State Finances in India

Volume 2

Studies in State Finances

Christine Wallich

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ABSTRACT OF THE STUDY

Under India's federal structure, a strict division of expenditure responsibilities exists between Central and State levels of government, with many important activities the responsibility of State government. The Bank's attention has increasingly focused on these State sectors, for example, agriculture, irrigation, power generation, rural development and health, in its lending strategy to India. As Bank lending to these sectors increases, familiarity with State fiscal capacity and the resource or other constraints which may impede smooth implementation of State Plan projects--especially of large or costly projects--is necessary for lending to be effective. In this series of papers on State finances we have sought to shed some light on the factors which determine the States' capacity and willingness to provide the budgetary resources necessary for financing these projects. The papers focus on State fiscal capacity as well as growth prospects. A methodology is developed through which consistency between the sectoral allocation of resources implied by a large project and State development priorities and other expenditure commitments can be assessed.

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STATE FINANCES IN INDIA

VOLUME II

INDIA - STUDIES IN STATE FINANCES

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PREFACE

1. Under India's federal structure, a strict division of expenditure responsibilities exists between the Central government and the States. Many important activities are the responsibility of state-level government with the Center's role limited to providing some financial support and to coordinating plan priorities between the Center and the States. The Bank's attention has increasingly focused on these state sectors of activity--agriculture, irrigation, power generation, rural development and health--in its lending strategy to India. As Bank lending in these sectors increases, familiarity with State's fiscal capacity and the resource or other constraints which may impede smooth implementation of Bank projects in the States--especially large or costly projects--is necessary for lending to be effective.

2. In this series of papers prepared by the India Programs division to assist in project appraisal on State finances, we have sought to shed some light on the factors which determine the States' capacity and willingness to provide the budgetary resources necessary for financing projects in their Plans. Three of the papers deal directly with the issues surrounding successful implementation of single, large Bank projects in Madhya Pradesh, Maharastra and Gujarat, involving credits of up to $210 million. The other papers, Orissa and Tamil Nadu, deal with the budgetary impact of a cumulatively large lending program; in the case of Orissa, four projects amounting to $622 million and in Tamil Nadu, three projects involving approximately $376 million. Because these projects are so large in relation to overall State Plan spending, the State's resource outlook must be examined carefully. The projects are also large in relation to past spending in the sectors in question. The danger in this is that if the needs of a single sector are considered in isolation from overall state finances, the Bank and the concerned department of the State Government, in their eagerness to formulate and fund much-needed projects, may unwittingly commit the State to sector programs which could involve significant reallocations from other State activities. Thus, not only are questions of the State's fiscal capacity and growth prospects important, but the State's development priorities must be scrutinized to insure that the resources available will indeed be allocated to the sector in question. The sectoral allocation implied by the project must be consistent with State development priorities and its other expenditure commitments. The papers therefore attempt to assess the degree to which resources will be available to implement these projects as planned.

3. One anomaly in our lending to India is that even for projects which are in the State realm of competence--implemented by the States and financed by them--the Bank's loan agreement is with the Government of India, and all disbursements are made to the Central Government. These are then passed on to the States in "accordance with the normal procedures for central assistance to the States for development." These arrangements have recently been liberalized for the States, who now receive just over 70% of project disbursements--about 35% of project cost, assuming Bank assistance to be 50% of project cost. The onus on the States to come up with the remaining resources is still fairly high, 65% of project cost must be committed from State

budgetary resources. An assessment of State resource capacity is therefore crucial. Similar questions do not arise when the Bank lends for projects in the central sector, for two reasons. Firstly, the Center's fiscal capacity is far more broadly based, and, therefore, more elastic; secondly, even for very large projects, the Center's budgetary allocations to such projects are not likely to interfere with its commitments in other areas as they are a far smaller proportion of the Center's total budget.

4. The methodologies used in the papers are broadly similar. Fiscal capacity is examined by analyzing the fiscal structure and the State's tax base; the income elasticities of various tax and other revenue sources are estimated to project future resource availability. The question of State "willingness" is somewhat more difficult. The general approach has been to examine the sectoral expenditure level implied by the projects, relative to expenditures committed by the State to this sector in the past, and relative to overall levels of Plan spending. Another indicator has been the implementation ratio--the ratio of Plan outlays in a sector to actual Plan expenditures. Because the exercise is based on readily available data, and at the level of generality dealt with, implies few conceptual problems, this type of analysis has become a common feature of appraisal for large State-level projects in India.

5. The conclusions of this type of exercise are uncertain, at best, since it is always possible that some unforeseen demand may be made on state resources which will divert the State's resources from the initial allocation. On the other hand, the exercise does provide some reassurance that, other things being equal, the project size is quite manageable given the likely level of State income and the expenditure levels projected for the sector.

6. The paper is organized as follows: The first chapter provides a general overview of the structure of Indian State finances--the budget structure, the sources of State revenue receipts, and the principles of revenue sharing. On the expenditure side, the categorization of expenditure, planning procedures and the earmarking of resources for the Plan are discussed. Finally, the methodology used to evaluate project expenditures in the context of sectoral outlays and resources available for the Plan, its rationale and limitations is explained. In the second through sixth chapters, the finances of Madhya Pradesh, Orissa, Maharastra, Tamil Nadu and Gujarat are reviewed in the context of the Bank assisted projects.

CHAPTER I

Introduction to State Finances and Planning

Christine Wallich
India Division

INTRODUCTION TO STATE FINANCES AND PLANNING

Christine Wallich

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Tables

Chapter 1: INTRODUCTION TO STATE FINANCES AND PLANNING

I. The Budget Framework

1.01 The budgets of all States are formulated on standard lines. The budget is broken down into the tripartite accounting classification of (1) Consolidated Fund; (2) Public Account and (3) Contingency Fund. The diagram on the following page clarifies the relationships.

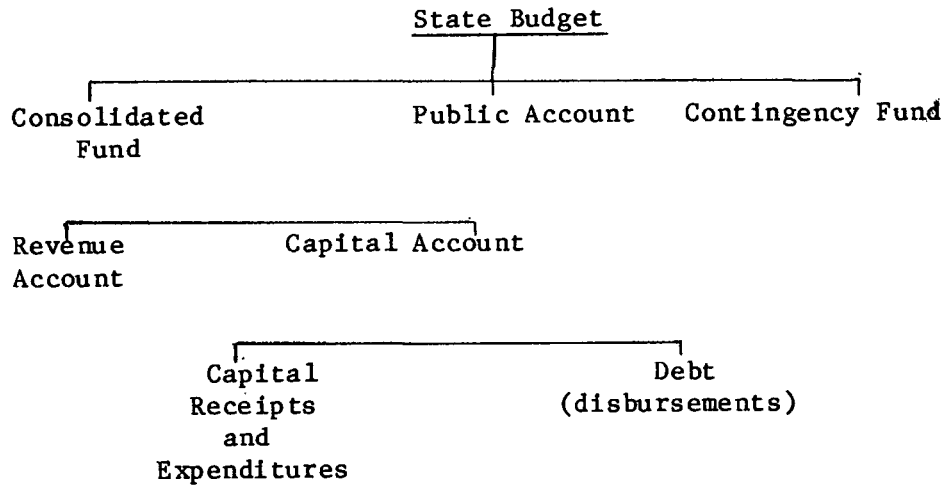
1.02 The Consolidated Fund is the source for all the "usual" budgetary transactions whether of capital, revenue or loan nature. State tax and non-tax revenues are entered into the Consolidated Fund and any expenditures which are to be met from the Consolidated Fund must be voted by the State legislature. 1/ The Consolidated Fund itself is broken down into two parts: the revenue account, and the capital account. The revenue account comprises expenditures covering the routine administration of the State, such as wages and salaries, vehicles, printing, etc. and other overheads. Expenditures relating to the creation of assets--and this includes most (but not all) Plan expenditures--will be in the capital account. Revenue receipts are all those which do not incur repayment liability. This includes, in addition to the State's own revenues, grants from the Central Government for the financing of State Plans, as well as non-Plan grants. Capital receipts include internal debt, loans from the Center and the State's recovery of its own loans and advances to State corporations, cooperative societies, etc., and are entered in the capital account. On the outlay side of the capital account, there are expenditures, corresponding to the States' own investment outlay, and disbursements, which are comprised of repayment of State public debt, and the loans and advances made by the State to the various entities. Thus, both the capital and debt portions of the Consolidated Fund are under the capital budget.

1.03 The Public Account includes those funds which do not rightly belong to the State but which the State holds in trust for other entities. This would include such items as deposits from municipal corporations, pension fund accumulations of the employees' provident fund and reserve and depreciation funds. It could almost be characterized as the fund for which the State acts as "banker."

1.04 The Contingency Fund is, as its name implies, a fund for emergency use. It does not, in fact, contain any "real" money, but is an accounting figure which is included in the Budget to cover unforeseen expenditures (such as a police strike for higher pay or some other emergency). Expenditures from the Contingency Fund can be made with Cabinet consensus alone and hence have the advantage that the budgetary procedure--involving legislative approval--is circumvented. The Contingency Fund in most states is increased every few years in the budget process.

1/ There are some few exceptions to this, such as interest payments on state debt which do not need to be voted on.

STATE BUDGETING AND ACCOUNTING



II. State Revenue Receipts

1.05 State revenue receipts are, as stated earlier, those receipts for which the State has no repayment liability and which are used to finance items of revenue expenditure. They consist of State tax revenues--the most important--non-tax revenues, the next largest, and grants from the Central Government. These categories will be treated in turn. Table 1 shows the standard classification of receipts.

1.06 Revenue sharing is a built-in feature of the India fiscal scene. 1/ The Indian Constitution assigns to the State and Central Governments specific expenditure responsibilities--irrigation, power and agriculture, among others, are sectors of State responsibility, while defense, ports and telegraphs, railways, etc. are in the center's sphere. 2/ Similarly, a breakdown has been made in the case of tax revenues, where many taxes, in the interests of efficiency and uniformity, are assigned to the Central Government and the States enjoined from tapping these sources. The first item in the table, "Share in Central Taxes" represents the automatic revenue sharing, known as devolution, which all States receive in four central taxes. The States

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1/ Revenue sharing is a long-standing feature of Indian fiscal administration. It began in 1919, when the British administration devolved certain tax revenues to provincial governments.

2/ A complete listing of central and state subjects is contained in Article 246 of the Constitution.

receive a share in the income tax, the central excise duties, central additional excise duties and the estate duty. The proportion in which these taxes are to be shared between the Center and the States, and amongst the States, is determined by the quinqennial award of the Finance Commission, a statutory body. This body most recently met in 1978, recommending that the States receive a 40% share in union excise duties, 85% of the income tax and 100% of the additional excise taxes and the estate duty. 1/

TABLE I

STATE GOVERNMENT REVENUE RECEIPTS

1. Share of Central Taxes

2. State Taxes - Total
   - (i) Land Revenue with Cess.
   - (ii) State Excise Duty
   - (iii) Taxes on Vehicles
   - (iv) General Sales Tax
   - (v) Central Sales Tax
   - (vi) Sales Tax on Motor Spirit
   - (vii) Stamps
   - (viii) Registration
   - (ix) Entertainment Tax
   - (x) Electricity Duty
   - (xi) Taxes on Roads
   - (xii) Taxes on Passengers
   - (xiii) Taxes on Professions
   - (xiv) Urban Property Tax
   - (xv) Surcharge on Sales Tax
   - (xvi) Taxes on Agricultural Income

3. Non-Tax Revenue
   - (i) Interest Receipts
   - (ii) Public Works
   - (iii) Irrigation
   - (iv) Forests
   - (v) Administrative Services
   - (vi) Social and Development Services
   - (vii) Others

4. Grants from Center
   - (i) Statutory Grants
   - (ii) Grants for Centrally Sponsored Scheme
   - (iii) Grants for Natural Calamities
   - (iv) In Lieu of Tax on Railway Fares
   - (v) Agricultural Wealth Tax

1/ The distribution among the States is based on a complex formula which differs for each tax.

1.07 The second item is the States' own taxes. In general, the most important of the State taxes is the general sales tax, which is levied on most non-food items sold including capital and intermediate goods and raw materials. Its growth is thus a function of increases in the volume of trade, monetization and upwards movements in the price level.

1.08 For most States, the second largest contributor of tax revenues is the central sales tax. 1/ This is a tax levied by the Center at a uniform rate of 4% in all States, but assigned wholly to the States and collected by them as well. The central sales tax is levied on goods when the purchase involves interstate trade. Receipts are a function, therefore, of the growth of interstate trade.

1.09 Land revenue is a tax which in most States has become a mere nuisance levy with little contribution to revenue receipts. It is levied, in most States, on land holdings over a certain size and originally related to the produce grown or net income of the land. In fact, suspension of resettlement surveys in many States has left land revenue more like an acreage levy. In drought years, or years of scarcity, the tax is typically remitted or suspended. In some States, land revenue contains an irrigation cess. In general, land revenue is a declining source of revenue, poorly administered and collected. In the longer term, it may be replaced by an agricultural income tax.

1.11 The tax on motor vehicles is an annual registration fee, levied on all motorized vehicles and at higher rates, in general, for buses and trucks. Its buoyancy is a function of the number of vehicles, road and transport infrastructure of the State.

1.12 The sales tax on motor spirits has, in some States been merged with the general State sales tax. It is levied on sales of Petroleum, oil and lubricants, and the growth of receipts is therefore dependant on the volume of consumption of these commodities in the State. This, in turn, is a function of, among other things, transport infrastructure, traffic densities and level of State income.

1.13 The stamp and registration taxes, like land revenue, in most states, have become unimportant levies. They are levied on all legal transactions and court cases initiated, and their growth is thus related to legislative measures taken by the State Government. The ceiling on agricultural holdings, for example, results in partitioning of large holdings and their separate registration.

1.14 The State entertainment tax is generally one of the most buoyant taxes. Levied on cinema tickets and other forms of entertainment (circuses, etc.), receipts are a function of the attendance at these places of entertainment, i.e., general increases in State income.

1/ Not to be confused with central excise duties.

1.15 Electricity duty is akin to a surcharge on electricity rates, but is not generally levied on units sold outside the State, nor on community uses of electricity, such as street lighting. Consumption of energy is the prime determinant of revenues from this source, although effectiveness of collection and arrears are also important.

1.16 Taxes on goods carried by road are not levied by all States. It is charged on truck cargoes, and receipts are thus a function of the number of public carriers and out-of-State vehicles bringing goods.

1.17 Taxes on passengers carried by road are collected through a surcharge on bus tickets. Receipts are thus a function of the States' general transport infrastructure, including the number of buses, their route mileage, intensity of traffic, etc. This tax is plagued by enforcement problems, but in those States where efficient collection is made easier thanks to large and dense urban transport systems, it is a growing, modest source of revenue.

1.18 The tax on professions, trades and callings is levied in only eight out of the 15 major States. Although in principle a general tax, it is in fact usually only collected in urban areas. Depending on the profession it may be levied on salary or in the case of traders, collected along with sales tax. In many States convenience of collection determines who is subject to this tax: employees of government and government undertakings are usually the first to be taxed.

1.19 Not all States levy the urban property tax--a tax which is difficult to administer at the State level and is usually left to cities. It is charged on urban property and receipts are a function of assessment, efficiency of collection and arrears.

1.20 Agricultural income tax is levied only in a few States in addition to land revenue. The greatest part of the yield of this tax is obtained from the taxation of plantations.

Non-Tax Receipts

1.21 Non-tax receipts play as great a role in state finances as tax revenues. Properly exploited and managed, they could be a very elastic source of income to the State Government. Moreover, in view of the growing investments of most State Governments in capital works, these investments should be generating an acceptable rate of return, through a correct structure of prices for the services provided by these assets.

1.22 Interest receipts represent the States' interest income from loans and advances they make to the various State corporations and undertakings. In most States, the bulk of interest receipts is accounted for by interest payments from the State Electricity Boards, the amount of which depends on the amount of surplus the Boards are able to set aside for repayment to the State Government. Interest due the State Government by the SEB's is a residual liability, payable only after the Boards' other obligations have been met.

1.23 Receipts under public works represent rents from government buildings, tolls on roads and bridges, and other miscellaneous charges.

1.24 Irrigation receipts include the receipts from water rates charged for irrigation water, and frequently also receipts accruing from the sale of water to municipal corporations, and public sector undertakings, where these are not supplied by a separate entity.

1.25 Forests receipts are the revenues from the sale of forest produce, timber pulp, etc. In general, investment which increases forest yields has a high payoff, and States in which improvements have been made do well on the receipts side.

1.26 Receipts from administrative services include (i) administration of justice (income from sale of unclaimed property, court fees and fines); (ii) jails (income from sale of jail manufactures); (iii) police (this includes reimbursement for services rendered by the police to public departments government undertakings and private companies); and (iv) supplies (primarily collection of license fees).

1.27 Social and development services are the final category of non-tax receipts. Under this head is classified the following income: education (fees from schools and technical institutions); medical (fees from medical colleges, hospitals, sale of medicines); public health (proceeds from sale of serums and vaccine, and preparation of town planning schemes, and water works, drainage and industrial housing schemes); agriculture (receipts from farms and fisheries operated by the State); and industries and cooperatives (receipts from small scale industries and cooperatives).

Grants and Other Assistance

1.28 The final category of revenue receipts covers the grants which all States receive from the Central Government. There are four kinds of grant. The first of these are the statutory grants, provided to the States through the Finance Commission's award. The grant is intended to help those States which, even after revenue sharing has taken place and expenditure economy effected, are still expected to be in deficit. This deficit, forecast ex-ante by the Finance Commission on the basis of tax elasticities and revenue trends, is bridged by these statutory grants in aid.

1.29 Grants are also provided to the States for centrally sponsored and central sector schemes. Centrally-sponsored schemes are projects in sectors constitutionally assigned to the States (such as agriculture, irrigation, power) but which the Center feels are sufficiently important to warrant its financing them in whole or in part, that is, subsidizing the States to do so. In general, they are projects of interstate importance, or which have research or demonstration properties, although recently, they have grown to include a broader range of schemes. Family planning is an important example of a centrally sponsored scheme. This portion of central assistance is provided to the States on a 30% grant, 70% loan basis. Included in table 2 is only the grant element. The loan portion of the assistance is included in the capital account of the State budget.

1.30 Grants for natural calamities are also available for the States. These are necessary because natural calamities occur unexpectedly and States' budgetary resources are not always able to cover the reconstruction expenditures and rehabilitation assistance required in the wake of a disaster. Present practice, suggested by the Seventh Finance Commission, is that the States themselves are responsible for the relief works up to an amount of 5% of their total Plan expenditures, with the Center providing assistance for the balance.

1.31 The grant in lieu of railway fares and the agricultural wealth tax originated as taxes to be shared between the Central and State Governments, much like the central income and sales taxes. They have now been converted to grants, for simplicity's sake.

1.32 For all States taken together, the following table describes the breakdown of receipts on revenue account.

Table 2

SOURCES OF STATE REVENUES: PERCENTAGE DISTRIBUTION	1978-79 (Budget Estimates) %
TOTAL REVENUES	100.0
1. TAX REVENUE	59.9
A. States' Own Tax Revenue	42.2
(i) Agricultural Income Tax	0.36
(ii) Profession Tax	0.27
(iii) Stamps and Registration Fees	2.42
(iv) Land Revenue	1.48
(v) Surcharge on Cash Crops*	0.01
(vi) Urban Immovable Property Tax	0.09
(vii) Sales Tax	24.3
(a) General Sales Tax	17.8
(b) Central Sales Tax	4.9
(c) Sales Tax on Motor Spirit	1.13
(d) Purchase Tax on Sugarcane	0.48
(viii) State Excise	5.09
(ix) Taxes on Vehicles	2.52
(x) Taxes on Goods and Passengers	2.04
(xi) Electricity Duties	1.45
(xii) Entertainment Tax	1.82
(xiii) Surcharge and Cess on Sugarcane	-
(xiv) Other Taxes and Duties	0.33
B. Share in Central Taxes	17.67
(i) Income Tax	6.77
(ii) Estate Duty	0.09
(iii) Union Excise Duties	10.82
2. NON-TAX REVENUE	40.13
C. States' Own Non-Tax Revenue	19.31
(i) Interest Receipts	5.28
(a) Departmental Commercial Undertakings	3.11
(b) Public Sector Undertakings	1.58
(c) Cultivators	0.08
(d) Local Bodies	0.12
(e) Others	0.38
(ii) Dividents	0.22
(a) Public Undertakings	0.08
(b) Other Investments	0.14
(iii) General Services	1.74
Of which: State Lotteries	0.34
(iv) Social and Community Services	1.89
(v) Economic Services	10.19
(a) Forests	3.37
(b) Industries	0.70
(c) Cooperation	0.14
(d) Royalty on Minerals and Mineral Concession Fees	0.94
(e) Multipurpose River Projects	0.22
(f) Agriculture	0.34
(g) Irrigation, Navigation, Drainage and Flood Control Projects	0.88
(h) Power Projects	0.25
(i) Road and Water Transport Services	0.75
(j) Dairy Development	1.32
(k) Animal Husbandry	0.11
(l) Fisheries	0.05
(m) Others	1.13
D. Grants from the Centre	20.82
(i) State Plan Schemes	8.11
(ii) Central Plan Schemes	1.44
(iii) Centrally Sponsored Schemes	3.88
(iv) Non-Plan Grants	7.40
(a) Statutory Grants	5.67
(b) Grants for Natural Calamities	-
(c) Others	1.73

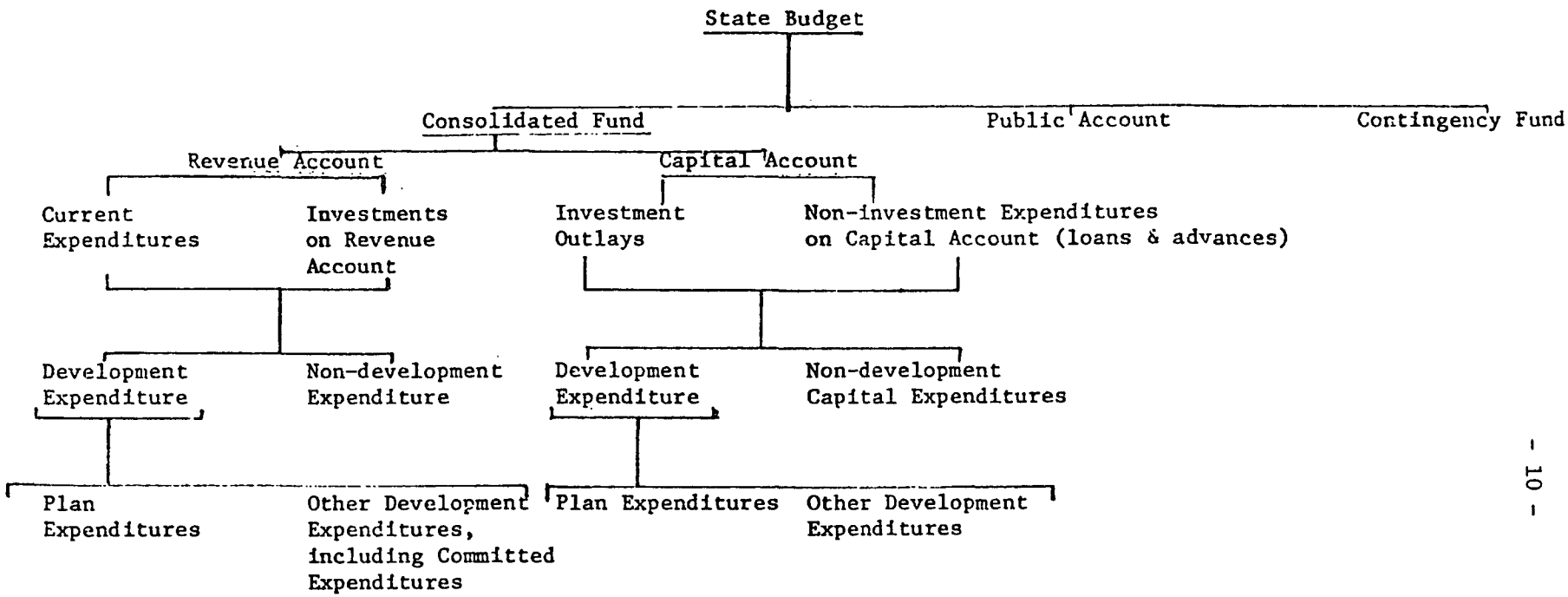
*Related to surcharge on commercial crops other than sugarcane.

SOURCE: RBI Bulletin

III. State Expenditures

1.33 Expenditures are classified under two headings: revenue expenditures and capital expenditures. Broadly, there is a correspondence between revenue expenditures and 'current' expenditures, as they are generally understood, and between capital expenditures and investment. The correspondence, however, is not exact, as the chart below shows. There is some investment expenditure on revenue account, (basically capital expenditures which are required for carrying out general administration of the State, such as housing for civil servants); and likewise, current expenditures show up on the capital account. An example would be the compensation payments to landlords on the abolition of the Zamindari system. Formally, the difference between revenue and capital expenditure is determined on the basis of whether the expenditures are financed from revenue or capital receipts. It is clear that this distinction is somewhat artificial, since there is fungibility between State income from the various sources.

1.34 There is another dichotomy in the expenditure budget as between 'developmental' and 'non-developmental' heads. The distinction is meant to indicate exactly what it implies, but the differences are sometimes a bit fuzzy. Thus the budgetary heads for "administrative services" and "collection of taxes" refer to non-developmental expenditures, while "education," "public health" or "industry," for example, would be developmental expenditures. On the other hand, famine relief comes under the non-development category. Plan expenditures may be either revenue or capital expenditures, since the Plan finances expenditures of a non-capital nature during the Plan period (they become non-Plan, committed, expenditures at the termination of the Plan) but they are always "developmental."


State Budget
Consolidated Fund
Public Account
Contingency Fund
Revenue Account
Capital Account
Current Expenditures
Investments on Revenue Account
Investment Outlays
Non-investment Expenditures on Capital Account (loans & advances)
Development Expenditure
Non-development Expenditure
Development Expenditure
Non-development Capital Expenditures
Plan Expenditures
Other Development Expenditures, including Committed Expenditures
Plan Expenditures
Other Development Expenditures

1.35 In general, the States spend far more on current (revenue) expenditures than on capital expenditure, the breakdown being about 80%:20% for all States taken as a whole. This purely financial aspect obscures the fact that much of current expenditure is in fact development expenditure, such as extension, education, medical and the like. It is the category of non-development revenue expenditures, such as general and administrative services, debt service tax collection, pensions and miscellaneous which should be sought to be kept to a minimum. Most States have attempted to compress non-Plan revenue expenditures in order to make the surplus available for financing the Plan as large as possible.

1.36 Among the economy measures which States typically implement are postponement of increases in State employees' pay scales, withholding of dearness allowances, increases in the proportion of State employee salaries held in escrow under compulsory savings schemes, restrictions on printing and paper, cuts in expenditures on vehicles, telephones and furniture, reductions in travelling allowances and official tours, reduction in new subjects to be taught in schools, bans on filling of posts, to name just a few.

1.37 Capital expenditures are composed of (i) investment expenditures (which may or may not be Plan expenditures), and (ii) loans and advances from the State Government which fill the gaps in the requirements for credit not filled by the banking sector. The State Government advances loans for a variety of purposes, ranging from pure consumption credit in times of distress to development loans to local bodies and public sector undertakings. Examples include loans to municipalities, loans to cultivators, loans to the State Electricity Boards and loans to State Transport Corporations. Some of these funds may be used for onlending. Recovery of loans and advances is a chronic problem for most States. Moreover, the States also frequently charge less than the Bank rate and less than their own cost of borrowing for the monies they lend, so that from the financial point of view these operations are not very profitable.

IV. Financial Resources for the Plan

1.38 Finance for the State Plan comes from five basic sources: (a) the State's surplus (if any) on current account, after all non-Plan expenditures have been netted out from revenue receipts; (b) the contribution of public sector enterprises; (c) central assistance; (d) negotiated and market loans, unfunded debt and other miscellaneous capital receipts; and (e) additional resources mobilized during the Plan period. Ex post, ad-hoc assistance from the Central Government or Reserve Bank, an increase in floating debt, or sale of state assets can also contribute to financing the Plan, but these are, of course, not planned sources of revenue when the Plan is being drawn up.

1.39 Table 3 shows the standard format for Plan finance: the balance from current revenues is the difference between non-Plan revenue receipts and non Plan revenue expenditures, and represents the States' own contribution to their Plans.

1.40 Additional resource mobilization is likewise a budgetary resource, conventionally accounted for apart from the ordinary revenue receipts because it is entirely earmarked for Plan finance. It refers to revenues from tax and non-tax sources, including public enterprises, over and above what would accrue to the State at the rates of tax and tariffs prevailing in the final year of the previous Plan. These are always shown separately in the State accounts and not merged with base levels of receipts. They derive from changes made in tax and tariff rates or base, improved collection techniques or better administration. Typical examples of additional resource mobilization measures include such things as changes in the issue price of liquor, increases in the electricity tariff and bus fares, increases in the rate of royalty on minerals, amendments to check evasion of sales tax or to prevent undervaluation of documents, higher retained receipts from district lotteries, an increase in court fee rates, higher sales tax rates, a reduction in concessionary rates and withdrawals of tax exemptions, to name just a few. Targets for additional resource mobilization are set by the State Government in consultation with the Planning Commission at the time of the annual or Five-Year Plan discussions.

1.41 The second item of Plan finance is the contribution of public sector enterprises. This has been moderate throughout most Plan periods. In spite of the positive figures, there is, in fact, no "contribution" as such: most public enterprises represent a net outflow from the States' revenue coffers. The figure represented here is simply an accounting notion: it represents the net operating surplus of the state enterprises, which is the surplus gross of depreciation and certain interest payment liabilities and is not equivalent to the net commercial profit or loss of the enterprises. This in most cases is negative. The rationale for this accounting is that a sinking fund is akin to the enterprises' own internal resource generation. Since these are public corporations and therefore their operations financed through the Plan, their sinking fund is in fact Plan finance. Were it netted out, the State would have to provide the same funds to the enterprise for replacement or expansion, but by other means. While this notional accounting is completely acceptable, it should be kept in mind that most public sector enterprises do not make a net contribution to the State's financial resources and do not generate funds for the public sector in a true sense. The figure simply represents the operating surplus and internal resources of the State corporations.

1.42 Loans from the market represent essentially State bond issues and are not market loans in a true sense, since their placement has been assigned, since the nationalization of the banks in 1969, between commercial banks and other financial institutions.

1.43 There are also market borrowings of the State enterprises, principally the State Electricity Boards. These are again, placed by assignment to various lending institutions in the "market," and make a moderate contribution to Plan resources. All of the public debt is allocated to the States by the Central Government, usually with lending ceilings increased in equal proportion for all States.

Table 3: RESOURCES FOR STATE PLANS

A. 1. Balance from Current Revenue
2. Contribution of Public Enterprises at Base Year Rates and Tariffs
(i) State Electricity Board
(ii) State Transportation Corporation
(iii) Mining Corporation
(iv) Construction Corporation
(v) State Investment Corporation
3. Loans from Market by State (Net)
4. State's Share in Small Savings
5. State's Provident Fund
6. Miscellaneous Capital Receipts (Net)

B. Additional Resource Mobilization by State Government and Public Undertakings

C. Negotiated Loans of the State Government and Public Undertakings and Market Borrowings of the Public Undertakings, Negotiated Borrowings

1. By State Government
(i) Loans from LIC
(ii) Loans from RBI
2. By State Enterprises
(i) Loans from LIC
(ii) Loans from REC
3. By Local Bodies
(i) Loans from LIC
4. Market Borrowing of State Enterprises (Net)

D. Net Interest Entitlement

E. Central Assistance (Normal)

F. Central Assistance (Advance)

G. Central Assistance (Additionality)

Total Resources for Plan

Expected Plan Outlay

Total Gap in Resources

(Opening Overdraft)

Total Gap in Resources

1.44 Negotiated loans are what their name implies and are negotiated principally from the Life Insurance Corporation of India and the Reserve Bank. State enterprises, principally the Electricity Board, also negotiate loans from the same sources.

1.45 Small savings loans are loans from the Central Government to the States which the States receive automatically as a result of their participation in the various schemes operated by the Center, primarily through the Post Office, to mobilize household savings. States receive two-thirds of whatever savings are made through these channels as an incentive to encourage further savings. For most States, this is modest, though steady source of revenue, comprising about 5% of Plan resources.

1.46 Miscellaneous Capital Receipts are all the other net transactions not accounted for under the other headings, such as short-term loans from the Central Government, recoveries of loans and advances to other institutions by the State Government, net accretions under various sinking funds and other net accounts including non-Plan loans. In general, this is a negative figure, since a substantial amount is repaid to the Central Government and financial institutions.

1.47 Central assistance on Plan account (as opposed to the assistance on revenue account, discussed earlier) 1/ is composed of grants and loans, and is fixed by the Planning Commission. All States receive Plan assistance, which is distributed amongst them according to a formula known as the "Gadgil formula," in which State population and per capita income, among other factors, are used as weights. For most States, the assistance is given on a 70% loan, 30% grant basis, except for the funds earmarked for Plan expenditures in tribal areas, which are given on a 10% loan, 90% grant basis. Although it is not shown here, some States also receive special Plan assistance from the Central Government under the heading of "assistance for special problems." (Orissa is one of these.)

1.48 Advance Plan assistance is assistance over and above normal Plan assistance (through the Gadgil formula), given by the Planning Commission to speed up implementation of projects in irrigation and power, both priority sectors. The funds provide flexibility to pace Plan implementation across states. Not all States receive advance Plan assistance in all years.

1.49 The final type of central assistance outside of the channels of normal (Gadgil) assistance is "additionality." This is a relatively new form of assistance, and is given to States on the basis of their participation in foreign-aided projects. Seventy percent of the aid disbursements are channelled to the State Government as an incentive for them to come forward with project proposals, and also, to insure that sufficient funds will be available for carrying out the project in a timely fashion. Because additionality is a new arrangement in Center/State financial relations, given is little historical experience to refer to in analyzing the extent to which additionality does in fact affect recipient States. The first question is whether it is even an additional resource to the State.

1.50 Both with and without the additionality arrangement, Bank Group disbursements form part of India's overall development expenditure and are part of the pool of resources used to finance Plan projects and programs. Development funds channelled to States through the additionality arrangement cannot be used in other ways; some adjustment in other financial arrangements necessarily will take place. It is extremely difficult to identify these adjustments and trace their impact on the finances of the States receiving the additional funds. At the one extreme, additionality from Bank Group disbursements to a State could be offset by adjusting other items in that State's financial relations with the Center; at the other, the adjustments could be diffused through the Indian system of development finance so what appears as additional funds to an individual State for all practical purpose is additional to that State's finances. The latter is the most likely occurrence with any shortfalls in central resources, due to this new form of revenue sharing, coming at the cost of a larger central budget deficit.

1.51 Even if all additionality from Bank Group disbursements is treated as truly additional to the State, a question remains as to the State's priorities for the use of funds available to it and the extent which additionality does ease the burden on a department if implementing a large project. Development funds will always be somewhat fungible; they no doubt are sufficiently fungible that the State Government need not allow the ex post Plan expenditures to differ greatly from their own ex ante priorities. These issues will be discussed further in the separate chapters on project financial implications.

1.52 Of the five items which make up the sources of revenue for the State Plans, the first two are budgetary resources and to some degree in the States' control. The latter items, borrowing and central assistance, are relatively fixed in terms of their interstate distribution. States' ability to finance a large Plan is, therefore, a function of their own budgetary resources. Additional resource mobilization measures taken at the outset of the Plan period are thus very important to ultimate fulfillment of Plan goals.

V. The Planning Process in Brief

1.53 The process of drawing up a five- year or annual Plan is essentially the same for all States. Differences among the States arise essentially from variations in in-house planning expertise and whether there is a planning board or department responsible for providing a longer term perspective framework to the programs in each sector, to assist the Finance Department in its work.

1.54 All State Plans are drawn up in consultation with the Central Planning Commission. The procedure is the same for all States for five-year and annual plans alike. Through a series of discussions, the overall size of the State Plan is fixed by the Planning Commission in Delhi in consultation with each State's Finance Department. The discussions, which take place over the course of two to three months, focus on State resource availability for the year, (which is a function of the balance from its current revenues, capital receipts and additional resource mobilization efforts)

as well as the physical implementation capacity in the various sectors, including staffing and raw materials availability.

1.55 In its earliest stages, a State Plan consists of a set of proposals for outlays drawn up by each Department, detailing the program and strategy of Plan expenditure in that sector. This level of outlays which results generally represents the absolute maximum which the Department could execute, and the program is often not very discriminating in terms of project content. State Departments usually consult their counterpart Ministry in Delhi on the formulation of their program. Even if not, the central Ministries will often try to influence the formulation of departmental proposals. These departmental proposals are submitted to the State Planning Department, or if there is none, the Finance Department in August-September of each year. They are discussed by the State Cabinet and at the Secretariat level, and an attempt is made to match the departmental proposals against the State's available resources. This first round aggregation of departmental proposals implies, in most States, a Plan far larger than what the State has resources for. In the State-level first round exercise, the departmental proposals are inevitably whittled down so that the State Plan taken to the Planning Commission in Delhi is to some extent commensurate with the State's resource position, even if this has been generously and optimistically estimated. In these first round State level discussions, it is not entirely clear which principles govern how the total Plan size is whittled down. Since the intersectoral allocation of Plan outlays in most States has changed very little from year to year, since the Fourth Plan, it is probably not far wide of the mark to conclude that the revised Plan outlay level is apportioned amongst the State Departments in line with past expenditure trends, allowing for any lumpy requirements for ongoing schemes.

1.56 Once the revised Plan total has been allocated amongst Departments, giving them a revised figure for that year's Departmental outlays, the departments themselves are responsible drawing up a new set of proposals, making up the Departmental Plan. Thus, the subsequent juggling of which projects to include in the program, to exclude, or to implement over a longer period of time, is carried out at the department level. The Departments' revised program must simply be consistent with the revised State Cabinet allocation to them. The manner in which the Departments whittle down outlays is basically ad hoc. Adjustments can be made by including fewer new projects, by postponing projects, or through slippage, allowing projects to be implemented over a longer period of time.

1.57 All new projects to be included must qualify under the cost benefit guidelines issued by the Planning Commission to select acceptable projects. In the irrigation sector, the required benefit-cost ratio is 1.5 (1.2 in tribal areas), and projects which fulfill this criterion are acceptable and can be given administrative approval by the State Finance Department. 1/

1/ Large projects, such as, in the Irrigation Department major schemes costing over Rs 5 crores must also undergo the technical appraisal of the Central Water Commission, and schemes costing from Rs 1-5 crores must also be submitted for pro-forma examination. For the Agriculture and Power Departments, the ICAR and CEA play a similar role.

However, selection from this group follows no discernable criteria. There is certainly no attempt to rank projects according to their benefit-cost ratio. Since the project pipeline is in fact quite limited, projects are usually included on a first-come, first-served basis, as soon as they are certified. There is some attempt to ensure that some regional balance is maintained: political pressures from local politicians are fairly strong. Many smaller projects in fact have political origins. (In the irrigation sector, these would be mostly minor irrigation schemes.) An MLA visiting a district will respond to constituent pressures by proposing a certain project to the department concerned. If the scheme fulfills the benefit-cost criterion, it is likely to be included, especially if its "regional" justification is strong. Larger schemes, of course, originate differently: some, especially inter-State schemes, may be suggested by a Ministry at the Center, while others correspond to the States' needs as perceived by the operating department of the State itself. In general, there is not that much room for inclusion of new projects, since expenditures on continuing schemes absorb a good part of a Department's allocation in most sectors.

1.58 It is also possible to whittle down outlays to meet the allocation by stretching out the implementation period of the project. There are some broad rules of thumb regarding the phasing of expenditures for a level consistent with the allocation to the sector. In general, for those projects which are near completion, or where other developments bring on the project's completion (joint development of irrigation and power), slippage would be avoided as much as possible. Nonetheless, if strong pressures are brought to bear for smaller schemes, especially if the regional justification is strong, slippage may be the manner in which the tradeoff takes place.

1.59 Postponement of projects on which works are yet to begin, for completion in a later Plan period 1/ is based on similar considerations: does postponement set off domino effects for other projects? Will the returns be greatly reduced by postponement? These questions are not answered, of course, in any scientific manner. No rate of return calculations, as a rule, are ever done, and the decisions made, therefore, are very much on the subjective side. This state of affairs is, however, more or less inevitable, since planning capacity at Departmental level is very inadequate. Departments generally have a small division responsible for planning, consisting of some 5-6 staff, and frequently they are technical people. (In the Irrigation Department they are all engineers.) Economists, therefore, still play a limited role in departmental planning work.

1.60 In sum, the criterion for project selection and the considerations on which the Departments resubmit their revised proposed outlays to the State Planning or Finance Department is an intuiting of the projects' "importance,"

1/ This is distinct from slippage. Projects would still be completed in the appropriate number of years, but the years would be, say two in the Sixth Plan period, and three in the Seventh, instead of the entire project being implemented in the earlier Plan period.

with a care for political exigencies, regional concerns, and interdependance between projects.

1.61 Coordination between the State's operating Departments takes place "as necessary" on a project by project basis. There is no formal inter-departmental coordination of the perspective Plan program. Instead, at the project levels, the initiating Department will pass a prepared scheme on to other Departments for information. In the case of the Irrigation Department, for example, this coordination is usually limited to the State Electricity Board and the Agriculture Department although the Irrigation Secretary could also coordinate with other departments (such as Tribal Welfare, if this seemed appropriate) which then certify their clearance. Once the clearance is received, the project moves ahead for administrative approval of the Finance Department.

1.62 It is this revised aggregation of departmental outlays, which comprises the State Plan presented to the Planning Commission in Delhi in December/January of each year and which forms the basis for the subsequent Plan discussions. The discussions in Delhi cover both micro and macro aspects of the State Plan. Each Department, during the week or so spent in Delhi, sits with the corresponding central Ministry, and discusses its program with them. The amount of central intervention in the State planning process during this period of discussions varies from State to State, and also within sectors. It is quite possible for the central Department or the Planning Commission to scrutinize projects individually, and to suggest that a project be dropped, or to insist on the inclusion of some scheme which that State has overlooked. In other cases, the Planning Commission discussions with the State Department may be more in the nature of a rubber stamp of the Department's project choice.

1.63 As the State Departments meet with their central ministerial counterparts, the State Finance Department representatives, State Chief Secretary and others meet with the Planning Commission to discuss State resource availability and the size of a workable Plan. In these discussions, the onus is generally on the State to "prove" that it has sufficient resources for the size Plan it has prepared. Initially, resource availability may be somewhat uncertain, since there are a number of unknowns, most importantly, the amount of central assistance. The Plan which the State is proposing at this first juncture is therefore a function of its best assessment of its own resources and the resources which are likely to be available from the Center. These discussions result in final agreement between the State and the Center on the resources actually available to the State (including additional resource mobilization) and the Plan size consistent with these resources. This is usually somewhat smaller than the State's Plan proposal to the Planning Commission.

1.64 The sectoral allocation of the Plan is also discussed at this time. National priorities find their way into State Plans via the guidelines of the Planning Commission.

1.65 After the Delhi discussions, for the departments, the whole procedure of whittling down begins again. The sectoral allocation, agreed to by the Planning Commission and State finance officials is returned to other State Departments, who must now trim down their proposed outlays according to the new ceiling through the same procedure as earlier. The final trimmed-down version of each Department's program is then resubmitted to the State Planning or Finance Department, which compiles them into a draft Plan. This final draft Plan is submitted to the Cabinet for discussion, presented to the legislature for approval and then finalized.

1.66 This planning procedure clearly has several weak links. One is the project selection process at State level, including the coordination between Departments, and the other is the involvement of the Center. Much more in the way of economic planning needs to be developed in the Departments, and at the State level.

1.67 The costs to the States of their weak planning capacity, resulting in sub-optimal project choices, responsiveness to political exigencies, and delays in implementation can be quite high. In the irrigation sector, for example, there is a chronic tendency for the Departments to begin expenditures on new schemes rather than to take stock and insure that investments necessary for full utilization of existing capacity have been made. Here, the finger should not be pointed exclusively at any one State in particular; rather it is a comment on the general level of development of departmental planning in the Indian States.

1.68 The Plan discussions with the Center do, in some measure, ameliorate this, since to some extent, the operating Departments learn from others' successes and failures in the course of the Plan discussions with the Center, since the Center's recommendations are a function of lessons gleaned from the experience of all States. In the end, of course, the development of strong planning capacity, both at the State level and in the operating departments as well is a sine qua non for States' progress.

Plan Evaluation

1.69 The capacity for evaluation of projects or monitoring Plan implementation is very limited. In the most superficial sense, there is no "implementation problem" since Plans are almost always implemented in the sense that nominal financial targets are achieved. This is true of almost all sectors. However, since the five-year ex-ante outlays are in constant prices, ex-post expenditures must exceed the nominal targets by the inflation rate capitalized over the Plan period, in order for "real" targets to have been implemented. Physical targets are, of course, another question again. Few States have expertise in performance budgeting in their operating departments. This, too, is a necessary development for the quality of planning at the departmental level.

VI. FINANCING WORLD BANK PROJECTS

1.70 The purpose of these papers is to review the financial position and prospects of the State Governments in order to investigate whether the five programs of expenditure currently proposed for Bank Group financing can be carried out as planned. This requires looking at the capacity and willingness of the governments to provide the necessary financial resources, which in turn requires a view of the States' past and future economic situation. Although analyzing a State's capacity and willingness to finance a particular sector's development program is a difficult task, it is no more so than, say, analyzing a country's creditworthiness and its capacity and willingness to pay foreign debts. It is also entirely necessary since in all the cases, the projects in relation to the State's budgets, and the Bank's overall exposure in each State are very large.

