managed as to avoid at least losses, when very large number of agriculturists were incurring higher costs in obtaining water from private sources. The Commission also assumed that, "Within next five years it would be possible for the State Governments to take steps to improve the returns for covering the working expenses and interest at the rate of 2 ½ per cent per annum on the investments in all irrigation projects".[11]

A Committee appointed to suggest ways and means of improving returns from irrigation projects recommended that irrigation rates should be fixed at 25 to 40 per cent of the additional net benefit to the farmer from irrigated net crop and keeping in view factors like rainfall, water requirements, yield and value of crop. Where it was not possible to measure this net benefit, the Committee suggested that the rate should be 5 to 12% of the gross income of the irrigated crop. The Committee also suggested that compulsory water charges sufficient to cover at least the maintenance and operation costs of irrigation works should be made applicable to the entire area served by irrigation projects irrespective of whether water is drawn by the cultivators or not. But these recommendations were not implemented. Still the irrigation projects are not

11 Government of India, Report of the Finance Commission, 1969, p.59.

only un-able to earn profits which could enhance the current revenues of the state governments but they are not even able to pay the interest charges. Steps like better utilization of the available potential, efficient and economic maintenance of irrigation systems, raising water rate demands correctly and collecting them fully and in time are essential to get the desired result.

Investment in Power Development.

Electricity is a basic input for economic development and is one of the fast growing sectors of the economy. Its generation and distribution are also highly capital intensive. The importance of the supply of energy can be best understood from the following statement. J. Walter and Tomson Company of New York showed that, "long run changes in industrial output and fuel consumption are also closely related to each other. There are strong grounds, therefore, for taking the statistics of energy consumption to be the quantitative measure of economic progress. A recent examination of relationship between energy consumption and economic growth suggests that, for the world as a whole, each 2% increase in energy consumption has been accompanied by a 3% per annum rise in industrial output."[12]

12 T.N. Kapoor et al. Industrial Development in the States of India (Sterling Publishers, New Delhi), 1967, p.329.

"Electricity is a concurrent subject in the Indian Constitution and within each state, the state governments have taken on the responsibility for power development. It is only in certain multi-purpose river projects and special circumstances that the centre or separate corporations have taken on the responsibility. Power generation is limited in quantity and area. As such the brunt of the responsibility of power development in India has fallen on the shoulders of the state."[13]

It was only with the beginning of the First Five Year Plan power development received a fillip. The second Plan had three aims in respect of power development : (i) To meet the normal load growth in the existing power system, (ii) to provide the requisite capacity for reasonable expansion of the areas of supply, and (iii) to meet the needs of industries which were to be established under the Second Five Year Plan. During the Third Plan larger amounts were also spent on rural electrification for extending power supply for agricultural pumping.

The states have set-up State Electricity Boards for generation and distribution of electricity. In a few states there are also investments in departmental schemes. Karnataka

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13 K. Venkatraman: Power Development in India, the Financial Aspects (Wiley Eastern (P) Ltd., New Delhi), 1972, p.1.

has a wholly owned company for the execution of generation projects and for the operation of projects which sells power to the State Electricity Board for distribution.

The larger portion of the Capital of Státe Electricity Boards is the loans provided by the state governments. The total investments of the State Electricity Boards in electricity generation and distribution would be higher than the loans from the State Governments, since they also mobilize internal resources which are ploughed back into fresh investments, apart from borrowings from the market and financial institutions and consumer deposits. Since larger resources of state governments in the form of loans have been invested in the State Electricity Boards it is imperative for us to see how far they are productive in augumenting the revenue of state governments.

Table VI.14 presents the rate of return to the investment in State Electricity Board.

Rate of Return on Investments in State Electricity Boards.