1.71 The basic task at hand is to review the financial position and prospects of the five State Governments in relation to ongoing and proposed projects assisted by the Bank Group to satisfy ourselves that these projects can be carried out as planned. Our concern here is not with the economic justification for the projects, the repayment capacity of the States, the physical implementation capacity nor the impact of these projects on the States' economy. Rather our interest is with the capacity and willingness of the State Government to provide the necessary financial resources for the implementation of these projects. Satisfying our curiosity on this requires at least a cursory look at the States' development and expenditure priorities and their financial outlook. The former requires some understanding of the State's economic situation; the latter calls for a view of its financial structure, its economic growth prospects and the course of financial relations between States and the Government of India.

1.72 In the papers which follow, different methodologies are developed to examine these questions. The papers begin by outlining each State's basic revenue position, the predominant sources of income, and "performance," to get an idea of each State's fiscal capacity and the degree to which it can be, or has been, exploited.

1.73 Expenditure policies are also examined, to yield an impression of the priorities of the State Governments with respect to the different sectors. On the non-Plan side, the studies assess the degree to which State Governments have been able to control non-development expenditure commitments and to prevent them from cutting into Plan uses of the monies. Using this information, projections of resource availability over the period of project implementation and the funds available to each sector are made. Finally, the project commitments are analyzed in the context of projected outlays in the sector in question to see whether or not the commitments can be easily accommodated in the budgeted level of outlays.

1.74 The conclusions are not all the same. In the case of Gujarat, Tamil Nadu and Madhya Pradesh, project commitments are easily accommodated even under ungenerous assumptions about levels of resource availability

and allocations to the sectors under review. In the case of Maharastra, the study concludes that there need be no cause for concern, but that the margin is almost being reached. The conclusions of the Orissa study were that the State is seriously over-committing itself to a program of expenditures in the irrigation sector for which resources may not be available.

CHAPTER II

MADHYA PRADESH: STATE PLANNING AND FINANCE

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October 1979

MADHYA PRADESH: TRENDS IN STATE FINANCE

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MADHYA PRADESH: TRENDS IN STATE FINANCE

Preface

This study was undertaken as part of the preparation of Madhya Pradesh Component Irrigation Project, as a result of the perceived need for a systematic review of the project financial implications in the context of State resource availability. Data for the study was obtained in the course of a mission to Madhya Pradesh in November 1979.

The paper is organized as follows: An introductory section provides a brief overview and the State of Madhya Pradesh, its history and salient features. Sections II and III review trends in State finances and expenditures comparing the relevant financial magnitudes with those of other States. The State Plan, and the State planning process are dealt with in sections IV and V. Finally, in section V the project investment program is discussed in the context of the resources likely to be available from the state Plan over the project implementation period.

I. THE STATE

2.01 The State of Madhya Pradesh was constituted nine years after independence on November 1, 1956, by integrating the former States of Vindhya Pradesh, Madhya Bharat, part of the former State of Madhya Pradesh and the princely State of Bhopal. It lies, as its name implies (Madhya-central; Pradesh-State) in the Deccan plateau in the heart of the subcontinent, and is entirely land locked. Being on the plateau, there is hardly any portion of the State which is less than 1,000 feet above sea-level and in its eastern hill region, large areas lie above 3000 feet.

2.02 The majority (80%) of the State is Hindi-speaking, as a result of the transfer, in 1956, of its eight Marathi-speaking districts to Bombay State under the States' Reorganization Act. Hill and tribal districts such as Bastar, where tribal dialects predominate, are an exception.

2.03 History. Tribal peoples, the ancestors of the modern Gond and Bhil tribes which still inhabit the easternmost region, were the earliest inhabitants of the Madhya Pradesh area. Since then, the area has featured in most aspects of Indian history. Early references to the city of Ujjain, are found in Buddhist scripture of the 6th century B.C. The region was part of the Mauryan empire and it was at Sanchi, in the heart of Madhya Pradesh, that Ashoka, the Mauryan emperor and first unifier of India built the great complex of stupas. In the 13th century, Muslims first invaded Madhya Pradesh, and one hundred years later, under Tulugq, Madhya Pradesh was firmly under Muslim dominion. With the decline the Moghul empire, Madhya Pradesh was successively conquered by the Marathas and then fell prey like most of the rest of central India from 1800-1830 to the thugee robber bands. The British pacified the area during the first half of the nineteenth century and by 1853 most of what is now in Madhya Pradesh was under British rule, forming, until 1947, the Central Indian provinces.

Salient Economic Features

2.04 Madhya Pradesh is often characterized as a "rich State inhabited by poor people." The State covers a vast geographical area - at 442,841 square kilometers, it is the largest state in India, covering 13% of the nation's area. The northermost tip extends almost as far as Agra, the southern extremity reaches as far south as Hyderabad. Orissa and Gujarat define its east-west extension. Madhya Pradesh is also a populous State. Its population at the 1971 census was 41.7 million, making it the sixth largest State in terms of population. Just over 20% of this population is tribal, giving Madhya Pradesh the largest concentration of tribal peoples in India. Moreover, thirty-three percent of the State's inhabitants belong to the so-called "backward classes", which includes scheduled castes and tribes; this places Madhya Pradesh just slightly behind Orissa in terms of the proportion of disadvantaged inhabitants of the State. This large population is distributed sparsely across the State. The density is 94 persons per square kilometer (in contrast to the all-India average of 167). This results in inadequate access to communication means and transport for many parts of the State. As

elsewhere in India, the bulk of the inhabitants live in rural areas, but the proportion is significantly higher: 83.7% as opposed to 80.1% for the country as a whole. The existing state infrastructure and development needs are put under further strain by the distribution of the rural population. Madhya Pradesh has the largest number of villages of any State (70,883) and the villages, with an average population of 428, are very small. Only in Orissa is the average population per village smaller, (408) while the all-India average is 796. From the point of view of the Draft Sixth Plan, "resources must cover a larger number of villages, more sparsely populated and more widely scattered over a much wider area than most other States."

2.05 Madhya Pradesh is a poor State, almost regardless of what indicator one chooses. Per capita income in 1975/76 was 80% of the all-India average of Rs 981, so that Madhya Pradesh occupied the position of 13th out of 15 States in the three years ending in 1975/76. It has not strayed far from this ranking in the past decade, having alternately placed 11th in 1964/65 and 14th in 1969/70. The differential between the incomes of Punjab, India's richest state, and Madhya Pradesh have widened in this decade: in 1964/65, per capita income of Punjab was 1.5 times the latters; by 1975/76 the gulf had widened to 2.1 times.

2.06 Ironically, Madhya Pradesh has among the richest natural resource bases of any State in India. The State is endowed with vast reserves of many minerals, including coal, iron ore, bauxite, manganese, limestone and copper, most located in the eastern region. The three very large rivers - the Mahanadi, Narmada and Chambal - provide huge hydro-electric potential. Madhya Pradesh is estimated at having 11% of the country's total hydro-electric potential - the second largest capacity of any other State except Assam. These same water resources could provide irrigation for agriculture as well. Teak and pine forests also comprise part of the natural wealth of the State: Madhya Pradesh has 26.7% of India'a total forest resources: The pine forests are suitable for pulp and paper industries; the teak tracts provide potential for the development of a high quality export-goods industry for which there is a highly income elastic world demand and are among the potentially most valuable resources of the State. But this is where the richness ends.

2.07 Madhya Pradesh's low per capita SDP is due, as might be expected, to the excessive dependence of the State economy on low productivity agriculture. Few benefits of the "Green Revolution" have made their way yet to Madhya Pradesh. In 1970/71, only 7% of net sown area was irrigated. This has risen to 12% today, as compared with the all-India average of 23%, and 75% in Punjab. Per hectare consumption of fertilizers is also extremely low: Madhya Pradesh farmers applied 4.8 kg per hectare in 1974, 30% of the all-India average, and one tenth of the amounts used in Punjab. Moreover, the low population density, poor communication and transport infrastructure, and low levels of education all conspire to make extension activity more difficult and have also contributed to the slow development of agriculture in the State.

2.08 Industry in Madhya Pradesh has also developed slowly not withstanding the potential for growth. The contribution of industry to SDP is small, less than 20% in 1977. Employment in manufacturing accounted for only

6.6% of total workers, as compared with 9.4% in all-India, and percentages ranging from 13-16% for Tamil Nadu, Maharashtra, West Bengal and Kerala.

2.09 The potential for a larger and more diversified industrial sector is there: Madhya Pradesh's huge hydro-electric potential should serve to attract industries which require an assured source of power. However, the development of this power infrastructure is still far behind the rest of India. Industrial power consumption is still very low: in Madhya Pradesh it is only 49 kwh per capita compared with the figure of 61 kwh for India as a whole, and with 130 kwh and 110 kwh for Maharashtra and Gujarat, respectively. Household consumption of power is equally low: this is due to low incomes, and to the very small fraction of villages electrified: only 17% of Madhya Pradesh's villages are electrified, compared with 33% in all-India, and 98% and 95% in Tamil Nadu and Kerala respectively. In sum, power development lags far behind. This is the reason behind the great emphasis, in the Plan, on the power sector.

2.10 Because of Madhya Pradesh's large population and its low density, the communications network of the State is crucial for the success of the State's development effort. At this point, unfortunately, the sector still represents a major hindrance to the State's development and intensifies problems in other sectors. There are few major highways in Madhya Pradesh: Madhya Pradesh ranks 13th out of 15 States with respect to density of highway length - 10.29 km of total highway length in the State per 100 sq. km. compared with 30.0 km in the all-India figures. The result is that vast areas of the State are virtually unaccessible, which in turn hinders exploitation of mineral and forest resources, inhibits commercialization and modernization of agriculture, not to mention the severe social problems (i.e., development of tribal areas) engendered by the deficient transport network. Railways are also seriously deficient: there is no comprehensive system linking all parts of the State; instead, the railway links the major industrial area with ports on the east coast and with one or two other large cities in other States. An adequate communication network is thus crucial for success of network is thus crucial for success of almost all other development efforts, especially for the exploitation of Madhya Pradesh's tremendous natural resource base.

2.11 The inhabitants of Madhya Pradesh are also vastly under-serviced in areas such as education and health. Literacy rates in Madhya Pradesh are amongst the lowest in India. While the percentage has risen substantially since the 1951 census, it has risen similarly all over India, and Madhya Pradesh's rank continues to be 12th-13th out of 15 States. Kerala, by contrast, has ranked in first place, with literacy rates of 40.7% and 60% in the 1951 and 1971 census, respectively. Similarly, medical facilities are poor, rural water supply is deficient, and many basic needs are far from being met.

2.12 Notwithstanding the desperate lack in the basic needs sector and that basic needs are very far from being met, the development strategy of the State emphasizes--rightly so--the development of agriculture, irrigation and power, as the only means of raising per capita incomes. The State's stress on the development of the "production sectors" has left very little room for developing social services infrastructure.

II. FINANCIAL RESOURCES

State Revenue Receipts

2.13 State revenue receipts are those receipts for which the State has no repayment liability and which are used to finance items of revenue expenditure. They consist of state tax revenues--the most important--non-tax revenues, the next largest, and grants from the Central Government. These categories will be treated in turn. Table 1 details the trends in each category since the beginning of the Third Plan.

2.14 Revenues from taxes make up 60% of the State's total revenue receipts. About two thirds of the tax revenues are from taxes which the State imposes and collects itself, the remainder are taxes which the State receives through revenue sharing arrangements with the Central Government.

2.15 The States, Madhya Pradesh included, recéive a share in four central taxes: the income tax, central excise duties, the Center's "additional" excise duties and the estate duty. These shared taxes, known as devolutions, have made up from 20 to 25% of Madhya Pradesh's total revenue receipts and 35% of total tax receipts. Since the share of central taxes is a function of the award made quinquennially by the Finance Commissions, their buoyancy, or elasticity is not a relevant concept here. Madhya Pradesh, has in general, done well by the Finance Commissions. Over the last 18 years; shared taxes have provided a growing source of funds and the category has grown faster than the State's revenues from its own taxes.

2.16 The State's own taxes make up about 40% of its total revenue resources. Three taxes account for almost two-thirds of Madhya Pradesh's tax revenues: the sales tax, the excuse duty and the central sales tax. The sales tax alone contributes close to 40% of the State's tax receipts - a result of the growth in the State of the volume of trade and increases in the price level. With an elasticity 1.61, of it is the most responsive tax in the fiscal system.

2.17 Second in importance is the State excise duty which contributes about 15% of State tax revenues. The excise duty is levied on narcotics and liquor and its growth is related to revision of rates, increases in the price of county liquor and the end, in 1967, of prohibition in Madhya Pradesh. The tax, with an income elasticity of 1.2 is also closely related to increased State prosperity.

2.18 The central sales tax--levied by the Center, but assigned to the States--is the third important tax, making up about 10% of total tax revenues. Receipts from this tax are a function of the volume of interstate trade. This tax has grown nicely over the period. Its elasticity is 1.71%, part of which is due to the increase in the tax rate in 1975, from 3 to 4%.

Table 1. MADHYA PRADESH REVENUE RECEIPTS

	61/2 a/	62/3 a/	63/4 a/	64/5 a/	65/6 a	66/7 a/	67/8 a/	68/9 a/	69/70 a/	70/1 a/	71/2 a/	72/3 a/	73/4 a/	74/5 a/	75/6 a/	76/7 p/	77/8 e/	% growth 1961/2-77/8	Elasticity w.r.t.
1. Share of Central Taxes 5/	11.60	15.48	18.08	17.80	19.27	25.06	27.58	33.34	46.65	52.96	63.16	68.73	86.28	93.23	121.50	129.67	136.65	16.0	1.48
2. State taxes--total 4/	29.23	32.58	39.66	46.96	48.96	53.48	63.54	69.85	79.92	86.58	55.14	103.23	128.38	172.83	231.46	249.05	269.46	13.5	1.26
i. Land revenue	8.78	9.63	10.62	10.93	6.99	5.50	7.26	7.89	7.82	7.30	7.64	7.46	11.34	14.64	17.29	13.70	7.96	2.2	0.24
ii. State excise duty	5.71	5.78	6.75	7.99	8.94	10.13	11.83	13.02	14.49	15.98	17.44	19.56	22.64	29.64	35.41	38.03	41.37	12.8	1.19
iii. Taxes on vehicles	2.11	2.18	2.28	2.58	2.85	2.93	3.14	3.27	3.68	4.19	4.53	4.76	5.45	6.38	7.59	8.61	9.12	9.3	0.86
iv. General sales tax	5.89	7.04	8.87	12.10	14.04	16.02	18.98	21.35	25.37	28.17	30.98	38.68	42.91	58.95	83.57	82.84	77.94	16.6	1.61 8/
v. Central sales tax	1.37	1.74	2.78	3.67	4.54	5.99	7.66	8.09	10.02	10.64	11.10	13.99	16.14	21.14	27.43	31.75	28.06	18.5	1.70
vi. Sales tax on motor spirit 7/	0.81	0.82	1.01	1.09	1.42	1.54	1.60	1.77	2.26	2.16	2.13	-	-	-	-	-	-	9.9	-
vii. Stamps	1.74	1.88	2.23	2.46	2.72	3.04	3.76	4.23	4.63	5.04	5.67	6.36	6.79	8.54	11.74	11.15	12.96	12.6	1.17
viii. Registration	0.27	0.25	0.29	0.33	0.47	0.48	0.60	0.61	0.69	0.73	0.82	0.95	1.05	1.17	1.34	1.42	1.51	11.6	1.07
ix. Entertainment tax	0.82	0.92	1.11	1.30	1.67	1.76	1.79	1.98	2.23	2.62	3.01	4.35	4.66	6.08	7.21	7.99	8.11	14.8	1.37
x. Electricity duty	1.01	1.09	1.20	1.53	1.68	2.03	2.37	2.62	2.87	3.16	3.61	4.41	5.14	7.51	7.60	7.99	8.52	14.2	1.32
xi. Taxes on roads	-	-	0.83	1.07	1.36	1.43	1.44	1.66	1.77	2.11	2.31	2.53	2.97	3.14	3.75	4.61	4.85	10.7	1.05
xii. Taxes on passengers	0.65	0.86	1.55	1.78	1.85	2.02	2.12	2.43	2.81	3.13	3.50	5.37	7.22	7.62	9.74	11.73	12.07	16.9	1.57
xiii. Taxes on professions	0.06	0.07	0.12	0.11	0.12	0.31	0.51	0.48	0.62	0.73	0.71	0.81	1.15	1.04	1.51	1.69	1.46	21.4	1.98
xiv. Urban property tax	-	-	-	-	0.28	0.26	0.45	0.44	0.64	0.62	1.43	1.55	1.73	2.05	3.15	0.94	0.13	2.2	0.58
xv. Surcharge on sales tax	-	-	-	-	-	-	-	-	-	-	-	-	1.80	3.65	6.38	11.98	17.22	-	-
xvi. Entry tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.99	11.48	-	-
3. Non-tax revenue 3/	20.81	18.83	32.30	26.83	35.31	40.14	44.50	52.55	58.19	57.53	65.71	73.73	89.42	117.86	145.83	169.80	180.42	13.6	-
i. Interest receipts	4.90	1.69	13.76	5.61	6.13	8.51	9.16	12.34	14.88	14.24	16.09	16.64	14.37	17.32	22.39	28.27	16.99	11.0	-
ii. Public works	0.53	0.62	0.78	0.87	1.06	0.93	0.81	0.90	1.28	1.11	1.47	1.80	2.16	2.78	3.70	3.59	4.09	12.7	-
iii. Irrigation	0.74	0.95	0.80	0.99	1.05	1.00	1.38	1.71	1.86	1.75	1.89	1.98	2.73	4.49	6.16	5.34	5.22	13.2	-
iv. Forests	10.38	10.74	12.05	13.37	17.20	19.41	20.65	75.20	75.86	24.40	30.68	36.29	49.29	68.38	76.81	88.37	103.80	14.3	-
v. Others 2/	4.26	4.82	4.91	5.99	9.87	10.29	12.50	12.40	14.31	16.03	15.58	17.02	20.87	24.89	36.77	44.73	50.32	-	-
4. Transfer from funds	-	-	-	-	-	-	0.11	0.73	0.73	0.37	0.74	-	-	-	-	-	-	-	-
5. Grants from Center 5/ 6/	16.62	14.69	14.65	18.86	19.51	19.18	31.83	23.40	30.07	27.71	42.29	52.75	47.78	39.44	47.97	65.51	78.76	-	-
i. Statutory grants 1/	3.00	3.00	3.00	3.00	3.00	2.70	2.70	2.70	-	-	-	-	-	-	-	-	-	-	-
ii. Grants for centrally sponsored schemes	-	-	-	-	-	-	-	6.59	9.78	9.78	13.95	20.0	23.84	17.08	27.26	41.58	50.23	-	-
iii. Grants for natural calamities	-	-	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-
iv. In lieu of tax on railway fares	1.04	1.04	1.04	1.04	1.04	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	-	-
v. Agricultural wealth tax	-	-	-	-	-	-	-	-	-	-	0.26	-	-	-	-	-	-	-	-
Total State Revenue Receipts 5/	78.30	81.60	104.69	110.45	123.06	137.86	167.46	179.14	214.83	228.15	267.66	296.65	351.83	423.37	546.77	614.37	679.37	13.7	1.27

a - actuals
p - preliminary
e - estimate

1/ Grants from Finance Commission.
2/ Includes: administrative service, social & developmental services, and miscellaneous receipts.
3/ Source: G.O.M.P. Finance Department.
4/ Source: G.O.M.P. Finance Department.
5/ Source: 1961-68, "Budgetary Trends"; 1968/9 - 72/3; G.O.M.P. Finance Department, Form II, 1973/4 - 77/8, Report to Finance Commission of G.O.M.P.
6/ Includes all grants to the state government, including the 30% grant portion of Plan assistance from the Planning Commission. The loan portion of this assistance appears in the Capital Budget.
7/ This became part of the General Sales Tax in 1972.
8/ Includes surcharge on sales tax.

2.19 There are a number of other taxes such as the stamp tax, the tax on passenger transport and the entry tax which presently each contribute about 5% or so to tax receipts. The stamp tax has grown more slowly than the total of receipts and is gradually becoming unimportant. Passenger transport taxes, on the other hand, with the development of transport infrastructure, have grown very rapidly, and have an elasticity of 1.57. This is likely to increase further in the future, as further expenditures are made in the transport and communications sector.

2.20 The remaining taxes, the entertainment tax, electricity duty--a function of power development--taxes on vehicles and land revenue among others, each make up less than 3% of revenues. The last, land revenue, was a traditional mainstay of the State's fiscal system: as recently as 1960, it made up 30% of total tax receipts. Since then, however, it has grown at less than 2.2% per annum and is fast becoming quite insignificant.

2.21 Overall, State tax revenues have grown at 13.5% per annum since 1961. In real terms, this performance is diminished somewhat, since the price level has risen also, by about 5% per annum. Nonetheless, an annual growth of 7-8% in real terms bespeaks good tax effort. Part of the explanation also lies in the fact that Madhya Pradesh began, in the early 1960's with very low levels of taxation - own tax revenues as a fraction of SDP were only 3.3%. The proportion has risen to 6.1% in 1977, which, in relative terms, is better than some states far wealthier than Madhya Pradesh. 1/

Non-Tax Revenues

2.22 Non-tax revenues have grown at the same rate as tax revenues, 13.6% per annum. Amongst the various types of non-tax receipts, as one might expect, forest receipts have grown the most quickly, at 14.3% per annum. Forests occupy a very important place in the economy of Madhya Pradesh. Receipts from forests accounted for 56% of total non-tax receipts in 1977/78. Madhya Pradesh earns twice as much from its forestry development than does Uttar Pradesh and almost three times as much as Karnataka, although per hectare yields are not high due to the low level of investment in forests. If forestry receipts are to continue to grow as a source of non-tax revenues, investment is necessary.

2.23 Irrigation receipts have grown at 13.2%, more slowly than the State revenue receipts as a whole. Included here are both the water rates collected under the Madhya Pradesh Irrigation Act, as well as income from provision of water to municipal corporations and public sector undertakings in the State.

2.24 Non-tax income from public works, which derives basically from building rentals and toll fees on government owned roads and bridges, has also been growing less rapidly than overall revenues, at 12.3% per annum.

1/ See R. Chelliah. "Tax Effort of Indian States."

2.25 Interest receipts have grown the most slowly of all, at just under 11%. The category is comprised mostly of interest payments to the State from the State Electricity Board, this is a residual payment for the Board, being a function of its repayment capacity, since interest due on other obligations has priority.

2.26 The category "others" is a catch-all for administrative services, social and development services and miscellaneous receipts. The first consists of administration of justice (sale of unclaimed properties, court fees, etc.); jails (income from sale of jail manufactures); police and supplies (collection of license fees). Under social services income come education (fees from schools); medical and public health (medical fees and sale of medicines, fees for preparing town drainage plans); agriculture (receipts from fisheries and farms operated by the State) and cottage industries and cooperation. Receipts from mines and minerals also come under this head.

2.27 In general, the trend in non-tax receipts, unlike tax receipts, is a function of the level of services provided, the development of the sector and in the case of the State Government's commercial undertakings, the State's management of these enterprises. It is not, in any way related to the growth of SDP, and therefore, no elasticities have been calculated.

2.28 The final State revenue receipts to be discussed are the grants from the Central Government. The first of these are statutory grants, which are provided to the State through the Finance Commission's award, and for which Madhya Pradesh has not been eligible since 1968, the last year in which it had an ex-ante budget deficit. Since then, Madhya Pradesh, has had, after revenue sharing, a budgetary surplus in each year.

2.29 On account of natural calamity, Madhya Pradesh has received one grant in the period under review, in 1968/69.

2.30 Centrally-sponsored schemes have become increasingly important for Madhya Pradesh. Receipts from this source have gone up 7-fold in less than 10 years, indicating the growing importance of these schemes in the State expenditure picture.

2.31 The grant in lieu of railway fares and the agricultural wealth tax, which originated as shared taxes do not amount to very much.

2.32 To summarize, revenue receipts in Madhya Pradesh have been fairly buoyant over the period, growing at almost 14% per annum in a period in which prices increased at slightly over one-third that rate. Because revenue expenditures have also been kept under control, this has enabled Madhya Pradesh to have a hefty surplus on revenue account in the past decade, which has been carried forward to help finance the State Plan. The following section discusses these trends in revenue expenditures.

III. REVIEW OF STATE EXPENDITURES

Revenue Expenditures

2.33 Expenditures in Madhya Pradesh, as in other States, are classified under two headings: revenue expenditures and capital expenditures. Madhya Pradesh has an explicit strategy of containing non-Plan expenditures to maximize the budgetary surplus and carry over for Plan finance. The State has pursued this strategy through numerous measures.

2.34 Economy measures have included postponement of or less than full adjustment for increases in State employees' pay scales, withholding of dearness allowances, increases in the proportion of State employee salaries held in escrow under compulsory savings schemes, restrictions on printing and paper, cuts in expenditures on vehicles, telephones and furniture, reductions in travelling allowances and official tours, reduction in new subjects to be taught in schools, and closing of polytechnics, and bans on filling of certain posts, to name just a few. It is frequently contended that expenditures are being squeezed to the point where it impinges on the efficiency of State administration.

2.35 Madhya Pradesh's success in maintaining a large revenue account surplus is also a result of its emphasis, in its development strategy, on the "production sectors", irrigation, power and agriculture. Since these are priority sectors for the Central Government as well as being capital intensive, most expenditures in these sectors come under the Plan, and not under non-Plan capital or revenue expenditure. Their capital intensity has another result. Expenditures on Plan schemes, whether capital or current in nature, are financed through the Plan, continuing expenditures on completed Plan schemes, such as maintenance and wages, become the responsibility of the State Government and must be financed as ordinary non-Plan revenue expenditure. Their capital intensity therefore means that upon completion, they generate very little in the way of continuing expenditure--such as on wages or other ongoing costs--which must be borne by the State as committed expenditure at the termination of the Plan. Thus, the State's surplus derives almost directly from the fact that expenditures in the social sectors are very low: taken together expenditures on transport, communication, education, health and other social services make up less than 20% of Plan outlays. These are the sectors, of course, where the State committment <u>after</u> the Plan, would be the largest. Continuing schemes (such as the continuing subsidy for purchase of medicines, in a health scheme, which would be an element of committed expenditure in a health scheme in addition to wages and overheads) can be quite burdensome for the State, if a large proportion of State Plan expenditures is in sectors where committed expenditures are high.

2.36 In Madhya Pradesh, then, there is a less sunny side to the large surplus on current account: it, and a larger Plan is achieved at the cost of social infrastructure expenditures. This is a tradeoff about which much has been said--this paper will not discuss it further.

2.37 Revenue expenditures are shown in table 2. Total revenue expenditures have grown at 12.4% since 1961, although in real terms this is, of course, much lower, about 7%. 1/ The State spends far more on revenue than on capital account: the present ratio is about 80:20. However, developmental expenditures have always made up the bulk of revenue expenditures throughout the two decades, and have also been the fastest growing. In 1978, education, public health, and agriculture and allied sectors together made up 42% of the total, and they have grown at 12%, 13.3%, and 16.7%, respectively. Moreover, of these expenditures on revenue account, some 10-20% of revenue expenditures are Plan expenditures, as Table 3 shows. In the developmental sectors alone, the Plan proportion has been 20-25% of revenue expenditure. Table 3 also shows the phenomenon of a spurt in "committed" expenditures at the end of every Plan period as completed Plan schemes are continued under state aegis, generating additional expenditure to be met from the State's revenue account. At the end of each Plan period, non-plan expenditures jump: in 1965/66, from 80.2% of the total to 88% immediately the following year. Again the same thing in 1968:69: non-Plan expenditure rise discontinuously from 84.5% to 89% in 1969. A similar spurt can be observed at the end of the Fourth Plan period when non-Plan expenditures go from 81% to 87% of the total.

1/ Based on an increase of the all Indian price level of about 5.5% per annum.

Table 2

MADHYA PRADESH

REVENUE EXPENDITURES

(Rs Crores)

	1961/2	1962/3	1963/4	1964/5	1965/6	1966/7	1967/8	1968/9	1969/70	1970/1	1971/2	1972/3	1973/4	1974/5	1975/6	1976/7	1977/8
TOTAL REVENUE EXPENDITURE	80.49	85.64	97.42	106.00	125.67	155.61	176.93	170.13	191.48	204.06	227.71	274.99	334.38	367.72	428.32	502.22	622.70
Non-developmental																	
1. Collection of taxes & other revenues	3.62	3.86	3.88	4.23	4.66	5.12	5.92	6.20	7.07	7.27	79.84	97.00	11.02	14.00	14.73	16.93	21.36
2. Debt service	4.99	6.26	13.48	11.59	15.21	21.76	25.33	27.78	27.53	28.84	307.09	326.09	34.79	34.02	44.11	45.41	56.38
3. Administrative services	13.79	13.76	14.13	15.15	16.85	19.10	22.54	23.15	25.96	27.15	297.23	328.49	44.15	45.24	50.43	49.96	62.35
Developmental																	
4. Education	18.19	20.54	23.50	26.70	29.95	31.14	39.67	40.49	46.83	49.47	559.28	706.12	79.71	92.47	98.65	106.42	127.58
5. Medical & Public Health	9.50	9.07	7.77	9.64	10.89	11.46	13.81	15.48	18.74	19.70	209.12	249.35	34.74	42.86	37.15	62.73	67.62
6. Agriculture, Animal Husbandry & Cooperation	4.26	4.80	5.84	7.17	8.60	8.33	10.89	12.71	13.38	15.37	170.84	204.75	25.40	33.53	45.55	47.50	66.13
7. Industries	1.26	1.33	1.15	1.14	1.14	1.11	1.11	1.07	1.19	1.38	14.16	17.56	2.22	2.62	2.96	3.58	5.34
8. Community Development 1/	5.23	5.60	5.62	6.74	7.46	6.77	3.87	3.11	3.25	5.03	7.96	10.58	-	-	-	-	-
9. Public Works 1/	5.50	6.69	7.00	6.37	7.46	8.03	10.17	10.80	13.27	13.46	15.11	19.87	-	-	-	-	-
10. Forests	3.81	3.96	4.09	4.75	5.46	5.94	6.54	6.92	7.63	7.53	8.74	9.3	2.67	36.44	39.90	46.01	55.70
11. Other 2/	10.08	9.74	10.90	12.47	17.94	36.79	37.01	22.37	26.57	28.80	41.07	53.28	78.71	86.54	94.84	123.66	160.24

1/ After 1973/4, included in "other".

Source: "Budgetary Trends" 1961/2 - 1972/3
1973/4 - 1977/8: M.P. Report to the 7th Finance Commission

(1) Budgetary heads: 220, 224, 230, 239, 240, 241, 245, 247
(2) Budgetary heads: 248, 249
(3) Budgetary heads: 251, 252, 253, 254, 255, 256, 258, 259, 260, 265
(4) Budgetary heads: 277
(5) Budgetary heads: 280, 281, 282
(6) Budgetary heads: 298, 305, 306, 307, 308, 309, 310, 311, 312, 314
(7) Budgetary heads: 320, 321, 328
(8) Budgetary heads: 313

2/ Includes pensions and miscellaneous.

Table 3: PLAN AND NON-PLAN REVENUE EXPENDITURES AS A PERCENTAGE OF TOTAL REVENUE EXPENDITURES

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
(1) Revenue Expenditure	80.5	87.7	97.4	106.0	125.7	155.6	177.0	170.1	191.4	204.0	227.7	275.0	334.0	386.7	448.3	502.3	584.9
(2) Plan Expenditure	14.7	18.9	19.5	23.5	26.8	19.4	21.2	24.9	22.0	26.3	35.7	38.6	64.1	52.0	61.4	72.7	84.9
(3) Non-Plan Expenditure	65.8	68.8	77.9	87.5	98.9	136.2	155.8	145.2	169.4	177.7	192.0	216.4	270.3	334.7	366.9	429.6	500.0
(4) (2) as a % of (1)	17.7	20.0	19.5	22.0	20.8	12.0	11.9	15.0	11.0	12.8	15.0	21.0	19.3	13.0	14.0	14.0	14.3

Source: "Budgetary Trends" 1961/62 - 1972/3 1973/4 - 1977/78: GOMP Finance Department

2.38 Turning again to Table 2, to non-developmental expenditure categories, debt service has grown at the same rate as total revenue expenditures, and amounted in 1977/78 to 9% of the total. Expenditure on administrative services has also been kept low. This category has grown at only 9.9% per annum over the period, and makes up a declining fraction of total revenue expenditures down from 17% in 1961, to 10% in 1977/78. Expenditures on collection of taxes has equally been kept low: it has grown at only 10.9%, and accounts for 3.3% of revenue expenditure. Expenditures in these two categories have been tightly controlled by Madhya Pradesh government, in an attempt to minimize the current expenditures drain on Plan resources. In general, the increases which have taken place are distributed across revision of pay scales (which follow the central government adjustments), limited revision of dearness allowance 1/ and some growth in the number of State employees. Given that the State Government has, over the past two decades, undertaken increased responsibility and increasing regulatory functions, these growth rates are very restrained.

2.39 Expenditures on forests and industries stand apart from others since they are expenditures on income-producing activities. Forest expenditure has grown the most rapidly of all sectors, just over 17% per annum, 1-1/2 times the rate of total expenditures as a whole. This growth rate cannot be evaluated without taking into account the yields produced for the State since whatever is spent on reforestation and conservation will later be reflected, many fold, in increased state revenues at a later date.

2.40 To summarize, developmental portion has always been larger than non-development proportion. This indicates that Madhya Pradesh has been quite successful in controlling those current expenditures on routine State administration in the interests of a larger Plan size and emphasis on development in the revenue budget.

Capital and Plan Expenditures

2.41 The bulk of capital expenditure is on Plan account. On average, less than 3-5% of capital expenditures are on non-Plan items of expenditure, as the table below shows. Capital expenditures have grown at 13.6% per annum, faster than revenue expenditures, indicating that Madhya Pradesh has been successful in its goal to maximize the resources put into development. The Plan expenditures given in Table 4 show that they have grown slightly faster than capital expenditures as a whole, at 14% per annum.

The Contingency Fund in Madhya Pradesh has been increased every few years in the budget process, and now stands at Rs 20 crores, which is not large by relative standards.

1/ Madhya Pradesh has deliberately withheld certain dearness allowances to affect economies.

Table 4: Plan and Non-Plan Expenditures as a Proportion of the Capital Budget

	1961/2	1962/3	1963/4	1964/5	1965/6	1966/7	1967/8	1968/9	1969/70	1970/1	1971/2	1972/3	1973/4	1974/5	1975/6	1976/7	1977/8
(1) Capital Expenditures	17.6	23.4	30.0	29.2	44.5	16.7	23.7	23.9	27.5	31.2	52.1	47.0	64.5	81.1	84.1	129.7	135.5
(2) Plan	16.7	20.5	26.4	25.5	30.3	26.8	23.4	22.4	24.0	27.8	44.9	54.0	60.9	76.9	79.3	127.7	135.9
(3) Non Plan	-0.94	2.8	0.6	3.7	14.2	-10.1	0.3	1.5	3.5	3.4	7.3	-6.9	3.6	4.2	4.8	2.0	-0.4

Composition of Plan Expenditures

2.42 Throughout the period, but especially since the Fourth Plan, Madhya Pradesh has focused its efforts on three sectors: irrigation, power and agriculture. In the Sixth Plan period, the State expects to spend nearly 80% of all Plan outlays in these three sectors combined. Power is being undertaken with the greatest intensity, taking up 38% of Plan expenditure. All other sectors--mineral and industrial development, transport and communication and human resource development have received far lower priority. Expenditures in the social service sector specifically have fallen from 20.2% of the Plan in the 1961/62-1965/66 period to 14.5% in the last Plan period, with the decline the largest in education and health. Industry and mineral development has also been neglected in relative terms. In both these sectors, as well as in transport and communication, expenditures between the Fourth and Fifth Plan periods declined in real terms, although a real increase is likely in the next Plan period.

2.43 It is very difficult to evaluate these levels of Plan expenditure and the Plan strategy. They can be viewed in relation to deficiencies in infrastructure in each sector, or in relation to per capita expenditures in other States, or the Plan strategy can simply be taken as given.

2.44 As regards irrigation, there is no question that present levels of infrastructure development in the sectors are very low. Madhya Pradesh has vast irrigation potential both from major rivers as well as groundwater. But inadequate development of irrigation facilities--less than 11% of net sown area is presently irrigated--has led to low levels of productivity in areas where the agricultural potential is immense. The goal in this sector is to bring irrigated acreage up to the national average as soon as possible.

2.45 Intensive power development is appropriate according to all of the above criteria--installed capacity is low by interstate standards, as is consumption. But more important, it is felt that development of all other sectors, and the concomitant development of the State, creation of employment, and attraction of industries is crucially dependent on this essential input. In the Sixth Plan, Rs 1,194 crores will be spent on power development. The bulk of this will be spent on power generation, with the remainder split between transmission and rural electrification. In reality, the latter is a bit understated since institutional finance (mainly ARDC) will increase the size of the rural electrification program. Although Madhya Pradesh had a surplus of power until about 1973, it presently has a power deficit, 1/ estimated at about 200-300 MW in the peak season (1978), and the power shortage is expected to continue through the end of the Plan period. The emphasis in power development is on hydel; the goal is to achieve a hydel-thermal mix of 25:75 by the end of the Seventh Plan.

1/ Due to delays in hydel projects which depended on interstate tribunals.

2.46 In industry, the State is focussing on the development of infrastructure facilities and development of industrial districts. Madhya Pradesh has tremendous industrial potential--as is clear from the abundant mineral and forest resources. At the present time, 36 out of the 45 districts are industrially backward and 21 districts are without a medium-sized industry. In short, Madhya Pradesh lags far behind other States in this sphere. The Plan envisages developing more industrial estates in "growth points", continuing infrastructure development in existing industrial areas such as Indore, Bhopal, Jabalpur, Durg and Gwalior, among others, and assisting the promotion of new industries through medium- and long-term loans of the Madhya Pradesh State Finance Corporation. To provide employment and help the economically weaker sections in rural areas, about 40% of the Plan expenditure in industry will be spent on handlooms, sericulture, handicrafts, and village and small scale industries. In addition, the fiscal incentives for industry such as sales tax subsidy, sales tax loan, power subsidy and interest subsidies will be continued.

2.47 Madhya Pradesh mineral resources are vast. It has been estimated that the State has 50% of India's total manganese, 44% of its bauxite resources, 30% of high grade iron ore and 25% of its coal reserves. Copper and diamonds are also located there. Exploitation is still very underdeveloped, but the Madhya Pradesh State Mining Corporation has high hopes. The 15% of Plan expenditure for exploitation is intended to help expand its activities in the state. The bulk (85%) of the Sixth Plan expenditures in this sector will go to exploration.

2.48 In view of the desperate needs of Madhya Pradesh in the transport sector, an urgent goal was to bring the level of pucca road construction (9.5 km per 100 sq km) up to the all India average (16.5 km) by 1983/84. The quantum of funds and organizational weaknesses make this sort of an effort impossible, and this goal will probably not be reached until the Seventh Plan period. Development of passenger transport is also crucial since the State is so poorly served by the rail network--about 15% of Sixth Plan will go to the further expansion of the Madhya Pradesh State Road Transport Corporation. Tourism development will take up less than 1% of this sector's Plan expenditures.

Social Services

2.49 The principle of universal primary education is a very distant goal in Madhya Pradesh. The national working group on universalization of elementary education identified Madhya Pradesh among the eight States in which this target will be very difficult to meet. In the Sixth Plan, Rs 108 crores will be allocated to this sector, the bulk of it to primary education.

Table 5: TREND OF PLAN EXPENDITURES - MADHYA PRADESH
(in Rs Crores)
(% in parentheses)

		II	III	Annual	IV	V	VI (Draft Plan)
I.	Agriculture & Allied Sectors	41.56 (27.9)	70.78 (24.7)	51.93 (23.2)	106.22 (21.5)	182.97 17.4	548.48 17.4
II.	Cooperation	-	-	-	17.92 (3.6)	16.51 (1.6)	36.94 (1.2)
III.	Irrigation	29.17 (19.6)	37.02 (12.9)	20.58 (9.2)	78.00 (15.1)	205.00 (19.4)	681.72 (21.6)
IV.	Power	27.75 (18.6)	89.07 (31.1)	100.60 (44.9)	133.76 (27.1)	424.15 (40.2)	1,194.37 (37.8)
V.	Industry & Mining	3.89 (2.6)	8.05 (7.8)	5.16 (7.3)	11.71 (2.4)	18.77 (1.8)	56.41 (1.8)
VI.	Transport & Communication	8.88 (6.0)	15.44 (5.4)	13.30 (5.9)	40.79 (8.2)	49.65 (4.7)	146.67 (4.6)
VII.	Social Services	30.04 (20.2)	59.50 (20.8)	25.36 (11.3)	104.50 21.1	152.91 (14.5)	486.30 (15.4)
	i. education	14.74 (9.9)	27.23 (9.5)	7.88 (3.5)	25.3 (5.1)	27.58 (2.6)	108.89 (3.5)
	ii. health	9.58 (0.4)	21.53 (7.5)	12.01 (5.4)	46.01 (9.3)	70.95 (6.7)	207.10 (6.6)
	iii. housing	2.84 (1.9)	3.05 (1.1)	0.95 (0.4)	17.78 (3.6)	33.56 (3.2)	103.28 (3.3)
	iv. other	3.28 (2.2)	7.69 (2.7)	4.52 (2.0)	15.87 (3.2)	20.82 (2.0)	67.03 (2.1)
VIII.	Economic Services)	7.19	6.81	7.22	0.20 (0.04)	0.66 (0.6)	6.36 (0.2)
IX.	General Services)	(4.8)	(2.5)	(3.2)	1.21 (0.2)	3.73 (0.4)	1.00 (0.3)
Total Plan Expenditure		148.92	286.68	224.15	494.46	1,054.37	3,156.00

Source: II-Annual Plans: G.O.M.P., Finance Department Publication "State Finances of Madhya Pradesh". IV-VI Plans: G.O.M.P. Planning Department.

2.50 Health and Family Welfare have been allocated Rs 207 crores in the Sixth Plan, about 6.6% of total plan expenditures. Medical and public health standards in Madhya Pradesh are the poorest in India: the doctor:population ratio is 0.47 per thousand and the bed:population ratio was 0.37 per 1,000 as compared to the all-India figure of 0.56 per 1,000. Many of the minimum needs program are not being implemented due to lack of funds. Emphasis in the expenditure pattern is on rural and tribal areas. Family planning has been a centrally sponsored scheme since the 1950's, and the Madhya Pradesh program continues to be financed totally by the Central Government. The goal to bring down the birth rate to 30/1,000 by 1983 is also a distant one--40% of all eligible couples would have to become users over the period which would mean 450,000 couples per year. Safe drinking water is provided in just over 1/2 of Madhya Pradesh villages and in about 65% of the urban areas. Water supply is thus another major health problem towards which insufficient progress will be made during the Sixth Plan period.

2.51 Housing has been allocated Rs 103 crores during the Sixth Plan. This will cover house sites for landless, houseless workers in rural areas, rental housing for civil servants, police housing, general sites and services including slum clearance, urban development (shops and markets, offices, etc.).

2.52 Under "Other", to which Rs 67 crores--2.1% of Plan expenditure--has been allocated, come information, publicity, labor and labor welfare, craftsman training, State employment service, welfare of scheduled castes and tribes, social welfare, nutrition, welfare of prisoners, legal and to the poor, among others. It is clear that none of these, individually, is getting very much.

IV. THE PLAN: FINANCIAL RESOURCES

2.53 Finance for the State Plan comes from five basic sources: (a) the State's surplus (if any) on current account, after all non-Plan expenditures have been netted out from revenue receipts; (b) the contribution of public sector enterprises; (c) central assistance; (d) negotiated and market loans, unfunded debt and other miscellaneous capital receipts; and (e) additional resources mobilized during the Plan period. Ex post ad-hoc assistance from the Central Government or Reserve Bank, an increase floating debt, or sale of state assets can also contribute to financing the Plan, but these are, of course, not planned sources of revenue when the Plan is being drawn up.

2.54 As tables 6 and 7 below show, the contribution from the State's own revenues surplus has grown steadily since 1961/62, with the exception of the Annual Plan period, when the State was in deficit on revenue account. Over the last two Plan periods, the balance from current revenues has contributed about 25% of total Plan finance: in comparison with other States, this is very good performance. For the Sixth Plan, 33.7% of outlays are expected to derive from the budgetary surplus. Madhya Pradesh's explicit strategy to curtail current expenditures to achieve a large budgetary surplus in order to maximize the size of the Plan, and its conseqences have already been discussed.

2.55 The second item of Plan finance is the contribution of public sector enterprises. This has been moderate in most Plan periods, but in recent years, it has been negative. As pointed out in the introduction, the figure represents the operating surplus and internal resources of the State corporations, and is not a contribution to the State's financial resources as such. 1/

1/ There have been exceptions, such as in 1975 and 1976 when the Madhya Pradesh Electricity Board indeed had a commercial profit positive.

Table 6

SOURCES OF STATE PLAN FINANCE
MADHYA PRADESH

	III Plan					Annual Plans			IV Plan					V Plan					
	61/2	62/3	63/4	64/5	65/6	66/7	67/8	68/9	69/70	70/1	71/2	72/3	73/4 a/	74/5 a/	75/6 a/	76/7 a/	77/8 P/	VI Plan Total
1. Balance from current revenue	1.55	0.87	10.51	4.78	-4.14	-13.44	-11.30	-5.50	18.87	20.48	36.82	40.22	45.01	40.28	93.39	71.02	28.39	+ 1064
2. Contributions of public sector enterprises	-	2.22	2.50	2.50	-	6.69	5.43	9.14	4.43	4.16	7.13	6.32	8.45	19.20	4.11	-16.57	-16.81	165.06
i. State Electricity Board	-	-	-	-	-	6.69	5.03	9.14	4.43	4.16	7.13	6 32	8.45	19.02	5.67	-12.03	-14.91	161.78
ii. Road Transport Corporation	-	-	-	-	-	-	0.40	-	-	-	-	-	-	0.18	1.56	-4.54	-2.90	3.28
3. Loans from Market	5.05	4.37	3.39	3.74	4.91	5.06	4.27	2.94	4.04	5.56	5.83	5.24	5.22	5.32	9.70	5.47	5.11	30.30
4. Small Savings	2.38	1.23	3.36	3.86	3.86	2.46	3.45	4.90	4.46	6.45	4.55	7.25	9.65	9.73	14.60	8.34	9.85	102.14
5. State Provident Fund	0.62	0.70	0.93	0.91	2.25	2.97	6.49	7.06	7.37	7.05	7.76	5.44	19.44	22.54	19.61	23.12	20.17	241.80
6. Miscellaneous Capital Receipts	-6.12	-7.42	-12.85	-12.33	-17.16	6.58	-29.50	-11.37	-33.30	-38.53	-46.13	-44.74	-53.90	-34.69	-37.40	-12.68	-56.83	-40.59
7. Additional Resource Mobilization	0.10	2.35	6.42	10.43	14.87	3.50	7.64	12.51	9.85	16.60	25.67	33.34	-	20.04	57.27	101.63	124.27	530.00
8. Negotiated Loans and State Market Borrowing	-	-	-	-	-	1.05	1.47	1.89	2.77	11.17	12.92	12.53	28.59	30.98	31.78	40.23	39.82	247.85
Negotiated Loans:	-	-	-	-	-	-	-	-	-	-	-	-	15.34	16.37	16.11	23.23	20.55	120.93
i. State Government	-	-	-	-	-	-	-	-	-	-	-	-	1.50	2.61	1.80	6.45	1.82	13.54
-- from L.I.C.	-	-	-	-	-	-	-	-	-	-	-	-	0.65	2.01	1.16	1.25	1.40	8.54
-- from RBI	-	-	-	-	-	-	-	-	-	-	-	-	0.85	0.50	0.64	5.20	0.42	5.00
ii. State Enterprises	-	-	-	-	-	-	-	-	-	-	-	-	8.25	10.66	12.55	14.50	16.82	88.81
iii. Other	-	-	-	-	-	-	-	-	-	-	-	-	-	4.05	3.12	2.50	2.75	18.58
Market Borrowing:	-	-	-	-	-	-	-	-	-	-	-	-	13.84	13.76	14.31	16.78	18.43	126.92
i. State Enterprises	-	-	-	-	-	-	-	-	-	-	-	-	12.94	12.93	12.93	14.88	17.05	116.06
ii. Other	-	-	-	-	-	-	-	-	-	-	-	-	0.90	0.83	1.38	1.93	1.38	8.86
9. Withdrawal from Reserves and increase in floating debt	5.26	7.07	1.79	1.77	17.71	-2.00	16.48	-19.35	-12.60	-7.71	-9.37	1.96	34.77	11.72	-30.52	0.17	75.66	-
i Ways and means advances	0.80	-0.60	0.09	3.84	-0.15	0.10	-	-4.00	-	-	-	-	7.94	8.28	-15.77	2.12	13.88	-
ii overdraft facility from RBI	3.56	4.98	1.96	-1.66	13.52	-10.49	2.41	-15.53	1.5	-	-	-	-	-	-	-	12.93	-
iii sale of securities, ad hoc central assistance and other 2/	0.70	2.77	-0.26	-0.41	4.34	8.39	14.07	0.18	-14.10	-7.71	-9.37	1.96	27.28	0.47	-14.75	-1.95	48.85	-
10. Central Assistance 3/	28.56	36.47	47.41	52.27	48.04	44.11	49.21	47.00	46.15	47.31	50.80	53.32	51.58	58.38	57.27	66.06	91.51	815.23
i. grants						)							13.29					-
ii. loans						)							38.29					-
iii. IDA additionality						)							-					31.00
iv. special assistance						)							-					40.00
TOTAL RESOURCES	37.40	47.86	63.46	67.93	70.04	56.98	53.64	60.22	52.04	72.54	95.98	120.88	142.81	183.50	224.82	312.15	320	3156.37

Table 7

% Breakdown of Sources of Plan Finances for Madhya Pradesh

	III Plan					Annual Plans			IV Plan					V Plan					VI Plan
	61/2	62/3	63/4	64/5	65/6	66/7	67/8	68/9	69/70	70/1	71/2	72/3	73/4 a/	74/5 a/	75/6 a/	76/7 a/	77/8 p/	78/9	Total
1. Balance from current revenue	4.1	1.8	16.6	7.0	-5.9	-23.6	-21.1	9.1	36.3	28.2	38.4	33.3	31.5	22.6	41.5	22.8	8.9		33.7
2. Contributions of public sector enterprises	-	4.6	3.9	3.7	-	11.7	10.1	15.2	8.5	5.7	7.4	5.2	5.9	10.5	1.8	-5.3	-5.3		5.2
i. State Electricity Board	-	-	-	-	-	11.7	9.4	15.2	8.5	5.7	7.4	5.2	5.9	10.4	2.5	-3.9	-4.7		5.1
ii. Road Transport Corporation	-	-	-	-	-	-	0.7	-	-	-	-	-	-	0.1	-0.7	-1.5	-0.9		0.1
3. Loans from Market	13.5	9.1	5.3	5.5	7.0	8.9	8.0	4.9	7.8	7.7	6.1	4.3	3.7	2.9	4.3	1.8	1.6		1.0
4. Small Savings	6.4	2.6	5.3	5.7	5.5	4.3	6.4	8.1	8.6	8.9	4.7	6.0	6.8	5.3	6.5	2.7	3.1		3.2
5. State Provident Fund	1.7	1.5	1.5	1.3	3.2	5.2	12.1	11.7	14.2	9.7	8.1	4.5	13.6	12.3	8.7	7.4	6.3		7.7
6. Miscellaneous Capital Receipts	-16.4	-15.5	-20.2	-18.2	-24.5	11.5	-55.0	-18.9	-64.0	-53.1	-48.1	-37.0	37.7	-18.9	-16.6	4.1	-17.8		-1.3
7. Additional Resource Mobilization	0.3	4.9	10.1	15.4	21.2	6.1	14.2	20.8	18.9	22.9	26.7	27.6	-	10.9	25.5	32.6	38.8		16.8
8. Negotiated Loans and State Market Borrowing	-	-	-	-	-	1.8	2.7	3.1	5.3	15.4	13.5	10.4	20.0	16.9	14.1	12.9	12.4		7.9
Negotiated Loans:	-	-	-	-	-						-		10.7	8.9	7.2	7.4	6.4		3.8
i. State Government													1.1	1.4	0.8	2.1	0.6		0.4
-- from L.I.C.													0.5	1.1	0.5	0.4	0.4		0.3
-- from RBI													0.6	0.3	0.3	1.7	0.1		0.2
ii. State Enterprises													5.8	5.8	5.6	4.6	5.3		2.8
iii. Other													-	2.2	1.4	0.8	0.9		0.6
Market Borrowing:	-	-	-	-	-								9.7	7.5	6.4	5.4	5.8		4.0
i. State Enterprises													9.1	7.0	5.8	4.8	5.3		3.8
ii. Other													0.6	0.5	0.6	0.6	0.4		0.3
9. Withdrawal from Reserves and increases in floating debt	14.1	14.8	2.8	2.6	25.3	-3.5	30.7	-32.1	-24.2	-10.6	-9.8	1.6	24.3	6.4	-13.6	0.1	23.6		-
i. Ways and means advances	2.1	-1.3	0.1	5.7	-0.2	0.2	-	-6.6	-	-	-	-	5.6	4.5	-7.0	0.7	4.3		
ii. Overdraft facilities from RBI	9.5	10.4	3.1	-2.4	19.3	-18.4	4.5	-25.8	2.9	-	-	-	-	-	-	-	4.0		
iii. Sale of securities ad hoc central assistance and other 2/	1.9	5.8	-0.4	-0.6	6.2	14.7	26.2	0.3	-27.1	-10.6	-9.8	1.6	19.1	0.3	-6.6	-0.6	15.3		
10. Central Assistance 3/	76.4	76.2	74.7	76.9	68.6	77.4	91.7	78.0	88.7	65.2	52.9	44.1	36.1	31.8	25.5	21.2	28.6		25.8
i. Grants													9.3						
ii Loans													26.8						
iii IDA additionality																			1.0
iv Special assistance																			1.0
TOTAL RESOURCES	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)		(100)

2.56 Central assistance has been the largest source of Plan finance until the Sixth Plan, but has declined considerably in importance over time. In the Third Plan, it made up, on average, 72% of Plan resources; the contribution remained high during the Annual Plans, but by the Fourth Plan, had fallen to 51%. Central assistance played an even smaller role in the last Plan - between 25-28% of the State Plan was financed through this source. Central assistance is expected to cover about 25% of Plan expenditures in the Sixth Plan period. This decline in the proportion of the State Plan financed by the Central Government is of some worry to Madhya Pradesh. There is a strong current of thought in the Madhya Pradesh administration that its efforts on behalf of large Plan outlays--maximal curtailment of revenue expenditure and additional resource mobilization--are not receiving the encouragement they are due, but rather, that because the efforts have been successful in increasing the State's budget surplus, the Center ascribes to the State a prosperity which is not there. 1/

2.57 Central assistance on Plan account, (as opposed to the assistance on revenue account, discussed earlier) is composed of grants and loans, and is fixed by the Planning Commission. For Madhya Pradesh, the assistance is given on a 70% loan, 30% grant basis, except for the funds earmarked for Plan expenditures in tribal areas, which are given on a 10% loan, 90% grant basis. Additionality represents the foreign aid disbursement received by the Central Government and passed on to the State for the project which is being funded. Just about 1% of total Plan finance comes from this source, but at the margin it represents a considerable incentive to the States to put forward projects for foreign assistance, since additionality represents funds which they would not ordinarily receive.

2.58 Targets for additional resource mobilization are set by the State Government in consultation with the Planning Commission at the time of the annual or 5-year Plan discussions. Madhya Pradesh has always done very well on this score, and has more than achieved, the targets in the past decade. Between the current balance and additional resource mobilization, the State will finance, in the Sixth Plan, just over 50% of its Plan outlays. This indicates a high level of self-sufficiency.

2.59 The next category is a compilation of a number of very different items on the financing balance sheet. Loans from the market are fairly insignificant as a contribution to the State's financial resources, less than 1% is expected from this source during the Sixth Plan period. There are also market borrowings of the State enterprises, principally the Madhya Pradesh Electricity Board. These are again, placed by assignment to various lending institutions in the "market", and have made a moderate though declining contribution to Plan resources--about 4% is expected from this source in the Sixth Plan.

1/ This applies a fortiori to the assistance from the Finance Commission from whom Madhya Pradesh has not received grants in aid since 1969, because of its budget surplus.

2.60 Loans of the State and of State enterprises, principally the Electricity Board negotiated from the Life Insurance Corporation of India, the Reserve Bank and HUDCO have been growing as a category of finance, although as a fraction of total resources for the Plan, they are expected to contribute less in the Sixth Plan (8%) than in the Fifth (13%).

2.61 Small savings loans have proven to be a modest, though steady source of revenue, comprising some 3-5% of Plan resources.

2.62 "Miscellaneous capital receipts" are all the other net transactions not accounted for under the other headings, such as short-term loans from the Central Government, recoveries of loans and advances to other institutions by the State Government, net accretions under various sinking funds and other net accounts including non-Plan loans. In general, this is a negative figure, since a substantial amount is repaid to the Central Government and financial institutions. The final item, the withdrawal from reserves and net increase in floating debt is an adjustment item. In it are entered the final closing balance of the previous year's accounts, the proceeds from sales of securities and treasury bills and the net change in ways and means advances from the Reserve Bank. This is, of course, not a planned resource for the State Plan but results, ex-post, from the State Plan accounts.

V. THE PLANNING PROCESS

i. Planning Machinery

2.63 Planning in Madhya Pradesh is carried out by the State's Planning Department. There is also a State Planning Board, which is intended to advise the Planning Department on Plan priorities and project selection. This Planning Board was originally set up in 1972, but did not function very effectively. As a result, the Board was reorganized and reconstituted in December 1978 with the hope that the new body will better serve the purpose intended. The Board consists of a chairman (the Chief Minister) who also holds the portfolio for Planning, Economics and Statistics, a deputy chairman (the Planning Minister), three part-time members (the Finance Minister, State Minister for Planning and the Chief Secretary) and six full-time members responsible for finance policy, projects, industry, regional planning, the minimum needs programme and the member secretary who is the Planning Secretary. The Board, of course, is not a statutory body and therefore has no authority; in its advisory role, it is hoped that it will provide a broader planning perspective than that of the Planning Department alone.

2.64 The Planning Department at present functions as coordinator between the operational departments and is the ultimate financial arbiter of overall Plan outlays as well as their sectoral disposition. At present, the Planning Department has insufficient manpower and technical resources to examine the state Plan on a project by project basis or to assist the individual departments in evaluating their projects and advising on the inclusion of specific projects in the departmental Plan. A cell to carry out this sort of work--

including the evaluation of projects by different public investment criteria--is being set up, and should be functioning by mid-1980. There is a great need for this kind of social and economic evaluation, since at present none of the individual departments do project evaluation.

The State Plan

2.65 In Madhya Pradesh, a five-year plan of Rs 4,500 crores expenditure ($5.3 billion) was put forward at the discussions with the Planning Commission. Subsequently the Plan has been finalized at Rs 3,156 crores through the whittling down process described in the introduction. Of this, Rs 815 crores is from central assistance and the balance, Rs 2.341 crores the State's own resources including borrowing. Additional resource mobilization is expected to be 23% of own resources, a target which if not met, will have to be made up through deficit finance such as overdrafts, accommodating loans from the Central Government, or by not meeting outlay targets. 1/

2.66 The State Plan of Rs 3,150 crores is "final" in the sense that these motions have all been completed. It remains formally, however, in the "draft" stage, until the national Plan and central assistance are finalized. Changes in the size or the sectoral breakdown of the Plan are, however, not expected to the final version of the State's Sixth Plan.

(ii) Plan Evaluation

2.67 Madhya Pradesh has made some headway here. In the early 1970's the Directorate of Statistics set up a cell consisting of two persons to do studies of physical targets' achievements, and also, on a selective project by project basis, post implementation evaluations of project benefits and implementation schedules. This trial experiment was discontinued due to funding pressures, although a few studies are still available. Such an evaluation unit is invaluable if departments are to learn from their mistakes and their successes. It is hoped that the planning cell in the Planning Department may make some headway here also.

VI. FUTURE RESROUCES: FINANCING THE MADHYA PRADESH COMPOSITE IRRIGATION PROJECT

2.68 The purpose of this review of State revenues and expenditures has been to provide the background for an assessment of the State's implementation capacity of the composite irrigation project.

2.69 The proposed Madhya Pradesh Composite Irrigation consists of four sub-projects: 2/

1/ In the past, Madhya Pradesh has usually achieved its additional resource mobilization targets.

2/ Per Project Status Report of 6/25/79.

(i) Mahanadi Reservor Project is an on-going construction program of nine reservoirs which are inter-linked to serve existing and new irrigated areas of about 330,000 ha at a proposed cropping intensity of 140%. It also provides water for the industrial complex at Bhilai. Works to be completed are the Paivi High Dam, a link feeder canal to connect the Paivi Dam to Mahandai Reservoir, remodelling and extension of the existing irrigation systems including a proposal to line all canals, construction of about 30,000 ha of lift irrigation and completion of minor irrigation works. There is also a power component.

(ii) Hasdeo-Bango Project is an existing multi-purpose scheme providing water for thermal power stations and the industrial complex at Korba and presently serving about 42,000 ha with supplementary kharif irrigation. The Phase III construction is ongoing and consists of the Hasdeo-Bango High Dam and hydro-power station, remodelling and extension of the major canal system to serve about 220,000 ha at 160% cropping intensity and completion of minor irrigation works.

(iii) Arpa Project is at the planning stage. It would consist of a low earth dam and construction of a complete irrigation system to serve about 72,000 with a cropping intensity of about 115%.

(iv) Hap Project is the planning stage. It would consist of an earth dam, a masonry diversion weir and headworks and a complete irrigation system to serve about 26,000 ha at a cropping intensity of about 115%. The Plan has hydrel possibilities and some water supplies would be used for industrial purposes. All projects have major CAD works, including rural roads and markets, field channel constuction and agricultural research and extension.

2.70 The major sub-project, Mahanadi Reservoir and Hasdeo-Bango are ongoing programs in which construction of most major works are so advanced that the basic design assumptions or concepts can be taken as fixed. Arpa and Hap are still at pre-construction stages, and could be modified.

2.71 Since the project has not yet been appraised, and some modifications may still be made, the first step in analyzing State implementation capacity, namely fixing project cost, has not been made. All references to costs are therefore taken from the WAPCOs' estimates shown in table 8.

2.72 Assessing the likelihood of smooth and timely implementation of the Composite Irrigation Project rests on the answers to two questions:

(a) Does the State have the ability to provide the necessary resources?

(b) Is the heavy expenditure required for the Madhya Pradesh Composite Irrigation Project consistent with State priorities as far as irrigation development is concerned, and within the irrigation sector itself, is this heavy expenditure consistent with the Irrigation Department's priorities?

2.73 The first question is a function of the resources available for the State Plan, the rate at which they will grow over the period of project implementation and the availability of Plan resources to the irrigation, as opposed to other sectors. The second question can be approached by looking at the proportion of State Plan outlays earmarked for the Irrigation Department in the period over which the Madyha Pradesh Composite Irrigation Project will be implemented. Is this proportion in line with the past trend of expenditures in the sector? If not, which sectors will this larger commitment come at the cost of? Within the irrigation sector itself, expenditure trends must be examined for any break in the past pattern of investment as between major, medium and minor schemes. If there are such changes which come at the expense of expenditures on which the State also places great priority, conflicts may arise and allocations to Madhya Pradesh Composite Irrigation Project could undergo some slippage.

2.74 Table 8 provides the basic framework for analyzing the first issue.

Table 8: Madhya Pradesh Composite Irrigation Project in Relation to State Plan Expenditure
(Rs crores)

	V /a	VI	VII	VIII	Total /e
1. Total Project Cost	62.2	137	671*		871
of which:	62.2	98.1	397*		557.3
(i) power	-	24	30	-	54
(ii) CAD	-	14.9 /g	244.4		259.7
2. Total Plan Size	1054	3156	7000 /b	-	
3. Irrigation Department Outlay /f	204 /f	661	1463 /c	-	
4. Irrigation Department Outlays as % of Plan	19%	22%	22% /d		
5. Madhya Pradesh Composite Irrigation as % of I.D. outlay	30.4%	14.8%	27.1%		
6. World Bank time slice	-	61	470.74		531.74
7. World Bank Assistance to Irrigation Dept.		23	194		
8. Additionality for Irrigation Dept.		16	135*		
9. Net Funds Required by State	62.2	87	262*		
10. Net funds as % Irrigation Dept. Outlay		12.4%	17.9%		

Source: WAPCOS documents.

/a As estimated by WAPCOS; the State Government has not yet agreed to lining or CAD works.
/b This is 2.2 times larger than the Sixth Plan.
/c Assuming Irrigation Department outlays remain a constant (20.9) percentage of total Plan outlays.
/d It is thought likely that this will increase to 25% or more in Seventh Plan, in which case resource position will be easier than shown here.
/e On assumption that the Bank finances 50% of the 5-year time slice 1981-85.
/f Excludes minor irrigation outlay by Irrigation Department.
/g As per WAPCOS' July 1979 letter.
/h Additionality assumed at 70%.
* figures not final until 8th Plan spillover is determined.

2.75 Several comments need to be made about this table. The first has to do with the total project cost, which, as estimated by WAPCOs' will be Rs 871 crores, or almost $1.03 billion dollars, by completion. This is a large figure, and one which has not been agreed by the State Government. Specifically, there are disagreements as to the extent of canal lining which is necessary and also as to the amount of CAD works which will be carried out. Together, these make up 16.1%, and 27%, respectively of the estimated project cost. CAD works are, of course, the responsibility of the Agriculture Department, and would have no implications for the Irrigation Department's financial implementation capacity.

2.76 The second caveat is that the bulk of the expenditures as estimated by WAPCOS take place in the Seventh Plan period. The Sixth Plan is still in draft form, and likely outlays in the Seventh Plan - whether total or for the Irrigation Department, are even more tentative. In this table, on the basis of discussion with the state Planning Department and the Planning Commission, the Seventh Plan has been assumed to be Rs 7,000 crores, 2.2 times larger than Sixth Plan. This number is in line with past trends of Plan growth, but since it is only an estimate, all the proportions which contain this figure in the denominator must take this into account.

2.77 Similarly, the likely allocation of Plan resource to the Irrigation Department--assumed to remain constant at 21-22% of total Plan outlays--is but a best guess of what is likely to happen 4-10 years hence. Should this proportion increase, the resource position for the Irrigation Department would be correspondingly eased.

2.78 Finally, there must be a caveat about the price escalation (7%) and other contingencies (15%), built into WAPCO's estimates. These account for 31% of the total eleven year cost estimate. Any changes here, therefore, can make a big difference.

2.79 The total project cost is Rs 871 crores (shown in line 1 of Table 8) of which Rs 62.2 crores have already been spent in the 5th Plan period. Rs 137 crores fall into the 6th Plan and Rs 671 crores will spill over into the 7th Plan period. In the Hasdeo-Bango work, both the CAD and Irrigation Department's components of the project will spill over into the 8th Plan (1988/89-1993/94) but WAPCOS has not yet indicated the time phasing; thus, the figures in column (3) will differ slightly ultimately.

2.80 The project works have three basic components. Irrigation makes up about 64% of the total, power about 6%, and CAD about 30%. Only the first is the responsibility of the Irrigation Department. The CAD works to be carried out under the project fall under the purview of the Agriculture Department, which will also contribute the financial resources.

2.81 Lines (4), (5) and (6) of the table show the total size of the State Plans from the Fifth and Seventh Plan periods and the corresponding share of the irrigation sector in the Plan.

2.82 Line (7) indicates the proportion of Irrigation Department Plan outlay which will be required for the implementation of the Madhya Pradesh Composite Irrigation Project. In the Fifth Plan period, the project sub-components accounted for 30.4% of this department's Plan outlay. Under WAPCOS' cost and contingency estimate, this proportion will fall to 14.8% in the Sixth Plan, but will rise again to 27.1% in the Seventh Plan period. 1/

2.83 Since the project will be financed by the World Bank, Madhya Pradesh will receive additional funds, 70% of project disbursements, and these must be netted out to arrive at the net requirement of funds from State's own sources. Line (8) shows the expenditures on the project during the five year World Bank time slice from 1981/2-85/6, and line (9), on the assumption that the project will be financed 50% by the World Bank, shows the amount of World Bank assistance which would be forthcoming. Seventy percent of this assistance comes as an additional resource to the State. It is assumed that the additionality is indeed passed on to the Irrigation Department, and the amount to the Irrigation Department is shown in line 10. 2/ To arrive at a net

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1/ Twenty-seven percent is slightly overstated because some expenditure will take place in the 8th Plan.

2/ This assumption is made on the basis of discussions with the Planning Department, which categorically states that additionality funds are indeed earmarked for the Department concerned, and effectively, do not substitute for funds which the State would have allocated to the department in any case. The implication is that additionality indeed does enable more ambitious projects to be carried out than would otherwise be the case. It is further assumed that within the Irrigation Department itself, additionality contributes to financing of the project on behalf of which funds are received. This is tantamount to saying that additionality does not substitute for funds which the Irrigation Department itself would have earmarked for the Madhya Pradesh Composite Irrigation Project, were there no additionality. Again, the assertion was that additionality enabled the Department to carry out a larger project. The question of whether additionality is additional in the first place to the assistance the State Government receives from the Center is of course the most basic one. Given the political circumstances, it appears that indeed, the States are getting a larger share of the pie, and that the Central Government is not reducing its assistance on one front while providing additionality. From an economic point of view, a fairly clear case be made for suggesting that additionality does not come at the cost of Central Government expenditure either, but is manifest in a larger budget deficit. The latter argument is quite compelling; the machinations within the Planning Department and the Irrigation Department are less easy to know. If the assumptions are indeed mistaken, to take the opposite case, there is full substitution, both at State and Department level the figures and proportions in lines (9) and (10) will be substantially higher--but the resource position of both State and Department will still be eased. There is no change in direction.

figure for the State funds required, one must subtract these "additional resources" from project cost. This is done in line 11. The final line (12) of the table shows the adjusted or net expenditure as a proportion of Irrigation Department Plan outlays. The fractions are far lower than those in line (7). There is no change in the Fifth Plan, when 30% of departmental outlays were absorbed by the composite schemes. In the Sixth Plan, the proportion falls from 14.8% to 12.4% and in the Seventh Plan, additionality causes the project to absorb 17.9% of Plan outlays instead of 27.1%.

2.84 It is clear that in the Sixth Plan period, the Madhya Pradesh Composite Irrigation Project will imply no strains on the Irrigation Department. A net outlay of Rs 82 crores, or 12.4% of Plan outlays is far less than the 30% allocated to the project in the Fifth Plan period. In nominal terms, it is only 30% more and in real terms 1/ it is approximately the same.

2.85 The situation is slightly different in the Seventh Plan. The Irrigation Department outlays for Madhya Pradesh Composite Irrigation Project are Rs 397 crores, which after additionality, commits 17.9% of the Irrigation Department Plan to the Madhya Pradesh Composite Irrigation Project. It assumes, of course, that all the CAD components will be picked up by the Agriculture Department. Thus, there should be no financial problem in the Irrigation Department unless the State Plan is substantially smaller than Rs 7,000 crores, or Irrigation Department outlays are somehow reduced. The project size is therefore quite manageable for the irrigation sector.

State Priorities

2.86 Table 9 confirms the priority Madhya Pradesh places on irrigation. Since the Fourth Plan, allocations to the irrigation sector have been growing rapidly, from 15.8% of total outlays to 22% for the Sixth Plan period. Any change in this trend is unlikely, because Madhya Pradesh is very determined to seek economic development though intensive efforts in the power and irrigation sectors. The assumption of 22% of Plan outlays allocated to irrigation in the Seventh Plan, therefore, seems easily justifiable.

1/ Assuming 7% annual inflation 1978/9 - 1982/3.

Table 9: Madhya Pradesh Plan Expenditures
(% in parentheses)

	II	III	Annual	IV	V	VI /a
Agriculture and Cooperatives	4156 (28)	7078 (25)	5193 (30.9)	12414 (21.0)	19948 (17)	58317 (18.4)
Irrigation excluding minor irrigation /b	2917 (19.5)	3702 (12.9)	2058 (12.3)	7800 (15.8)	20500 (19.4)	60172 (21.6)
Power	2775 (18.6)	8907 (31.0)	10060 (63.7)	13376 (27.0)	42415 (40.2)	119437 (37.8)
Industry & Mining	389 (3)	805 (3)	516 (3)	1171 (2)	1877 (2)	5641 (1.8)
Transportation & Communications	888 (6)	1544 (5)	1330 (7.9)	4079 (8)	4965 (5)	14667 (4.6)
Education	1474 (9.8)	2723 (9.4)	788 (4.6)	2534 (5.1)	2758 (2.6)	10889 (3.4)
Health	958 (6.4)	2153 (7.5)	1201 (7.1)	4601 (9.3)	7095 (6.7)	20710 (6.6)
Housing	284 (1.9)	305 (1.1)	95 (0.5)	1728 (3.4)	3356 (3.1)	10328 (3.3)
Other Social Services	328 (2.2)	769 (2.7)	452 (2.7)	1602 (3.2)	2084 (1.9)	6703 (3.3)
Miscellaneous	719 (4.8)	681 (2.4)	277 (1.7)	141 (0.31)	439 (0.42)	736 (0.23)
TOTAL	14892 (100)	28668 (100)	16779 (100)	49446 (100)	105437 (100)	315600 (100)

Source: Madhya Pradesh Planning Department.

/a Plan outlays.

/b Source: Table 2.

2.87 Table 10 approaches the second part of the second question: Does the project--largely major irrigation works--imply any distortions in the Plan allocation as between major, medium and minor schemes?

Table 10: IRRIGATION SECTOR EXPENDITURES
(Rs lakhs)

Plan period: Type of Scheme:	I	II	III	Annual	IV	V	VI /a
Major	423	2,122	2,573	1,215	5,368	12,765	
%	(36)	(58.9)	(48.2)	(36.8)	(49)	(41.8)	66,100 (80.9)
Medium	372	795	1,129	843	2,392	8,790	
%	(31.6)	(21.1)	(21.1)	(25.5)	(21.8)	(28.7)	
Minor /b	365	702	1,242	1,034	3,125	8,970	15,656
%	(31)	(18.6)	(23.3)	(31.3)	(28.5)	(29.3)	(19.1)
Other	15	139	391	208	54	-	-
%	(1.2)	(3.6)	(7.3)	(6.3)	(0.4)	-	-
TOTAL	1,175 (100)	3,758 (100)	5,335 (100)	3,300 (100)	10,939 (100)	30,525 (100)	81,756 (100)

Source: Irrigation Department - Statistical Cell.

/a Source: GOMP Planning Department.
/b Irrigation Department outlays only: Agriculture Department outlays on minor irrigation are excluded.

2.88 The Sixth Plan does anticipate a far larger share of Irrigation Department outlays on major and medium schemes than in the past. Together they will make up about 81% of the Irrigation Department Plan; closer to 70% was allocated in both the Fourth and Fifth Plan periods. As a result, the share of minor irrigation has fallen by one third, and there may, therefore, be some conflict. It also appears that the share of medium irrigation is scheduled to be reduced slightly, (the Irrigation Department Plan has not yet been made public and no final figures are available) so that the bulk of the Rs 817 crores to be spent in the three sub-sectors combined will in fact go to major works. Whether this will remain acceptable over the course of the Plan period remains to be seen. The question which immediately follows is whether since the bulk of the project takes place in the Seventh Plan, this sub-sectoral breakdown can be maintained for such a long period. An answer is not realy possible. It can be noted, however, that since on a gross basis, 27% of Irrigation Department outlays in the Seventh Plan will be taken up by the Madhya Pradesh Composite Irrigation Project -- more than in the Sixth, further emphasis on major projects is likely to continue and conflict between the major works and

the political pressures for minor works, therefore remains a possibility. How such conflicts might be resolved is difficult to know. One can refer back to the Irrigation Department principles for Plan implementation, namely, that implementation will go forward fastest where incremental returns are highest, and weigh this against the obvious political influences to which the Irrigation Department is subject in the field of minor irrigation. On the other hand, on the timely implementation of the Hasdeo Bango component of the Madhya Pradesh Project, depends further expansion of Korba superthermal plant, a very high priority the State.

2.89 To summarize: There should be no financial difficulty in the Sixth Plan, nor in the Seventh, because of additionality, for the Irrigation Department to implement the Madhya Pradesh Composite Irrigation Project as scheduled. The foreseeable source of conflict arrises out of the growing proportion of total Plan outlays in the Sixth Plan (and, it is presumed here, in the Seventh), devoted to major irrigation, at the cost of minor schemes for which MLA's lobby loudly, and frequently with success. Moreover, since immediate benefits of major schemes are not distributed across many districts of the State, the "regional balance" criterion for Plan investment may even support their cause. The trend of minor and medium irrigation in the Sixth and Seventh Plans should therefore be closely monitored.

CHAPTER III

INDIA

A REVIEW OF MAHARASHTRA STATE FINANCES

John Wall
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INDIA

A REVIEW OF MAHARASHTRA STATE FINANCES

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INDIA

A REVIEW OF MAHARASHTRA STATE FINANCES

Preface

1. Were Maharashtra an independent member of the Bank, its size--60 million people and an NDP of US$10 billion--and the Bank Group's lending within the State--about US$420 million committed and US$250 million under consideration--would make Maharashtra one of the Bank's larger borrowers and the subject of considerable economic work as to the State's creditworthiness, its development policies, implementation capacities and financial requirements. 1/ The loan guarantee of the Government of India mitigates any concern we may have over Maharashtra's repayment capacity. We do not have the manpower to undertake thorough going economic reviews of the development performance and prospects of each State in India. However, the complex system of financing development projects in India, the nature of the Bank's financial relations with the Government of India and with individual State Governments and the nature of Center/State financial relations in India cause us to be interested in the financial situation of State Governments which implement projects supported by the Bank. This is particularly so when either the Bank's overall exposure in the State or a single project under consideration is large relative to the State's budget. Both of these conditions currently exist in Maharashtra.

2. The data for the analysis was obtained in the course of a mission to Maharastra in 1978 the paper is organized as follows: In the first section basic features of the State economy are highlighted. The second section provides an overview of Maharastra's financial position. Expenditure patterns are discussed in sections III and IV, and future resource availability in section V.

1/ The amount of US$420 million is the sum of Bank Group commitments on projects that are financed through the budget of GOM: Bombay Water Supply I & II, Maharashtra Irrigation, Purna Irrigation and Bombay Port. This sum does not include the commitments on the Maharashtra components of national projects or the commitments on projects which are physically located in Maharashtra but financed by some means other than by the GOM, e.g. Trombay (Tata) Power I & II, Korba Power, Trombay Fertilizer and Bombay High Oil and Gas. Commitments on these sums US$536 million.

Summary and Conclusions

i. The State of Maharashtra, were it an independent country, would be one of the Bank Group's larger borrowers, both in terms of its size and in terms of its borrowing from the Bank. The purpose of this paper is to review the financial position and prospects of the Government of Maharashtra to investigate whether the program of irrigation development currently proposed for Bank Group financing can be carried out as planned. This requires looking at the capacity and willingness of the Government to provide the necessary financial resources, which in turn requires a view of the State's past and future economic situation. Although analyzing a State's capacity and willingness to finance a particular sector's development program is a difficult task, it is no more so than, say, analyzing a country's creditworthiness, and its capacity and willingness to pay foreign debts.

ii. Maharasthra is the most industrialized State in India, and its largest electric power consumer. Agricultural production has been particularly slow in growing and is highly variable, even by Indian standards. Living standards are somewhat higher in Maharashtra than elsewhere in India; but the overall growth of the economy has been no higher in Maharashtra than in India as a whole.

iii. The Government of Maharashtra's financial resources are fairly elastic with respect to economic growth in the State and this relation is expected to persist into the future. An increasing proportion of State product and Government resources have been devoted to development expenditures, and recently, to plan expenditures.

iv. The Government of Maharashtra has allocated over the past about 15% of plan expenditure to surface irrigation development, although this has been as high as 17% in the recent past. The Government appears committed to raising expenditure on irrigation to develop the remaining potential as fast as possible; but there is also the need to accommodate within the Plan a program of power development that has grown quite large in both absolute and proportional terms as well as many other high priority development programs.

v. Under conservative assumptions concerning financial mobilization by the Government of Maharashtra, carrying out the irrigation program as planned, over the next five years, including the improved standards envisaged, would require the Government of Maharashtra to devote 21% to 23% of Plan outlays to irrigation. This is a significant but not infeasible increase in priority of irrigation in financial allocations. Although the additional funds derived from Bank Group financial participation in Maharashtra's irrigation program do not relieve the State from deciding upon its overall development priorities, the additionality should make it somewhat easier for the State to devote a larger proportion of Plan expenditure to irrigation.

INDIA

A REVIEW OF MAHARASHTRA STATE FINANCES

I. Salient Economic Features

3.01 Maharashtra is India's most industrialized State, which, with 9% of India's population, has nearly one-sixth of her industrial capital, one-fifth of factory employment and one-fourth of gross value of industrial output and value added by manufacturing in the organized sector. Manufacturing contributes one-fourth of Maharashtra's net domestic product compared to its 16% share at the national level. The composition of manufacturing in Maharashtra has changed considerably since the early 1960's, with a relative fall in the manufacture of consumer goods--textiles and food products--which predominated earlier, and a considerable rise in the proportion of producer goods--chemicals, metals and machinery. Industry is concentrated in the Bombay area; the districts of Bombay, Thane and Pune have one-fourth of Maharashtra's population but five-sixths of its value added in organized industry. Maharashtra's heavier industrialization means the State's economy is more vulnerable than the rest of India to power shortages, labor disputes and industrial supply constraints, three problems that have plagued India in the past. Manufacturing output has grown more slowly in Maharashtra than nationwide, at about 5% per annum in real terms since 1960/61 and 4% since 1970/71, compared to 7% and 5% respectively, for India as a whole.

3.02 Agriculture both contributes a smaller portion of State product (SDP) and is less advanced than in other States. In current prices, agriculture contributes 30% of SDP, 1/ compared to 43% all-India. Foodgrain yields in Maharashtra are, along with those in Rajasthan and Gujarat, the lowest in India. Yields of cash crops like cotton and groundnut are somewhat better and for sugarcane are among the highest in India. Maharashtra's basic agricultural problem is low and variable rainfall, small areas of assured rainfall, lack of perennial rivers and a low proportion of cropped area irrigated. A consequence of this is a cropping pattern dominated by coarse grains--sorghum, millet and barley--which are drought resistant but low yielding.

3.03 The progress of agricultural output can be appreciated by viewing the accompanying graph (Chart 1). Maharashtra fully shared in the all-India drought of 1965 and 1966. Production had barely recovered its pre-drought level when the State had another, more severe and prolonged drought of its own with bad monsoons in 1970, 1971 and 1972, by which time food-grain production was an astounding 40% of its level just three years before. This drought

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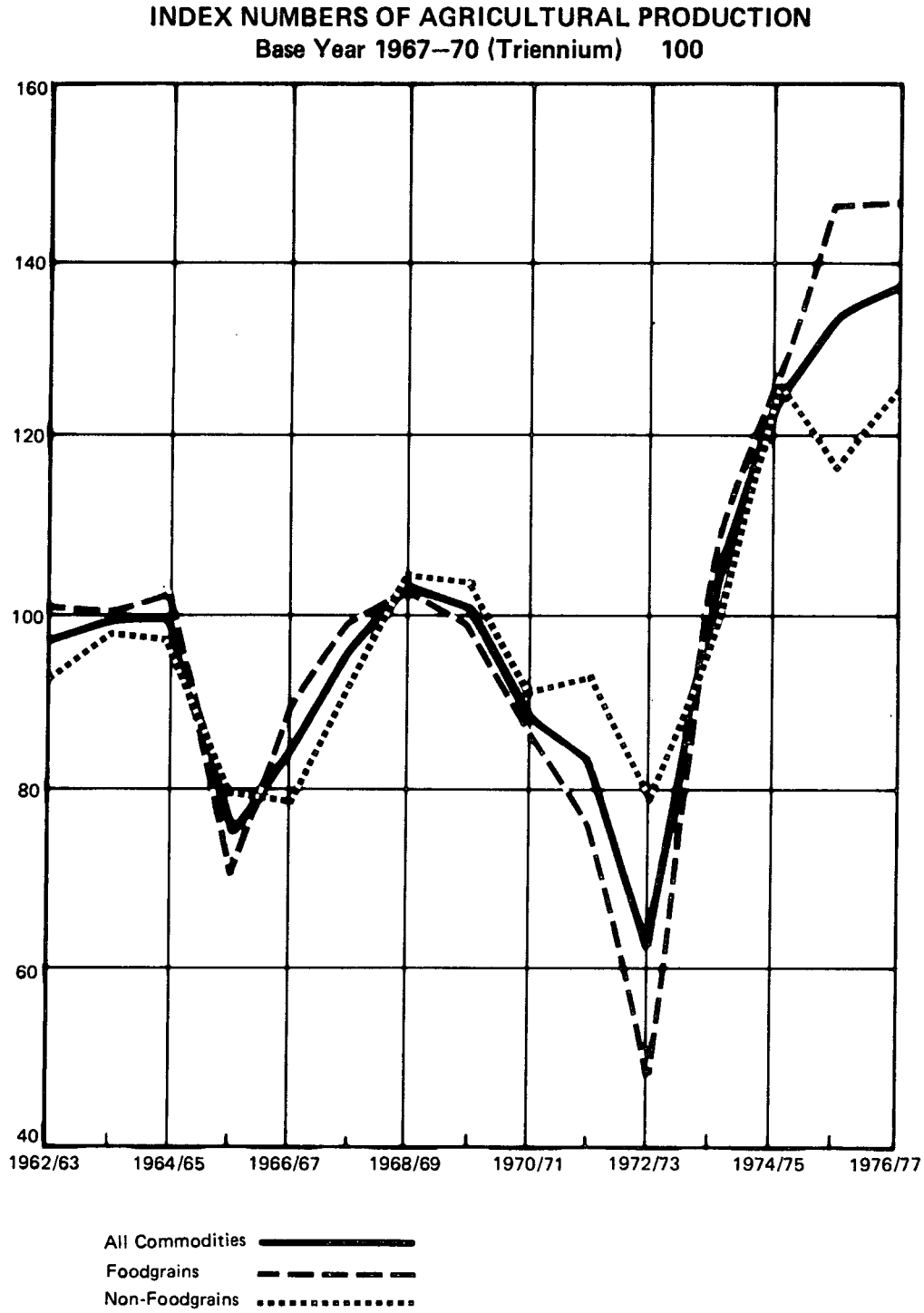
1/ This is a rise in the proportion of SDP contributed by agriculture; it was 26% in the early 1970's, when bad weather severely depressed

Chart 1



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had severe repercussions on the revenues of rural familes (see Wolf Ladejinsky, "Maharashtra, 1972/73") and in many other ways. Since 1972/73, output has been growing smartly, although yields are still quite low.

3.06 Maharashtra's is India's largest electric power consumer, with 12% of generating capacity and 16% of consumption. Only Punjab, with a higher average income, all villages electrified and a considerable amount of tube-well irrigation had a higher per capita power consumption than Maharashtra. Economic growth in Maharashtra has been power intensive; power consumption has grown at an average of 9% per annum since 1960/61; the elasticity of power demand with respect to industrial production is 1.7 and 2.5 with respect to SDP; power demand for irrigation has grown at 30% per annum since the early 1960's, but from a low base. Since 1960/61, 60% of the increase in supply has been consumed by industry, 11% by domestic householders and 12% by tube-wells. Currently about 60% of villages with 80% of the rural population are served with electricity. Maharashtra is persistently short of power, the deficit being 10% to 25% in a good year, such as now, and was as much as 50% in the worst, as in the early 1970s.

3.07 Living standards are somewhat higher in Maharashtra than in most other States in India. The per capita income of Maharashtra's population was Rs 1,489 (or about US$175) in 1976/77, second only to Punjab's and 42% higher than the India-wide average. A higher proportion--30%--of the population is urban than in other States and a higher proportion is employed in factories. Over 90% of children of primary school age are enrolled in school and about 40% of the population is literate, compared to 30% across India. Maharashtra has had one of India's most active family planning programs and more than one-third of couples in the reproductive age group are adopters of various birth control methods. Nevertheless, due to steady in-migration, the population growth rate is considerably higher than India's. Over the decade, 1961 to 1971, Maharashtra's growth rate was 2.4% per annum while India's was 2.2%. Maharashtra is unique among the States of India in providing guaranteed employment for those seeking unskilled jobs in rural areas; in 1976/77, the Employment Guarantee Scheme provided 133 million man days of employment or 22% more than the year before.

3.08 The overall growth of the economy of Maharashtra since 1960/61 has been almost exactly the same as for India as a whole, at about 3.6% per annum. Agricultural growth was considerably less, under 1% per annum between 1960/61 and 1976/77. The secondary and tertiary sectors both grew at about 5% per annum over the same period. Although the growth rates of each of these sectors in Maharashtra is below the all-India average, the State's overall growth is as high as India's due to the higher proportion of the faster growing secondary and tertiary sectors in Maharashtra's SDP. Given the faster population growth rate, per capita income grew by 1.25% per annum, or less than it did on the national level.

II. Financial Profile Of Maharashtra

3.09 Maharashtra's finances, like those of other Indian States, are heavily influenced by the constitutional arrangements between the Central and State Governments. Taxes on personal and corporate non-agricultural income, on imports and on certain commodities are reserved for the Center. Other taxes, including those on agriculture and on most commodities, are left to the States. The States are responsible for funding through their budget most public development programs, including those in education, social services, agriculture, irrigation, power, transportation and communication. The Center has the responsibility for national defense and certain types of development efforts, particularly for some large industries of national importance in the public sector, such as steel, coal, petroleum and heavy electrical and engineering goods. In addition, the Center has the responsibility for overseeing the overall development of India and uses its resources to balance and accelerate development by transferring funds to States by a variety of means. The Center regulates the State's access to credit, not only from the Central budget and the Reserve Bank of India, but also from the open market.