It is clear that the rate of return in all the state Electricity Board is low. As such the financial working of the electricity boards and the returns realised on the investments made by the State Governments have been a matter

Table VI.14

Rates of Return of Electricity Boards for Selected Years

States	1959-60	1962-63	1966-67	1967-68	1968-69	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
AndhraPradesh	-0.2	1.1	2.2	4.2	6.0	4.2	3.9	4.2	6.6	7.7	9.0
Assam	-0.06	2.8	0.2	0.2	1.1	0.4	0.5	0.5	1.0	3.5	11.7(P)
Bihar	-1.0	1.5	0.8	Neg	1.3	1.5	2.0	2.0	0.15	7.0	8.1
Gujarat	2.9	2.8	4.5	3.7	4.8	4.3	3.9	4.1	4.6	7.9	9.7
Haryana						3.3	2.8	2.1	4.0	7.2	6.4
Jammu & Kashmir	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Karnataka	3.5	4.9	9.0	9.6	2.9	5.0	3.9	3.8	6.8	15.75(P)	15.8
Kerala	3.1	3.6	4.2	3.0	3.2	3.2	2.9	3.0	5.7	5.9	8.5
Madhya Pradesh	6.5	5.5	5.6	4.4	5.6	6.2	6.2	5.9	11.7	12.8	13.1
Maharashtra	2.5	1.3	6.3	5.0	5.1	5.8	4.9	6.6	10.9	10.0	13.0
Orissa	1.3	0.5	1.8	2.3	4.9	2.2	3.5	3.7	3.3	8.5	6.4(P)
Punjab	5.2	4.9	NA	4.5	5.5	2.5	1.6	0.8	3.0	7.4	8.2
Rajasthan	-5.6	0.8	NA	NA	NA	3.3	2.9	2.7	4.96	8.7	9.2
Tamil Nadu	6.2	6.0	4.4	5.3	4.3	3.6	1.5	3.5	9.6	9.7	9.5
Uttar Pradesh	3.0	4.2	4.1	3.2	3.9	3.0	3.8	3.1	1.3	4.6	5.8
West Bengal	2.2	-0.2	6.1	6.6	5.3	2.8	2.8	2.1	5.2	5.5	9.5

Source: 1. 1959-60, 1962-63, 1966-67, and 1967-68 - Venkatraman: Power Development inIndia: The Financial Aspects, Wiley Eastern (P) Ltd., New Delhi, 1972, p.44.
2. 1971-72 to 1973-74 - Government of India, Report of the Finance Commission, 1973, pp.206-207.
3. 1974-75 to 1976-77 - Government of India, Report of the Finance Commission, 1978, p.27.

of concern for a long-time. A Committee of Ministers which went into the working of the State Electricity Boards made a number of recommendations in 1964 and suggested that within 3 to 5 years the Boards should aim at a total return of 11 percent after meeting fully the operation and maintenance expenses and depreciation. The return of 11 per cent was composed of 6 per cent interest on capital, 1/2 per cent for appropriation to reserve, 3 per cent net profit and a notional 1½ per centon account of electricity duty. In other words, the return expected was 9½ per cent exclusive of electricity duty."[14]

Consequent of the low rate of return the State Electricity Boards are not able to pay even the interest charges to state governments and the interest liabilities accumulated. Table VI.15 shows the estimated interest liabilities of State Electricity Boards to the State Governments.

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14 Government of India. Report of the Financial Commission, 1978, p.26.

Table VI.15

Estimated Accumulated Interest liabilities of State Electricity Boards on State Government Loans at the end of 1977-78

(In lakhs of Rs.)

Name of the Board	Accumulated interest liability	Name of the Board	Accumulated interest liability
Andhra Pradesh	345.8	Maharashtra	114.3
Assam	324.6	Orissa	281.6
Bihar	1336.7	Punjab	1279.1
Gujarat	285.2	Rajasthan	608.5
Haryana	624.6	Tamil Nadu	204.5
Jammu & Kashmir	-	Uttar Pradesh	1985.5
Karnataka	58.0	West Bengal	461.0
Kerala	421.1		
Madhya Pradesh	85.3	Total	8416.0

Sources: Government of India, Report of the Finance Commission, 1978, p.28.