3.10 The accompanying chart II and Table 1 give a cross-sectoral overview of Maharashtra's receipts and expenditures. In 1975/76, the GOM raised 43% of its receipts through State taxes and 17% from its own sources of non-tax revenue. It received 4% as grants from the Center and 12% as its share in Central taxes. It raised another 6% by borrowing from the Center and the rest--18%--either by recovering its loans to others or by other borrowing. The State spent three-quarters of its total expenditures either directly on development programs or on capital transactions, including loans to others, such as Maharashtra's State Electricity Board, for development purposes. Plan expenditure was 23% of total disbursements.

3.11 As might be expected from its larger share of manufacturing and higher average income, Maharashtra raises and spends more resources per capita than the average State--Rs 234 per capita for Maharashtra raises more of these funds from its own resource base and relies less on the Center than other States. See Table 2. Maharashtra's own tax revenue per capita is particularly high, almost twice the level of the other States. Although Maharashtra's share of Central taxes is roughly in proportion to its population it receives a much lower proportion of central grant and loan assistance.

Chart 2

GOVERNMENT OF MAHARASHTRA
FINANCIAL POSITION
1975/76
ACCOUNTS

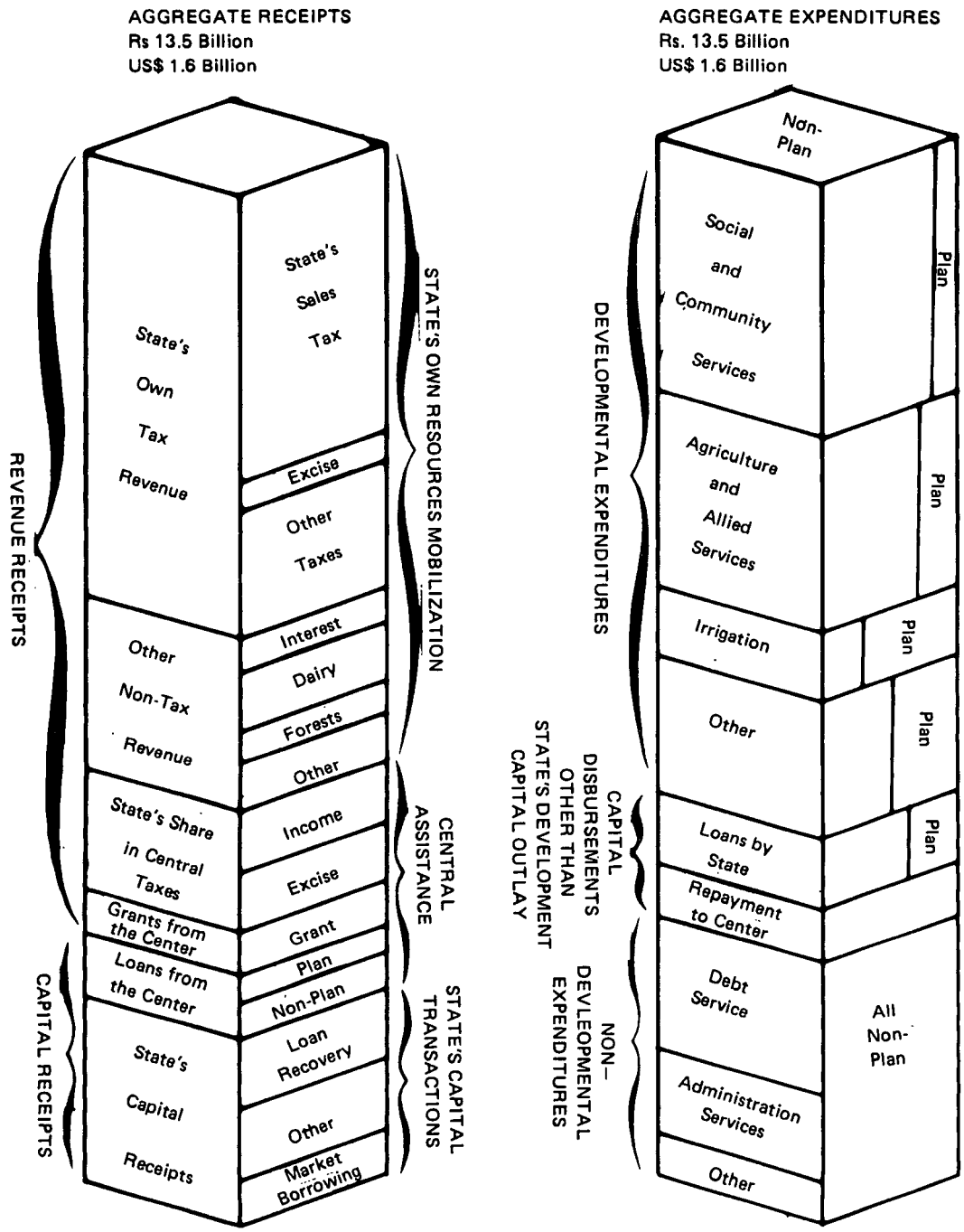


Table 1

MAHARASHTRA

OVERALL BUDGETTING POSITION
OF MAHARASHTRA STATE GOVERNMENT
(Rs. million)

	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	(Revised) 1975/76
Aggregate Receipts	1692	1874	2267	2877	2795	3148	3950	4417	5244	5303	6198	7300	8771	11035	11071	13447
A. Revenue Receipts	1154	1168	1459	1836	1984	2215	2657	2931	3455	3771	4311	4946	5925	7710	8506	10199
1. Tax Receipts	799	812	1035	1292	1420	1530	1964	2187	2456	2820	3360	3756	4160	5069	6211	7349
(a) State's Taxes	642	651	781	1004	1127	1224	1525	1682	1875	2165	2556	2746	3028	3820	4978	5729
(b) Share in Control Taxes	157	161	254	288	293	306	441	505	581	655	804	1010	1132	1246	1233	1620
2. Non-Tax Receipts	355	355	425	544	565	685	693	744	999	951	952	1190	1765	2642	2295	2850
(a) Grants from Center	60	125	134	143	183	250	271	274	316	263	296	454	1044	1171	379	538
(b) Other	295	230	291	401	382	435	422	470	683	688	656	736	721	1471	1916	2312
B. Capital Receipts	538	706	808	1041	811	933	1293	1486	1789	1532	1887	2354	2846	3325	2565	3248
1. State's Capital Receipts	299	316	458	474	489	400	817	1048	1132	1047	1225	1299	962	1780	1761	2404
2. Loans from Center (Gross)	239	390	350	567	322	533	476	438	657	485	662	1055	1884	1552	804	848
Aggregate Disbursements	1829	1757	2104	2622	2604	3713	3845	3755	4671	5635	6262	7113	8744	11222	10732	13345
A. Developmental Expenditure	899	891	898	1032	1202	1717	1808	1416	1811	2493	2888	3144	5004	6520	6182	8010
B. Non-Developmental Expenditure	584	609	797	862	916	1176	1468	1605	1719	2141	2231	2706	2377	3050	2940	3553
C. Repayment of Loans to Center	76	78	77	147	92	176	226	260	312	391	366	465	668	982	478	702
D. Other Disbursements	270	179	332	581	394	644	343	474	829	609	777	798	695	670	1132	1080
Overall Surplus (+) or Deficit (-)	-137	117	163	255	191	-566	105	662	573	-331	-64	-977	27	-187	339	102

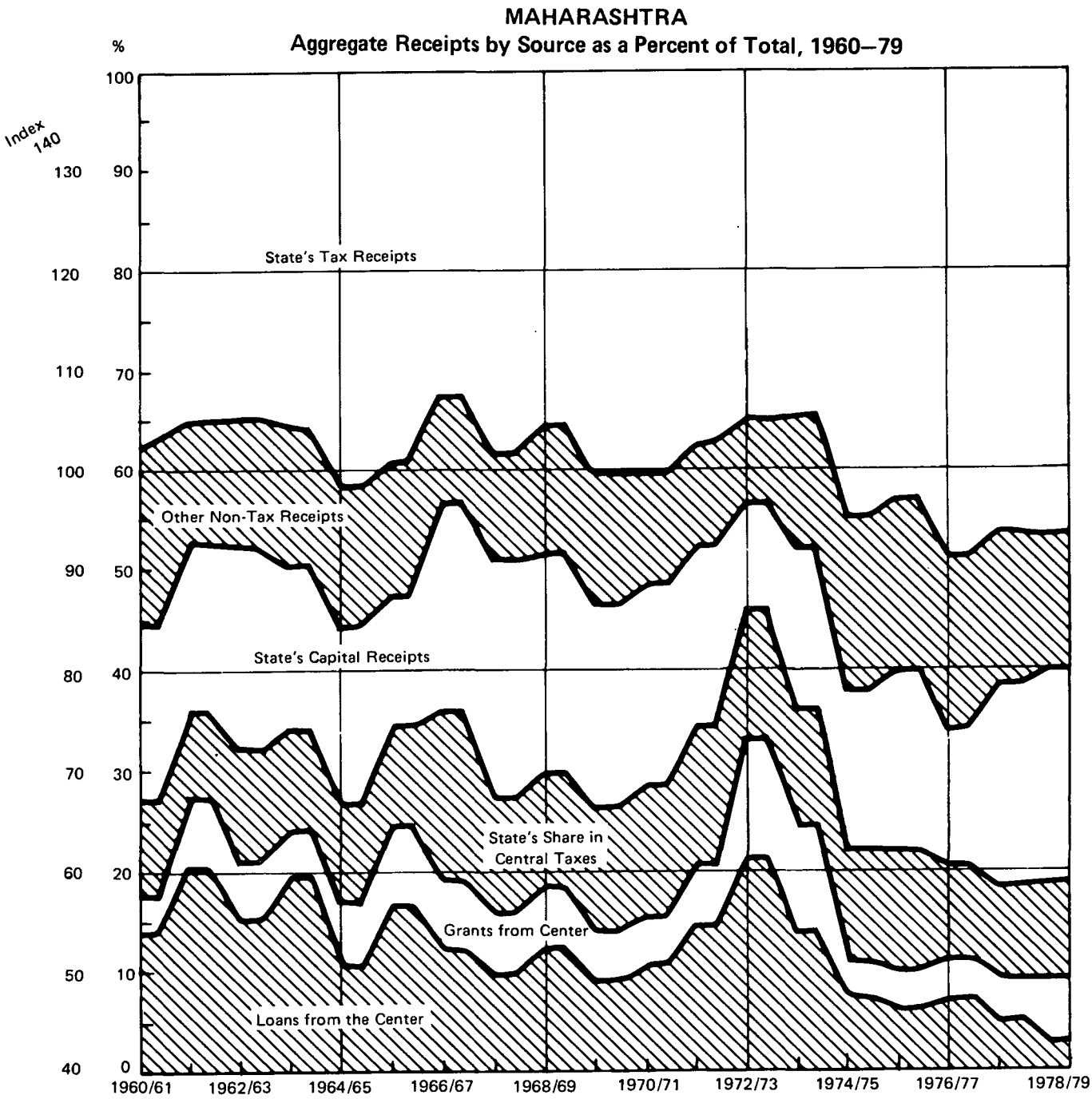
Table 2

Sources of Aggregate Budget Receipts
1975/76

	Maharashtra	All Other States
Own taxes and own non-tax revenue	65%	48%
Central Grants, loans and taxes	22%	40%
Market borrowing and loan recovery	23%	12%

3.12 The accompanying chart 3 presents broad trends in receipts of the Government of Maharashtra since the State was created in 1960. One striking feature to note is the rise in central assistance as a proportion of total receipts in the years 1971/72, 1972/73 and 1973/74, along with the relative fall during these drought years in Maharashtra's own revenues. During those years Maharashtra's own revenue stagnated in real terms and even fell in 1972/73. Central assistance increased sufficiently to increase real resources at the State's disposition and allow a considerable increase in development expenditure. With improved weather Maharashtra's own resources rebounded by 1973/74 and Central assistance remained high, allowing another jump in overall expenditure. Since 1973/74, central assistance has fallen way below its pre-1971 proportion, to about 20% of total State receipts. Although Maharashtra's share of central taxes has increased since 1973/74, central grant and loan assistance has fallen over 50% in real terms; the fall in 1974/75 in real aggregate receipts is all due to a fall in central assistance. Maharashtra's own revenues have increased considerably, by more than 50% in 1976/77 over their 1972/73 levels.

Chart 3



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3.13 Overall, Maharashtra's revenues are fairly elastic. Table 3 contains the various revenue elasticities with respect to income. All major sources of Maharashtra's revenues are elastic with respect to SDP; the values of the various elasticities are remarkably close to 1.4. Paradoxically, the most elastic source is Maharashtra's share of central taxes at almost 1.5. This is not as strange as it may seem at first as the pool from which this automatic sharing takes place is made up of personal income and Union excise taxes Maharashtra provides 70% of the former and must provide a major share of the latter as well. The size of the total pie, of which Maharashtra gets a fairly fixed slice, is very sensitive to income in Maharashtra.

Table 3: MAHARASHTRA - REVENUE ELASTICITIES 1960/61-1976/77

Elasticity of	State Domestic Product	SDP in Industry		SDP in Agriculture	R^2
State Taxes	1.39				.996
State Taxes		1.082	+	0.388	.996
Central Tax Devolution	1.488				.960
Total Tax Revenue (GOI & GOM)	1.413				.991
Total Tax Revenue (GOI & GOM)		1.2	+	0.219	.995
Non-tax Revenue	1.343				.996
Total Revenue Receipts (GOI & GOM)	1.395				.992
Total Revenue Receipts (GOI & GOM)		1.14	+	0.273	.995

3.14 State taxes are much more elastic with respect to industrial production than to agricultural production. This is because the State taxes non-agricultural commodities; basic food items such as grain, milk, fruit, etc. are exempted. The tax on agricultural income which exists in Maharashtra is not a serious tax; it has a threshold of Rs 36,000 (compared to a threshold of Rs 10,000 for the non-agricultural income tax collected by the Government of India), and only Rs 896,000 was collected in 1976/77, or about one-tenth of one percent of Maharashtra's taxes. There are some other taxes, including one for the Employment Guarantee Scheme, on commercial crops such as cotton and groundnut; these amounted to Rs 20.5 million in 1976/77 or about three-tenths of one percent of State taxes. The main taxes on agriculture are land revenue--Rs 108 million, or 1.7% of State taxes--and a purchase tax on sugarcane--Rs 181 million or 2.9% of State taxes. In all, taxes on agriculture amounted to Rs 360 million in 1976/77, under 6% of Maharashtra's taxes. Agricultural taxation amounted to less than 2% of agricultural income in that year; given their low elasticity and limited coverage, taxes from agriculture are likely to decline in importance even further in the future.

3.15 Maharashtra's revenue receipts can be expected to grow faster than State income and continue to provide the GOM with a rising proportion of SDP. Maharashtra is unlikely to have to raise tax rates to accomplish this, given

the high revenue response from industrial production and the likelihood that industrial production will continue to grow faster than agricultural output and SDP. The Finance Minister of the GOM in his speech presenting the revised budget for 1978/79 said he felt taxes were already at very high levels and he could not recommend raising them further.

3.16 Overall, the elasticities calculated over the last 17 years can be taken as a fair estimate of those likely to apply over the next five years. They are unlikely to rise as a result of a rise in sales tax or agricultural tax rate, although there is some possibility they may rise somewhat as a result of Maharashtra getting a larger share of centrally collected taxes.

3.17 The broad outlines of Maharashtra's debt position is presented in Charts 4 and 5. The first shows debt acquisition by the GOM and its proportion of State taxes. Debt outstanding has grown by 85% from 1960/61 to 1971/78, just over 3.5% a year, in real terms, on average, or at about the same rate as GDP. Debt outstanding grew rapidly in the drought years 1965 to 1968 and 1971 to 1973. It has fallen by half as a proportion of State taxes, revenue receipts and aggregate receipts over the period. As of the end of March 1978, Maharashtra's debt was just under Rs 15 billion (US$1.8 billion) of which 56% was owed to the Government of India, 16% to State pension fund, statutory bodies, etc., and 28% to the public. Acquiring debt is not completely under the control of the GOM; loans from the Government of India are negotiated in the context of the State's needs for Plan and non-Plan assistance and the overall volume and purpose are subject to criteria laid down by the Government of India. The Government of India has also restricted GOM's use of open market borrowing to avoid Maharashtra's crowding out borrowing by financially weaker State Governments. In the last year (1977/78), GOM was able to increase its market borrowing by only 10%, and all of this was for the Maharashtra State Electricity Board. The GOM would appear to have the repayment capacity to take on more liabilities and its Finance Secretary has said the Government would like to do so to enhance development expenditure; but at the moment the Government of India has restricted the GOM's long term borrowing.

Chart 4

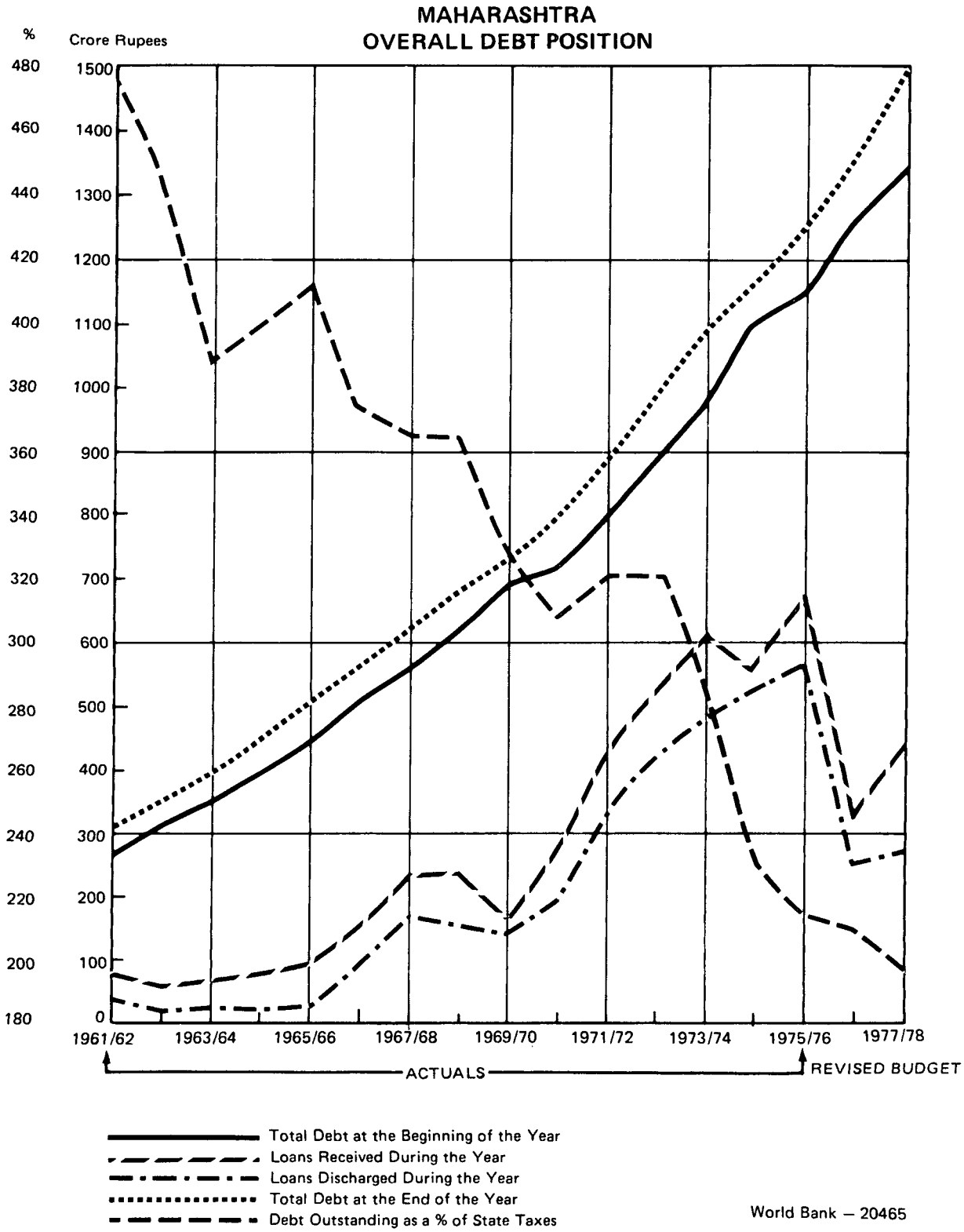

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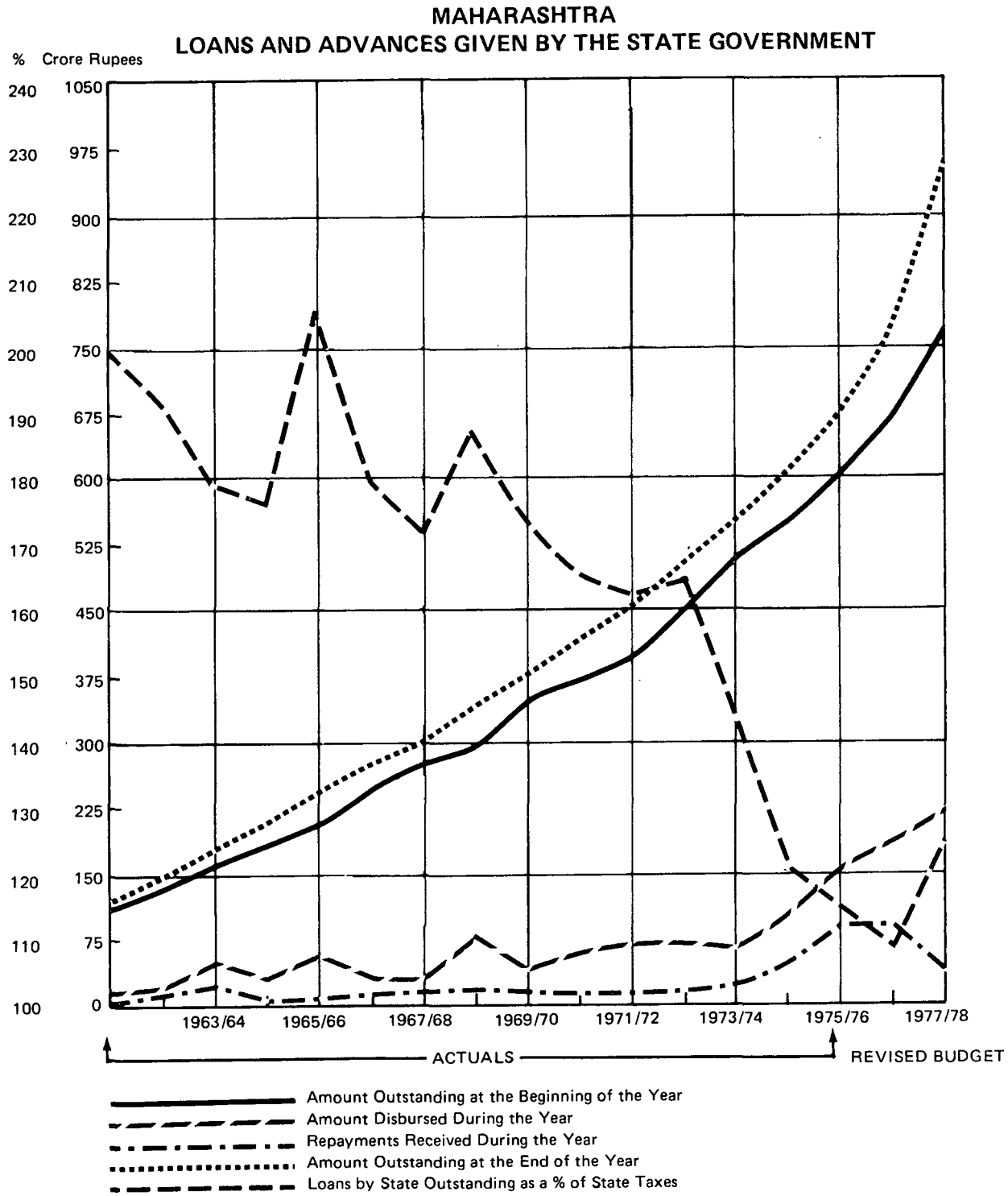
Chart 5



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3.18 On the asset side, the GOM has outstanding Rs 9.4 billion (US$1.1 billion) of loans to others as of the end of 1977/78. These loans have grown faster than the SDP, at about 6% per annum in real terms, since 1960/61. These loans have grown particularly rapidly in the last few years; nevertheless, they have declined as a proportion of State tax receipts. A very large proportion--90%--of these loans outstanding are with the Maharashtra State Electricity Board (MSEB), with a 30 year term, six year grace period and at the current rate of 6.25% per annum. The MSEB has no equity base of its own. The GOM gives loans to MSEB to implement an agreed development program, after considering the other resources--internal cash generation and other borrowing --available to the MSEB. Given the continuing need for the GOM to supplement the resources of the MSEB for development purposes, the GOM has not asked the MSEB to repay any of its outstanding loans. Much of the remaining amount outstanding is loans to farmers or cooperatives for various agricultural development purposes. Repayments have fallen short of amounts due; many of the loans were for land development carried out by the Department of Agriculture or some other agency on an area-wide basis, the cost of which was then charged to farmers, some of whom are quite poor with little repayment capacity. Given the dominance of loans to the MSEB in this category and the high priority given to power development in the State, the loans by the GOM outstanding are likely to continue to grow relatively rapidly.

III. Government Expenditures

3.19 Aggregate Government expenditure, including loans to others for development purposes, has grown at over 12% per annum since the early 1960s. Development expenditure has grown even faster. The growth of aggregate expenditure, developmental expenditure and plan expenditure as a proportion of SDP is presented in Chart 6 and the accompanying Table 4. All of these three variables have risen as a proportion of SDP; development expenditures and Plan expenditures have risen particularly fast in the last four years.

IV. Plan Expenditures

3.20 Plan expenditures have increased at about 8% per annum in real terms since 1961/62. The major shifts in Plan allocations since the Second Plan are indicated in Chart 7 and Table 5. Perhaps its most striking feature is the growth of Plan expenditures on power and the decline of allocations to agriculture cooperation and community development. Expenditure on irrigation has remained fairly constant at about 15% since the early 1960s. Starting in the early 1970s, Maharashtra's Employment Guarantee Scheme emerged as a major program of expenditure.

3.21 There is little doubt that Maharashtra is a power-hungry State and that power shortages are economically costly to the State and the nation's economy. Although the supply situation is better now than a few years ago,

when power cuts of 50% or more of demand were experienced, current power cuts remain in the range of 10% to 25% of demand. The portion of unconstrained demand not met is not readily discernable as many potential power users are denied power connections or enhancements due to shortages. The basic problem, Maharashtra's State Electricity Board (MSEB) feels, is lack of installed capacity, which in turn has resulted from lack of finances. MSEB claims an efficient operating performance (while admitting there is room for improvement); these claims are supported by MSEB's meeting or bettering Central Electricity Authority's norms for capacity utilization, power production from rate capacity, system losses, return on assets, etc. The MSEB thinks that planning and implementation capacity is not the problem; it is the constrained financial provision for the Board's development program.

3.22 Plan expenditure on power generation has grown at a rate of over 12% per annum, in real terms, since 1961/62.

Chart 6

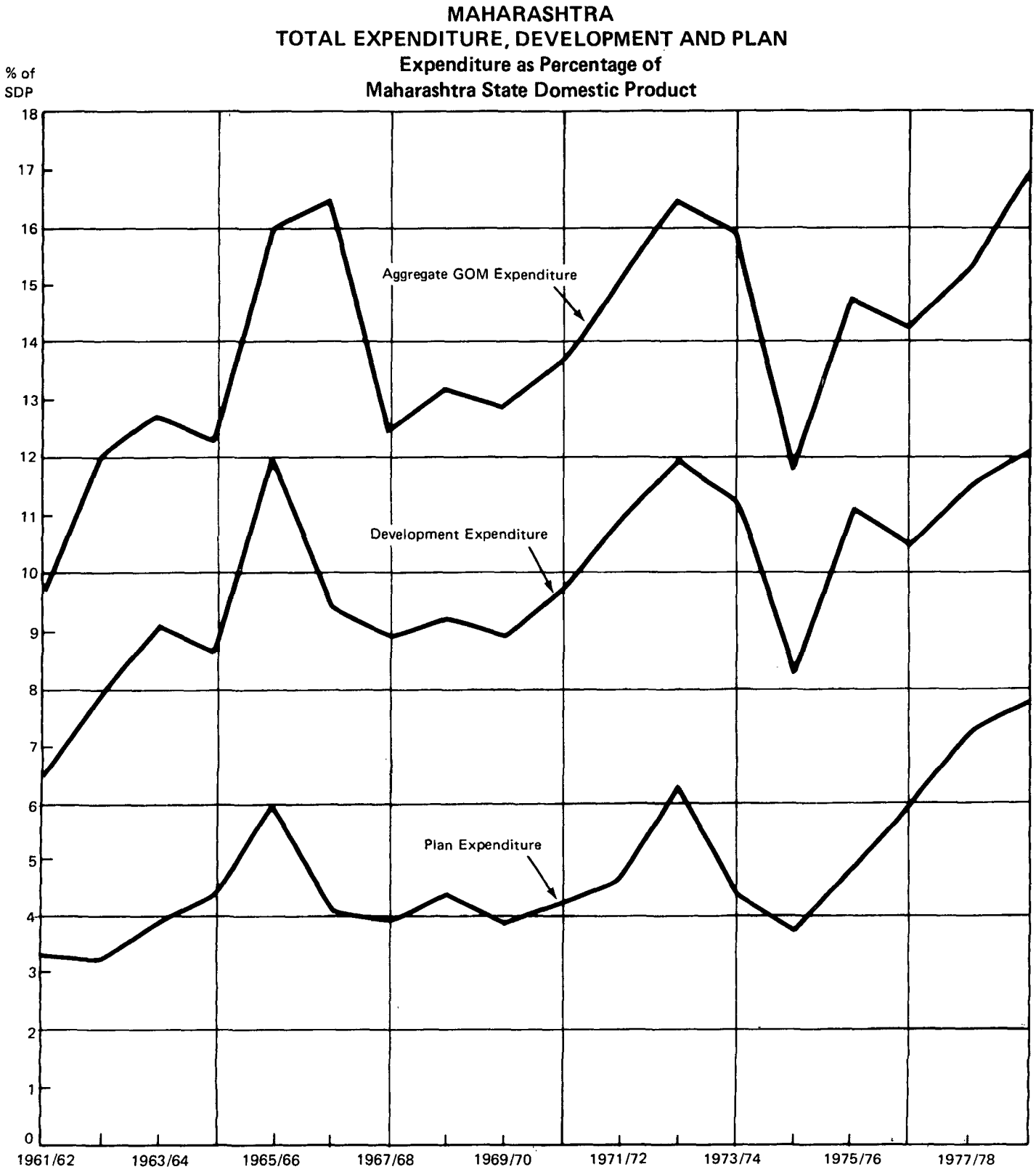

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Chart 7

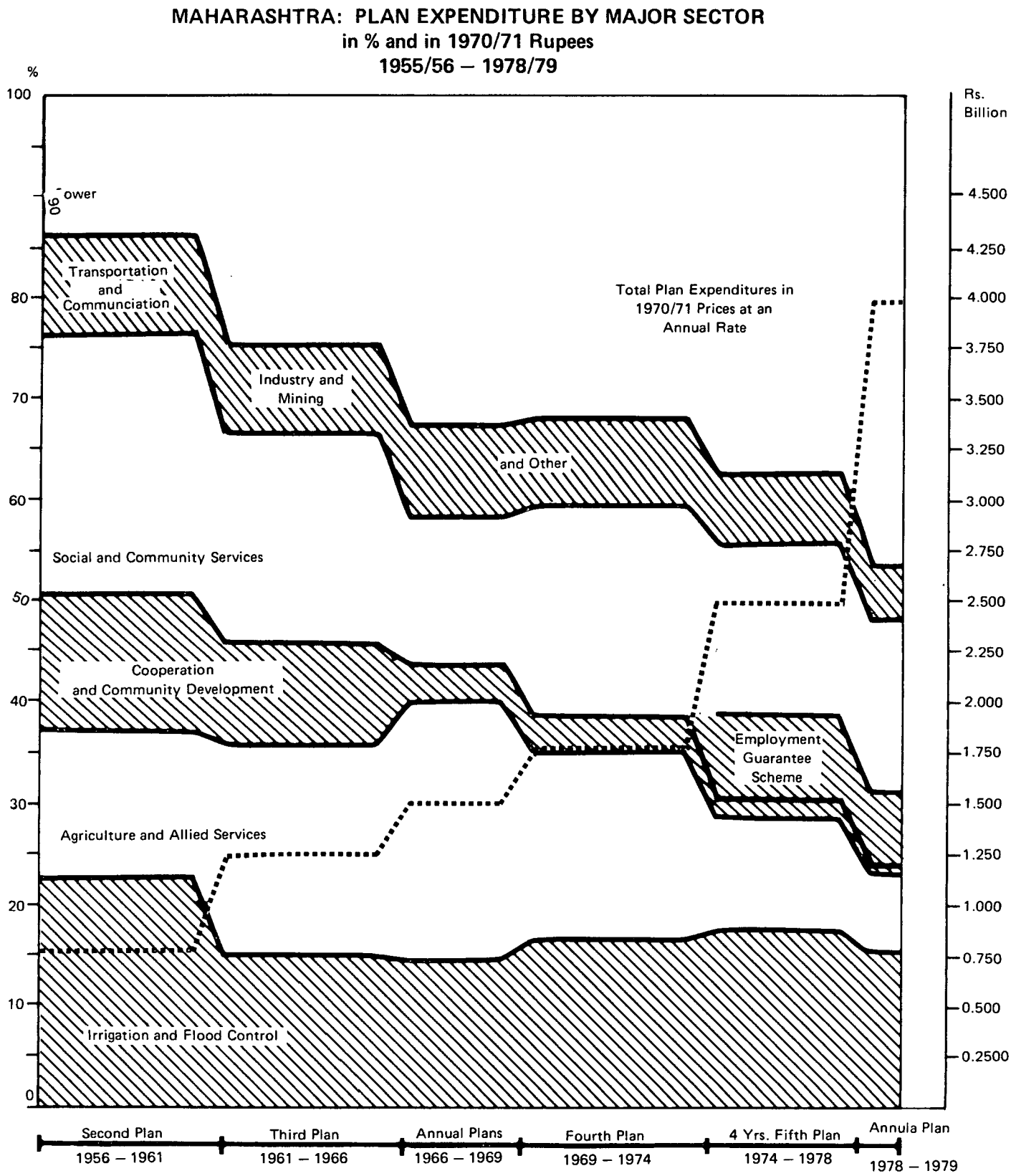

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Table 4

MAHARASHTRA

Total Expenditure, Development Expenditure & Plan Expenditure, 1961/62-1978/79
(in million of current rupees)

Year	Total Expenditure 1/	Development Expenditure (Revenue + Capital)	Plan Expenditure	Plan Expenditure as % of Total Expenditure
1961/62	1589.6	1076.4	550.8	35
1962/63	2189.1	1442.1	591.5	27
1963/64	2662.6	1855.9	790.4	31
1964/65	2788.8	1955.0	996.5	36
1965/66	3773.8	2843.2	1418.1	38
1966/67	4550.0	2617.1	1156.3	25
1967/68	3905.0	2792.6	1236.2	32
1968/69	4391.6	3065.9	1473.5	34
1969/70	4705.2	3288.2	1460.3	31
1970/71	5499.0	3900.3	1709.0	31
1971/72	6445.0	4691.8	1999.6	31
1972/73	7428.8	5358.3	2348.7	32
1973/74	9338.2	6609.8	2583.8	28
1974/75	8706.3	6153.7	2815.5	32
1975/76	11267.7	8454.6	3713.7	33
1976/77	11986.3	8883.0	5053.2	42
1977/78	13958.1 (R)	10524.8 (R)	6687.5*	48
1978/79	16089.0 (B)	11588.5 (B)	7450.0@	46

1/ Total expenditure is expenditure on revenue account and capital expenditure outside the revenue account; it does not correspond to aggregate disbursements in Annex Table 1 as it does not include capital transactions.

(R) Revised Estimates
(B) Budget Estimates

* Anticipated
@ Proposed outlays

Figures for 1961-62 to 1976-77 are actual.

Table 5

MAHARASHTRA

Plan Expenditure by Sector, 1956/57-1978/79
(in million of rupees)

Sector	Second Plan 1956-61	Third Plan 1961-66	Annual Plan 1966-69	Fourth Plan 1969-74	Fifth Plan 1974-1978	1978/79 (Proposed)
Agriculture & Allied Programs	657 (29)	1342 (31)	1112 (29)	2217 (22)	2323 (13)	598 (8)
Irrigation & Flood Control	514 (23)	649 (15)	567 (15)	1660 (17)	3200 (17)	1113 (15)
Power	192 (8)	939 (22)	1155 (30)	2836 (28)	6145 (33)	2835 (38)
Industry & Mining	64 (3)	148 (3)	106 (3)	396 (4)	752 (4)	315 (4)
Transport & Communications	222 (10)	375 (9)	352 (9)	811 (8)	1320 (7)	614 (8)
Social Services	585 (26)	892 (21)	563 (15)	2078 (21)	3150 (17)	1349 (18)
Employment Guarantee Scheme	-	-	-	-	1538 (8)	600 (8)
Other & Unallocated	32 (1)	4 -	2 -	47 -	12 -	25 -
Total	2263 (100)	4347 (100)	3856 (100)	10045 (100)	18459 (100)	7450 (100)
Total Expenditure in 1970/71 prices at an annual rate	785	1249	1504	1759	2511	3973
Index 1961-66=100	63	100	120	141	201	318

Table 6

	Plan Expenditure on Power at an annual rate in 1970/71 Prices Rs Million	As a % of Plan Expenditure	As a % of SDP
3rd Plan	270	22	0.9
Annual Plans	450	30	1.3
4th Plan	497	28	1.3
5th Plan	841	34	1.9
1978/79 (outlay)	1,512	38	3.0

Only a portion of these Plan expenditures on power are financed through the GOM's budget; the MSEB is a statutory body of the GOM and the first source of Plan financing is its own internally generated funds. Since 1974/75 (at least) the MSEB has been earning a rate of return of 9.5% 1/ on its capital base and for the past two years the rate of return has exceeded 13%. The next recourse is to market and other institutional borrowing. As mentioned earlier, the Government of India has restricted the GOM's open market borrowing to that for the MSEB and has limited this to a 10% increase over the year before. The main institutional sources are the Life Insurance Corporation and Rural Electrification Corporation. The remaining gap is filled by the GOM through loans under the Plan. As an example, the following is the proposed distribution of financing for the 1977/78 MSEB Plan expenditures.

%	Source
11	Internal Cash Generation
6	Open Market
2	Life Insurance Corporation
2	Rural Electrification Corporation
79	Government of Maharashtra Loans
100	

Some Plan expenditure on power lies outside the MSB's budget; hydro generating capacity is developed directly by the GOM, which then leases the developed hydro unit to the MSEB to operate. There are some minimal development expenditures of the MSEB that fall outside of Plan allocations; one example of this is the special pump connection arranged under certain agricultural projects financed by loans from ARDC.

1/ In 1975/76, reaching this rate required the transfer of subsidy funds from the GOM, as agreed with the World Bank. In the previous year, 1974/75, such a transfer was unnecessary to achieve the target rate of return.

3.23 The MSEB believes its development program needed to avoid power shortages over the next five years would cost over Rs 19 billion (US$2.2 billion). Hydro development would be on top of this. The year by year estimate along with the MSEB's internal cash generation is as follows:

	Need Based Expenditure	Internal MSEB Funds	Difference to be financed
		(in rupee millions)	
1979/80	2,840	699	2,141
1980/81	3,240	781	2,459
1981/82	3,800	1,070	2,730
1982/83	4,380	1,390	2,990
1983/84	4,780	1,707	3,073
	19,040	5,647	13,393

Neither the GOI nor, consequently, the GOM, have accepted these as expenditure targets, nor the increase in power demand they are based on. The MSEB is not optimistic that its need-based program will be accepted (nor the power deficit avoided) and thinks a realistic expenditure level over the next five years is Rs 15 billion. This essentially would keep expenditures close to their current level in real terms. In addition to the loans for its development program, the MSEB feels that due to an increasingly costly burden of rural electrification, the GOM will have to transfer an increasing level of subsidy to maintain the MSEB's rate of return at its 9.5% level.

3.24 A more informed and detailed review of irrigation development Plans than is possible here is being carried out in the Maharashtra State Irrigation Review. The need here is to review intended expenditures on irrigation over the next five years. Only a very rough view is possible, as the Irrigation Department does not yet have a firm estimate of available finances to Plan on. There is wide agreement that whatever major surface irrigation potential remains should be developed as soon as possible but accomplishing this in the next five years is infeasible from the standpoint of finances and GOM implementation capacity.

3.25 The Irrigation Department has begun planning on the basis that around Rs 8 billion (US$0.93 billion) would be available from normal sources, including expenditures under the Employment Guarantee Scheme. The Department has then phased the expenditure on planned projects (including the six candidate projects for World Bank assistance) as below:

Year	Rs billion
1979/80	1.40
1980/81	1.50
1981/82	1.65
1982/83	1.70
1983/84	1.75
	8.00

These levels do not include the costs of the improved standards and the accelerated pace likely to be agreed to in the case of the six projects making up the IDA composite project. The rough estimate for the additional cost is Rs 2.1 billion (US$244 million including Command Area Development) and 15% price escalation not normally counted in the irrigation Plan) which in the end will appear as Plan expenditures but which the GOM is considering sources additional to its normal resources -- i.e., it should come from other than GOM as additionality. The total Plan expenditure on irrigation would be then on the order of Rs 10 billion, Rs 2 billion of which should be additional to normal Plan resources.

V. Financial Resources in the Future

3.26 The main variables that will determine Maharashtra's financial ability to carry out its development Plans, including project undertakings we are interested in, are the growth rate of SDP, the elasticity of State receipts with respect to SDP, the level of aggregate State expenditure, the proportion of State expenditure devoted to Plan outlays and the priorities within the Plan. We can ignore Maharashtra's debt position as an influence on its resource mobilization efforts; Maharashtra may be constrained in the levels it can borrow in the future but by the policy of the Government of India rather than by creditworthiness considerations. As indicated below, we assume transfers from the Center will be as responsive (as adjusted below) as in the past to rises in Maharashtra's SDP.

3.27 There is one other crucial variable not mentioned above: the determination of the Government of Maharashtra to carry out its development program as planned even if it requires departures from the patterns of past financial arrangements, which are used here as guides for the future. The GOM's determination is, of course, a wild card in the play of forces governing expenditure. Some feel that if this variable cannot be included in the calculation (as it cannot in any very useful way), then the exercise is useless. Nevertheless, this lack is of limited concern. The same objections can be raised to exercises analyzing a borrower's creditworthiness, in which the borrower's determination to service debt is equally a wild card in the deck. Determination to repay cannot be rigorously analyzed; most Banks undertake creditworthiness investigations before lending and, in fact, the banking industry thrives on them.

3.28 There are many possible ways to specify the variables mentioned above -- SDP, revenue elasticity, and Plan priorities. The approach followed below is to choose a set of parameters that constitute reasonable or best guess estimates of their future levels, calculate the implications of these parameters for GOM's finances, draw the conclusions that are warranted and then test the sensitivity of these conclusions to changes in the parameters. The estimates chosen rely most heavily on their past levels or trends, although these have been adjusted in some cases to reflect future conditions likely to prevail.

3.29 The central estimate for SDP growth is 5% per annum in real terms. This is somewhat faster than in the past. Using the higher level reflects both optimism that India's overall growth rate will be higher than in the past and Maharashtra's potential to grow faster because of the large and growing weight of a faster growing industrial sector. Aggregate receipts are projected to rise at a rate 1.4 times the SDP growth rate (i.e., with an elasticity of 1.4) until aggregate receipts read 25% of SDP, after which they are projected to grow at the same rate as SDP. This estimate reflects the view that Maharashtra's revenues are basically elastic with respect to SDP but that the portion of State product commanded by the State Government will be limited; the estimate of 25% is somewhat arbitrary. Rupee inflation is estimated to be 7% per annum over the period. These estimates yield the following series for SDP and aggregate receipts.

Table 7: MAHARASHTRA: PROJECTED STATE DOMESTIC PRODUCT AND AGGREGATE RECEIPTS, 1976/77-1983/84
(in billion rupees)

Year	State Domestic Product	Aggregate Receipts
1976/77	80.4*	18.3
1977/78	92.6	20.3
1978/79	103.7	23.7
1979/80	116.1	27.7
1980/81	130.0	32.3
1981/82	145.6	36.4
1982/83	163.1	40.8
1983/84	182.7	45.7

* Preliminary estimate.

3.30 Total expenditures are projected to rise at the same rate as aggregate receipts. Plan expenditure is projected to remain at its average proportion (45%) during the last three years and not continue to rise as it has over the recent past. Plan allocation to power and irrigation are projected to remain at around 39% and 15%, respectively, of Plan expenditure over the next five years. Although proportional allocations to the power sector have risen rapidly over the past eighteen years, it is unlikely the proportion would rise further. Allocations to irrigation and flood control at times have been a little higher than 15%, and it is possible they could go higher again. Nevertheless the 1978/79 proportion is used as a first estimate. The results of these projections are presented in Table 8.

Table 8: MAHARASHTRA: ACTUAL AND PROJECTED TOTAL EXPENDITURES AND PLAN EXPENDITURE IN TOTAL AND ON POWER AND IRRIGATION 1976/77-1983/84
(in billions of both current and constant rupees)

Year	Total Expenditure	Plan Expenditure Total	Plan Expenditure Power	Plan Expenditure Irrigation
	(in billions of current rupees)			
1976/77 (A)	11.99	5.05	1.51	0.98
1977/78 (R)	13.96	6.69	2.62	1.08
1978/79 (B)	16.09	7.45	2.84	1.11
1979/80 (P)	18.79	8.46	3.30	1.27
1980/81 (P)	21.95	9.88	3.85	1.49
1981/82 (P)	24.58	11.06	4.31	1.66
1982/83 (P)	27.53	12.39	4.83	1.86
1983/84 (P)	30.84	13.88	5.41	2.08
Total (1979/80-1983/84)	123.69	55.67	21.70	8.36
	(in billions of constant 1978 rupees)			
1979/80 (P)	17.56	7.91	3.08	1.19
1980/81 (P)	19.17	8.63	3.36	1.30
1981/82 (P)	20.07	9.03	3.52	1.36
1982/83 (P)	21.00	9.45	3.68	1.42
1983/84 (P)	21.98	9.89	3.86	1.48
Total (1979/80-1983/84)	99.78	44.91	17.50	6.75

Note: (A) is actual, (R) is revised estimate, (B) is budget estimate and (P) is projected.

3.31 A comparison between the financial resources estimated by the above method and the requirements, discussed earlier, needed to finance the power and irrigation development are presented in Tables 9 and 10.

Table 9: MAHARASHTRA: COMPARISON OF NEED BASED FINANCIAL REQUIREMENTS FOR POWER SECTOR AND ESTIMATES OF FINANCE AVAILABLE, 1979/80-1983/84
(in billions of 1978 rupees)

Year	Need-Based Requirements	Hypothetical Projected Availability From all Sources	Difference
1979/80	2.84	3.08	+0.24
1980/81	3.24	3.36	+0.12
1981/82	3.80	3.52	-0.28
1982/83	4.38	3.68	-0.70
1983/84	4.78	3.86	-0.92
	19.04	17.50	-1.54

Table 10: MAHARASHTRA: COMPARISON OF NEED-BASED FINANCIAL REQUIREMENTS FOR IRRIGATION SECTOR AND ESTIMATES OF FINANCE AVAILABILITY, 1979/80-1983/84
(in billion of 1978 rupees)

Year	Requirements*	Availability	Difference
1979/80	1.72	1.19	-0.53
1980/81	1.83	1.30	-0.54
1981/82	2.02	1.36	-0.66
1982/83	2.09	1.42	-0.67
1983/84	2.15	1.48	-0.67
	9.82	6.75	-3.07

* These requirements include the proposed additional expenditure on projects aided by IDA, distributed over the five years in the same proportion as the regular program and excluding the 15% contingency.

These tables use constant (1978) rupee estimates of financial availability to compare with program requirements. The cost estimates for Plan projects are made in the prices prevailing at the time of the estimate, i.e., in 1978 rupees.

3.32 In both the power and the irrigation sectors, projected availability of funds fall somewhat short of projected requirements. In the case of the power sector the projected financial availability lies between the need based estimates of requirements and the MSEB's pessimistic estimates of what it would get. It is easily conceivable that, should the assumption underlying the projected availabilities and demand projections hold true, the need based requirements would not be met and Maharashtra would continue to be power short for another five years rather than further increase the proportion of development funds devoted to power. It is also possible that the Government of India would transfer additional funds to Maharashtra for power development or allow the MSEB to raise the additional funds on the domestic bond market.

3.33 The divergence between requirement and availability is larger in the case of the irrigation sector; the difference is 45% of projected availability. However, the projected availability does not include any additional funds that would devolve to the GOM because of World Bank participation in the irrigation projects. Although the GOM has calculated the additional expenditures on IDA aided projects as Rs 2.1 billion (US$253 million) or Rs 1.82 billion (US$219) net of price contingencies, the total project cost would be much larger and the IDA credit itself could be US$250 million or so. Under current arrangements between the Government of India and State Governments with regard to Bank Group aided projects, 70% of Bank Group disbursements on projects funded through State budgets devolve to the States in addition to normal transfers from the Government of India to the States. In this case up to Rs 1.5 billion, or almost half of the estimated difference between irrigation requirements and availabilities, could come to the GOM as additional funds in response to expenditures on IDA aided irrigation projects.

full irrigation program would be 22% of Plan expenditures (42% for power). If economic growth in Maharashtra were 4% rather than 5%, the proportion of Plan expenditure devoted to the irrigation sector would be 22% with all additionality and 23% if none was additional (42% and 43% respectively for the power sector).

3.34 The above discussion should be sufficient to indicate the range in which the Plan allocation must fall if the irrigation program is to be implemented as planned. Plan allocations to the irrigation sector must be around 21-23% of Plan outlays. This is somewhat higher than the current proportion of 15% and is high enough to cause some concern; but the somewhat higher proportion cannot be regarded as being out of the feasible range. The GOM clearly can expand on irrigation at this rate if it chooses to give irrigation developoment sufficient priority. The proportion has been as high as 17% in the past; the GOM says it is placing a higher priority on irrigation development than in the past; some of the requirements may be met by work carried out by the Employment Guarantee Scheme; and the Bank Group additionality accompanying higher levels of expenditure on irrigation should allow some increase in the proportion of Plan outlays devoted to irrigation. Nevertheless, it should be recognized that carrying out the irrigation program as planned, including implementing the higher standards agreed between the GOM and the Bank will involve an increase in the proportion of Plan expenditures devoted to irrigation.

CHAPTER IV

INDIA

ORISSA: STATE PLANNING AND FINANCE

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INDIA

ORISSA: STATE PLANNING AND FINANCE

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INDIA

ORISSA STATE PLANNING AND FINANCE

Preface

This study was undertaken in early 1980, in support of preparation of three major irrigation projects in Orissa. Its purpose was to shed some light on the factors which affect the capacity and willingness of Orissa to provide the budgetary resources received for financing the three large irrigation projects. Data for the study was collected during a mission to India in March 1980.

The paper is organized as follows: An introductory section provides a brief overview of the State of Orissa, its history and economic characteristics. In section II, trends in Orissa's financial resources are reviewed. The third section discusses trends in expenditure. Sections IV and V address issues of planning and Plan finance. The final section assesses the three irrigation projects in the content of the resources likely to be available for the irrigation sector over the next two Plan periods. This analysis is intended to assist in the allocations to the sector commensurate with its other commitments.

INDIA

ORISSA STATE PLANNING AND FINANCE

I. Orissa Background and History

4.01 Orissa is among India's oldest kingdoms. It has been a unified linguistic and cultural entity for many centuries before Christ, the same territory having been identified with Oriya speaking people for over two and a half millenia. Known as Kalinga until the 16th century, Orissa was a principal power of medieval India, extending at the height of its power, in terms of political extension, from the Ganges to the Godvari in Andra Pradesh. Its political supremacy also made a strong force of Oriya culture, and during the 14 - 16th centuries, Orissa remained a citadel of Hindu culture: not until the reign of Akbar was Orissa finally incorporated into the Moghul empire. Orissa is typically still thought of as the bastion of Hindu civilization in India. Indeed, 97% of the population is Hindu. This steadfastness or cultural integrity is among the factors cited, in its more negative aspects such as an immured caste system and excessive traditionalism, as inimical to rapid economic development of the area.

4.02 Orissa was integrated into the British empire in the early 1800s, but 26 princely States remained outside the provincial administration, with the result that large parts of the present day State remained feudal. The consequences are very clearly seen in the distribution of the transport network, and in the failure to develop, until after 1947, Orissa's vast mineral reserves most of which are located in erstwhile princely States. Orissa was constituted as a State in the Indian Union in 1950.

Salient Economic Features

4.03 Orissa is among the poorest and most backward States of India, with a per capita income of Rs 785, approximately three-fourths of the all-India average. Both in terms of area, 156 million km^2, and population, at 1971 census, of 22 million, Orissa is fairly small, making up only 4% of India's total population and 5% of its land area. Just under a quarter of Orissa's population belongs to scheduled tribes, living in the Koraput and Surdargh districts primarily, and 15% come from the scheduled castes. This gives Orissa the largest proportion of disadvantaged people, relative to the State's total population of the Indian Union: 39% of the population belongs to these backward groups. The extent of poverty and backwardness of this State is confirmed by the Planning Commission's estimate that 90% of Orissa's rural population and 76% of the urban population live below the poverty line, as compared with 40% for India as a whole.

4.04 The economy of the State centers on agriculture, which provides employment to 79% of Orissa's working population, as compared to 68% for India as a whole, and accounts for 69% of State income. It follows that Orissa remains very rural. There are only six towns with populations greater than 50,000. Most urban areas are very new, having sprung up as a result of Central Government development projects. These include Hirakud (dam), Rourkela (steel), Paradeep (port), and Talcher (electricity). The bulk of the population--92%, as compared with 80% for the country as a whole, lives in sparsely populated rural areas. Population density is very low, and the population per village--408--is the smallest in the country.

4.05 These features make the task of those trying to provide the fruits of development very difficult, since transport and communication to most parts of the State are very inadequate. The State is very poorly served by the existing railway system and has only 30 km of road per 100 km^2, less than one-fifth of which is surfaced. Large parts of the State thus become inaccessible during much of the year. The consequences are myriad: incomes are kept low as produce must be marketed locally at reduced prices; the exploitation of the State's large mineral and forest resources cannot begin and, with all-weather communication to only 6 of the 13 district headquarters, even routine State administration is difficult.

4.06 In spite of heavy reliance on agriculture, this sector is extremely undeveloped by all India standards. Less than 15% of net sown area is irrigated, and since double cropping is restricted to irrigated areas, it is also limited. Use of HYV in irrigated areas has spread rapidly, however. Fertilizer use, at nine kg per hectare, is amongst the lowest in the country. Although there are substantial ground water resources in much of the State, agricultural power consumption is negligible, since only 28% of villages have been electrified. Orissa is thus extremely vulnerable to vagaries of weather and even in years of normal rainfall, erratic distribution can cause severe flooding and drought. As a result, agricultural output in the State, and hence per capita incomes, are highly variable; in 1976/77, for example, per capita income fell 20% below the previous year's level. A declining land/man ratio is also the cause of concern to the Government.

4.07 The contribution of industry to State domestic product has been very low; 12%, although the potential in view of the State's mineral and forest wealth is tremendous. Orissa ranks third in India in terms of forest resources, with 40% of its land area under forests, much of it in high value woods. In terms of minerals, Orissa is rich in iron, chromite, manganese, coal and limestone among others. Unfortunately, mineral development, which could have for the State, was slow to take place since the bulk of the deposits were located in princely States and were not exploited until the second Plan period.

4.08 In terms of gross output of industry Orissa ranks 14 out of 15 major states, and in terms of employment, the sector's contribution is also small, with industry providing work for only 7% of the labor force. The bulk of the industrial development which has taken place has been in public sector

undertakings. Not surprisingly, entrepreneurial talent and finance have been scarce in view of the very low level of technical education, poor banking and commercial facilities, general low level of urbanization and fragmented markets.

4.09 With regard to basic needs and social infrastructure, Orissa also fares very poorly. At independence, health standards were particularly deficient, the entire coastal region being malarial, with smallpox and cholera epidemics frequent. During the first three Plan periods, much was accomplished to counteract this, but standards are still low. There are only 26 hospital beds per lakh of population, compared with 81 for India as a whole. Per capita outlays on health, Rs 9, are also low, about 75% of the all India average. The relative standards are not much different in education. Per capita outlays in education were Rs 25, 15% less than the all India average and less than half that of Punjab or Kerala. Literacy rates are concomittantly low although at 26% not much lower than the all India figure of 30%. They are above the corresponding figures for Bihar and Rajasthan (19%), Madhya Pradesh (22%), Andhra Pradesh (24%) and Uttar Pradesh (22%). Similarly, rural water supply is deficient and many basic needs are far from being met.

4.10 Notwithstanding the desperate lack in the basic needs sector, and the fact that basic needs are very far from being met, the development strategy of the State emphasizes, in keeping with national priorities, the development of agriculture, irrigation and power, stress on these sectors has left very little room for development of social services infrastructure.

II. Financial Resources

State Revenue Receipts

4.11 State revenue receipts are, as stated earlier, those receipts for which the State has no repayment liability and which are used to finance items of revenue expenditure. They consist of State tax revenues--the most important--non-tax revenues, the next largest, and grants from the Central Government. These categories will be treated in turn. Table 1 details the trends in each category since 1960/61.

4.12 Orissa is, as we have seen, a poor State, and this poverty characterizes private as well as public incomes. Because of its low level of urbanization, underdeveloped agriculture, small industrial sector, and the generally low purchasing power of most of the State's inhabitants, the taxable capacity of the State is very low. Per capita tax receipts were 42 rupees, less than half of the all States' average 1/; total receipts were similarly constrained.

1/ RBI Bulletin, September, 1978.

Table 1

ORISSA REVENUE RECEIPTS

(Rs Crores)

	61/62	62/63	63/64	64/65	65/66	66/67	67/68	68/69	69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77
1. Share of Central Taxes	6.52	10.36	12.14	11.81	12.99	15.06	16.53	19.99	25.26	30.47	37.57	42.07	46.42	47.24	61.46	65.22
2. State Taxes - Total	10.34	13.34	16.60	18.78	19.75	21.18	24.23	26.05	28.40	33.27	34.79	39.97	42.20	50.43	68.41	80.82
i. Land Revenue with Cess	2.42	2.79	3.01	2.99	2.87	2.51	1.61	1.58	1.73	1.67	1.79	2.06	2.31	2.43	3.19	4.39
ii. *State Excise Duty*	1.67	1.81	1.95	2.13	2.23	2.45	2.87	4.16	4.22	4.25	4.65	4.92	5.09	5.51	6.13	6.69
iii. Taxes on Vehicles	1.03	1.29	1.50	1.65	1.71	1.87	2.17	2.59	2.60	2.93	3.07	3.33	3.61	4.66	5.71	5.56
iv. General Sales Tax	2.80	3.73	4.21	6.24	6.37	6.41	7.38	7.75	8.50	10.09	9.90	12.37	16.65	19.64	29.30	29.56
v. Central Salex Tax	0.77	1.24	2.58	2.03	2.93	3.71	4.22	4.30	4.97	6.35	6.20	7.14	3.82	6.86	7.90	15.49
vi. Sales Tax on Motor Spirit	0.45	0.53	0.65	0.77	0.63	0.85	0.96	1.01	1.02	1.11	1.39	1.70	-	0.81	0.84	2.03
vii. Stamps	0.74	0.82	1.07	1.14	1.25	1.31	1.58	1.63	1.82	2.10	2.64	2.73	2.89	3.59	4.17	4.00
viii. Registration	0.22	0.28	0.32	0.35	0.30	0.39	0.47	0.50	0.55	0.56	0.56	0.55	0.59	0.79	1.07	1.13
ix. Entertainment Tax	0.15	0.22	0.23	0.26	0.30	0.39	0.36	0.39	0.44	0.49	0.61	0.79	0.70	1.16	1.32	1.74
x. Electricity Duty	0.04	0.52	0.80	1.23	0.87	1.10	2.55	7.08	2.14	2.79	2.93	3.30	3.79	3.45	6.74	2.75
xi. Taxes on Roads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
xii. Taxes on Passengers	-	-	0.21	0.19	0.12	0.12	0.01	-	0.35	0.86	0.97	0.99	1.19	1.47	1.96	2.10
xiii. Taxes on Professions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
xiv. Urban Property Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
xv. Surcharge on Sales Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
xvi. Taxes on Agricultural Income	0.05	0.11	0.06	0.06	0.08	0.07	0.05	0.06	0.06	0.07	0.09	0.09	0.06	0.06	0.08	0.07
3. Non-Tax Revenue	11.24	14.93	14.11	16.89	19.69	19.04	17.44	20.60	29.01	25.37	25.59	28.06	30.21	31.09	43.55	58.03
i. Interest Receipts	0.96	0.81	0.90	1.64	2.25	1.51	1.67	4.08	6.50	4.18	3.73	3.33	2.51	2.12	4.13	5.56
ii. Public Works	0.36	0.48	0.71	0.75	0.85	0.67	0.60	0.64	0.88	0.98	1.25	1.84	3.01	0.56	0.52	0.62
iii. Irrigation	1.48	1.94	2.09	2.35	2.80	1.83	1.60	1.00	2.59	0.68	0.70	0.93	1.84	4.01	9.46	10.16
iv. Forests	3.10	4.24	3.77	4.36	4.70	4.59	4.79	5.64	6.58	7.38	7.91	7.97	8.24	10.95	12.43	14.08
v. Others	3.34	7.45	6.64	7.50	9.09	10.44	8.78	9.24	12.46	12.15	11.95	13.99	14.61	13.45	17.01	27.61
4. Transfer from Reserve Funds	3.43	7.80	2.43	3.34	3.22	4.42	4.01	7.10	8.70	8.38	9.03	12.02	2.10	15.18	10.61	13.22
5. Grants from Center	8.94	19.52	22.13	22.44	20.60	43.11	41.01	39.21	40.92	38.93	44.22	48.27	44.18	81.66	89.48	101.78
i. Statutory Grants	3.67	13.95	16.20	15.56	11.00	53.82	30.38	30.35	26.02	24.03	22.30	20.75	18.90	56.97	60.11	62.33
ii. Grants from Centrally Sponsored	-	-	-	-	-	-	-	-	-	-	-	-	9.98	6.21	6.86	12.07
iii. Grants from Natural Calamities	-	0.50	0.78	-	-	2.63	1.00	1.00	-	0.13	3.00	3.72	1.05	-	-	-
iv. In Lieu of Tax on Railway Fares	0.22	0.22	0.22	0.11	N.A.	0.34	0.34	0.34	0.38	0.38	0.38	0.38	0.38	0.36	0.36	0.36
v. Agricultural Wealth Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total State Revenue Receipts including transfer from Reserve Funds shown against Item 4.	40.47	65.95	67.41	73.46	78.25	102.81	103.22	112.95	132.29	136.42	151.20	170.39	165.11	223.60	273.51	319.07

4.13 The State derives 42% of its current revenues from taxes, 37% through grants from the central government and 20% from various non-tax sources. About 55% of the tax revenues are from taxes which the State imposes and collects itself, the remainder are taxes which the State receives through revenue sharing arrangements with the Central Government.

4.14 The States, Orissa included, receive a share in four central taxes: the income tax, central excise duties, the Center's "additional" excise duties and the estate duty. These shared taxes, known as devolutions, have over the of total tax receipts. Since the share of central taxes is a function of the award made quinquennially by the Finance Commissions, their buoyancy, or elasticity is not a relevant concept here. Orissa has, in general, done well by the Finance Commissions. Since the Fourth Plan, shared taxes have provided a relatively buoyant source of funds and the category has grown at approximately the same rate as the State's revenue from its own taxes, 13.8%.

4.15 The State's own taxes make up about 22% of its total revenue resources. The most important State tax is the sales tax which contributes about one-third of the State's overall own tax revenues. Its growth is a funtion of the growth in the volume of trade and increases in the price level. This tax has proven to be acceptably buoyant, (its elasticity with respect to GDP has been 1.8 over the past two Plan periods) although it has not grown as fast as state own tax revenues as a whole.

4.16 Second in importance is the central sales tax, a tax levied by the Center at a uniform rate of 4% in all States, but assigned to the States so that they receive the entire revenues. The central sales tax makes up about 20% of Orissa's own tax revenues Receipts from this tax are a function of the volume of interstate trade. At 13%, this tax has been among the faster growing sources of revenue for the States.

4.17 The excise duty contributes only about 8% to State own revenues, far less than in most States, and its growth has been slow (6%). The excise duty is levied on narcotics and liquors and its buoyancy is related to revision of rates, increases in the price of country liquor and the policies regarding prohibition and country liquor shops.

4.18 Most other taxes contribute less than 5% each to the State's own taxes. Taxes on vehicles have grown slightly more slowly than the overall total, but with development of transport infrastructure, should grow faster, providing the State makes efforts to exploit them. The growth of land revenue, which contributes 5% or so to own tax revenues, has picked up after a period of decline due to strict implementation of land reform measures and consolidation of holdings, but this rate of growth is not expected to continue. The entertainment tax, taxes on passengers and taxes on motor spirit are all, in principle, elastic taxes. However, their contribution to State's income remains low, because of the State's overall low level of development. The same is true for electricity duties, which are duties on power sold by the Orissa State Electricity Board and on private generation. Since 1974/75, efforts have been made to collect arrears and duties have been raised, contributing to the faster growth in the recent period. As in other States, taxes such as the agricultural income tax have never been a prolific source of income to the State.

4.19 Overall, State tax revenues have grown at 13.5% per annum since 1968/9. In real terms, this performance is diminished somewhat, since the price level has risen also, by about 5% per annum. Nonetheless, an annual growth of 7-8% in real terms bespeaks some effort. Part of the explanation also lies in the fact that Orissa began in the mid 1960s with very low levels of taxation - own tax revenues as a fraction of SDP were only 1.5%. The proportion has risen to 4% in 1976/7, which represents almost a tripling.

4.20 The fact that performance of own tax revenues in terms of growth rates or elasticities has not been poor should not obscure the fact that taxes are very low, as the 4% figure above attests. Orissa collects only Rs 20 per head in own tax revenues; this compares with an average of Rs 48 for the 15 major States, and Rs 99 for Punjab, Rs 80 for Maharashtra, Rs 36 for Madhya Pradesh, Rs 23 for Bihar and Rs 31 for Assam. 1/ Thus in terms of absolute level of taxation, Orissa still has a very long way to go. How much of this is due to poor tax effort, and how much to a taxable capacity which remains to be developed is an interesting issue. Unfortunately it cannot be dealt with in this short paper.

4.21 In the past decade, non-tax receipts, such as revenues from irrigation rates, forestry undertakings, interest receipts, etc. have grown much less rapidly than tax receipts (11% per annum). Irrigation receipts have grown rapidly in the past three years, just making up for poor cost recovery and declining revenues throughout the sixties and early 1970s. Since 1974/75, efforts at better collections are quite striking, with a 3-fold increase in receipts in 4 years. Whether this is evidence of a longer term change in the pattern of cost recovery remains to be seen.

4.22 Forest receipts make up one-third of total non-tax receipts, as might be expected, with Orissa's rich forest resources. The forest resource in general remains underdeveloped, and more investment, if properly managed, is likely to yield better returns from forestry operations. Income from interest receipts, public works, (mostly building rents and tolls on government owned roads and bridges) have remained constant or declined.

4.23 The category "others" is a catch-all for administrative services, social and development services and miscellaneous receipts. The first consists of administration of justice (sale of unclaimed properties, court fees, etc.); jails (income from sale of jail manufactures); police and supplies (collection of license fees). Under social services income come education (fees from schools); medical and public health (medical fees and sale of medicines, fees for preparing town drainage plans); agriculture (receipts from fisheries and farms operated by the State) and cottage industries and cooperation. Receipts from mines and minerals also come under this head.

1/ These figures are three year averages, see Volume III Chelliah "The Measurement of Tax Effort of State Governments".

4.24 In general, the trend in non-tax receipts, unlike tax receipts, is a function of the level of services provided, the development of the sector and in the case of the State Government's commercial undertakings, the state's management of these enterprises. It is on the non-tax side where Orissa's poor performance, and poor effort are most visible. The picture on the non-tax side is one of stagnation and decline, with a turn-around, beginning in 1974/5 in irrigation and forestry receipts. There is clearly a great deal of scope in increasing revenues from the non-tax source; additional resource mobilization measures, better collection of arrears, management and collection practices are necessary if the State is to avoid unintentional effective subsidization of the services it provides. Nevertheless, because taxable capacity is indeed low, the same standards cannot be applied to Orissa as to other States.

4.25 The final State revenue receipts to be discussed are the grants from the Central Government. The first of these are the statutory grants, provided to the States through the Finance Commission's award. Orissa has continually received this special budgetary assistance; generally it has been only very slightly less than the amount of the State's own tax revenues, 20% of total revenue receipts.

4.26 Natural calamities occur with unfortunate frequency in Orissa, and the State has frequently required assistance for drought works for rebuilding after floods. In the last year the State was eligible, 1.05 acres was transferred on this account.

4.27 Centrally sponsored schemes are relatively rare in Orissa - grants equivalent to just over 3% of revenue receipts were given in 1977/8. (The loan portion of these schemes is found in the capital account.) Part of the reason for this is the high proportion of public sector investment in the State.

4.28 The grant in lieu of railway fares does not amount to very much.

4.29 To summarize, revenue receipts in Orissa have been acceptably buoyant over the period, growing 13% per annum in a period in which prices increased at slightly over one-third that rate. On the other hand, the overall level of receipts has been extremely low; revenue receipts per capita are the lowest of the 15 major States. As a result, in spite of extreme economy in revenue expenditures, the State has had a budget deficit for most of the recent period, (covered by ad hoc assistance from the center) whose consequence is that no funds are available from budgetary sources, for financing the State Plan. The State depends, therefore, entirely on borrowing central assistance and additional resource mobilization undertaken during the Plan period. The following section discusses these trends in Plan and non-Plan expenditures.

III. Review of State Expenditures

Revenue Expenditures

4.30 Revenue expenditures make up some 16-18% of total expenditures in Orissa, and have been growing at 11.4% per annum over the past decade, more slowly than revenue receipts. Table 2 shows the allocation across various types of expenditure. Approximately two-thirds is spent on development items, primarly on education, irrigation, public health, and agriculture. The most important item in the non-development category is debt service - this is common to most States, followed by the wages and overheads of state employees. Land revenue turns out to be a costly tax to administer.

Table 2: ORISSA REVENUE EXPENDITURES*
(Rs crores)

	1974/75		1975/76		1976/77	
Development	149.21	(66.76)	182.87	(66.23)	204.43	(66.35)
Agriculture	16.4	(7.33)	21.5	(7.79)	23.3	(7.56)
Co-operative	2.4	(1.07)	2.98	(1.08)	4.16	(1.35)
Irrigation	21.32	(9.53)	19.51	(7.07)	25.54	(8.29)
Electricity	1.92	(.85)	3.93	(1.42)	4.93	(1.60)
Public Works	13.39	(5.99)	14.70	(5.32)	13.79	(4.48)
Local Development	8.79	(3.93)	10.14	(3.67)	11.92	(3.87)
Forests	3.40	(1.52)	5.47	(1.98)	5.23	(1.70)
Transport & Communications	.59	(.26)	.82	(.30)	.61	(.20)
Education	46.79	(20.94)	58.84	(21.31)	65.08	(21.12)
Medical	18.16	(8.13)	24.65	(8.93)	28.76	(9.33)
Other						
Non-Development	74.29	(33.24)	93.29	(33.79)	103.73	(33.67)
Land Revenue	6.22	(2.78)	7.86	(2.85)	9.23	(3.00)
State Excise Tax	.5	(.22)	.8	(.29)	.9	(.29)
General Sales Tax	.9	(.40)	1.21	(.44)	1.31	(.43)
Administration Service	26.7	(11.95)	34.7	(12.57)	34.7	(11.26)
Debt Service	28.2	(12.62)	35.2	(12.75)	38.9	(12.63)
Pensions	2.28	(1.02)	2.73	(.99)	3.45	(1.12)
Stationary & Printing	1.74	(.78)	2.54	(.99)	2.97	(.96)
Famine Relief	3.84	(1.72)	3.88	(1.41)	3.68	(1.19)
Other						
Total Revenue Expenditure	223.5	(100)	276.1	(100)	308.1	(100)

*percentages in parenthesis
Source = Government of Orissa, Finance Department.

4.31 Of the 16 - 18% of total expenditure on capital account, the bulk of it, approximately 95% represents Plan expenditures. Capital expenditures have grown at 13.7% per annum indicating that Orissa has succeeded in directing an increasing proportion of State resources to development sectors, even though in absolute terms, the overall capital budget, and the Plan, is very, very small. 1/

Composition of Plan Expenditures

4.32 Throughout the period, but especially since the Fourth Plan, Orissa has focused its efforts, as Table 3 shows, on three sectors: irrigation, power and agriculture. In the Sixth Plan period, the State expects to spend nearly 73% of all Plan outlays in these three sectors combined. Power is being undertaken with the greatest intensity, taking up 31% of Plan expenditure. All other sectors--mineral and industrial development (which is allocated 3.4% of Draft Sixth Plan expenditures), transport and communication (8%) and human resource development have received far lower priority. Expenditures in the social service sector specifically have fallen from 16% of the Fourth and Fifth Plans to 13% in the Sixth through a decline in education and housing expenditures.

4.33 It is very difficult to evaluate a States' levels of Plan expenditure and the Plan strategy. They can be viewed in relation to deficiencies in infrastructure in each sector, or in relation to per capita expenditures in other States, or the Plan strategy can simply be taken as given.

4.34 As regards irrigation, there is no question that present levels of infrastructure development in the sector is very low. Orissa has vast irrigation potential both from major rivers as well as groundwater. But inadequate development of irrigation facilities--less than 15% of net sown area is presently irrigated--has led to low levels of productivity in areas where the agricultural potential is there. Moreover, existing irrigation facilities are frequently underutilized, and the water supply system not always insure that small farmers get their share. Both are to be remedied, according to the Draft Plan, although there is nothing in the document which suggests how this will be done.

1/ See appendix tables.

Table 3: PLAN EXPENDITURE - ORISSA
(in Rs. Crores)
(% in parenthesis)

		II	III	Annual	IV	V *	VI (Draft Plan
I.	Agriculture & Allied Sectors	17.88 (20.64)	39.97 (17.80)	21.55 (17.25)	46.00 (18.65)	67.54 (14.89)	208.40 (18.52)
II.	Cooperation	.97 (1.13)	2.37 (1.06)	1.72 (1.38)	6.75 (2.71)	9.89 (2.18)	22.00 (1.96)
III.	Irrigation & Flood Control	27.69 (31.98)	29.14 (12.97)	21.45 (17.17)	25.80 (10.34)	76.49 (16.86)	260.00 (23.11)
IV.	Power	12.02 (13.88)	51.71 (23.03)	33.17 (26.54)	88.16 (35.36)	183.36 (40.42)	350.00 (31.11)
V.	Industry & Mining	3.94 (4.56)	20.26 (9.02)	11.94 (9.55)	21.14 (8.48)	13.24 (2.92)	38.00 (3.38)
VI.	Transport & Communication	6.04 (6.97)	38.46 (17.12)	17.37 (13.90)	16.63 (6.67)	28.62 (6.31)	93.65 (8.32)
VII.	Social Services						
	i. education	6.47 (7.47)	17.63 (7.85)	6.34 (5.07)	14.75 (5.92)	26.57 (5.86)	47.00 (4.18)
	ii. health	3.50 (4.04)	14.66 (6.53)	7.96 (6.37)	14.96 (6.00)	21.90 (4.83)	61.00 (5.42)
	iii. housing	1.07 (1.24)	1.49 (.66)	.43 (.35)	7.43 (2.98)	11.59 (2.55)	19.00 (1.69)
	iv. other	3.83 (4.42)	4.56 (2.03)	2.19 (1.75)	3.16 (1.26)	11.02 (2.43)	20.00 (1.78)
VIII.	Economic Services	3.18 (3.67)	4.34 (1.93)	.83 (.67)	4.06 (1.63)	.27 (.06)	1.75 (.16)
IX.	General Services					3.13 (.69)	4.20 (.37)
Total Plan Expenditure		86.59	224.59	124.95	249.34	453.62	1125.00

* 5th Plan relates to 1974-75 to 1977-78.

4.35 Intensive power development is appropriate according to all of the above criteria--installed capacity is the lowest of the 15 major States, as is generation. Domestic consumption is lower than all States but Bihar. But more importantly, it is felt that development of all other sectors, and the concomitant development of the State, creation of employment, and attraction of industries is crucially dependent on this essential input. In the Sixth Plan, Rs 350 crores are to be spent on power development. The bulk of this will be spent on additions to installed capacity, although the Plan includes transmission and rural electrification also. Institutional finance (mainly ARDC) will also contribute to the size of the rural electrification program.

4.36 In industry, the private sector is extremely weak, so to push industrial growth in Orissa, the State emphasizes the need for large scale investments by the Central Government, although the Orissa State Financial Corporation offers finance to local entrepreneurial activity. The State's own input Plan-wise to industrial development and mining is correspondingly low, at 3.4% of Plan outlays.

4.37 Like it neighbors in the Eastern region, Orissa is rich in minerals, although exploitation to date has not gone far. In the Sixth Plan, further schemes for exploration and iron-ore extraction are planned.

4.38 Given its sparsely populated area, and vulnerability to weather, road transport facilities are a priority for a State like Orissa. The Plan goal is to provide all villages with populations greater than 1,500 with link roads by the end of the Plan period. This sector has been allocated 8% of Sixth Plan outlays.

4.39 Among social services, universal primary education is the long-run goal in the education sector, but it is still a very distant one, tentatively to be achieved by the end of the Seventh Plan. At the end of the Fifth Plan, primary enrollments were about 80% and in upper primary, about 25%; although the numbers are much lower in backward districts where distance is a problem. The Plan also focusses on adult literacy programs. Approximately 4% of Plan outlays are allocated to the education sector.

4.40 Public health facilities in Orissa are very poor, the doctor: population ratio is 0.11 per thousand, and the bed:population is 0.47 per thousand, as compared to the al-India figures of 0.31 and 0.81 per thousand. These low overall standards are due to financial constraints and low level of expenditures on health which was only Rs 9 per capita, compared with an all India average of Rs 12.5. The objectives in the Sixth Plan are to achieve one health Center per 8000 population by 1982/3 and to strengthen the primary health Center network. Family planning, financed in all States 100% by the Central Government, also receives high priority. About 5.5% of Sixth Plan expenditures have been allocated to the health sector, including medical education and rural water supply, both of which are still very deficient.

4.41 Outlays under "other", to which 2% of Plan expenditure has been allocated, include, information and publicity, labor and labor welfare, craftsman training, development of backward classes, nutrition, welfare of prisoners, and legal aid to the poor.

IV. The Plan: Financial Resources

4.42 Finance for the State Plan comes from five basic sources: (a) the State's surplus (if any) on current account, after all non-Plan expenditures have been netted out from revenue receipts; (b) the contribution of public sector enterprises; (c) central assistance, (d) negotiated and market loans, unfunded debt and other miscellaneous capital receipts, and (e) additional resources mobilized during the Plan period. Ex post ad-hoc assistance from the Central Government or Reserve Bank, an increase in floating debt or sale of state assets can also contribute to financing the Plan, but these are, of course, not planned sources of revenue when the Plan is being drawn up.

4.44 As table 4 shows, the contribution from the State's own revenues, the difference between non-Plan revenue receipts and non-Plan revenue expenditure 1/ has been of a fairly large negative order, 10% of the estimated Plan size.

4.45 Additional resource mobilization is likewise a budgetary resource conventionally accounted for apart from the ordinary revenue receipts because it is entirely earmarked for Plan finance. Examples of additional resource mobilization measures include such things as changes in the issue price of liquor, increases in the electricity tariff and bus fares, increases in the rate of royalty on minerals, amendments to check evasion of sales tax and to prevent undervaluation of documents for stamp tax, higher retained receipts from district lotteries, increases in court fee rates, higher sales tax rates, reductions in concessionary rates and withdrawals of tax exemptions, to name just a few. Targets for additional resource mobilization are set by the State government in consultation with the Planning Commission at the time of the annual or 5-year Plan discussions to fix the State's contribution to its own Plan.

1/ Note that while this is always loosely referred to as the revenue account surplus, it is, stricly speaking, the surplus (deficit) only of non-Plan revenues over expenditures on current account. Non-Plan revenue receipts, moreover, include only those receipts which would have been earned at rates of tax prevailing at the beginning of the Plan period. Additional tax or non-tax receipts, from rate increases introduced after the outset of the Plan, come under the heading "additional resource mobilization". At the outset of the subsequent Plan period, the slate is once again clean, with all the previous Plan's additional measures included in revenue receipts and a different set of new measures under this head.

Table 4

Resources for the State Plan

(Rs. in crores)

	1977-78 Latest Estimates	% of Plan Resources Req.
A. Plan Out-lay	156.00	
1. Balance from Current Revenue	(-)16.28	(-)10.4
2. Contribution of Public Enterprises at 1973-74 Fares and Tariffs	(-)1.05	(-) 0.6
(i) O.S.E.B.	(-)2.19	(-) 1.4
(ii) O.S.R.T.C.	(-).66	(-) 0.4
(iii) Orissa Mining Corporation	1.50	9.6
(iv) Orissa Construction Corporation	.16	-
(v) O.S.I.C.	.04	-
3. Loans from Market by State (Net)	6.75	4.3
4. State's share in small savings	8.10	5.2
5. State's provident fund	12.00	7.7
6. Miscellaneous Capital Receipts (Net)	(-)10.90	-7.0
B. Additional Resource Mobilisation by State Government and Public Undertakings	46.27	30.0
1. 1974-75 Measures	14.91	
2. 1975-76 Measures	9.96	
3. 1976-77 Measures	9.65	
4. 1977-78 Measures	11.75	
5. 1978-79 Measures		
C. Negotiated Loans of the State Government and Public Undertakings and Market Borrowings of the Public Undertakings, Negotiated Borrowings	19.14	12.27
1. By State Government	3.69	2.3
(i) Loans from L.I.C.	1.25	0.8
(ii) Loans from R.B.I.	2.44	1.5
2. By State Enterprises	6.60	4.2
(i) Loans from L.I.C.	4.40	2.8
(ii) Loans from R.E.C. (Normal)	2.20	1.4
3. By Local Bodies		
(i) Loans from L.I.C.	.20	-
4. Market Borrowing of State Enterprises (Net)	8.65	5.5
D. Net Interest Entitlement	14.80	9.5
E. Central Assistance (Normal)	39.50	25.3
F. Central Assistance (Advance)	-	-
States Total Resources	78.73	50.0
Memo Items: Total Resources for Plan	118.23	75.6
Total Gap in Years Resources	37.77	24.0
Opening Overdraft	26.40	16.9
Total Gap in Resources	64.17	41.0

4.46 If additional resource mobilization over the Plan period is added to the balance from current revenues, the State's budgetary contribution rises to 20% of the Plan. This is very low compared to other States, in which up to 40-60% can come from the State's own resources, and is simply a reflection of Orissa's very low resource capacity.

4.47 The second item of Plan finance is the contribution of public sector enterprises. This has been moderate throughout most Plan periods. As pointed out in the introduction the figure simply represents the operating surplus and internal resources of the state corporations, not the enterprises' commercial profit.

4.48 Loans from the market and market borrowings of the State enterprises, principally the Electricity Board amount to about 9.8% of Plan resources.

4.49 Negotiated loans of the State and State enterprises negotiated principally from the Life Insurance Corporation of India and the Reserve Bank contributed about 12% in 1977/78.

4.50 Small savings loans make a modest, though steady source of revenue, comprising about 5% of Plan resources.

4.51 "Miscellaneous capital receipts" are all the other net transactions not accounted for under the other headings, such as short-term loans from the Central Government, recoveries of loans and advances to other institutions by the State Government, net accretions under various sinking funds and other net accounts including non-Plan loans. In general, this is a negative figure, since a substantial amount is repaid to the Central Government and financial institutions.

4.52 Central assistance made up about 25% of plan expenditures in the year under review. Central assistance on Plan account, (as opposed to the assistance on revenue account, discussed earlier) is composed of grants and loans, and is fixed by the Planning Commission. For Orissa, the assistance is given on a 70% loan, 30% grant basis, except for the funds earmarked for Plan expenditures in tribal areas, which are given on a 10% loan, 90% grant basis. Although it is not shown here, Orissa also receives special assistance from the Central Government for its Plan, under the heading of "assistance for 'special problems'".

4.53 Two other features should be noted: Orissa begins its financial year 1977/8 with an opening overdraft. Moreover, after all sources of Plan finance have been taken into account, the expected size of the Plan remains 32% larger than the resources available for it. There is a resource gap of 37.8 crores, in addition to the opening overdraft. This resource gap will be filled through various means, among them, the withdrawal from reserves, increase in floating debt and sale of securities. In addition, there are various forms of ad hoc assistance from the Central Government which the State may take recourse to, including 'special problems' assistance.

4.54 The financial picture of Orissa is a troubling one. It shows a State which is heavily dependent on the Central Government for financial assistance, and which has been unable to generate a revenue surplus to supplement other sources of Plan funding. Quite the contrary, in most years in the recent past, the budget has shown a revenue deficit. The State's performance in the additional resource mobilization sphere remains an indication that Orissa is indeed making efforts. Although these are sufficient to turn around the revenue deficit so that a net positive balance of approximately Rs 30 crores was achieved in 1977/8, this reflects less than 20% of expected Plan outlays, which is low by comparison with the average of 15 major States.

4.55 It is clear therefore that whatever progress the State is able to make will be a function of resources from external sources or borrowing, and that the State will continue to be affected closely, and far more than other States, by the formula used by the Central Government in determining the patterns of assistance, both on revenue and Plan account, to the States.

V. The Planning Process

Planning Machinery

4.56 Planning in Orissa is carried out by the Finance Department. There is no separate department or Board for planning. The Finance Department at present functions as coordinator between the operational departments and is the ultimate financial arbiter of overall Plan outlays as well as their sectoral disposition. In the department's joint portfolio, Finance takes up the bulk of the work, and the planning side is notably weak. Such planning as is carried out consists, essentially, of an accounting and balancing of revenues remaining after funds have been allocated to ongoing schemes; there is no in-house facility for scrutinizing sectoral strategies, much less for an examination of the State Plan on a project by project basis or for assisting the individual departments in project evaluation or advising on the inclusion of specific projects in the departmental Plan.

4.57 In Orissa, a five-year plan of Rs 2525 crores expenditure ($2.9 billion) was put forward at the discussions with the Planning Commission. The center's counter-proposal was a Rs 955 crore Plan. Subsequently the Plan has been finanlized at Rs 1125 crores of which approximately Rs 237 crores is from the states own resources 1/ and the balance, Rs 888 crores, the Center's assistance plus borrowing.

1/ As per Sixth Draft Plan, November, 1978.

VI. Financing the Orissa Projects

4.58 The purpose of this review of state revenues and expenditures has been to provide the background for an assessment of the State's implementation capacity of the three irrigation projects, a brief description of which follows:

(i) Mahanadi Barrages. Preliminary, preparatory works on this project began in 1979/80. The barrages are expected to finish in 1984/85, the second year of the Seventh Plan. Tentatively, the total cost of the works is estimated at $98 million (Rs 82 crores). Model studies for the project remain to be completed by CWC, but eventually, they are expected to show that the barrage needs shifting towards the left bank and that Kendrapara and Pattamundai canals will function better if they are taken off from the left bank of the Mahanadi Barrage rather than from the right bank.

(ii) Subernarekha Irrigation Project. The project is to be a joint undertaking of the States of Bihar, Orissa (the principal partners) and West Bengal (minor share). It will provide irrigation to about 250,000 ha, industrial and municipal water supply to the Jamshedpur steel complex, and flood protection on the lower Subernarekha river. The participating States have agreed on the sharing of the water and the cost. The main investments will include two dams (Chandil and Kharkai), two barrages (Galudih and Kharkai), main canals (including the Link Canal to Orissa), water distribution networks to 5-8 ha outlets, drainage and roads. The total cost is roughly estimated at US$500 M.

(iii) Rengali Irrigation Project. The project is part of the Rengali Multipurpose project which is being developed in two stages. Stage I includes the construction of the Rengali Dam on the Brahmani river for flood control, irrigation and hydropower generation (through two hydro-electric units of 50 m.w. each). Stage II envisages development of irrigation over an area of about 400,000 ha of CCA. It includes the construction of a barrage on river Brahmani (Samal barrage), two main canals on the left and right river banks, the distribution system to 5-8 ha outlets, drainage and roads. The total cost of Phase 1 is roughly estimated at US$160 M.

4.59 Of these three, works have begun on the first two, for Subernarekha, implementation is presently scheduled to begin in 1981/82.

4.60 Since the projects have not yet been appraised and some modifications may still be made, the first step in analyzing State implementation capacity, namely fixing project costs, has not been made. All references to costs are therefore taken from the estimates provided by the Orissa Irrigation Department. 1/ Assessing the likelihood of smooth and timely implementation of the three irrigation projects rests on the answers to two questions:

(a) Does the State have the ability to provide the necessary resources?

(b) Is the heavy expenditure required for the three irrigation projects consistent with State priorities as far as irrigation development relative to other sectors is concerned, and within the irrigation sector itself, is this heavy expenditure consistent with the Irrigation Department's priorities?

4.61 The first question is a function of the resources available for the State Plan, the rate at which they will grow over the period of project implementation and the availability of Plan resources to the irrigation, as opposed to other sectors. The second question can be approached by looking at the proportion of State Plan outlays earmarked for the Irrigation Department in the period over which the projects will be implemented. Is this proportion in line with the past trend of expenditures in the sector? If not, which sectors will this larger commitment come at the cost of? Within the irrigation sector itself, expenditure trends must be examined for any break in the past pattern of investment as between major, medium and minor schemes. If there are such changes which come at the expense of expenditures on which the State also places great priority, conflicts may arise and allocations to one or more of the projects could undergo some slippage. Table 5 provides the basic framework for analyzing the first issue.

4.62 Total Orissa commitments to Bank-financed projects in medium and major irrigation are expected to total Rs 620 crores, or $738 million, by 1990. This is a sizeable commitment, and averages out to Rs 23 per capita, per year. Line (5) shows the proportion of irrigation department outlays which, by mission estimates, will be committed to Bank-financed projects. In the Sixth Plan, on average 67% of outlays are on Bank-financed projects; in the Seventh Plan, the proportion averages 61%, although with phasing of expenditures as proposed by the irrigation department, Bank commitments absorb close to all of irrigation budget in the years 1983/84 and 1984/85. Not shown in the table, but worth pointing out, is that, if to these committments, are added: (1) pre-Fifth Plan projects which remain

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1/ The estimated project costs provide a probable lower bound to actual costs; both design criteria as well as physical and price contingencies may differ, most likely raising, not lowering costs. From the point of view of implementation capacity, the project costs should be thought of as a lower bound.

unfinished, and (2) Fifth Plan projects still incomplete this amounts to more than 100% of projected outlays 1/ in the initial years of the Seventh Plan excluding spillover from Sixth Plan expenditures, as presently phased.