The reasons for the low rates of return are :-

1. The transmission loss and the loass due to pilferage are very heavy. Table VI.16 shows the energy losses of State Electricity Boards. In Bihar the transmission losses and pilferage are very high and the annual loss was estimated to be Rs.20 million.

Table VI.16

Energy Losses of State Electricity Boards

(Percentage)

States	1969-70	1970-71	1971-72	1974-75	1975-76	1976-77
Andhra Pradesh	24.1	24.9	26.5	25.24	24.53	24.40
Assam	18.9	19.0	19.0	18.22	16.50	20.19
Bihar	27.9	29.8	25.2	29.33	23.94	25.83
Gujarat	21.7	21.2	22.8	20.22	19.51	17.13
Haryana	25.6	27.3	27.3	24.40	23.19	22.27
Jammu & Kashmir	24.0	24.0	25.0	24.49	23.34	NA
Karnataka	16.1	13.9	14.8	18.53	15.92	15.47
Kerala	14.4	12.9	17.2	15.20	16.13	14.52
Madhya Pradesh	19.9	19.7	20.8	20.08	18.80	18.24
Maharashtra	15.0	15.2	16.2	15.90	17.50	17.36
Orissa	10.5	9.3	12.2	11.04	14.29	16.76
Punjab	24.4	22.2	21.0	23.52	21.18	24.43
Rajasthan	19.7	18.2	23.9	30.27	25.74	21.43
Tamil Nadu	20.0	18.2	19.9	21.55	18.75	18.34
Uttar Pradesh	26.3	27.8	25.5	24.73	21.69	22.25
West Bengal	13.6	13.6	13.6	9.19	11.69	11.57
All India				20.48	19.42	19.92

Source: 1. For 1969-70 to 1970-71 and 1971-72, Report of the Finance Commission, 1973, p.207.
2. For 1974-75, 1975-76, 1976-77, Report of the Finance Commission, 1978, Appendix Table 1.20, p.68.

2. The frequent increases in dearness allowance have increased the establishment charges.

(3) Some electricity boards have found it difficult to increase their rates because of the attitudes of the state governments.[15]

But the Seventh Finance Commission observed that the financial performance can be improved by better and efficient management and revisions of tariffs need only be a last resort.

The above analysis shows that the irrigation schemes, public sector undertakings and Electricity Boards incur losses mainly due to inefficient management and reluctance of the state governments to raise water rate, betterment levy and tariff. This tendency should be givenup to avoid sizeable subsidy burdens on the revenue budgets and therefore on the general tax payers.

D. Capital Outlay on Transport and Communications.

The capital outlay on Transport and Communication embraces the investments on Road and Bridges, Road and Water Transport Systems, Tourism and others.

D.1 Levels of Percapita Outlay.

The percapita capital outlay onTransport and Communica-

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15 K. Venkatraman, op.cit., p.53.

tion was highest in Jammu & Kashmir in all the years. It was lowest in Bihar in 1957-58, in Maharashtra (Rs.0.12) in 1962-63, in Andhra Pradesh (Rs.0.31) in 1967-68, in Karnataka (Rs.0.69) in 1972-73 and in Tamil Nadu (Rs.0.43) in 1977-78.

In Haryana and Punjab the percapita capital outlay is higher because of their larger investment in Road Transport systems. The percapita capital outlay is relatively low in Maharashtra and so the road length is lower in that state. As Tamil Nadu and West Bengal have relatively more length of roads their percapita outlay on this function is relatively lower.

The share of this function in total capital outlay is next only to that of Water and Power Developmental Services in all the states. The percentage of total Capital outlay absorbed by this service declined from 1957-58 level in Karnataka, Maharashtra and West Bengal. We have already seen the reasons for the variations in the percapita expenditure levels in the previous chapter.