4.63 In sum, the table shows that the bulk of the Sixth and Seventh irrigation Plans do consist of World Bank projects, although at the outset of the period a few ongoing schemes do come to completion and towards the end there is some slack so that new schemes can be begun.

4.64 Several comments need to be made about this table. The first has to do with the total cost of the new projects, which, as furnished by the Irrigation Dpartment will be Rs 81 crores, Rs 244 crores, and Rs 167 crores respectively or almost $590 million, by completion of all three in 1990. This is a large figure, and one which has not been agreed by the State Government. All three projects are still far from appraisal; hence, price and physical contingencies, as well as project design, may ultimately change these costs.

4.65 The second caveat is that the bulk of the expenditures as estimated by the Irrigation Department take place in the seventh Plan period. The sixth Plan is still in draft form, and likely outlays in the Seventh Plan - whether totals or for the Irrigation Department, are even more tentative. In this table, on the basis of discussion with the State Finance Department and the Planning Commission, the Seventh Plan has been assumed to be Rs 2800 crores, 2.5 times larger than Sixth Plan. The author feels this figure is generous, and is more in the nature of an upper bound on Plan growth given the growth in revenue trends of the State, discussed earlier. Thus, all the proportions which contain this figure in the denominator must take this into account.

4.66 Similarly, the likely allocation of Plan resource to the Irrigation Department--assumed to remain constant at 22% of total Plan outlays--is but a best guess of what is likely to happen 4 - 10 years hence. It amounts to a larger figure than that presented by the Irrigation Department for its best estimate of the Seventh Plan. Should this proportion increase, the resource position for the Irrigation Department would be correspondingly eased. However, such a rise is not likely, because of the pressure to maintain Plan outlays in the power sector. Several large projects were completed at the end of the Fifth Plan, leading to a temporary lull in the momentum of investment in power. This provided the margin to increase irrigation department expenditures, which are expected to rise to 25% of Plan outlays in the last year of the Sixth Plan. In the Seventh Plan however, it is likely that efforts to increase investments on the power front will be renewed, it is for this reason that irrigation department outlays are projected at 22% through the seventh Plan.

1/ This result does not occur if the phasing for Seventh Plan annual expenditures provided by the Irrigation Department is used, a phasing which struck the mission as most improbable, since annual Plan expenditures were phased to decline from Rs 137 crores in the first year of the Seventh Plan to Rs 68 crores in the final year. The mission has projected a rising trend, in line with past trends.

Table 5

Orissa Irrigation Projects in relation to State Plan Expenditures

	Total	78/79	79/80	80/81	81/82	82/83	VI	83/84	84/85	85/86	86/87	87/88	VII	88/89	89/90
1. Total Project Costs:[a/]	619.25	26.31	19.18	38.38	42.45	37.81	164.04	98.06	106.25	71.76	56.53	33.68	376.29	48.60	28.90
(1) Mahanadi	82.86	.13	. 1	3.00	7.96	8.58	20.08	31.36	31.39	-	-	-	62.75	-	-
(2) Rengali	244.77	2.32	4.00	8.00	8.06	8.57	30.95	42.34	48.50	53.04	34.00	17.20	195.08	16.20	2.54
(3) Subernarekhn	167.28	-	-	-	6.94	8.03	14.97	16.80	17.76	18.72	22.53	16.48	92.29	32.40	26.36
(4) Ongoing Medium (11)	76.71	23.35	12.74	18.33	10.54	2.90	67.85	8.85	-	-	-	-	8.85	-	-
(5) Ongoing Medium (4)	47.63	.51	2.03	9.05	8.95	9.77	30.19	8.72	8.60	-	-	-	17.32	-	-
2. Total State Plan Size[b/]		187	220	225	240	255	1125	450	500	550	600	700	2800	-	-
3. Irrigation Plan[c/]		32	38	52	61	62	245	100	110	120	135	150	615	-	-
4. (3) as % of (2)		17%	17%	23%	25%	24%	22%	22%	22%	22%	22%	22%	22%	-	-
5. Projects as % of Irrigation Plan:		73%	50.5%	73.8%	69%	61%	67%	98%	96%	60%	41%	22%	61%	-	-
(1)		na	1.0	5.8	13.0	14.0	8.1	31.3	28.0	-	-	-	10.0	-	-
(2)		7	10.5	15.4	13.0	14.0	12.7	42.3	44.0	44.0	25.0	11.5	32.0	-	-
(3)		-	-	-	11.0	13.0	6.1	16.8	15.0	16.0	16.0	11.0	15.0	-	-
(4) + (5)		66	39	52.6	32.0	20.0	40.0	17.0	7.0	-	-	-	4.0	-	-
6. Additionality[d/]		8.1	4.9	10.65	10.0	9.0	-	32.0	37.0	25.0	20.0	-	114		
7. Irrigation Department Plan[e/] including additionally increment		32.0	38.0	52.0	63.8	71	-	133.0	147.0	155.0	155.0	150.0	873.0		
8. Projects as a % of Irrigation Department Plan additionality included		73%	50.5%	73.8%	66.5%	53.2%	-	73.6%	72.1%	45.8%	36.1%	22%	43%		

a/ As furnished to mission by Irrigation Department. All expenditures are to be carried out by Irrigation Department; there is no CAD nor power components.
b/ Seventh plan is estimated to be 2.5% x the size of the Sixth.
c/ Assumes seventh plan Irrigation Department outlays continue to take up 22% of plan; this is 100 crores more than estimated by Irrigation Department for size of Seventh plan, although annual phasing differs.
d/ On assumption that Bank finance 50% of project costs of 5 year time slice as follows; (OM: 77-81), S (81-8).
e/ No change for 1978/79 - 1980/1, on the assumption that additionality for ongoing projects has already been incorporated into Sixth plan Irrigation Department outlays.

4.67 Finally, there must be a caveat about the price escalation (8%) built into the Irrigation Department's estimates. These account for 34% of the total twelve year cost estimate. Any changes here, therefore, can make a big difference. Also, since all three projects are still far from appraisal, the annual phasing of the three projects, especially Subernarekha is still in doubt. Modifications here will also affect the ultimate burden on the Irrigation Department Plan relative to the Department's other committments to non-bank ongoing or new schemes.

4.68 Since the projects will be financed by foreign assistance, Orissa will receive additionality funds - 70% of project disbursements - which must be added to the State's present expected levels of Plan outlays to arrive at the total irrigation Plan outlays, taking the effects of additionality into account. Line 6 shows the additionality Orissa can expect to receive from the four projects (for ongoing medium, for the time-slice 1977/78 - 1982/83, for Subernarekha and Rengali 1982/83 - 1986/87 and for Mahanadi, 1980/81 - 1985/86) on the assumption that all projects will be financed 50% by the World Bank. Line (7) shows the level of Irrigation Department outlays, inclusive of additionality. A Seventh Plan of Rs 615 crores is the mission estimate: if the three major projects are in fact financed by the World Bank, then an additional Rs 114 crores will become available for the State/irrigation department Plan. The size of the Sixth Plan remains unchanged, since it is assumed that additionality has already been incorporated, the bulk of it deriving from projects which were ongoing pre-sixth Plan projects. The proportion of Bank-assisted projects relative to this additionality inclusive Plan size are shown in line (8).

4.69 There is little way of knowing whether the Irrigation Department Plan, estimated at Rs 615 crores, will be based on the assumption that the projects will go forward with Bank financing (and that the Rs 615 crores is therefore inclusive of the additionality expected) or whether it has been drawn up on the assumption that a program of this size is to be implemented regardless of financing Plans. (In this case, if the projects do obtain Bank financing, the

department will receive an additional, unexpected Rs 115 crore windfall). 1/ If the former is the case, line (5) is relevant, if the latter, then line (8) is the appropriate figure.

4.70 Additionality implies that Bank projects will require 63% of Irrigation Department outlays on the Sixth Plan, instead of 67% and to absorb 43% in the Seventh instead of 61%.

4.71 The scenario depicted in Table 5 suggests that with the four projects in Orissa, the Bank is effectively implementing the major part of the State's irrigation Plan. This represents a high degree of exposure for the Bank, since any changes are likely to affect four projects simultaneously there being so little slack in the secotr. The slack is reduced to near-zero at the outset of the Seventh Plan, even though the figures include only spillovers from the Sixth Plan and no new projects to be taken up in the Seventh Plan. Some rephasing of Sixth Plan projects, whether Bank or internally financed, must clearly be contemplated. Both the estimates for the overall size of the seventh Plan, and the Irrigation Department's share in it, are on the generous side. Thus, it is unlikely that the financial burden represented by the present arrangements would be significantly eased by an increase in financial outlays to the state or to the sector.

1/ This assumption implies that additionality funds are indeed earmarked for the department concerned, and effectively, do not substitute for funds which the State would have allocated to the department in any case. The implication is that additionality indeed does enable more ambitious projects to be carried out than would otherwise be the case. It is further assumed that within the Irrigation Department itself, additionality contributes to financing of the project on behalf of which funds are received. This is tantamount to saying that additionality does not substitute for funds which the Irrigation Department itself would have earmarked for the Orissa projects, were there no additionality. Again, the assertion was that additionality enable the Department to carry out a larger project. The question of whether additionality is additional in the first place to the assistance the State Government receives from the Center is of course the most basic one. Given the political circumstances, it appears that indeed, the states are getting a larger share of the pie, and that the Central Government is not reducing its assistance on one front while providing additionality. From an economic point of view, a fairly clear case can be made for suggesting that additionality does not come at the cost of Central Government expenditure either, but is manifest in a larger budget deficit. The latter argument is quite compelling; the machinations within the Planning Department and the Irrigation Department are less easy to know. If the assumptions are indeed mistaken, to take the opposite case, there is full substitution, both at State and Department level the figures and proportions in Line (7) will be substantially higher - but the resource position of both State and Department will still be eased. There is no change in direction.

State Priorities

4.72 Table 6 confirms the priority Orissa places on irrigation. Since the Fourth Plan, allocations to the irrigation sector have been growing rapidly, from 9.4% of total outlays to 22% for the sixth Plan period. Any reduction in this level is unlikely, because Orissa is very determined to seek economic development though intensive efforts in the power and irrigation sectors. The assumption of 22% of Plan outlays allocated to irrigation in the seventh Plan, therefore, seems easily justifiable, although, as noted earlier, it is unlikely to be increased because of competing demand from the power sector.

Table 6: PLAN EXPENDITURE - ORISSA
(in Rs. Crores)
(% in parenthesis)

		II	III	Annual	IV	V *	VI (Draft Plan)
I.	Agriculture & Allied Sectors	17.88 (20.64)	39.97 (17.80)	21.55 (17.25)	46. (18.65)	67.54 (14.89)	208.40 (18.52)
II.	Cooperation	.97 (1.13)	2.37 (1.06)	1.72 (1.38)	6.75 (2.71)	9.89 (2.18)	22.00 (1.96)
III.	Irrigation & Flood Control	27.69 (31.98)	29.14 (12.97)	21.45 (17.17)	25.80 (10.34)	76.49 (16.86)	260.00 (23.11)
IV.	Power	12.02 (13.88)	51.71 (23.03)	33.17 (26.54)	88.16 (35.36)	183.36 (40.42)	350.00 (31.11)
V.	Industry & Mining	3.94 (4.56)	20.26 (9.02)	11.94 (9.55)	21.14 (8.48)	13.24 (2.92)	38.00 (3.38)
VI.	Transport & Communication	6.04 (6.97)	38.46 (17.12)	17.37 (13.90)	16.63 (6.67)	28.62 (6.31)	93.65 (8.32)
VII.	Social Services						
	i. education	6.47 (7.47)	17.63 (7.85)	6.34 (5.07)	14.75 (5.92)	26.57 (5.86)	47.00 (4.18)
	ii. health	3.50 (4.04)	14.66 (6.53)	7.96 (6.37)	14.96 (6.00)	21.90 (4.83)	61.00 (5.42)
	iii. housing	1.07 (1.24)	1.49 (.66)	.43 (.35)	7.43 (2.98)	11.59 (2.55)	19.00 (1.69)
	iv. other	3.83 (4.42)	4.56 (2.03)	2.19 (1.75)	3.16 (1.26)	11.02 (2.43)	20.00 (1.78)
VIII.	Economic Services	3.18 (3.67)	4.34 (1.93)	.83 (.67)	4.06 (1.63)	.27 (.06)	1.75 (.16)
IX.	General Services					3.13 (.69)	4.20 (.37)
Total Plan Expenditure		86.59	224.59	124.95	249.34	453.62	1125.00

* 5th Plan relates to 1974-75 to 1977-78.

4.73 Table 7 approaches the second part of the second question: Do the projects - major irrigation works - imply any distortions in the Plan allocation as between major, medium and minor schemes?

Table 7: ORISSA: IRRIGATION SECTOR EXPENDITURES
(Rs crores)
(% in parenthesis)

Plan Period:	III	Annual	IV	V	VI	VII
Type of Scheme:						
Major:			14.09	28.58	136.34	475
			(54.6)	(36.5)	(50.0)	(92)
	26.22	20.44				
	(95.8)	(92.9)				
Medium:			9.78	42.05	108.66	141
			(37.8)	(53.6)	(39.0)	(8)
Minor:	1.14	1.56	1.92	7.72	30.0	
	(4.2)	(7.1)	(7.4)	(9.8)	(11.0)	-
TOTAL:	27.36	22.00	25.79	78.39	275.0	616

Source: Irrigation Department, GOO.

4.74 The proportion of minor irrigation undertaken by Irrigation Department has increased slightly over the past four Plan periods from 7% in the Annual Plans to 11% in the Sixth Plan, in which major and medium projects make up 89% of the Irrigation Department Plan. Within the sector, though, there has been a major shift between major and medium schemes, which accounted for 36% and 54%, respectively in the Fifth Plan, but 50% and 39% in the Sixth. A further shift is envisaged in the Seventh Plan. As presented by the Irrigation Department, 92% is anticipated for major schemes, and 8% for medium.

4.75 Notwithstanding the State's stated shift in priorities towards major irrigation, many exploitable medium schemes having been taken up through the Bank-assisted ongoing project, it is unlikely that investments in medium schemes can be reduced to the extent implied by the estimates presented in the Irrigation Department Plan for no new medium or minor schemes to be taken up during the Seventh Plan. Thus, either the overall irrigation Plan must be larger to accommodate the planned major, some additional medium and minor schemes, or likely inclusion of medium and minor schemes will cut into the present phasing of the major works.

4.76 To summarize: the Plans for concurrent implementation of the three major irrigation projects, Mahanadi barrages, Rengali and Subernarekha, in addition to the State's ongoing medium irrigation projects is likely to put some financial strain on the State, especially at the beginning of the seventh Plan. The large proportion of Irrigation Department outlays devoted to major irrigation, at the cost of medium and minor schemes which are politically popular is also a potential source of conflict. Both issues should be followed up during appraisal and postponement of Subernarekha on which works have not yet begun or rephasing of outlays considered.

APPENDIX TABLES

ORISSA CAPITAL EXPENDITURE
(Rs in crores)

Plan and Non-Plan Expenditures

	Capital Expenditures	Plan	Non-Plan	% Plan	% Non-Plan
1961-62	14.12	12.99	1.13	92.00	8.00
1962-63	26.89	16.83	10.06	62.59	37.41
1963-64	30.48	28.20	2.28	92.52	7.48
1964-65	41.72	38.96	2.76	93.38	6.62
1965-66	32.57	30.17	2.40	92.63	7.37
1966-67	34.34	26.30	8.04	76.59	23.41
1967-68	17.76	28.72	(-)10.96	161.71	(-)61.71
1968-69	24.72	21.11	3.61	85.40	14.60
1969-70	22.05	21.56	0.49	97.78	2.22
1970-71	24.80	26.22	(-)1.42	105.73	(-)5.73
1971-72	29.87	28.97	0.90	96.99	3.01
1972-73	32.07	29.07	3.00	90.65	9.35
1973-74	38.22	29.00	9.22	75.88	24.12
1974-75	44.93	35.17	9.76	78.28	21.72
1975-76	56.86	45.20	11.66	79.49	20.51
1976-77	55.52	50.43	5.09	90.83	9.17
1977-78	78.43	76.56	1.87	97.62	2.38

CHAPTER V

GUJARAT STATE FINANCES AND

PLANNING FOR IRRIGATION AND AGRICULTURE

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GUJARAT STATE FINANCES AND PLANNING FOR IRRIGATION AND AGRICULTURE

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GUJARAT STATE FINANCES AND PLANNING FOR IRRIGATION AND AGRICULTURE

Preface

This study was undertaken in support of a review of medium irrigation in Gujarat. A proper assessment of the prospects for the State's proposed investment program for medium irrigation could not be made outside the context of State planning and State finances.

Data for the study was collected during a mission to India in June 1977. The author wishes to acknowledge the useful comments of Armand Van Nimmen, Per Ljung, the mission leader, and John Wall. Consequently, it was decided to review briefly but systematically both the financial magnitudes and the institutional setting in the State. The resulting case study was intended to indicate whether such reviews were feasible and useful so that they might become regular features of preparatory work on large State sector projects.

The paper is organized as follows: An introductory section provides a brief overview of the State of Gujarat, its history, salient economic features. In Section II, trends in State finance are reviewed. In Section III more detailed treatment is given to the process of planning in Gujarat, particularly as it affects the irrigation and agriculture sectors. The allocation pattern between major and medium irrigation will be reviewed and the financial feasibility of the projected medium irrigation program will be evaluated. The components of Plan expenditures in agriculture will be similarly analyzed. Trend projections of likely expenditures in relevant categories will be presented. This information is intended to assist in the appraisal of the project size in the light of the State's capacity to maintain allocations to the sector commensurate with its other commitments.

I. GUJARAT: HISTORY AND BACKGROUND

Background

5.01 Gujarat is one of India's newest States, created in 1960 under the Bombay State Reorganization Act which split the State of Bombay into Gujarat and Maharastra. The bifurcation of the State was made along linguistic lines, and language is basically the only unifying feature of the State. Geographically it is extremely varied, ranging from desert in the area near the Kutch district to the rich, moist rice-growing areas of the southwest. Gujarat history goes far back: lack of present day. Gujarat had contract with the Indian Valley civilizations and the area is rich in paleolithic finds. Like most of Northern India from the 4th-8th centuries, Gujarat was part of the Mauryan and Gupta empires; it was in the 8th century that the first Parsee migrations began. The area was under Muslim domination from 1298, and friction with neighboring Rajput States was a source of constant trouble for ruling sultans, who did, however, successfully rebuff the Portuguese trying to establish trading centers along the coast. At the time of Independence, all component princely States of what was then the Bombay Presidency, joined the Indian union, forming Bombay State.

Salient Economic Features

5.02 Gujarat has a (1971) population of 26.7 million and an area of 196,000 square kilometers, giving it India's 4.9% of Indian population (the 9th largest) and 6% of its total land area. Gujarat is relatively ubranized, with 28.1% of the population living in towns and cities, compared to the all Indian average of 19.9. This places it third after Maharastra and Tamil Nadu. Its villages, too, though scattered, are large; having an average population of 1051, compared with the all-India figure of 762. The population of Gujarat is highly literate - almost 36% of the population ws recorded as literate in the 1971 Census, compared to 29% for India on a whole, and 40% for Tamil Nadu and 18% for J&K, the States in the tails of the distribution.

5.03 Agriculture dominates the State economy, employing 67.6% of the labor force and contributing 40% of GDP. Principal crops are wheat, jowar and bajra, and amongst non-foodgrain, cotton and groundnut. Even in normal years, Gujarat is a heavy foodgrain deficit State, with per capita foodgrain production of 132 kg, compared to the all Indian figure of 186 kg per person. Irrigation development remains extremely low; with only 16% of net sown area irrigated (compared to 23% for India as a whole). Multiple cropping is also infrequent. Only 6% of net sown area is cropped more than once, compared with 23% in the country overall, and 46% in States such as Haryana and Punjab. Fertilizer consumption, however, is more or less the same as for all States taken together. As a result, yields on foodgrains, rice, cereals and pulses are below the all India average.

5.04 Industry in Gujarat by contrast is well developed. Per capita gross output is Rs 1,000 per capita, second only to Maharastra, with Rs 1,284 and per capita value added is Rs 190 compared to Rs 281 for Maharastra. In terms of almost any measure--gross output, persons employed, productive capital,

etc., textiles industry dominates the State. In terms of net value added, the industry contributes 45%, chemicals 18%, machinery 9% and all others 28%.

5.05 Per capita incomes in Gujarat, Rs 1,038 in 1975, are above the all India average of 989, but not by much.

5.06 From the point of view of social infrastructure development Gujarat generally ranks fairly high. A well developed transport network serves the State. Per capita consumption of electricity is 40% above the all India average, 39% of villages have been electrified compared with 35% in India as a whole. Primary school enrollments are above the all Indian average. In terms of medical facilities, however, Gujarat fares poorly. There are 70 hospital beds per lakh of population compared to 81 for India asa whole.

5.07 To summarize in terms of economic and social development, Gujarat presents a mixed picture. On some indicators the State ranks well above the all-India level. On the other hand, agriculture remains very low productivity. Gujarat is clearly among the better off of India's States, but cannot by any means be classified as a "success case" even in relative terms.

5.08 In the following section, the State's financial resources are examined.

SECTION II - TRENDS IN GUJARAT GOVERNMENT FINANCE

5.09 Structure of State Accounts. State financial accounts are categorized in several different ways. Expenditures and receipts are both split into revenue and capital accounts. The revenue account balance represents roughly the excess or deficit of tax and non-tax revenue (i.e., receipts excluding borrowings) over recurrent expenditures while the capital account corresponds roughly to a statement of changes in the assets and liabilities of the State. On the expenditure side each of these categories is further broken down into development and non-development. Development expenditures consist of all expenditures except those which relate directly to the administration and fiscal services of the State Government. Development expenditures, in turn, are subdivided into social and community services and economic services each of which consists of several functional categories (education, housing, agriculture, water development, etc.). Non-development expenditures aside from administration, debt service and repayment also include loans and advances by the State Government; but these are rarely of consequential size. All expenditures on projects in the State's Annual Plan are classified as development expenditures; the non-Plan classification includes all non-development expenditures and the recurrent portion of development expenditures. In principle, all investments undertaken by the State are included in the State's Annual Plan, though some minor irrigation works may escape inclusion as they are the responsibility of District Panchayats and could be funded from general resources available to the Panchayat.

5.10 State Income. Tax revenues are the major source of funds to the State and are growing in importance from 51% of the total in 1973/74 to 63% in the budget estimates for 1977/78. Tax revenues have almost doubled while total receipts of Gujarat have increased by 53% from 1973/74 to the budget estimates of 1977/78. Gujarat's share in central taxes has remained relatively constant as a proportion of total receipts at 14-15%. At the State level, taxes on property and capital constitute 4-5% of the total while sales and other consumption taxes constitute the cornerstone of the State's revenue system providing approximately 30% of total receipts. Based on final accounts data for 1973/74 through 1975/76, the contribution of taxes on agricultural produce to total sales tax revenue has averaged 13%. This percentage fell over these three years, however, this is mostly due to worsening agricultural terms of trade through 1975/76--a phenomenon which has subsequently reversed itself. Commodities which are subject to agricultural sales tax in Gujarat are groundnuts and other oilseeds, groundnut oil, cotton, and sugar. Groundnut oil is taxed at the rate of 5%, all others at 4%. Oilseeds and cotton fall in the category of "declared goods" which can only be taxed at one stage of production. As these are the two most important cash crops produced in Gujarat and their processing constitutes a significant portion of industrial activity in Gujarat, this restriction reduces the tax base and the effective rate on value-added for these commodities. As the following figures indicate, Gujarat has maintained a significant surplus on the revenue account in recent years, indicating tax effort reasonably responsive to development needs. Based on final account figures for 1974/75, the latest year for which all-India comparisons are readily availabile (RBI Bulletin; December 1976), Gujarat's revenue budget position was sixth among 21 States. This same position was maintained for budget estimates in 1976/77.

	1973/74	1974/75	1975/76	1976/77 (R.E.)	1977/78 (B.E.)
	(Rupees, millions)				
Surplus (+) or Deficit (-) on Revenue Account	-2.9	+243.5	+721.0	520.5	825.3

Table 1: Sources of Gujarat State Finances

	1973/74 Actuals	1974/75 Revised Estimate	1974/75 Actuals	1975/76 Budget Estimate	1975/76 Revised Estimate	1975/76 Actuals	1976/77 Budget Estimate	1976/77 Revised Estimate	1977/78 Budget Estimate
Share in Central Taxes	5867	6341	6349	6886	8120	8316	7839	8478	8755
Income	2720	2844	2844	3053	4069	4074	3258	3601	3704
Estate	87	41	49	44	42	42	42	40	40
Exise	3060	3456	3456	3789	4009	4200	4539	4837	5011
Property & Capital Taxes	1631	1571	1586	1700	1900	2221	2097	2859	3016
Land Revenue	791	650	638	650	700	867	700	829	829
Stamps, etc., other	840	921	948	1050	1200	1354	1397	2030	2187
State Taxes	13488	17239	18529	19142	21085	21377	24140	26134	27843
Exise	90	93	97	97	100	126	107	190	200
Sales	9397	12264	13452	13313	15482	15585	17704	19040	20000
Vehicles	887	1055	1079	1319	1180	1162	1265	1293	1409
Goods & Passengers	1286	1722	1713	2134	1936	1961	2231	2259	2478
Electricity	971	1067	1080	1174	1130	1177	1425	1875	2162
Entertainment	683	761	873	827	981	1002	1132	1175	1294
Other	174	277	235	278	276	364	276	302	300
Tax Revenue	20986	25151	26464	27728	31105	31914	34076	37471	39614
Interest Receipts	2408	2505	2486	3307	2724	3134	3519	3285	4121
Dividends & Profits	283	319	213	328	250	382	300	557	420
Other non-Tax Revenue	4304	4748	4925	4284	4627	5161	5389	7087	7465
General services	1033	544	658	620	1089	866	943	1133	1029
Social services	676	665	857	619	680	1036	986	1079	898
Economic services	2595	3539	3410	3045	2858	3259	3460	4875	5538
Cooperation	62	92	94	83	92	104	106	108	120
Agriculture	166	74	107	119	98	85	111	88	96
Dairy	36	123	64	23	23	30	23	22	24
Forest	365	468	471	405	495	551	425	585	642
Industry & Mines	547	871	938	900	849	861	1080	1544	2126
Water & Power	-	5	5	13	13	47	28	21	54
Irrigation	537	300	295	279	310	336	400	400	478
Other (roads)	882	1606	1436	1223	978	1245	1287	2107	1998
Grants for State Plan Schemes	1184	1262	1165	965	1759	1700	965	1906	1460
Grants for Central Plan Schemes	327	149	909	51	337	765	412	314	712
Grants for Centrally Sponsored Schemes	1497	1976	995	2365	1179	1923	2010	2544	2859
Statutary Grants	165	-	141	-	-	-	-	-	-
Grants for National Calamities	2275	-	-	-	-	-	-	-	-
Other Grants	210	161	286	171	172	348	477	599	557
Net Public Debt-State	564	503	4040	1902	2170	-433	418	1953	1772
Net Loans & Center Advances	5311	3425	3171	882	1770	1159	1430	2742	1931
Recovery of Loans & Advances	1550	2356	1931	2918	2217	3961	1262	4361	1846
Grand Total	41064	42555	46766	44901	48310	50014	50258	62819	62757

5.11 Assistance from the Center is an important part of the State's financial picture; however, changes in the composition of this assistance over the period 1973/74 to 1977/78 (budget estimates) have resulted in little net contribution of central assistance to the growth in State resources as the increase in Plan assistance has been mitigated by reductions in grants for natural calamities and in net loans and Center advances (see Table 1). Nevertheless, central assistance may have played an important role in influencing expenditure allocations as it has been increasingly tied to particular activities favored by the Center (rather than general loans or disaster relief which is generally allocated according to State priorities). 1/

5.12 State Expenditures. The relation between Plan and non-Plan expenditures is dealt with in Tables 2 and 3. Since 1970/71, Plan expenditures as a percentage of total expenditures in Gujarat (exclusive of State debt repayment) have fluctuated around a mean of 29% with a standard deviation of slightly more than 2 percentage points. There is no evident trend in these figures; the Gujarat Government has been able to control recurrent expenditures tightly enough so as to provide a relatively stable framework for projecting Plan allocations. Agriculture and irrigation expenditures, which constituted approximately 25% of total expenditures in 1973/74 and 1974/75, dipped to around 20% in the subsequent two years but in the budget estimates for 1977/78 their share has again risen to 27%. Irrigation here includes the large scale multi-purpose projects which have a significant power generation component. While the power sector is an important "competitor" for Plan resources, it is important to note that there are significant non-Plan expenditures in irrigation and even more in agriculture which increase the share of these sectors in overall resource allocation. In reviewing or projecting Plan expenditures for agriculture, it should be borne in mind that roughly an equivalent amount is spent on non-Plan expenditures; for irrigation the non-Plan proportion is roughly half the Plan allocations. While these non-Plan expenditures cannot be counted as irrigation or agricultural investment, they, in many cases, increase the productivity of the rural infrastructure by supporting complementary services.

5.13 As indicated in Table 3, the share of Plan expenditure in both agriculture and irrigation has rapidly increased since 1970. Plan expenditures in agriculture have increased from less than 20% in the early 1970s to over 40% in recent years. The Plan component of irrigation, navigation, and flood control expenditures has likewise increased from less than 50% in 1974/75 to over 70% in the budget estimates for 1977/78. This trend may be taken as evidence that increasing importance is being attached to investments in the rural infrastructure. There is an indication of a similar trend for total agriculture and allied services expenditure but it is not yet significant.

1/ Such funds may also simply substitute for funds the State would have spent itself. In the case of State Plan assistance for irrigation in Gujarat this could well be the case, given the priority attached to irrigation by the State itself. However, it is likely that Command Area Development expenditures would suffer unless supported by special loans as a central sector scheme.

Table 2
V Plan Period-Budget Expenditures
Plan and Non-Plan Expenditures on Agriculture and Irrigation

Category	73/74 Actuals		74/75 Actuals			75/76 Actuals			76/77 Revised Est.			77/78 Budget Est.		
	Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
Agriculture	27.0	42.5	24.7	106.9	131.6	46.5	38.9	85.4	74.1	97.3	171.4	129.9	121.3	314.2
Minor Irrigation		8.0	62.5	15.3	77.8	39.4	17.5	56.9	97.2	29.2	126.4	119.6	18.0	137.6
Soil & Water Conser.		16.0	18.9	1.4	20.3	15.3	2.8	18.1	32.4	2.4	34.8	29.1	4.9	34.0
Area Development		24.0	31.7	92.8	124.5	7.5	22.9	30.4	16.9	45.1	62.	21.7	54.3	76
Fisheries		11.3	8.4	5.6	14.0	9.8	5.8	15.6	11.1	8.5	19.6	20.8	9.1	29.9
Dairy Development		2.1	3.9	0.9	4.8-(1.3)		1.4	0.1	2.8	0.9	3.7	2.8	0.8	3.6
Forest		36.7	17.5	16.8	34.3	19.8	20.5	40.3	37.0	30.3	67.3	56.	38.5	94.5
Community Development		95.9	5.4	76.5	81.9	5.2	90.7	95.9	7.8	89.5	97.3	11.6	94.7	106.3
Other		63.0	3.9	125.9	129.8	5.4	- (41.3)	- (35.9)	11.0	66.5	77.5	23.3	145.5	168.8
State Ag. Loans		162.7		103.3	103.3		40.6	0.6		10.	10.		.1	.1
Total Ag. And Allied Services	183.8	462.2	176.9	545.4	722.3	147.6	199.8	347.4	290.3	379.7	670.	477.8	487.2	965.2
Multi-Purpose River Pro.		327.8	337.8	1.7	339.5	346.1	3.6	349.7	417.4	5.6	423	336.3	7.8	344.1
Irrigation, Navigation		328.0	101.	108.8	209.8	98.4	118.7	217.1	150.8	119.3	270.1	335.8	130.9	466.7
Water & Power Services			6.1	108.2	114.3	9.3	128.9	138.2	12.9	154.2	167.1	19.2	177.9	197.1
Total-Irrigation	361	655.8	444.9	218.7	663.6	453.8	251.2	705	581.1	279.1	860.2	691.3	316.6	1007.9
Power		9.7	532.7 307.5		307.5	784.3 375.		375	810.7 420.8		420.8	840.8 524.9		524.9
Power Loans		129.2				14.6		14.6						
Grand Total	1378.8	4661.2	1409.9	3982.7	5392.6	1741.	4052.4	5793.4	2041.2	5165.2	7206.4	2279.9	4805.3	7095.2
Discretionary Center Assistance		831.9			624			500.7			750.6			696.2
Percentages														
Agriculture		9.9%	12.5	13.7	13.4	2364 8.5	4.9	6.0	14.2	7.4	9.3	21.0	10.1	13.6
Irrigation		16.2	31.6	5.5	12.3	26.1		12.2	28.5	15.4	11.9	30.3	6.6	14.2
Power		10.9	21.8		5.7	22.4		6.7	20.6		5.8	23.0		7.4
Center Assistance		17.8			11.6			8.6			10.4			9.8
Center Assistance/Plan		60.3			44.2			28.7			36.7			30.5

Table 3: PLAN EXPENDITURE AS % OF TOTAL FXPENDITURES

Category	1970/71	1971/72	1973/74 1/	1974/75	1975/76	1976/77 2/	1977/78 3/
Agriculture	16.7	22.5	65.2	18.8	54.4	43.2	41.3
Mines Irrigation	100.0	100.0	100.0	80.3	69.2	76.9	86.9
Total Agriculture Service	38.0	40.2	39.8	24.5	42.5	43.3	49.5
Multi-purpose schemes				99.5	99.0	98.7	97.7
Irrigation flood control				48.1	45.3	55.8	72.0
Water and power services				5.3	6.7	7.7	9.7
Total Irrigation	76.6	82.8	55.0	67.0	64.4	67.6	68.6
Power	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Grand Total	26.2	30.9	29.6	26.1	30.1	28.3	32.1

1/ Breakdown of expenditure on plan and non-plan basis not available on consistent basis as categorization changed this year. Estimates may not be consistent with other years. 1972/73 is not presented due to non-availability of data.

2/ Based on "revised estimates" as opposed to "actuals".

3/ Based on "budget estimates" as opposed to "actuals".

5.14 Considered in total, the receipts and expenditure position of Gujarat provides an adequate environment for investment planning. While the agricultural sector could probably contribute more development resources (land revenues, sales taxes on agricultural commodities, and other directly agricultural sources raise only a moderate portion of revenue), there has been considerable growth in total resources mobilized by the State and consequently in the capacity of the State to finance both its Plan and non-Plan development expenditure. In particular, State sales tax revenues have more than doubled between 1973/74 and 1977/78 belying any serious inelasticity in the State tax resources. A sectoral analysis of expenditure indicates a continuing commitment to agricultural and irrigation investment.

SECTION III - PLANNING FOR IRRIGATION AND AGRICULTURAL INVESTMENT IN GUJARAT

5.15 General Planning Framework. Planning by the Government of Gujarat is carried out by the Planning Division of the General Administration Department. The portfolio for this department is held by the Chief Minister of the State. The Planning Division is advised by the State Planning Board which consists of the Chief Minister as Chairman, a Vice Chairman, and seven other members. This body replaces previous advisory boards. Composed of individuals who donate their services (excepting, of course, the Chairman) and have no administrative authority, it is intended to play a major role in determining intersectoral allocations and deciding on the inclusion of particular projects in the Plan. The Vice Chairman of the State Planning Board is a distinguished agricultural economist, V. L. Vyas, also newly appointed but widely experienced. Other experts in various fields fill the remaining positions on the Board. The new Planning Board intends not only to advise the Government of Gujarat but also to undertake special studies to evaluate Plan performance and identify important constraints impeding Plan implementation in key sectors. The evaluation of specific projects may also be undertaken by the State's Directorate of Evaluation which is responsible to the Chief Secretary. The Planning Division and the Planning Board decide which projects should be evaluated by the Directorate which has its own staff of investigators. However, much of the work they currently perform is basically of an audit nature responsive to the concerns of the secretaries of the various State departments. There is a need for more social and economic evaluation perhaps by units within the concerned departments so as to ensure maximum feedback. At present, neither the Public Works nor Agriculture Departments undertake any performance evaluations.

5.16 Each major planning document produced by the Planning Division is preceded by a perspective paper which reflects the guidelines established by the Central Planning Commission as well as the priorities of the State's own Planning Board. These documents are circulated throughout the executive agencies of the State which would include State departments, municipal and State corporations, and district panchayats. (In Gujarat district panchayats have responsibility for many agriculture and extension activities, social welfare, rural roads and minor irrigation.) Taking into account the priorities of the perspective papers, the various executive agencies prepare their

own Plans which are then refined and coordinated in working groups organized by the Planning Division. As in other States, a draft Plan is produced and discussed with the national Planning Commission and on the basis of its comments as well as those from State agencies, the Plan is finalized. Annual Plans have been produced within the five year Plan framework through a similar but less intensive process.

5.17 Irrigation Planning. Within the Public Works Department, the Water Resources Investigation Unit is responsible for the technical preparation of projects. Their program is geared to the availability of finance, the expression of local demand, and the availability of staff. Based on preliminary assessments of valleys throughout the State which incorporate data from existing rainfall and soil surveys, lists of prospective projects are drawn up which form the basis for aggregate State planning estimates. Planning for individual irrigation projects then proceeds with the preparation of a feasibility report which should be based on a thorough site investigation. Preliminary cost estimates are then prepared and incorporated into a "Reconnaissance Report" which must be approved by the State PWD headquarters. If the project goes ahead, a complete Project Report is prepared covering soil conditions, cropping patterns and other agronomic data, as well as detailed geological information. This is forwarded to the State Government for administrative approval and to the Central Water Commission in New Delhi for proforma approval in the case of medium schemes and technical scrutiny in the case of major schemes. The project is then reviewed by the Planning Commission. In the case of major irrigation projects, administrative approval by the State Government is delayed until the Planning Commission has sanctioned the project. The final stage in the planning process is the preparation of a second project report on which final technical sanction hinges taking into account detailed financial estimates and designs. This process is estimated to consume from two to three years; with present staffing the Water Resources Investigation unit processes approximately seven projects a year. However, the assurance of finance outside the scope of regular State funds (through advance Plan assistance from the center, for example) may considerably speed the process, indicating considerably flexibility in the system. The planning framework of the state thus relies greatly on the capacity of functional departments. In the case of irrigation this capacity is adequate and should not be a constraint on an expansion of investment in medium-scale irrigation. 1/

1/ This assessment does not apply should the resolution of the Narmada water dispute require the preparation of detailed designs and estimates for that major scheme. In this case, a separate Narmada planning and design unit should be established outside the normal establishment.

TABLE 4

STATEMENT OF OUTLAYS AND EXPENDITURE - GUJARAT STATE

FOURTH FIVE-YEAR PLAN, 1969/70 - 1973/74

(in millions of Rupees)

Major/Sub-Major Head of Development	1969/70		1970/71		1971/72		1972/73		1973/74		Total	
	Outlay Budgeted	Expenditure	Outlay Budgeted	Expenditure	Outlay Budgeted	Expenditure	Outlay Budgeted	Expenditure	Outlay Budgeted	Expenditure	Outlay Budgeted	Expenditure
Agriculture	21.0	16.6	22.7	19.9	24.9	18.6	26.3	18.4	34.1	27.0	129.0	100.5
Land Reforms	2.0	2.2	2.0	2.5	2.0	2.5	2.2	2.4	3.3	2.6	11.5	12.2
Minor Irrigation	45.0	70.1	55.1	61.8	59.1	49.8	76.7	64.4	66.8	77.8	302.7	323.9
Soil and Water Conservation	14.7	17.3	15.7	14.2	18.3	17.1	20.6	32.4	22.3	20.8	91.6	101.8
Area Development	-	-	-	-	-	-	-	-	-	-	-	-
Animal Husbandry	9.9	5.8	11.4	7.7	11.2	8.9	13.7	10.5	12.9	10.2	60.1	43.1
Dairy Development	4.6	1.3	2.8	1.3	2.4	2.0	2.2	2.2	7.5	2.7	19.5	9.5
Fisheries	6.5	5.3	7.3	9.1	7.4	6.8	8.2	6.9	11.0	7.7	40.4	35.8
Forests	5.3	5.2	5.4	5.0	5.5	5.3	15.7	10.2	14.1	10.0	46.0	35.7
Investment in Agricultural Financial Institutions	-	-	-	-	-	-	-	-	-	-	-	-
Community Development												
a. General (Panchayats)	0.4	0.3	0.4	0.4	0.4	0.5	0.7	0.6	1.0	0.6	2.9	2.4
b. Community Development	11.4	11.3	9.6	8.0	9.0	7.5	8.4	6.3	9.0	5.5	47.4	38.6
c. Rural Works Program	-	-	1.5	0.6	3.0	1.8	3.0	3.0	3.0	1.0	10.5	6.4
TOTAL - Agriculture & Allied Services	120.8	135.4	133.9	130.5	143.2	120.8	177.7	157.3	186.0	165.9	761.6	709.9
Cooperation	8.8	13.8	9.0	10.1	14.6	12.2	14.6	7.5	14.6	18.8	61.6	62.4
Water Development (Irrigation)	190.0	161.4	214.0	193.4	233.0	234.7	278.8	361.8	254.5	361.0	1,170.3	1,312.3
Power Development	190.0	254.0	220.0	288.1	272.0	301.6	294.6	389.3	315.7	269.5	1,292.3	1,602.5
Industries	20.4	19.4	23.4	19.4		33.9	33.1	18.0	36.6	23.3		114.0
Village and Small Industries	5.1	4.9	5.0	4.3	38.1	5.5	11.2	7.0	8.4	7.1	213.5	28.8
Mining and Metallurgical Industries	8.5	7.7	9.1	7.7		9.6	6.1	17.0	8.5	14.3		56.3
TOTAL - Industries and Minerals	34.0	32.0	37.5	31.4	38.1	49.0	50.4	42.0	53.5	44.7	213.5	199.1
Ports, Light Houses and Shipping	7.6	7.5	11.5	16.4	10.5	5.1	11.7	10.1	12.0	5.5	53.3	44.6
Civil Aviation	-	-	-	-	-	-	-	-	-	-	-	-
Roads and Bridges	37.5	39.9	37.7	43.6	40.5	52.6	60.0	77.1	64.0	86.8	239.7	300.0
Road Transport	17.3	8.5	15.0	11.4	20.0	22.0	25.0	43.8	30.0	22.3	107.3	108.0
Tourism	0.7	0.8	1.3	1.2	1.3	0.9	2.0	0.7	2.2	0.5	7.5	4.1
TOTAL - Transport and Communications	63.1	56.7	65.5	72.6	72.3	80.6	98.7	131.7	108.2	115.1	407.8	456.7
General Education	22.6	18.8	35.7	41.0	61.1	66.7	97.3	89.3	114.4	99.2	346.2	315.0
Technical Education	1.9	1.9	3.0	2.8		4.1	4.9	4.9	5.3	4.3		18.0
Medical)	12.3	11.9	13.6	11.6	16.0	14.5	17.9	21.8	26.9	29.7	86.7	89.5
Public Health and Sanitation)												
Sewage and Water Supply	22.3	30.2	28.5	26.7	36.5	26.3	51.7	57.8	60.0	64.0	199.0	205.0
Housing	5.4	5.1	10.0	12.9	18.0	17.4	23.0	21.8	25.0	18.5	84.4	75.7
Urban Development	0.8	0.7	0.8	0.8	1.0	1.1	1.4	1.6	1.7	1.6	5.7	5.8
State Capital Project	52.5	67.7	60.0	50.7	30.3	28.6	21.6	16.9	25.0	16.6	189.4	180.5
Information and Publicity	0.5	0.5	0.8	0.6	0.9	0.4	0.8	0.5	0.7	0.4	3.7	2.4
Labor and Labor Welfare	2.6	1.6	4.6	2.1	5.9	3.2	7.0	16.3	21.5	14.5	41.6	37.7
Welfare of Backward Classes	6.3	4.0	8.9	6.5	16.5	14.5	22.0	17.4	23.4	23.2	78.1	65.6
Social Welfare	0.6	0.4	0.8	0.5	1.0	0.8	1.2	1.0	1.3	1.7	4.9	4.4
Nutrition	-	-	-	-	-	-	-	-	1.6	-	1.6	-
TOTAL - Social and Community Services	127.8	142.8	166.7	156.2	188.2	177.6	248.8	249.3	306.8	273.7	1,038.3	999.6
Secretariat Economic Service (Planning Machinery)	-	-	-	-	-	-	-	-	0.1	-	0.1	-
Special and Backward Areas	25.1	18.1	26.2	21.0	25.1	28.5	32.5	36.7	32.4	29.8	141.3	134.1
Other General Economic Services (Statistics)	Neg.	Neg.	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	1.0	0.8
TOTAL - Economic Services	25.1	18.1	26.4	21.2	25.3	28.7	32.8	36.9	32.8	30.0	142.4	134.9
GRAND TOTAL	759.6	814.2	873.5	903.5	986.7	1,005.2	1,196.4	1,375.8	1,272.1	1,378.7	5,088.3	5,477.4

STATEMENT OF OUTLAYS AND EXPENDITURE - GUJARAT STATE (Cont'd)

(1974/75 - 1977/78)

(in millions of Rupees)

	1974/75		1975/76		1976/77		1977/78
	Budgeted Outlay	Expend-iture	Budgeted Outlay	Expend-iture	Budgeted Outlay	Anticipated Expenditure	Budgeted Outlay
Agriculture	55.7	36.3	65.8	40.3	64.0	75.8	90.3
Land Reforms	4.4	5.1	5.0	5.5	6.3	16.2	32.0
Minor Irrigation	58.6	79.6	61.0	158.9	74.0	104.1	119.5
Soil and Water Conservation	19.5	59.7	21.5	73.0	17.0	34.1	29.0
Area Development	10.0	5.4	12.0	3.3	10.0	8.3	6.1
Animal Husbandry	11.6	3.7	10.0	5.3	10.0)		23.2
Dairy Development	5.5	4.5	6.5	4.1	6.5)	18.8	5.8
Fisheries	9.8	7.3	10.0	9.2	12.5	15.9	21.5
Forests	14.6	22.3	22.0	28.4	25.0	38.1	55.5
Investment in Agricultural Financial Industries	11.3	8.8	10.0	7.8	10.0	9.1	16.0
Community Development							
a. General (Panchayats)		-	1.0	1.2	3.3		6.3
b. Community Development	11.7	4.9	6.0	4.0	3.2	9.5	4.1
c. Rural Works Program		46.8	2.5	68.4	3.0		1.6
TOTAL - Agriculture and Allied Services	212.7	284.4	233.3	409.4	244.8	329.9	410.9
Cooperation	14.1	6.2	14.0	47.4	41.5	61.0	55.5
Water Development (Irrigation)	314.9	448.0	385.0	468.7	481.3	606.7	730.3
Power Development	440.0	532.7	630.0	784.3	700.0	810.7	840.8
Industries	35.7	59.0	46.7	66.1	45.0	124.5	116.1
Village and Small Industries	35.6	8.3	9.1	10.4	9.7	18.7	13.8
Mining and Metallurgical Industries	9.4	8.6	12.6	6.4	7.9	8.6	11.1
TOTAL - Industries and Minerals	80.7	75.9	68.4	82.9	62.6	151.8	141.0
Ports, Lighthouses and Shipping	8.4	10.4	8.4	16.5	8.4	18.1	14.0
Civil Aviation	-	-	-	-	-	-	-
Roads and Bridges	40.0	153.6	55.0	152.7	60.0	174.3	97.5
Road Transport	43.9	78.6	65.0	64.2	61.0	83.0	67.5
Tourism	0.9	0.6	0.9	0.3	0.9	2.0	1.5
TOTAL - Transport and Communication	93.2	243.2	129.3	233.7	130.3	277.4	180.5
General Education	65.4	33.2	53.9	43.6	61.5	77.2	83.9
Technical Education	4.6	2.7	4.9	3.0	4.7	5.2	7.0
Medical)	25.8	7.5	5.4	6.2	5.9)	20.9	14.9
Public Health and Sanitation)		3.3	9.6	2.7	8.2)		12.0
Sewerage and Water Supply	75.7	105.7	75.0	137.2	85.5	131.1	130.0
Housing	51.8	53.5	54.6	86.6	41.9	134.8	86.5
Urban Development	8.5	24.4	18.7	16.9	18.9	17.7	30.6
State Capital Project	9.8	23.7	7.6	10.0	8.0	19.8	25.0
Information and Publicity	1.2	0.7	1.0	0.3	0.5	0.4	0.9
Labor and Labor Welfare	6.2	4.0	4.5	2.8	4.5	4.6	7.1
Welfare of Backward Classes	15.7	20.4	15.7	17.0	17.0	22.9	29.5
Social Welfare	1.1	1.1	1.1	1.2	1.2	1.2	1.7
Nutrition	10.0	8.5	10.5	8.5	10.2	10.2	11.0
TOTAL - Social and Community Services	275.8	288.7	262.5	336.0	268.0	446.0	440.1
Secretariat Economic Services (Planning Machinery)	0.8	0.1	0.1	0.1	0.1	0.2	0.4
Special and Backward Areas	0.2	0.7	3.1	1.5	3.1	3.1	5.0
Other General Economic Services (Statistics)	1.5	3.7	0.8	0.8	0.8	1.2	1.3
Growth Centers	-	-	-	-	-	0.4	2.0
Administrative Machinery for T.A.S.P.	-	-	-	-	-	1.3	-
						10.8 (TDD)	
TOTAL - Economic Services	2.3	4.5	4.0	2.4	4.0	17.0	8.7
GRAND TOTAL	1,433.7	1,883.6	1,726.5	2,364.8	1,932.5	2,700.5	2,807.8
			+150.0*				
			1,876.5				

5.18 Plan Investments. Details of Plan expenditures from 1969/70 are presented in Table 4. Expenditures are estimated and revised for each year in the same manner as receipts; estimates presented with the budget are classified as "anticipated outlay" while the final accounts are characterized as "expenditures." 1/ It is apparent that sectoral allocations have not changed substantially over the fourth and fifth Plan periods (see columns 3 and 4 of Table 5). Of major expenditure heads, the share of power at 31% and social and community services at 17.5% each declined by a percentage point or so in the seven year period 1969/70 to 1976/77. The major growth items were water development (irrigation) which increased its share from 19.8% to 22.5%, transport and communications, from 7% to 10.3% and industry and minerals, from 3.9% to 5.6%. These increased shares were largely achieved at the expense of agriculture and allied services which fell from 16.6% of Plan expenditure in 1969/70 to 12.2% in 1976/77. This relative decline of agricultural expenditures occurred in all sub-categories except forestry (and land reform, which, however, is a quite minor category); particularly striking is the decline in the share of minor irrigation, 2/ though the share of agriculture itself and soil and water conservation also declined significantly.