D.2 Financial Results of Road Transport Undertakings.

The Road Transport undertakings are another important sector in which the State governments have invested huge sums in the form of equity shares and loans. Most of the undertakings are corporations under State Road Transport Corporation Act. Some undertakings are run departmentally by State Governments and a few by government owned companies.

Table VI.17 shows the net receipts of the State Road Transport undertakings.

Table 6.17 : State Road Transport undertakings. Net Profit (+) Loss (-) after providing for interest, depreciation and other funds.

(Rs. in lakhs)

States	1973-74	1974-75	1975-76	1976-77
Andhra Pradesh	+339.00	+364.00	+224.00	+249.00
Assam	- 70.78	- 75.46	- 14.13	- 34.45
Bihar	-252.00	-155.00	-116.83	-262.00
Gujarat	-374.00	-712.00	-276.00	-256.00
Haryana	+ 33.54	- 56.43	- 49.70	+107.89
Jammu & Kashmir	-168.00	- 93.00	- 31.40	- 14.00
Karnataka	+ 26.00	+ 11.00	-130.00	+ 42.00
Kerala	+367.00	-470.00	-411.00	-108.00
Madhya Pradesh	-154.57	-148.27	+ 46.31	+ 48.24
Maharashtra	-305.00	-780.00	+153.00	+741.00
Orissa	-	- 59.37	- 70.71	- 8.99
Punjab	- 8.00	-151.00	-296.00	-350.00
Rajasthan	+ 34.76	+ 49.90	- 50.67	+ 1.13
Tamil Nadu	- 95.00	-274.00	-839.00	+137.00
Uttar Pradesh	+ 14.00	-248.00	+ 189.00	+173.00
West Bengal	-1182.05	-1533.61	-1634.76	-1616.77

Source: Report of the Finance Commission, 1978, Appendix Table I.28 (i), p.70.

The Table VI.17 reveals that the financial performance is better in Andhra Pradesh, Karnataka, Maharashtra and Uttar Pradesh. The loss is very heavy in Bihar, Gujarat, Kerala, Punjab and West Bengal. One could suspect that the financial loss may be due to inefficient management or lower fares or both. The Seventh Finance Commission felt that the variations in the performance of the State Road Transport undertakings were due to different aspects of the efficiency of management and maintenance of the fleets. They further pointed out that, "it would be incorrect to assume that improvement in the financial performance of most of the undertakings will be possible only through upward revision of fares."

CONCLUSIONS :

(1) Though the Capital outlay had increased significantly during the past twenty years the basic structural change in the expenditure composition during this period was not very much. The developmental outlay forms roughly 98% of the total capital outlay. Of the total developmental outlay about 85% was absorbed by Economic Services. In all states importance has been given to the formation of physical capital.

(2) Of the total Capital Outlay about 65% was spent on water and Power Development services and Transport and

communications. Hence major portion of the Capital Outlay was spent on the development of infrastructure.

(3) The inter-state disparity in the percapita Capital outlay widened during the period under our review. This is partly due to the utilization ofavailable resources and the states' interest to develop infra-structure.

(4) The percapita capital outlay was less than the all state average level in the states of Assam, Bihar, Kerala, Madhya Pradesh,Tamil Nadu, Uttar Pradesh and West Bengal throughout the period. In the developed states like Punjab, Tamil Nadu and West Bengal the percapita Capital Outlay is relatively lower partly due to their achievement in irrigation, power sector and road development. The weaker states have lower percapita outlay and the development of infrastructure is also lower.

(5) It is interesting to observe that in Revenue Account the expenditure shift took place in favour of Social and Community services whereas in Capital Account the shift was in favour of economic services. The revenue budget aims at formation of human capital while the capital budget has been designed for the development of infra-structure. In Capital account the shift in favour of social and community development

has not taken place as the infra-structural development is still on the way.