5.19 Sectoral allocations are reflected in the anticipated outlays for 1977/78 show some reversal of the earlier trends in that the share of agricultural services has increased again to 14.6% of the total. All subcategories, in particular agriculture, have experienced relative increases. Irrigation Plan outlay also grew in the 1977/78 budget to 26% of total, a rather dramatic increase from 22.5% in 1976/77, largely compensated by a decline in transport and communications outlays.

1/ "Revised estimates" are also prepared mid-way through the financial year.

2/ These figures may primarily reflect the shift in responsibility for minor irrigation from the State Government to the district panchayats which occurred in 1971/72; but it is doubtful that resources raised by the panchayats themselves could have made up the relative dramatic drop. Another factor is the increase in natural calamity assistance from the center in 1972/73. Much of this went into minor irrigation and it is likely to have displaced some regular State Plan associations.

TABLE 5

ROLE OF AGRICULTURE AND IRRIGATION IN GUJARAT PLAN OUTLAY AND EXPENDITURES

	Compound Annual Growth of Expenditure 69/70 - 76/77	Sector Share 69/70	Sector Share 76/77	Contribution to Growth Increment for Expenditures 69/70 - 76/77	Contribution to Growth Increment for Outlay 76/77 - 77/78	"One"[1/]	Contribution to Growth Increment 69/70 - 76/77
	Percentages Based on Current Price Series					Constant Price	
Agriculture	21.8	2.0	0.8	3.1	3.0	9.9	3.9
Minor Irrigation	11.4	8.6	3.9	1.8	5.2	0.6	-2.9
Soil and Water Conservation	13.7	2.1	1.3	0.9	1.4	0.4	0.1
Area Development			0.3	0.4	-0.4		0.7
Animal Husbandry	7.5	0.7)	0.7	0.6	1.4		
Dairy Development		0.2)					
Fisheries	10.1	0.7	0.6	0.6	1.0	6.6	0.5
Forests	37.8	0.6	1.4	1.7	3.5	21.1	2.5
Agriculture and Allied Services - Total	18.9	16.6	12.3	10.3	19.0	7.4	6.0
Water Development	20.5	19.8	22.5	23.6	28.4	8.7	26.2
Power Development	19.2	31.2	30.0	29.5	16.1		
Industry and Minerals	24.9	3.9	5.6	6.4	9.0		
Transport and Communication	25.5	7.0	10.3	11.7	5.7		
Social & Community Service	17.7	17.5	16.5	16.1	19.7		
Economic Services	-0.9	2.2	0.6	-0.1	0.5		
Cooperation	23.7	1.7	2.3	2.5	1.6		
GRAND TOTAL	19.7	100	100	100	100	8.8	100

1/ CNP Net Investment Deflator used for period 1969/70 to 1975/76 and wholesale price index for fuel manufactures for 1976/77.

5.20 Overall Plan expenditures grew at an annual compound rate of 18.7% per annum in the seven years between 1969/70 and 1976/77. The distribution of growth rates among sectors is of course implied by the changes in relative shares discussed above. Water development, industry and transport all grew faster than average (20.5, 24.9, 25.5% per annum respectively) while power development and social services kept pace with the average and agricultural services fell considerably below at 13.6% per annum. In terms of the growth increment over this period power development accounted for almost 30%, water development 24%, and agricultural services a mere 10%. The extent of the change between 1976/77 and 1977/78 is indicated in a doubled contribution of agriculture (20%) to the growth increment, an increase in the contribution of power to 16%. While the changes of a single year must be discounted appropriately, these are further indications of a heighted priority to agriculture and irrigation in Gujarat planning.

5.21 Some sectoral differences emerge in Table 6 which indicates the annual percentage change between budgeted outlay and actual expenditure for each year since 1969/70. Water development expenditure which fell below authorized amounts in the first two years has consistently exceeded authorization since 1971/72. This reflects both improved implementation capacity and the increased availability of extra resources through advance Plan assistance from the Center which has been earmarked specifically for irrigation development. On the other hand, the consistently below par expenditures for agriculture indicate that at least some of the failure of agriculture to keep pace with other sectors in Plan expenditures may be due to implementation problems. Expenditures which averaged more than 80% of anticipated outlays in the years 1969-71 fell to little more than 60% over 1974-76. Declining "implementation ratios" may also be observed for animal husbandry and community development while dairy development and fisheries have also displayed implementation ratios below 100% over the whole period but with rather erratic ups and downs. Of course, one cannot identify the precise problems which have impeded agricultural investment in these various activities: physical obstacles, weak agricultural administration or a lack of political priority may have all played a role. Furthermore, in 1976/77, there was a dramatic improvement with revised expenditures rising well above budgeted outlays for all agricultural services with the exception of relatively new activities of area development and an agricultural investment fund. As agricultural outlays themselves have increased relative to other categories between 1976/77 and 1977/78, the maintenance of these higher implementation ratios should reinforce the rising trend of agricultural investments.

Table 6

GUJARAT "IMPLEMENTATION RATIOS"

PLAN OUTLAYS AND EXPENDITURE

	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77
Agriculture	79.0	87.7	74.7	70.0	79.2	65.2	61.2	118.4
Land Reform	110.0	125.0	125.0	109.1	78.8	115.9	110.0	257.1
Minor Irrigation	155.8	112.2	84.3	84.0	116.5	135.8	260.5	140.7
Soil & Water Conservation	117.7	90.4	93.4	157.3	93.3	306.2	339.5	200.6
Area Development						54.0	27.5	83.0
Animal Husbandry	58.6	67.5	79.5	76.6	79.1	31.9	53.0	
Dairy Development	28.3	46.4	83.3	100.0	36.0	81.8	63.1	
Fishery	81.5	124.7	91.9	84.1	70.0	74.5	92.0	127.2
Forests	98.1	92.6	96.4	65.0	70.9	152.7	129.1	152.4
Investment in Agriculture						77.9	78.0	91.0
Community Development								
a) General	75.0	100.0	125.0	85.7	60.0		120.0	
b) Community Development	99.1	83.3	83.3	75.0	61.1	41.9	66.7	
c) Rural Works Programs		40.0	60.0	100.0	33.3			
Total: Agriculture and Allied Services	112.1	97.5	84.4	88.5	89.2	133.7	175.5	134.8
Water Development	84.9	90.4	100.7	129.8	141.8	142.3	121.7	126.1
Power Development	133.7	131.0	110.9	132.1	85.4	121.1	124.5	115.8
Total: Industry & Minerals	94.1	83.7	128.6	83.3	83.6	94.1	121.2	242.5
Total: Transport and Communication	89.9	110.8	111.5	133.4	106.4	260.9	180.7	212.9
Total: Social and Community Services	111.7	93.7	94.4	100.2	89.2	104.7	128.0	166.4
Total: Economic Services	72.1	80.3	113.4	112.5	91.5	195.7	60.0	425.0
Grand Total	107.2	103.4	101.9	115.2	108.4	131.4	137.0	139.7

5.22 Thus far, the analysis has been made in terms of current prices; however, in the period under review India experienced considerable inflation. The all-India index of wholesale prices increased from 168.8 to 300.8 between 1969 and 1976, a rise of 178%. That Gujarat was not insulated from the general trends is apparent as the Consumer Price Index for industrial workers at Ahmedabad rose 165% over the same period. Deflators for Gujarat Plan expenditure are not readily available but "real" outlays and expenditures have been calculated using the all-India implicit deflator for gross fixed capital formation. 1/ These figures indicate that the "real" growth in State expenditures from 1969/70 to 1976/77 was on the order of 8.2% per annum, less than half the nominal rate of 19.7% per annum. Expenditures on water development, power development, and agricultural services have not grown at rates significantly different from the mean for overall Plan expenditure either in nominal or in real terms. However, minor irrigation expenditures (which is classified here under agricultural services) which grew at 11.4% per annum in nominal terms fell to only 0.6% per annum in real terms. Primarily this is due to the rapid inflation during 1974/75 and 1975/76, years in which the nominal value of minor irrigation expenditure grew most rapidly as part of the State program to provide employment and alleviate severe drought conditions.

1/ The Gujarat based consumer price index and the all-India wholesale price index were eschewed as deflators because of the excessive weight given to agricultural and other consumption commodities in their construction. The implicit deflator for gross fixed capital formation effectively covers all investment goods excluding stocks and seemed the most appropriate adjustment factor for government investment. The implicit deflator and wholesale price index may be compared as follows:

	Implicit Gross Investment Deflator	Wholesale Price Goods
1969/70	100	100
1970/71	107.1	100.5
1971/72	112.4	109.8
1972/73	119.3	120.7
1973/74	132.6	148.7
1974/75	167.3	182.4
1975/76	181.4	176.4
1976/77	194.1 (Est.)	191.5

Table 7: GUJARAT PROGRESS OF IRRIGATION

	No. of Schemes New	No. of Schemes Spillover	Outlay Rs. Million	Expenditure Rs. Million
I. Plan	35 1/	33	192	192
II. Plan	23	52	354	354
III. Plan	-	17	461	446
Annual Plans)			461	479
)	50	59		
IV. Plan)			1100	1213
V. Plan	17	33		2921 (est.)
1974/75				(448)
1975/76			(435) 2/	(449)
1976/77			(481 + 60) 3/	(607)
1977/78			(730) 4/	(850) (est.)
1978/79				
VI. Plan 5/	16 + 30 6/			2892 + 1244 (est.)

1/ Including two "pre-plan" projects.

2/ Including advance plan assistance of Rs. 73 million (of which Rs. 53m for Kadana).

3/ Additional approved outlay of which Rs 40 for Kadana.

4/ See Annual Plan 1977/78 p. 119 for breakdown. Recent indications are that Rs 120 million in additional funds will be spent during 1977/78.

5/ The introduction of rolling plans will mean that this period from 1979/80 to 1984/85 will not be officially designated as the "Sixth Plan", but will function as one five year planning period.

6/ The sixteen projects have been included in the perspective planning for the sixth plan period. Thirty additional projects have been identified by the Water Resources Investigation Unit but the cost estimates are quite tentative. It is likely that many of these projects would spillover into the late 1980's.

5.23 The productivity of agriculture and irrigation plan expenditures has yet to show up in aggregate relationships, since weather induced fluctuations in agricultural production dominate any trend relationships. Dominance of foodgrains other than wheat and rice establish this fluctuating pattern. Wheat and rice are largely produced on irrigated land and exhibit virtually no trend until the sharp upward spurt in 1975/76. This is at least consistent with the steady increase in irrigated area from 1973/74 which coincided with an equally sharp upturn in nominal irrigation expenditures. 1/

5.24 Projected Expenditure. Projections for Gujarat Plan investment in irrigation have been calculated on several alternative bases. Table 7 illustrates the scheme wise progress of irrigation. The tendency to initiate more schemes than can be completed in a give planning horizon is evident in the large number of schemes which have spilled over into subsequent Plan periods. Spillover into the Third Plan was so great that no new projects were initiated during this period. A new backlog developed during the IV Plan period (1969/70-1973/74) which has been ameliorated somewhat during the current period. Nevertheless, a sufficient pipeline of projects clearly exists through the sixth Plan period. 2/ Sixteen new projects are well into the planning stages and 30 additional projects have been identified and preliminary cost estimates have been prepared, which would result in estimated sixth Plan expenditures of approximately Rs 4,350 million or US$483 million (in constant 1976/77 prices and an exchange of Rs 9 = US$1).

5.25 This projection is based on the sum of individual project estimates and is consistent with the aggregate projections contained in the (draft

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1/ Efforts to correlate measures of agricultural production over the fourth and fifth Plans with total Plan investments or with particular components did not lead to significant relationships. As indicated in Appendix Table 2 the log-linear estimated trend for agricultural production between 1969/70 and 1975/76 is negative (-2.5 percent per annum) so that significant aggregate relationships with irrigated area or Plan investments are unlikely. The value of agricultural production in current prices does exhibit a positive but low elasticity with real Plan expenditure. There are likely to be lags in this relationship which, if properly accounted for, could increase its significance, but the few observations available here preclude experimenting with lag structures.

2/ The inauguration of five year rolling Plans should not affect these projections since given any five year period, the allocative perspective will remain.

issues paper). 1/ The question arises as to how these aggregates compare with trend projections based on expenditures since 1969/70. Two sets of projections were calculated: one based on a constant proportion (22.6%) of projected total Plan expenditures, 22.6% being the mean proportion of irrigation to total Plan expenditure between 1969/70 and 1976/77 and the other based on a direct projection of irrigation expenditures. Both are given in constant prices converted to 1976/77 dollars. The two projections for the period 1979/80-1983/84 inclusive are respectively Rs 4,489 million (US$498 million) and Rs 4,653 million (US$517 million). As these are four year projections, they indicate substantial scope for cost revisions in the projects already identified so total sixth Plan period expenditure in the range US$630-US$650 million would be consistent with the past investment program of Gujarat and should not put undue pressure on traditional sources of revenue.

5.26 The projections and anticipated project cost are summarized in the table below:

	(US$ millions -	Trend Projections 1976/77 Constant Dollars)		Project Cost
	Pipeline Cost Estimate	Constant Proportion	Direct Trend	
1978/79-1982/83	416 /a	498	517	170 (Est.)

/a This figure represents 85% of the five year total reported in para .. above to adjust from the five year plan perspective to the four year anticipated project life.

Assuming that project costs cover the entire medium irrigation sector, the proportion of medium irrigation to total irrigation expenditure for the project period would range between 32-40% (depending on which sector expenditure projections are used). This compares to a 48% medium irrigation component during the Fifth Plan period and only 21% during the Fourth Plan period. As it is likely that some medium irrigation investments will be made outside

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1/ Financial estimates based on the aggregation of individual projects are quite flexible depending on which projects are included over a given time horizon. In particular, the Narmada project, currently under central adjudication could consume vast resources quite rapidly. The impact of this project is not taken into account in the projections of irrigation expenditures. The size and "lumpiness" of the investments required for Narmada development would significantly alter the investment trends projected here and require detailed scrutiny. The projections in the (draft issues paper) do make a considerable allowance for Narmada at the expense of some of the 30 tentative projects listed as "new" for the Sixth plan in Table 9.

the project coverage, a continuation of the high Fifth Plan proportion of medium to major schemes is necessary. As medium irrigation has received considerably greater emphasis in recent years, the timing of this project is Gujarat appears quite appropriate and the project size is certainly manageable within the range of projected government expenditures in the irrigation sector as a whole. Nevertheless, successful implementation of the project should include periodic monitoring of ongoing and new commitments to major irrigation schemes in Gujarat, to ensure that the proportion of expenditures on medium schemes is not unduly constrained.

Chapter VI

TAMIL NADU FINANCE AND PLANNING

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TAMIL NADU: FINANCE AND PLANNING

Tables

TAMIL NADU FINANCE AND PLANNING

Preface

The objective of this study is to review the finances and planning framework of Tamil Nadu and of Madras, the State capital, since a proper assessment of the State's proposed investment program could not be made outside of the context of the institutional setting, and the specific financial magnitudes. The study was undertaken in early 1980, in connection with past appraisal of Tamil Nadu Nutrition, Madran Urban Development II, and Madras Water Supply projects. Data for the study was collected in the course of a mission to Tamil Nadu in March 1980.

The paper is organized as follows: the introductory section provides a brief overview of the State, its history and economic features. In Sections II and IV, the State's financial resources and expenditure patterns are described. Sections IV and V are devoted to issues of planning and Plan finance, the financial status of Madras and the fiscal relations between Madras and the State of Tamil Nadu, and a general discussion of municipal finances in India are contained in Chapter VI. The final chapter evaluates the three projects in the context of projected city and State resources.

I. Salient Economic Features

6.01 Tamil Nadu is typically thought of as a prosperous State, in the main, because of its high ranking in terms of indicators of social welfare, high level of urbanization and achievements in literacy, indicators which tend to be associated with high incomes. However, Tamil Nadu ranks ninth out of fifteen States in terms of its per capita income, which, at Rs 887 (1975), places it 12% below the all India figure of Rs 1,008.

6.02 Tamil Nadu's population was estimated at 46.8 million in 1979, which is about 7.5% of the total population of India. Almost one -hird of the State's population is urban, which makes Tamil Nadu India's most urbanized State. It is also very densely populated with 317 people per square kilometer, as compared with 178 for India as a whole.

6.03 As in all of India, agriculture provides the economic base for the State, although in relative terms, the agricultural sector is small, making up only 38.8% of State domestic product as contrasted with the 42.7% for India as a whole. The sectoral distribution of income has shifted primarily in favor of the tertiary sector. This is also reflected in the fact that only about 64.5% of the labor force is employed in agriculture, compared with 72.1% for India as a whole. This is on the low side; only in West Bengal and Punjab does the sector employ a smaller proportion of the labor force.

6.04 A large proportion of the agricultural labor force is landless, and land holdings are small. The net sown area per cultivator is 1.3 hectares compared to 1.8 hectares for the 18 major States, and 2.8 in Haryana, Maharashtra, 2.9 in Rajasthan and 2.5 in Punjab. These factors, among others, contribute to Tamil Nadu's low ranking in terms of per capita incomes. Apparently, the intensive use of irrigation--over 44% of the net sown area, compared with 23% in India as a whole--and high rate of fertilizer consumption, 36 kg, which puts Tamil Nadu ahead of Haryana, are not enough to offset them.

6.05 Industry, mostly small scale, contributes about 22% of SDP and has grown fairly rapidly over the past two decades. The State's leading industries are textiles, the largest single industry in the State, electrical machinery and transport equipment. Cement, sugar, fertilizers and mineral processing are also important. 15.2% of the work force is employed in the industrial sector, as compared with 11% for India as a whole.

6.06 In terms of other indicators, especially social indicators, Tamil Nadu ranks very high. Communications infrastructure, such as roads and railways, serve the State well, there being 71 km of roads per 1,000 square km, and 29 km of railway lines per 1,000 square km, 2 and 1.6 times the all India average, respectively. Tamil Nadu has the second highest number of hospital beds relative to population of all Indian States. Tamil Nadu also ranks high--third--in the provision of rural water supply and electricity. 98% of villages have been electrified. In literacy, Tamil Nadu ranks second, with 40% of the population recorded as literate; this is roughly 34% higher than the all India average.

6.07 Tamil Nadu continues to emphasize basic needs and social infrastructure in its development strategy, for although achievements are high, there is still a great deal to be done. In the following sections, Tamil Nadu's budgeting and development strategies and the resources available for the state's programs are discussed in greater detail.

II. Revenue Sources

State Revenue Receipts

6.08 State revenue receipts are those receipts for which the State has no repayment liability and which are used to finance items of revenue expenditure. They consist of State tax revenues--the most important--non-tax revenues, the next largest, and grants from the Central Government. These categories will be treated in turn. Table 1 details the trends in each category since the beginning of the Fourth Plan.

6.09 Revenues from taxes make up 80% of the State's total revenue receipts. About 60% of the tax revenues are from taxes which the State imposes and collects itself, the remainder are taxes which the State receives through revenue sharing arrangements with the Central Government.

6.10 The States, Tamil Nadu included, receive a share in four central taxes: the income tax, central excise duties, the Center's "additional" excise duties and the estate duty. These shared taxes, known as devolutions, have until recently made up from about 20% of Tamil Nadu's total revenue receipts and 30% of total tax receipts. Under the award of the Seventh Finance Commission, the share of the States in the excise tax has been doubled, from 20% to 40% of the Center's receipts. The results of this change are clearly shown by the large jump in shared taxes in 1979/80; in the first year of the award, shared taxes make up 32% of Tamil Nadu's revenue receipts. Since the share of central taxes is a function of the award made quinquennially by the Finance Commissions, their buoyancy, or elasticity is not a relevant concept here. Tamil Nadu has, in general, done well by the Finance Commissions. Over the last 11 years, shared taxes have provided a growing source of funds; at 14.5% the category has grown faster than the State's revenues from its own taxes, 11.2%.

6.11 The state's own taxes make up about 50% of its total revenue resources, a proportion which, by comparison with other States, indicates a high degress of self-reliance. As in most States, the single most important State tax is the sales tax, which contributes about 68% of the State's own tax revenues and dwarfs all other revenues. The sales tax has two parts: (they are not shown separately in the table), the central sales tax, levied by the center but wholly assigned to and collected by, the States and the State's own sales tax. The taxes are a function of growth in the volume of trade, including interstate trade, and increases in the price level. The sales tax is among the most buoyant revenue sources for the State, with a growth rate of 14.8%.

TABLE 1

TAMIL NADU REVENUE RECEIPTS

	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80
1. Share in Central Taxes 1/	4963	5736	7218	8108	8615	9736	12237	12851	14185	16312	27128
2. State Taxes	13469	14963	19419	22613	29221	30568	29146	34635	35610	39990	42320
(1) Land Revenue	321	524	449	736	785	172	1153	509	555	398	475
(2) Stamps and Registration	1553	1678	1772	1923	2552	2577	2389	2222	2761	3092	3220
(3) Non-agricultural Property	-	-	-	-	-	-	-	269	154	247	322
(4) Excise	117	140	76	3915	5646	2522	310	466	418	332	335
(5) Sales	7216	8182	9897	11401	13225	18788	20893	22934	24186	26820	29120
(6) Vehicles, goods and passenger	1947	2184	2299	2615	2763	3907	4401	4859	4944	5500	5695
(7) Electricity	831	915	915	476	218	97	103	614	129	1100	430
(8) Entertainment	777	863	982	1098	1294	1593	1859	2133	2123°	2140°	-
(9) Other											
3. Non-Tax Revenue	7277	8095	9756	8460	8517	9012	8943	10002	11045*	9332*	9664*
(1) Interest Receipts	1901	1937	3121	2833	1676	2010	1935	2555	2882	2412	2073
(2) Public Works	-	-	-	-	-	-	-	82	83	68	67
(3) Irrigation	373	344	-	-	201	180	110	114	187	760	888
(4) Forests	336	366	456	491	736	922	846	1286	1051	868	925
(5) General and Social Services	-	-	-	-	-	2393	3077	3449	2830	2670	-
(6) Industry and Mining	309	338	275	340	145	136	154	156	123°	133°	n/a
(7) Cooperation	90	86	136	124	168	149	217	211	192°	188°	n/a
(8) Agriculture	829	738	985	1159	1183	308	341	357	334°	338°	n/a
(9) Dairy	303	358	395	206	153	88	34	35	18°	9°	n/a
(10) Dividends and Profession	3	64	33	30	40	39	36	59	76°	75°	n/a
(11) Other											
4. Transfer from Funds	-	-	-	-	-	-	-	-	-	-	-
5. Grants from Center	2652	2596	3641	4634	3624	2713	3246	5410	7346	7709	6465
(1) Statutory	665	574	469	375	275	11	11	-	-	-	-
(2) Centrally Sponsored Schemes	319	469	1364	1505	1118	777	944	1551	1200°	1200°	-
(3) Natural Calamities	300	107	-	87	-	-	-	-	-	-	-
(4) State and Central Plan Scheme	1072	1099	1342	1823	2037	1682	1991	3164	4930°	4925°	-
(5) Other											
6. Total Revenue Receipts	28361	31390	40034	43815	49977	52029	53572	62898	68205	73349	84982

1/ Includes excise, income and estate taxes.
o Indicates 1977/78 revised estimate and 1979/80 Budget Estimate.

Source: Finance Department, Tamil Nadu

6.12 Second in importance contributing 13% to State taxes are the taxes on vehicles, goods and passengers. Tamil Nadu is the most urbanized State in India, and also among the most densely populated, with a transport infrastructure which is excellent by Indian standards. That transport taxes should provide such a large slice of revenue is thus no surprise. This group of taxes has been growing at 17.8%.

6.13 Tamil Nadu's high level of urbanization and per capita income, make entertainment taxes a rapidly growing source of revenues, at 13%, second only to the sales tax, although it contributes a far smaller (5.3%) share of the State's revenues.

6.14 The effects of prohibition on State revenues are clearly shown in the trend of the excise tax. It is levied on the sale of liquor and narcotics and its growth is related to revision of tax rates, and price of country liquor. The excise tax is the mainstay of revenue collection in many States (in Madhya Pradesh, it contributes 15% of its own revenues, for example); in Tamil Nadu it makes up less than 1%.

6.15 Other taxes, such as land revenue, urban property taxes, electricity duties and the like are all very minor sources of revenue in Tamil Nadu, and it appears that they are suffering some neglect. Revenues from electricity duties show an absolute decline in the past decade, as do the stamp and registration taxes. This is a trend common to many States although in Tamil Nadu these have never been as important a source of revenue as in many other states.

6.16 Overall, State revenues have grown at 11.2% per annum since 1969. In real terms, this performance is diminished somewhat, since the price level has risen also, by about 5% per annum. Nonetheless, an annual growth of 5-6% in real terms bespeaks some tax effort. As a proportion of State income (SDP) own tax revenues have risen from 6.2% in 1970/71 to 7.5% in 1975/76. In comparison with other States, Tamil Nadu is by far the most self-reliant: it has already been pointed out that own tax revenues as a fraction of total State revenue receipts are higher in Tamil Nadu than any other State.

Non-Tax Revenues

6.17 Non-tax revenues have declined considerably in importance over the past decade, due to their near stagnation since 1974/75. At the beginning of the decade, non-tax revenues contributed 26% of Tamil Nadu's revenue receipts; in 1979/80, they are expected to contribute less than 11%, the result of annual growth rates as low as 2.4%. Among the reasons for this is the formation of many corporations in the public sector, particularly in transport operations. In the past, the revenues from such operations, accrued directly to the State Government had been considerable, and this avenue is partly closed with the formation of these corporations. Only Forestry and Irrigation have provided any growth at all, the former increasing at 11.9% and the latter at 8.7% per annum.

6.18 The drain on State resources represented by these corporations, especially the Electricity Board is thus quite large.

6.19 Another 25% of non-tax revenues derives from social and developmental services which head come education (fees from schools); medical and public health (medical fees and sale of medicines, fees for preparing town drainage Plans) and the like. This category have also shows stagnation. The Agriculture represents receipts from fisheries and farms operated by the State; under industries and minerals are found receipts from cottage industries and mines and minerals. Receipts in all of those latter categories of non-tax receipts, including dairy and cooperation have shown a downward trend.

6.20 In general, the trend in non-tax receipts, unlike tax receipts, is a function of the level of services provided, the development of the sector, in the case of the State Government's commercial undertakings, the State's management of these enterprises, and the overall level of collection effort put forward by the State. In the case of Tamil Nadu, it appears that concessions and failure to revise the prices of many services managed by the State Government, have also played a role in the stagnating level of non-tax receipts.

6.21 To summarize, the picture presented above is one of a structural change in the composition of revenue receipts, towards far greater reliance on tax, rather than non-tax receipts.

6.22 Tamil Nadu has not been eligible for the statutory grants in and from the Finance Commission since 1975, the last year in which it had an ex-ante budget deficit. Since then, Tamil Nadu has had, after revenue sharing, a budgetary surplus in each year, projected to continue through 1983/84 by the Finance Commission.

6.23 Tamil Nadu's receipts from centrally sponsored schemes have remained more or less constant over the past 10 years, indicating that the importance of these schemes in the State expenditure picture has not changed dramatically.

6.24 Tamil Nadu has not received grants for natural calamities since 1972.

6.25 To summarize, revenue receipts in Tamil Nadu have not been very buoyant over the period, growing at only 10% per annum in a period in which prices increased at slightly over one-half that rate. The failure of non-tax revenues to keep pace--in real terms, they showed a decline of about 2-3% per annum--is largely accountable for this.

III. Review of State Expenditures

6.26 Expenditures in Tamil Nadu, as in other States, are classified under two headings: revenue expenditures and capital expenditures. Broadly, there is a correspondence between revenue expenditures and 'current' expenditures, as they are generally understood, and between capital expenditure, and investment. The correspondence, however, is not exact. There

is some investment expenditure on revenue account (basically capital expenditures which are required for carrying out general administration of the State, such as housing for civil servants, and likewise, 'current' or non-investment expenditures show up on the capital account. An example would be the compensation payments to landlords on the abolition of the Zamindari system, or loans to State entities. Formally, the difference between revenue expenditures and capital expenditures is determined on the basis of whether the expenditures are financed from revenue receipts or from capital receipts. It is clear that this distinction is somewhat artificial, since there is fungibility between State income from the various sources.

6.27 There is another dichotomy in the expenditure budget as between 'developmental' and 'non-developmental' heads. The distinction is meant to indicate exactly what it implies, but the differences are sometimes a bit fuzzy. Thus, the budgetary heads for "administrative services" and "collection of taxes" refer to non-developmental expenditures, while "education," "public health" or "industry," for example, would be developmental expenditures. On the other hand, compensation payments to landlords upon the abolition of the Zamindari system are also developmental expenditures. Plan expenditures may be either revenue or capital expenditures, since the Plan finances expenditures of a non-capital nature during the Plan period, but they are always "developmental."

Revenue Expenditures

6.28 Revenue expenditures in Tamil Nadu make up a far larger proportion of total expenditures - 72% - than in most States in the Indian union. This is a result of the explicit strategy, emphasizing social development, which Tamil Nadu has pursued. The high priority attached to investment in social infrastructure is a unique characteristic of Tamil Nadu's development program. In the Sixth Draft Plan, the combination of social services (including education, public health, water supply and sewerage and community development) accounted for 25.5% of total State Plan outlays, compared with the 10-12% which such expenditures typically represent in the Plans of most states in which greater emphasis is put on power and irrigation and agriculture. The result of this orientation is reflected in the revenue expenditure picture because investments in social sectors typically imply more ongoing expenditures (wages, salaries and other overheads) than investments in the more capital-intensive sectors, such as power or irrigation. These ongoing expenditures are financed through the Plans, as part of total Plan project costs during the Plan period. At the end of the Plan, however, the current ongoing expenditure, after "bricks and mortar" part of the project has been completed, becomes "committed expenditure" for which the State is responsible on revenue account. 1/ This is in contradistinction to many States in which the Plan focus is on the more capital intensive sectors in which the State commitment

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1/ Indirectly, since the Finance Commission takes committed expenditure into account when projecting the State's revenue account balance, the burden of these committed expenditures is shared.

after the Plan is likely to be smallest. The burden on the revenue account is therefore also reduced, leaving a larger surplus for the financing of the State Plan.

Table 2: TAMIL NADU REVENUE ACCOUNT EXPENDITURES

(Rs Crores)

	1975/76	1976/77	1977/78
Development Expenditure	382.9	414.4	438.3
1. Social & Community Services	242.4	259.6	283.5
Education, Art & Culture	122.5	135.5	159.3
Public Health	55.1	75.0	70.7
Housing & Urban Development	7.1	8.7	11.7
Social Services	36.3	32.3	33.8
Other	21.2	8.0	7.9
2. Economic Services			
Agriculture & Allied Services	75.6	81.7	82.1
Industry & Minerals	7.5	8.4	7.9
Water & Power	19.3	27.8	29.9
Transport & Communications	30.0	27.7	25.4
Other	7.98	9.08	9.46
Non-Development Expenditure	174.9	215.8	225.0
3. General Services	159.3	196.6	204.3
Organs of State	6.7	6.92	8.0
Fiscal Services	12.4	13.9	14.3
Debt Services	58.9	67.0	73.8
Administrative Services	64.4	67.3	77.6
Pensions & Miscellaneous	16.87	41.3	34.5
4. Assignments to Local Bodies	15.63	19.20	20.7
Total Revenue Expenditure	557.9	630.2	663.4

Source: Economic Survey, Tamil Nadu, 1977.

6.29 Revenue expenditures have been growing at about 10.6% per annum over the past decade, less rapidly, but only slightly, than revenue receipts. Table 2 shows the allocation across various types of expenditure. The State spends far more on revenue than on capital expenditure (the present ratio is about 75:25). 1/ However, approximately 70% of revenue expenditures are on

1/ This is, in fact, slightly less than the all States' average.

development items, primarily education, agriculture and public health, indicating that Tamil Nadu has, like all State Governments, kept current expenditure on routine items of State administration in check, in the interests of a larger Plan size and emphasis on development in the revenue budget. The most important item among non-development expenditures is general administration services, followed closely by debt servicing. The assignments to local bodies item refers to assistance given to cities in Tamil Nadu, and is akin to the revenue sharing between the Center and the States. Of the expenditures on revenue account, some 8-12% are Plan expenditures, as Table 3 shows. Table 3 also shows the phenomenon of a spurt in "committed" expenditures at the end of every Plan period as completed Plan schemes are continued under State aegis, generating additional expenditure to be met from the State's revenue account. At the end of each Plan period, non-Plan expenditures jump: in 1965/66, the end of the Third Plan, from 81.1% of the total to 89% immediately the following year. Again, the same thing in 1968/69: non-Plan expenditure rise discontinuously from 90% in that year to 94% in 1969/70, the first year of the fifth Plan.

Table 3: TAMIL NADU REVENUE ACCOUNT
PLAN AND NON-PLAN EXPENDITURE

Figures in Lakh Rupees

Year	Total Expenditure	Plan Expenditure	Non-Plan Expenditure	Non-Plan as % of Total
Actuals				
1965/66	18066	3421	14645	81
1966/67	20143	2117	18025	89
1967/68	23333	2261	21071	90
1968/69	36094	2443	23651	90
1969/70	30624	1811	28812	94
1970/71	32148	2285	29863	92
1971/72	39384	3053	36331	92
1972/73	41704	3497	38207	91
1973/74	47263	3583	43680	92
1974/75	52836	3790	49046	93
1975/76	55792	5677	50115	89
1976/77	62837	7169	55668	89
1977/78	70612	9411	61201	86
1978/79	75351	10442	64909	86

Source: GOTN Finance Department

Plan Expenditures

6.30 Plan expenditures have grown considerably faster than total revenues, at 14.6% per annum, over the Fourth and Fifth Plan periods, indicating an increasing emphasis on development expenditures. The sectors which have grown most rapidly have been irrigation (18%), transport and communication (23%) and social services (25%). Cooperation and industries also grew very slightly faster than the overall average during the two Plan periods.

Composition of Plan Expenditures

6.31 Throughout the period, but especially since the fourth Plan, Tamil Nadu has focused its efforts, as Table 4 shows, on the social sectors: education, health, water supply, housing and the like. In the fifth Plan, expenditures on social sectors made up 55% of total plan spending. In the sixth Plan period, the State expects to spend nearly 26% of all Plan outlays in this sector. Power is also being undertaken with great intensity, taking up 37% of Plan expenditure--this large increase comes at the expense of social services. All other sectors, mineral and industrial development (5.7%), transport and communication (8.9%) and irrigation (6.7%) receive far lower priority.

6.31 It is very difficult to evaluate these levels of Plan expenditure and the Plan strategy. They can be viewed in relation to deficiencies in infrastructure in each sector, or in relation to per capita plan expenditures in other States, or the plan strategy can simply be taken as given.

6.32 Irrigation and Agriculture: The gross irrigated area in Tamui Nadu as a proportion of the gross cropped area was nearly 48% in 1973/74, almost twice as high as the all-India average, about the same as Haryana, and two thirds that of Punjab. 75% of the state's irrigation potential has been exploited. As a result, irrigation expenditures do not make up a very large proportion of Plan expenditures. In the sixth Plan, Rs 156.7 crores is to be the outlay, or roughly 7% of the overall draft Plan.

6.33 Power. Intensive power development is the cornerstone of the Tamil Nadu Plan, as it is in most States. Since Tamil Nadu is relatively dependent (70%) on hydro power, power supply is dependent on the monsoon and there are typically chronic power shortages in poor monsoon years. Since the state's industrial structure is biased in favor of industries such as chemicals, fertilizers, textiles, cement, aluminum and other metal-based industries whose requirements of power are of a very high order, reliable power supply is essential. Rs 812 crores, 38% of sixth Plan outlays have, as a result, been earmarked for power development, which includes more thermal stations; a nuclear plant is also under consideration.

6.34 Transport. Transport needs are relatively well served in Tamil Nadu, compared with other States; road length per lakh of population is well above the all India average, and second only to Kerala and Karnataka. Plan investments in transport and communications make up about 8% of total outlays.

Table 4

Tamil Nadu
Plan Expenditures, Category Totals

Rs lakhs

	Actual 1969/70	Actual 1970/71	Actual 1971/72	Actual 1972/73	Actual 1973/74	Actual 1974/75	Actual 1975/76	Actual 1976/77	Revised Estimate 1977/78	Budget Estimate 1978/79	Draft Sixth Plan 1978/9-82/3*
Current Prices											
Agriculture	1826	1822	1860	1956	2142	2036	1862	2392	4547	4484	28018
Community Development	251	265	603	529	824	126	447	498	332	363	-
Cooperation	263	415	435	381	544	418	1260	1366	1576	976	2638
Irrigation	479	490	565	660	635	622	1122	1638	1960	2171	15675
Power	3857	3805	4116	4287	4940	3584	5252	7780	9841	11381	81222
Industires & Minerals	520	683	741	737	1016	1040	1069	1731	1656	1510	12365
Transport & Communications	271	577	907	1281	1322	1821	1417	2561	3235	2903	19054
Social Services (Excluding WS&S)	1612	2313	3672	4599	4586	4581	5591	6388	8377	7790	19563
Water Supply & Sanitation	351	401	380	844	1047	1796	1186	2591	2622	2730	34736
Total	9430	10770	13279	15247	17056	16024	19026	26945	34146	34308	215000

*As finalized December 1979.

6.35 Investments in social services have always been a high priority relative to other Plan sectors. On many indices, there are indications that this investment has resulted in increased service levels in some sectors. In health, Tamil Nadu has the second largest number of hospital beds relative to population of all Indian states (97.2 per lakh in 1976), very slightly less than Kerala (106) and more than West Bengal with 91 per lakh. In literacy, Tamil Nadu ranks second in India, with 40% of the population recorded as literate. In terms of rural water supply, Tamil Nadu ranks third among Indian States.

6.36 On the other hand, the priority placed on investments in this sector by no means exhaust the improvements in the quality of and access to services which can take place: rural mortality remains high, infant mortality rates in Tamil Nadu rank the State in the lowest third of the major States.

6.37 Social sectors, as a whole, make up one-fourth of all Sixth Plan outlays. This is a slight decline from the 29% of the Fifth Plan. This reduction is spread across almost all social service categories, including education, health, housing and water supply, barring only nutrition, which has increased its relative share of Plan outlays from 0.2% in the fifth Plan to 1.6% in the Sixth Plan.

IV. THE PLAN: FINANCIAL RESOURCES

6.38 Finance for the State Plan comes from five basic sources: (a) the State's surplus (if any) on current account after all non-Plan expenditures have been netted out from revenue receipts; (b) the contribution of public sector enterprises; (c) central assistance; (d) negotiated and market loans, unfunded debt and other miscellaneous capital receipts; and (e) additional resources mobilized during the Plan period. Ex post ad hoc assistance from the Central Government or Reserve Bank, an increase floating debt, or sale of state assets can also contribute to financing the Plan, but these are, of course, not planned sources of revenue when the Plan is being drawn up. 1/

6.39 Table 5 shows the details of the financing of the Fifth and Sixth Plans. As the table indicates, the contribution from the State's own revenues, the difference between non-Plan revenue receipts and non-Plan revenue expenditures, made up 4% of Plan resources during the Fifth Plan and is expected

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1/ This is the standard format for all States for States' Plan resources. Since all monies are fungible, this dichotomy between Plan finance and other financial resources is to some extent artificial.

to contribute 12.4% over the Sixth Plan. 1/ As was discussed earlier, although per capita revenue receipts in Tamil Nadu are high (Rs 178 per person in 1976), the State's emphasis on plan investments which require heavy subsequent committed expenditures serves to limit the extent to which the State's own budgetary resources are available to finance the Plan. The grants-in-aid from the Finance Commission would fill in any gap rising from an excess of revenue expenditures over receipts, but in the absence of a gap, cannot provide any assistance to increase the small revenue surplus.