(6) A review of the financial results of the irrigation schemes, State Electricity Boards and State Road Transport undertakings show that their financial performances are poor. The receipts are not enough even to meet the interest charges. The poor financial performance is predominantly due to inefficient management and poor maintenance of the organisations. The state governments' reluctance for the upward revision of water rates and betterment levy is also a factor for the negative receipts in respect of irrigation schemes. However, though all these schemes are not remunerative in financial sense they have formed a good infra-structural base in the states.

APPENDIX VI-1

First let us explain how the various items of expenditures met under State Trading have been reclassified. The expenditure on eradication of malaria and filaria, family planning materials etc. have been included under the functional head Medical, Public Health and Family Planning. Expenditures on food-grains, sugar, salt-supply scheme have been included in Food & Nutrition. Milk supply scheme is looked under Dairy Development. Agricultural implements, manures, seeds are grouped under Agriculture which is a functional head under Agriculture and Allied Services. Expenditures on Poultry, Veterinary are included with Animal Husbandry. Tube-wells and Pump-sets are put under Minor Irrigation. Expenditures on nationalisation of timber, minor forest produces and Forest crops are included under the major head Forest. The major functional head Fisheries includes Diesel Engine supply to fishermen. The expenditures on all kinds of mills and mining are grouped under Industry. Expenditures on rural and village electrification are put under community Development.

Other unallocable items like expenditures on developmental schemes, progressive Capital outlay less than Rs.5 lakhs are included in General Economic Services.

Likewise the various expenditure items under '<u>Other Works</u>' have also been re-grouped and looked under respective functional heads. Expenditures on Rehabilitation, Industrial housing schemes, displaced persons, scientific departments, After Care Colony and Occupational Centre for TB patients, welfare departments, housing for displaced persons are included with the appropriate functional heads under social and Community services. Expenditures on Punjab Roadways*, Government bus services of Uttar Pradesh are put under Transport and Communication. Ice-making plant for storage of fish is included under Industries. Area Development Comprises expenditures on Salt Lake Reclamation Scheme and Colonization Scheme. Tourism has been booked under Transport and Communications.

Expenditure on Government Press Building is included with Public Works whereas Establishment and Stationary and Printing have been brought under Administrative Services.

Expenditures on Revenue and Finance are included with Miscellaneous General Services.

APPENDIX VI.2

The power projects erected during the period of our analysis are as follows :

Andhra Pradesh: Kothegudam, Machkund, Nagarjunsagar, Nellore, Ramagundam, Sileru Hydro Projects.

Assam : Gauhati Thermal project, Namlup thermal project and Uranium hydro project.

Bihar : Baruni and Patratu thermal projects, Subarnarekha hydro project.

Gujarat : Dhuvaran Project, Gas Turbines schemes, and Ukai Thermal project.

Haryana : Delhi and Faridabad thermal projects.

Jammu & Kashmir : Chenani, Kalakot, Lower Jelam, Salal and Sindh hydro projects.

Karnataka : Bhadra, Jog, Kalinadi, Munirabad, Sharavathi.

Kerala : Edamalayar, Iddiki, Kuttiyadi, Sabarigiri and Sholayar.

Madhya Pradesh : Ambarkantak, Chambal, Gandhisagar, Korba, Ranapratap Sagar and Satpura project.

Maharashtra : Bhusawal, Khaperkheda, Kyna, Nagpur, Nasik, Paras, Parhi and Vaitarna.

Orissa : Balimala and Talchur.

Punjab : Bhatinda, Upper Bari, Bakra Nangal.

Rajasthan : Jawahardam.

Tamil Nadu : Ennore Thermal project, Kodyar, Kundah, Mettur, Neyveli, Pandiyar, Punampula and Periyar.

Uttar Pradesh : Kanpur, Harduaganj, Richand and Yamuna Hydel scheme.

West Bengal : Bandel and Santaldih.

Bihar and West Bengal get their share of electricity from Damodar Valley Corporation also.

Source: Times of India Directory and Year book, 1978.