6.40 Additional resources mobilization is also a budgetary resource, conventionally accounted for separately from the ordinary revenue receipts because it is entirely earmarked from Plan finance. It refers to revenues from tax and non-tax sources including public enterprises, over and above what would accrue to the State at the rates of tax and tariffs prevailing in the final year of the previous Plan. These are always shown separately in the State accounts and not merged with base levels of receipts. They derive from changes made in tax and tariff rates or base, improved collection techniques or better administration. Typical examples of additional resource mobilization measures would include such things as changes in the issue price of liquor, increases in the electricity tariff and bus fares, increases in the rate of royalty on minor minerals, amendments to check sales tax evasion or to prevent undervaluation of documents subject to stamp tax, higher retained receipts from district lotteries, increases in court fee rates, higher sales tax rates, and reductions in concessionary rates and withdrawals of tax exemptions, to name just a few.

6.41 Targets for additional resource mobilization are set by the State Government in consultation with the Planning Commission at the time of the annual or five-year Plan discussions, to fix the State's contribution to its own Plan. Tamil Nadu has always done very well on this score, and has usually more than achieved its targets in the past decade. Between the current balance and additional resource mobilization, the State will finance, in the Sixth Plan, 27.5% of its Plan outlays, compared with 20.1% in the Fifth Plan. This indicates a reasonable level of self-sufficiency, keeping in mind Tamil Nadu's explicit strategy to devote a large proportion of its Plan outlays to social sectors representing subsequent drain on resources.

1/ This is often loosely referred to as the State's "revenue account surplus," but it is, strictly speaking, the surplus (deficit) only of non-Plan revenue account receipts over non-Plan revenue account expenditures. The non-Plan revenue receipts moreover, include only those receipts which would have been earned at rates of tax prevailing at the beginning of the Plan period. Additional receipts, whether tax or non-tax earned thanks to measures introduced after the beginning of the Plan, are denominated "additional resource mobilization."

TABLE 5

SOURCES OF STATE PLAN FINANCE

Rs. in Crores

	FIFTH PLAN					SIXTH PLAN			
	1974/75	1975/76	1976/77	1977/78	Fifth Plan (%)	1978/79	1979/80	1980/81	Sixth Plan (%)
1. Balance from Current Revenue	10.04	11.01	10.67	39.28	71.0 (3.9)	103.52	72.62	71.10	268.50 (12.4)
2. Contributions of Public Sector Enterprises									
(i) State Electricity Board	6.87	17.21	37.55	17.08	78.71 (4.3)	20.90	1.82	20.47	32.58 (1.5)
(ii) Road Transport Corporation	7.53	14.78	21.36	9.74	53.41 (3.0)	12.91	13.26	13.64	62.46 (2.9)
(iii) Others	-	-	-	-	-	-	-	-	12.00 (0.5)
3. Loans from Market	16.34	26.30	13.68	13.19	69.5 (3.8)	13.22	13.05	14.36	65.38 (3.0)
4. Small Savings	10.12	18.27	23.54	22.20	74.13 (4.0)	36.98	32.00	34.60	173.00 (8.0)
5. State Production Fund	3.60	5.79	11.22	9.68	30.29 (1.6)	9.12	9.89	10.38	56.15 (2.6)
6. Miscellaneous Capital Receipts	1.68	16.98	20.41	31.57	70.64 (3.8)	103.11	15.12	1.12	34.06 (1.6)
7. Additional Reserve	47.75	105.18	145.87	-	298.8 (16.2)	27.44	50.97	50.39	325.00 (15.1)
8. Negotiated Loans									
(i) State Government									
-- From LIC	1.26	1.45	1.25	1.40	5.36 (0.2)	1.37	1.51	1.51	8.39 (0.4)
-- From RBI	0.76	2.90	3.85	1.82	9.33 (0.5)	1.14	1.82	2.00	10.09 (0.4)
(ii) State Enterprises	6.80	8.09	8.17	13.72	36.78 (2.0)	15.54	10.36	11.40	57.18 (2.6)
(iii) Others	6.55	3.50	5.35	6.08	21.48 (1.1)	5.81	6.60	7.26	36.63 (1.7)
Market Borrowings									
(i) State Enterprises	9.90	9.82	12.65	15.34	47.71 (2.6)	18.72	22.15	24.28	131.65 (6.1)
(ii) Others	3.30	3.30	3.30	2.31	12.21 (0.7)	3.30	3.30	3.63	16.50 (0.7)
9. Withdrawal from Reserve and Increase in									
(i) Ways and Means Adv.	2.20	18.37	3.78	12.43	31.78 (1.7)	3.26	1.10	-	-
10. Central Assistance									
(i) Grants	14.61	17.15	27.30	42.67	101.73 (5.6)	37.24	23.73	62.86	119.63 (5.5)
(ii) Loans	34.04	40.00	63.72	95.49	233.25 (12.7)	84.77	55.37		279.15 (13.0)
(iii) IDA Additionality	-	-	-	-	-	1.50	3.00	6.00	23.38 (1.1)
(iv) Supplementary Assistance	-	-	-	-	-	35.35	30.00	33.00	377.34 (17.5)
TOTAL RESOURCES	140.85	195.14	226.13	270.86	1,832.98	310.74	331.59	324.82	2,149.84

6.42 The second item of Plan finance is the contribution of public sector enterprises. This has been moderate throughout most Plan periods. In spite of the positive figures, this is in fact no "contribution" as such: most public enterprises represent a net outflow from the State's revenue coffers. The figure represented here is simply an accounting notion: it represents the net operating surplus of the State enterprises which is the surplus gross of depreciation and certain interest payment liabilities and is not equivalent to the net commercial profit or loss of the enterprises. This, in most cases, is negative. 1/ The rationale for this accounting is that a sinking fund is akin to the enterprises' own internal resource generation. Since these are public corporations and, therefore, their operations financed through the Plan, their depreciation fund is, in fact, Plan finance. Were it netted out, the State would have to provide the same funds to the enterprise for expansion by other means. While this notional accounting is completely acceptable, it should be kept in mind that most public sector enterprises do not make a net contribution to the State's financial resources and do not generate funds for the public sector in a true sense. The figure simply represents the operating surplus and internal resources of the State corporations.

6.43 Loans from the market represent essentially State bond issues and are not market loans in a true sense, since their placement has been assigned, since the nationalization of the banks in 1969, between commercial banks and other financial institutions. As a contribution to the State's financial resources, they are not really significant; some 3.0% is expected from this source during the Sixth Plan period. There are also market borrowings of the State enterprises, principally the Electricity Board. These are again, placed by assignment to various lending institutions in the "market," and also make a moderate contribution to Plan resources--about 6% is expected from this source in the Sixth Plan. All of the public debt is allocated to the States by the Central Government, and the State Government has practically no say in the matter.

6.44 Negotiated loans are what their name implies and are negotiated principally from the Life Insurance Corporation of India, the Reserve Bank and HUDCO. State enterprises, principally the Electricity Board, also negotiate loans largely from the same sources. As a fraction of total resources for the Plan, this source contributed less in the Sixth Plan (5.1%) than in the Fifth Plan (3.7%).

6.45 Small savings loans are loans from the Central Government to the States which each State receives automatically as a result of State participation in the various schemes operated by the Center, primarily through the Post Office, to mobilize household savings. States receive two-thirds of whatever savings are made through these channels as an incentive to

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1/ In Tamil Nadu's case, were the SEB breaking even in a commercial sense, another Rs 20 crores would have been available to the State over the Sixth Plan period.

encourage further savings. This has proven to be a modest source of revenue, comprising 4% of Plan resources in the Fifth Plan, and to make up 8% in the Sixth Plan.

6.46 "Miscellaneous capital receipts" are all the other net transactions not accounted for under the other headings, such as short-term loans from the Central Government, recoveries of loans and advances to other institutions by the State Government, net accretions under various sinking funds and other net accounts including non-Plan loans. In general, this is a negative figure, since a substantial amount is repaid to the Central Government and financial institutions. The final item, the withdrawal from reserves and net increase in floating debt is an adjustment item. In it are entered the final closing balance of the previous year's accounts, the proceeds from sales of securities and treasury bills and the net change in ways and means advances from the Reserve Bank. This is, of course, not a planned resource for the State Plan but results, ex-post, from the State Plan accounts.

6.47 Central assistance on Plan account (as opposed to the assistance on revenue account, discussed earlier), 1/ is composed of grants and loans, and is fixed by the Planning Commission. All states receive Plan assistance, which is distributed among them according to a formula known as the "Gadgil formula," in which State population and per capita income, among other factors, are used as weights. For Tamil Nadu, the assistance is given on a 70% loan, 30% grant basis, except for the funds earmarked for Plan expenditures in tribal areas (the "tribal sub-plan") which are given on a 10% loan, 90% grant basis. Normal central assistance contributed approximately 18% to financing the Fifth Plan; during the Sixth Plan, 19.6% is expected from this form of revenue sharing. Compared with other States, this figure represents a fair degree of independence.

6.48 Additionality is a type of central assistance which derives from the foreign aid disbursements received by the Center, and which is passed on to the State for the project which is being funded. Just about 1% of Tamil Nadu's total Plan finance comes from this source, but at the margin it represents a considerable incentive to Tamil Nadu and to all States to put forward projects for foreign assistance, since additionality represents funds which they would not ordinarily receive. All three projects will imply additional assistance for Tamil Nadu.

6.49 The picture presented by this brief overview of the State Plan and its financing is one of overall soundness. Tamil Nadu differs from other better off States primarily in the contribution made by the balance from current revenues, which is small in relative terms. This is an explicit choice of the State. As a result, however, the overall size of the Tamil Nadu plan, Rs 305 crores in 1978/79, for example, is far smaller than what

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1/ This distinction is to some extent arbitrary since the Finance Commission award contributes to the positive balance on revenue account, which in turn finances the Plan.

might at first expect from a State in which tax efforts and resource mobilization have been good, generally speaking. In terms of overall Plan size, Rs 305 crores places Tamil Nadu ninth in a ranking of 15 major States; in per capita terms with an expenditure of Rs 65, Tamil Nadu ranks far lower, fourteenth. 1/

V. THE PLANNING PROCESS

Planning Machinery

6.50 Planning in Tamil Nadu is carried out by the State's Finance Department, although there is also a State Planning Commission, whose purpose is to advise on Plan priorities and project selection. The Planning Commission has recently produced its first five-year Plan (1978/79-1982/83), a document in which, among other things, future Plan outlays are measured against an estimate of resources over the Plan period, thus identifying the gap in future resource requirements. Although the Commission has not functioned effectively to date, the five-year Plan is a worthwhile document, because it represents the first step taken in Tamil Nadu toward the process of Plan formulation and monitoring. In the absence of such a Plan and a capital program which looks a few years ahead, spending agencies and the State Government can only budget on a year to year basis for both capital and current expenditures. As a result, bids for spending are based on a historical pattern--as they have been in Tamil Nadu--and not on an analysis of goals and objectives and performance in the sector, or from the point of view of the State's more global objectives.

6.51 The Commission is not a statutory body and its role is purely advisory. With continued development of its expertise, it is hoped that the broader perspective it provides will change the extent to which the annual budget process determines the State's development strategy. Until then, the Finance Department will continue to function, among other things, as coordinator between the operational departments and to be the ultimate financial arbiter over all Plan outlays as well as over their sectoral disposition.

Plan Coordination

6.52 Tamil Nadu's State Plan is drawn up in consultation with the Central Planning Commission. The procedure is the same for all States, and is more or less similar for five-year and annual Plans alike. The overall size of the State Plan is fixed by the Planning Commission in Delhi in consultation with the State Finance Department through a series of discussions. These

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1/ "Basic Statistics Relating to the Indian Economy," November 1978, Vol. II.

focus on State resource availability for the period (which is a function of its budget surplus, capital receipts and additional resource mobilization efforts) and implementation capacity in the various sectors.

6.53 In these discussions, the onus is generally on the State to "prove" that it has sufficient resources for the size Plan it has prepared. Initially, resource availability may be somewhat uncertain, since there are a number of unknowns, most important, the amount of central assistance. The Plan which the State proposes at this juncture is, therefore, a function of its best assessment of its own capacity and the sketchy information available about central resources. In Tamil Nadu, a five-year Plan of Rs 2,523 crores expenditure ($3.0 billion) was put forward at these discussions. Subsequently, the Plan has been finalized at Rs 2,150 crores of which Rs 798 crores is from central assistance and the balance, Rs 1,352 crores, the State's own resources including borrowing. Additional resource mobilization is expected to be 24% of own resources, a target which if not met, will have to be made up through deficit finance such as overdrafts, accommodating loans from the central Government, or by not meeting outlay targets. 1/

6.54 The sectoral allocation of the Plan is also discussed at this time. National priorities find their way into State Plans via the guidelines of the Planning Commission. Proposals from each State Department are drawn up and forwarded to the Finance Department. The Finance Department's coordination and scrutiny of sectoral outlay levels are carried out with these guidelines in mind. In the case of Tamil Nadu, the view points of the Planning Commission and the State Finance and operating departments are generally convergent, but this is not always the case for all States.

6.55 In its earliest stages, the State Plan consists of a set of proposals for outlays drawn up by each department, detailing the program and strategy of Plan expenditure in that sector. This level of outlays which results generally represents the absolute maximum which the department could execute, and the program is not very discriminating in terms of project content. State Departments usually consult their counterpart ministry in Delhi on the formulation of their program. Even if not, the central ministries will in any case try to influence the formulation of departmental proposals because of their "empire building" tendencies. These departmental proposals are submitted to the Finance Department in August/September of each year. They are discussed by the Cabinet and at the Secretariat level, and an attempt is made to match the aggregate of proposals against the available resources. This first round aggregation of departmental proposals implied, in Tamil Nadu, a Plan far greater than the Rs 2,523 crores which was presented to the Planning Commission. How the sectoral allocation is ultimately determined in this whittling down process remains somewhat of a mystery. To some extent, it is an ad hoc procedure, in the absence of a perspective planning cell in the Finance Department. The figure fixed for the Planning Commission for Tamil Nadu after the Plan discussions for the Sixth Plan was Rs. 2,150 crores.

1/ In the past, Tamil Nadu has usually achieved its additional resource mobilization targets. These figures are as finalized, December 1979.

6.56 The Tamil Nadu State Plan of Rs 2,150 crores is "final" in the sense that all the motions have all been completed. It remains formally, however, in the "draft" stage, since the national Plan and hence central assistance, have not yet been finalized. Changes in the size or the sectoral breakdown of the Plan are, however, not expected to differ markedly the final version of the State's Sixth Plan.

VI. Madras: Municipal Finances in India

6.57 Up to this point, this paper has only been concerned with the resource position of the State of Tamil Nadu, which is to finance and implement the Tamil Nadu Nutrition Project, Madras Water Supply Project, and Madras Urban Development II Project. Selected components of this last project, including street lighting, drains, land acquisition and solid waste management are to be implemented by the Madras Corporation. The financial health of Madras city is, therefore, also pertinent to a full analysis of the financial aspects of implementing these three projects. A brief survey of the city's revenues, expenditure commitments and budgeting practices and a general discussion of the situation of Indian municipalities in general, follows.

6.58 Madras is the oldest local government unit in India, chartered by James II of England in 1688. The city has grown from its rather modest beginnings as a trading center to become India's fourth largest city, with a present population of 4.4 million, over 20% of Tamil Nadu's population.

6.59 There are two tiers of municipal administration in Madras, the Madras Municipal Corporation 1/ and the Madras Metropolitan Development Authority. The MMC takes care of purely local municipal functions, providing civic amenities and infrastructure facilities such as roads, water supply, drainage, street lights, elementary education parks, and public health. The City Corporation also licenses buildings, markets and industries, and is responsible for local tax administration and administration of public agencies. The MMDA is an agency set up in 1972 by the State Government and charged with responsibility for development planning for the entire Madras Metropolitan Area. This area consists of the Madras Municipal Corporation, four municipalities, four townships and twenty panchayats. 1/ At present, the MMDA has only an advisory role, but is intended in future to be the primary body responsible for capital budgeting and planning of investment priorities in

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1/ In India, there are five types of urban local governments: municipal corporations, municipalities, notified areas, town areas and cantonments. There are wide variations in the pattern of local authority between States: all five types are not found in all States; some States may have only one type. On the rural side, Panchayati Raj institutions cover the entire rural areas and consist usually of a three-level hierarchy of administration linking the village to the district level administration.

the MMA. This dual arrangement is similar to that of the other large cities (Bombay, Calcutta) in which independent development and municipal authorities divide responsibility for maintenance of services and town/regional planning. The Tamil Nadu government maintains considerable control over the administration and finances of the Corporation. A Commissioner, appointed by the State Government is the executive head of the Corporation. Moreover, much of the investment in MMA is carried out by various departments or agencies of the Tamil Nadu government. This includes major city roads and highways which are constructed and maintained by the Highways and Rural Works Department, and urban housing which falls under the aegis of the Tamil Nadu Housing Corporation and the Slum Clearance Board. State approval is required for the Corporation's budget, for revisions in tax levies and for its borrowings, for which the State is the major source. In 1974, the Municipal Council was dissolved and replaced by a Special Officer, also appointed by the Tamil Nadu government.

Resources

6.60 The Madras Metropolitan Corporation, like almost all Indian municipal corporations, is severely constrained in its ability to generate revenue and to provide the urban services which are so urgently required. The municipal area faces pressures from both the need to provide services to a rapidly growing population (5% per annum) and to remedy the existing deficiencies in service levels to prevent service provision from deteriorating still further. Revenues are derived from five broad sources: (i) local taxes and surcharges on State taxes (such as land revenue and entertainment taxes) which more or less reflect the autonomous financial capacity of the city; (ii) assigned revenues; (iii) taxes levied and collected by the State Government whose proceeds are turned over to the local government (such as stamp duties); (iv) grants from the State; and (v) loans primarily from the State and the LIC. The first three items are considered current revenue, the latter capital income, untied to the local revenue base and determined by factors largely outside the local bodies' control. The Corporation's current revenue has always exceeded capital revenue, making up about 80% of the municipality's income.

Table 6

Total Current and Capital Revenues of Madras Metropolitan Corporation, 1970/71 - 1979/80

(Rs Lakhs)

	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80 R.E.
A. CURRENT REVENUES										
I. Tax Revenues	614.84	700.99	706.53	914.87	1035.36	1126.06	1315.29	1,147.93	1,145.05	980.16
(1) Property Tax:	580.93	670.23	679.01	878.81	999.23	1086.26	1220.22			
a) General Purpose	248.09	299.15	287.15	376.12	427.95	451.74	527.36	482.41	468.68	574.03
b) Lighting	56.96	95.28	85.05	108.60	124.80	137.49	153.82	145.82	167.30	167.23
c) Water	30.76	34.33	35.41	46.51	53.49	58.92	65.92	62.49	71.70	-
d) Drainage	127.60	110.71	133.65	170.68	196.12	216.05	241.71	229.14	262.90	-
e) Education	103.70	115.16	115.34	147.42	165.06	185.98	219.74	228.07	320.19	238.90
f) Library Cess	13.02	15.65	22.41	29.48	31.81	36.08	11.67	-	29.28	-
(2) Other Tax Revenue:	33.91	30.71	27.52	36.06	36.13	39.80	95.07	150.16	146.73	146.09
a) Profession	21.43	16.86	13.69	20.46	18.74	22.41	72.91	127.55	123.12	125.00
b) Company	7.95	8.26	8.15	8.59	9.58	9.95	10.62	10.27	10.66	10.00
c) Timber	1.68	2.82	2.83	3.02	2.77	2.23	72.91	1.98	1.76	2.00
d) Advertisement	2.78	2.75	2.80	3.95	5.15	7.14	9.57	10.22	11.09	9.00
e) Carriages and Animals	0.07	0.02	0.05	0.04	0.09	0.07	0.36	0.14	0.10	0.09
II. Non-Tax Revenues (User Charges, fees):	228.48	249.57	299.05	341.92	265.05	284.30	228.43	304.76	360.93	374.58
(1) Management	33.46	51.89	82.31	104.61	77.81	110.19	53.18	103.60	151.12	189.14
(2) Education	0.24	9.42	6.27	6.84	6.87	0.57	1.13	11.57	26.10	23.81
(3) Communication	42.50	49.35	45.86	50.53	33.15	35.80	28.37	22.20	98.39	104.00
(4) Public Health	35.39	44.69	49.28	29.56	25.66	27.20	22.45	20.13	17.85	16.41
(5) Remunerative	63.52	37.94	52.34	52.11	55.75	42.36	28.34	51.63	28.10	29.74
(6) Lighting	1.09	1.86	2.75	2.07	3.18	1.20	5.09	1.70	2.58	11.36
(7) Water Supply	49.30	50.20	56.35	63.80	51.43	46.72	67.84	65.07	23.80	-
(8) Drainage	2.80	3.06	3.12	28.96	10.03	18.04	19.84	26.49	11.49	-
(9) Town Planning	0.18	1.16	0.71	0.44	1.12	2.12	2.19	2.37	1.50	0.12
III. Revenue Transfers:	251.68	267.94	292.59	290.34	318.45	309.34	363.17	363.01	474.12	498.65
(1) Entertainment Tax	197.42	211.97	234.91	284.76	235.17	231.33	323.75	346.62	364.34	350.09
(2) Surcharge on S.D.	50.63	52.30	54.03	51.93	79.63	73.61	35.77	12.74	106.21	145.00
(3) MPT Compensation	3.63	3.67	3.65	3.65	3.65	2.40	3.65	3.65	3.57	3.56
IV. Grants	38.35	18.15	22.39	24.58	22.00	0.11	1.84	141.05	138.65	215.95
V. Non-Recurring Grants	57.59	115.36	20.72	@	@	@	@	-	-	-
TOTAL CURRENT REVENUES	1,190.94	1,352.01	1,341.38	1,571.74	1,640.86	1,721.81	1,913.73	2,106.91	2,265.48	2,215.43
B. CAPITAL REVENUES										
I. Grants	62.17	50.71	95.91	39.04	102.86	122.74	12.34	273.51	205.33	489.30
(1) Management	NE	NE	NE	NE	NE	3.40	NE	-	-	-
(2) Education	NE	NE	NE	NE	NE	15.00	NE	-	-	-
(3) Communication	15.50	44.57	68.75	28.32	7.84	19.08	10.72	84.57	185.15	461.80
(4) Public Health	NE	NE	NE	NE	10.00	NE	NE	-	-	-
(5) Remunerative	NE	NE	NE	NE	NE	1.22	NE	-	-	-
(6) Lighting	NE	NE	NE	NE	NE	NE	NE	-	-	27.50
(7) Water Supply	20.93	2.95	16.12	3.61	57.70	69.40	1.01	51.73	-	-
(8) Drainage	25.74	3.19	11.04	7.11	27.32	14.64	0.81	130.00	-	-
(9) Town Planning	NE	NE	NE	NE	NE	NE	NE	7.21	20.18	-
II. Loans	205.86	948.25	1,000.25	209.84	147.24	352.48	127.36	600.16	310.15	599.30
(1) Management	54.00	103.41	696.60	100.00	NE	110.00	110.00	239.00	110.00	110.00
(2) Education	NE	NE	NE	NE	NE	NE	NE	-	-	-
(3) Communication	89.36	189.34	38.50	22.36	18.20	15.03	NE	172.50	185.15	461.80
(4) Public Health	0.50	NE	1.00	NE	5.00	15.00	NE	-	10.00	-
(5) Remunerative	20.00	NE	84.00	0.48	3.18	0.01	0.24	-	-	-
(6) Lighting	14.00	37.75	83.00	NE	12.00	NE	5.00	5.00	5.00	27.50
(7) Water Supply	14.00	545.25	49.15	12.00	47.7	94.62	4.62	53.66	-	-
(8) Drainage	14.00	72.50	48.00	61.76	40.32	105.50	NE	130.00	-	-
(9) Town Planning	NE	NE	NE	13.24	20.79	12.32	7.50	-	-	-
TOTAL CAPITAL REVENUES	268.03	998.96	1,096.16	248.88	250.10	475.22	139.70	873.67	715.48	888.68
TOTAL REVENUES	1,458.92	2,350.97	2,437.54	1,870.62	1,890.96	2,197.03	2,053.73	2,980.58	2,980.96	3,104.03

@ Category abolished in 1973/74

6.61 Unlike the arrangements with respect to State-level government, there are no constitutional provisions regarding revenue competence for local bodies, which consequently, derive such taxing powers as they have from the State Government. The primary source of revenue for the Madras Metropolitan Corporation is local taxes. The most important of these is the property tax, which presently contributes about 50% of the city's total income and which constitutes about 95% of the city's total tax revenues as Table 6 shows. Within the property tax itself are cesses nominally earmarked for water supply, public lighting, drainage, education and libraries. Among other city taxes are the tax on companies and professions, the scope of which is limited by the Indian constitution to avoid double taxation of income and taxes on animals. The contribution of these taxes to revenues is negligible: less than 5% of current income derives from this assortment of levies. Notable by its absence is the octroi tax, a common source of revenue for most large Indian cities (in Bombay and Ahmedabad, for example, it makes up 35% and 52% of municipal revenues, respectively). Octroi is an unpopular tax with economists because of its impact on the movement of goods made and proposals for abolishing it are frequently made. Its absence in Tamil Nadu is, from this point of view, a good thing, in spite of the revenue implications.

6.62 Non-tax revenues are the user charges and fees charged by the municipality for the services it provides, such as land development, leasing of markets, cinemas, slaughter facilities, building permits, license fees, water charges, fines and the like. The primary purpose of most of these fees is "regulation of trade" not resource mobilization, and as such, perhaps, it is not surprising that non-tax revenues have made up only about 15% of MMC current revenues. Nonetheless, a good cause can be made for improving their yield.

6.63 Local bodies' own revenues are augmented through tax sharing arrangements with the State. Revenues from the State entertainment tax and stamp duty, for example, are generally shared with municipalities as well as with panchayats. In the case of Madras, these revenue transfers made up about 20% of current municipal revenues over the period 1970/71-1976/77. The main objective of this arrangement parallels that of the revenue sharing between the Center and the States: (a) to ensure uniformity and efficiency in the administration of certain revenues; and (b) to maintain some degree of control over the finances of local bodies.

6.64 Local bodies receive other current income from the State as well, mostly in the form of grants. Recurring grants are given to meet the city's current expenditure gap and are provided on an annual basis if the city's own revenues are insufficient to cover required revenue expenditures. These grants were required in 1975 and 1976, when the Madras Corporation was in deficit on revenue account. However, judging the city's fiscal health on the basis of its revenue surplus is at best a dubious exercise since most of MMC's expenditures go towards maintenance and, by varying standards, a wide range of outcomes is possible by year's end.

6.65 In addition to financing some revenue expenditures, <u>all</u> capital expenditures in MMC are covered from State funds. Grants and loans from the State Government are provided to help the city meet the capital costs of

specific projects. 1/ Over the period in question, capital revenues have fluctuated widely, ranging from 7-41% of the city's total income. The years 1971/72 and 1972/73 represent a peak when large loans were provided for management, water supply, and street lighting. These fiscal transfers from the State are determined largely on an ad hoc basis, and are linked to a specific project or program suggested by the local government. They also reflect to a large degree the financial straits of the State itself, financial largesse being more likely when the State is under little financial pressure of its own. Madras, like other municipal bodies is allowed to borrow, although prior permission is required from the government of Tamil Nadu, from whom much of the borrowing is done in any case. Open market borrowing and negotiated loans from the Life Insurance Corporation of India must also be cleared with the Reserve Bank, which also approves the loans' end-use.

Revenue Buoyancy

6.66 While the municipal tax base is narrow, and the property tax--from which the bulk of revenues derive--among the more difficult taxes to administer, tax revenues in the Madras Metropolitan Corporation have increased at an average rate of 13% per annum in nominal terms. Non-tax revenues have not performed so well. In the early 1970s, they showed a buoyancy equal to that of the property tax, but this was shortlived, for by 1977, revenues had fallen in nominal terms very close to their 1970 level of Rs 228 lakhs. By 1978/79, the levels had recovered.

6.67 Revenue transfers from the State and the State levies in which the MMC receives an agreed share, show a slight upward trend. Over the period, they have risen by an average 6.6% per annum, which is suprising given the buoyancy one would expect, a priori, from an entertainment tax in an urban setting.

6.68 In sum, non-tax revenues have been far less buoyant than tax revenues, growing at just over 8% since 1979. Total current revenues grew at 8.2% from 1970-77. This rate of increase, however, was not sufficient to achieve any growth in real terms, much less in per capita terms. In constant prices, total current revenues declined by 2% per annum, and in real per capita terms, by 6-7%. Even the property tax revenues, when seen in this light, declined by 2-3% in real per capita terms since 1970/71. 2/

6.69 The Corporation is statutorily requird to raise sufficient revenues to meet the current costs of operation and maintenance including debt servicing costs and, in addition, show a minimum balance of Rs 1.5 lakh on the

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1/ The grant/loan proportion varies, but in general, loans are the more important.

2/ Population growth rate is approximately 5% per annum in MMC, of which roughly 50% is attributable to in-migration.

General Revenue Account. The Corporation has found it impossible until recently to comply with the requirement, as the following discussion of the expenditure side of the municipal budget shows.

Madras Metropolitan Corporation - Expenditures

6.70 Current expenditures in MMC have increased far more slowly than current revenues. Between 1970 and 1978, expenditures grew at 7.1% per annum. 1/ This trend growth rate masks some very large fluctuations during the period in many of the categories, and in the level of total expenditures as well. Current expenditures increased rapidly over the first three years of the period under review, at an average rate of 14% per annum, but declined thereafter in absolute terms; by 1977, they had fallen back to their 1971/72 level. These growth rates, however, are not very meaningful for two reasons: firstly, MMC operates under such a degree of fiscal constraint that expenditure levels can be directly and abruptly affected by shortfalls in revenues. The point was made earlier that the bulk of MMC expenditure is on maintenance-related items which allow for a great deal of flexibility in the items actually undertaken each year. The more important reason, however, is the cash-accounting system used by MMC and most other municipalities, which means that the trends shown in the tables do not provide an adequate basis for extrapolating trends or predicting future expenditure patterns. This is especially true of capital expenditures, where additionally, their lumpiness makes for a very uneven pattern, with large expenditures in any sector influencing significantly the total expenditure in a particular year.

6.71 These expenditure levels have been insufficient to generate any growth in service provision to the city in real per capita terms. On average, per capita real expenditures shrunk by 10% per annum over the period 1970/71-1978/79, implying an overall decline in the city's service level.

Sectoral Composition of Expenditures

6.72 Current expenditures constitute the bulk of expenditures in MMC, ranging from 88% to 63% between 1976/77 and 1979/80. The latter drop was due to the fact that loans for roads and bridges led to increased capital expenditures in this period.

1/ Because of the very uneven nature of the expenditure trends, the growth rates referred to are growth rates derived from the OLS regression of the relevant variable against time, enabling all observations to be taken into account in estimating the trend.

TABLE 7

REVENUE AND CAPITAL EXPENDITURES OF MADRAS CORPORATION (Rs Lakhs)

	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80(B.E.)
Revenue Expenditure										
Management	96.67	97.88	113.56	138.31	134.61	150.80	182.06	327.39	423.12	514.45
Education	66.66	72.72	81.71	78.76	94.87	84.85	81.16	408.08	531.15	609.57
Communication	214.17	288.56	342.03	168.43	125.76	136.10	182.67	79.97	137.64	173.38
Public Health	328.10	402.33	426.09	444.60	476.34	501.34	501.24	445.93	550.36	621.36
Remuneration	22.85	22.50	40.11	29.32	25.71	20.94	23.31	13.21	15.56	15.89
Lighting	96.36	129.66	186.00	99.71	99.10	101.38	109.70	99.91	139.82	144.25
Water SS	68.09	74.06	91.37	98.95	105.59	120.63	136.26			
Drainage	84.00	94.16	104.63	123.68	129.62	143.15	150.29	288.50	141.40	5.22
Town Planning	2.20	1.56	1.57	2.02	2.14	3.28	2.46	- 0 -	- 0 -	- 0 -
Debt Service	121.24	130.24	169.99	442.46	388.30	167.89	110.24	243.24	351.34	212.45
Other	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -	- 0 -	48.10	114.01	181.83
Total	1097.64	1413.66	1557.06	1636.53	1583.21	1434.40	1481.17	1954.38	2404.45	2478.44
Capital Expenditure										
Management	54.00	99.08	31.03	1.44	0.69	2.90	3.16	- 0 -	- 0 -	- 0 -
Education	- 0 -	- 0 -	- 0 -	2.17	3.57	13.56	8.11	- 0 -	- 0 -	- 0 -
Communication	59.59	94.00	134.70	133.40	68.77	88.76	74.21	198.98	371.65	1264.79
Public Health	10.06	6.38	9.01	20.11	37.28	12.37	20.91	26.81	53.05	76.87
Remuneration	0.36	0.99	3.79	7.06	6.05	15.85	29.25	1.96	1.76	5.51
Lighting	5.61	35.50	41.454	36.69	17.23	20.12	10.41	4.68	4.82	77.94
Water SS	51.45	54.27	46.73	61.67	52.25	84.63	38.06			
Drainage	42.59	25.42	46.41	60.02	55.34	18.90	20.50	437.10	78.0	- 0 -
Town Planning	3.22	2.82	1.84	1.62	1.72	0.82	0.01	- 0 -	1.04	- 0 -
Total	226.88	318.61	314.96	324.18	243.90	270.96	204.42	670.70	546.99	1463.52

Source: MMC

6.73 In absolute terms, the largest single current expenditure category for MMC has been public health; expenditures in 1978/79 reached Rs 22 per capita. Expenditures as education were next in importance, at Rs 21 per person, which is not surprising, in view of the fact that MMC provides both elementary, higher elementary and secondary education. Approximately Rs 10 per capita was spent on water supply in 1977/78, the year prior to which the responsibility for water supply was transferred to MWSSB. Expenditure on street lighting was of the order of Rs 5 per capita; it is low because of inadequate provision and repairs and because MMC is in arrears in its payments to the Electricity Board.

6.74 Wages and salaries make up about half of current expenditure, a proportion which is growing faster than the rate of increase of current revenues, implying that the gap between the resources available for developmental expenditures and total outlays is widening.

6.75 Debt servicing has ranged between 10-25% of total revenue expenditures over the past decade, a consequence of the sizeable loans received by MMC for development expenditure for roads and water supply.

Budgetary Balance

6.76 Some "public services" provided by municipal government can be expected to be self-liquidating, others cannot. Expenditures on services such as public health, education, or general urban administration obviously fall into the latter category, and indeed, they have been the largest drain on the municipal budget throughout the period. However, regarding other services for which it is feasible and efficient to charge a fee for service, expenditures may be recouped via the imposition of user charges. Street lighting pays its own way, as do drainage and remunerative expenditures; in most years, the same has been true of water supply. In the case of drainage and remunerative expenditures there has been a considerable surplus of revenues from user fees and earmarked taxes over expenditures. None of these sectors, however, is self-financing in the sense that revenues are available for capital works' expansion: the surplus referred to here is solely a revenue account balance. Overall, the MMC revenue budget has shown a surplus in one year out of two. Judging the city's financial wealth on this basis, to reiterate, is a dubious exercise because of (i) cash accounting; and (ii) the nature of revenue expenditures means that expenditures can be varied by lowering service levels to accomodate budgetary constraints. A more exact analysis of the "true" budgetary situation would have to examine physical service levels as well. Finally, it must be recalled that all capital expenditures are financed by loans and grants from the State.

Table 8

Current Revenues and Expenditures of Madras Metropolitan Corporation

Rs. lakhs.

	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80
I. Management										
(i) Current Revenues	33.5	51.8	82.3	104.6	77.8	110.1	53.1	103.0	151.0	189.0
(ii) Current Expenditures	96.7	97.9	113.6	138.3	134.6	150.8	182.0	327.0	423.0	514.0
(Deficit/Surplus)	(-63.2)	(-46.1)	(-31.3)	(-33.7)	(-56.8)	(-40.0)	(-128.9)	(-224.0)	(-272.0)	(-325.0)
II. Education										
(i) Current Revenues	103.9	124.6	121.6	154.2	171.9	186.5	220.8	239.0	346.0	261.0
(ii) Current Expenditures	66.6	72.2	81.7	78.6	94.8	84.8	81.1	408.0	531.0	609.0
(Deficit/Surplus)	(+37.3)	(+52.4)	(+34.9)	(+75.6)	(+76.1)	(+101.7)	(+139.7)	(-169.0)	(-185.0)	(-348.0)
III. Communication										
(i) Current Revenues	42.5	49.3	45.3	50.5	33.1	35.8	28.3	22.0	98.0	104.0
(ii) Current Expenditures	214.1	288.6	342.0	168.4	125.7	136.0	162.6	79.0	137.0	173.0
(Deficit/Surplus)	(-171.6)	(-239.3)	(-296.2)	(-117.9)	(-92.6)	(-100.2)	(-134.3)	(-57.0)	(-39.0)	(-69.0)
IV. Public Health										
(i) Current Revenues	35.4	44.7	49.3	29.5	25.6	27.3	22.5	20.0	17.0	16.0
(ii) Current Expenditures	328.0	402.0	426.1	444.6	476.3	501.3	501.2	445.0	550.0	621.0
(Deficit/Surplus)	(-292.6)	(-357.3)	(-376.8)	(-415.1)	(-449.7)	(-474.0)	(-479.8)	(-425.0)	(-537.0)	(-605.0)
V. Remunerative										
(i) Current Revenues	65.5	37.9	52.8	55.1	55.7	42.3	28.3	51.0	28.0	29.0
(ii) Current Expenditures	22.8	22.5	40.1	29.3	25.7	20.9	23.3	73.0	15.0	16.0
(Deficit/Surplus)	(+42.7)	(+15.4)	(+12.7)	(+25.8)	(+30.0)	(+21.4)	(+05.0)	(-38.0)	(+13.0)	(+13.0)
VI. Lighting										
(i) Current Revenues	50.0	107.4	87.8	110.6	127.9	147.7	158.9	147.0	169.0	178.0
(ii) Current Expenditures	96.3	129.6	186.0	99.7	99.0	101.4	109.1	99.0	139.0	144.0
(Deficit/Surplus)	(-46.3)	(-22.2)	(-98.2)	(+10.9)	(+28.9)	(+46.3)	(+49.2)	(+48.0)	(+30.0)	(+34.0)
VII. Water Supply										
(i) Current Revenues	80.0	84.5	91.7	110.3	104.9	105.6	133.7	383.0	368.3	-
(ii) Current Expenditures	68.0	74.0	91.2	98.9	105.6	120.6	136.3	288.0	141.0	5.0
(Deficit/Surplus)	(+12.0)	(+10.5)	(+0.5)	(+11.4)	(-0.7)	(-15.0)	(-2.6)	(+95.0)	(+127.0)	(-5.0)
VIII. Drainage										
(i) Current Revenues	130.4	113.7	139.8	199.6	206.1	234.0	261.5			-
(ii) Current Expenditures	84.0	94.1	104.6	123.7	129.6	143.0	150.3			5.0
(Deficit/Surplus)	(+46.4)	(+19.6)	(+35.2)	(+75.9)	(+76.5)	(+91.0)	(+111.2)			(-5.0)
IX. Town Planning										
(i) Current Revenues	0.1	1.1	0.7	0.4	1.1	2.1	2.1	-	-	-
(ii) Current Expenditures	2.2	1.5	1.8	2.0	2.1	3.2	2.4	-	-	-
(Deficit/Surplus)	(-2.1)	(-0.4)	(-0.9)	(-1.6)	(-1.0)	(-0.9)	(-0.3)	-	-	-
X. Other Revenue 1/	642.6	746.9	672.7	756.5	837.1	838.9	1003.9	1141.0	1088.0	1472.0
Other Expenditures 2/	121.2	130.2	169.9	442.5	388.3	167.8	110.2	295.0	468.0	396.0
Total Revenues	1190.9	1352.0	1341.3	1571.7	1640.8	1721.8	1913.7	2106.0	2265.0	2478.0
Total Expenditures	1097.6	1413.6	1557.6	1636.5	1583.2	1434.0	1481.1	1954.0	2404.0	2478.0
Current Account Balance	+93.3	-60.6	-215.7	-64.8	+57.6	+287.8	+432.6	+152.0	-139.0	-263.0

1/ Includes property taxes, library cess, other miscellaneous taxes, revenue transfers and current grants.

2/ Debt Service.

Source: Tables 6 and 7.

VII. FINANCING THE PROJECTS IN TAMIL NADU

6.77 The purpose of this review of State revenues and expenditures and municipal finances has been to provide the background for an assessment of the State's implementation capacity for the three appraised projects, scheduled to be executed between now and 1985/86. These projects are:

(i) Tamil Nadu Nutrition ($66.4 m) whose goal is to increase the efficiency, coverage and impact of GOTN nutrition efforts by concentrating systematically on the nutritionally most vulnerable groups and includes supplemental feeding, improvement of home nutrition, education and expanded maternal/child health care in six rural districts.

(ii) Madras Urban Development II ($74 m) will expand low cost solutions to Madras' shelter, infrastructure and transport problems, including sites and services, slum improvement, solid waste management, small scale business, and bus transport. This project is to be implemented between 1980-84.

(iii) Madras Water Supply ($238 m) which will augment the supply of water to Madras and adjacent urban areas and improve the city's existing water-borne sewerage system. Some additional sewerage treatment capacity and expansion of existing sewerage collection is also included.

6.78 Assessing the likelihood of smooth and timely implementation of the three projects rests on the answers to the following questions:

(a) Does the State/city have the ability to provide the necessary resources?

(b) Is the heavy expenditure required for the projects, especially in water supply, consistent with State priorities as far as sector development is concerned and within the social services sector itself, is the distribution of expenditures implied by the projects consistent with the required outlays in other items on the same plan head?

(c) Finally, do the three projects taken together represent over-investment in the MMA relative to rural areas of the State and is this likely to give pause at later budgetary sessions when difficult political decisions may have to be made?

6.79 The first question is a function of the resources available for the State Plan, the rate at which they will grow over the period of project implementation and the availability of Plan resources for the social services as

opposed to other sectors. The second question can be approached by looking at the proportion of State Plan outlays earmarked for the social services sector and its various sub-components in the period over which the projects will be implemented. Is this proportion in line with the past trend of expenditures in the sector? If not, which sectors or sub-sector will the larger project commitments come at the cost of? Within the social sector itself, expenditure trends must be examined for any break in the past pattern of investment as between subsectors: education, health, water supply, nutrition, and housing all having their claims. These questions are important because if there are such changes which come at the expense of other expenditures on which the State also places great priority, conflicts may arise and allocations to any one of the three projects could undergo some slippage.

6.80 Tamil Nadu. Numerous agencies besides Tamil Nadu government and Madras Corporation 1/ will be responsible for implementing the three projects. However, because they are State agencies to whom allocations are made from the State budget (as opposed to parastatal autonomous corporations), it is primarily the finances of Tamil Nadu and the budgeting practices of the State which are relevant. Since the budget of each organization is largely determined by the State's contribution to it, it is this contribution which is important in relation to project implementation. From a financial or planning point of view, allocations to MWSSB, the implementing agency for Madras Water Supply Project are a commitment of the Rural Development and Local Administration Department (RDLA). RDLA's proposals for outlays for MWSSB must be forwarded to the Finance Department, along with all other outlay proposals of the RDLA Department in order to be incorporated into the State budget. In the case of MWSSB, 8% of its investment program must be contributed by self-generated resources, and its financial health is, therefore, not entirely a function of RDLA budget allocations. To the extent that among the project's goals is the strengthening of the body responsible for water supply in Madras, the overall financial viability of MWSSB is indeed important. But, because the amounts are small and because compensating allocations would be likely to be made through RDLA Department in the case of any shortfalls, project implementation, narrowly defined, is not likely to suffer.

6.81 As Table 9 shows, total commitments to Bank-assisted projects serving the Madras area are expected to come to Rs 115.9 crores ($137 m) in the Sixth Plan and Rs 273.6 crores in the Seventh ($325 m). All of these projects come under the "social and community services" head of Plan outlays which traditionally has comprised upwards of 25% of the Tamil Nadu's Plan outlays, second only to outlays in power. Of these Plan expenditures on social services, approximately 21% in the Sixth Plan and 25% in the Seventh

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1/ MWSSB is the implementing agency for Madras Water Supply; components of MUDPII will be implemented by Tamil Nadu Housing Board, Tamil Nadu Slum Clearance Board, Palavan Transport Co. and SIDCO. Allocations to these agencies for carrying out components of Bank projects, can be found in the Tamil Nadu Budget, under loans and grants to State corporations. Expenditures of these agencies do not appear in the budget.

Plan, must be earmarked for the four Bank assisted projects (see line 14), a proportion which does not appear unduly high, leaving 75-80% of the sector's outlays for ongoing or new, non-Bank schemes.

6.82 Within the sector itself, the four projects do not appear to upset the balance between outlays on the various subsectors--education, art and culture, public health, publicity, welfare of backward classes--to any extent. Outlays implied by both urban development projects and even the Madras water supply are not out of line with past trends in these subsectors. Expenditures on water supply remain more or less constant between the Fifth and Sixth Plans (9.8% compared with 9.4%). If this level of allocation is projected to continue through the Seventh Plan, project expenditures will absorb close to 50% of outlays on this subhead (line 15). Urban development and housing allocations as a proportion of Plan outlays also show little change between Fifth and Sixth Plans. Projecting this allocation to continue through 1987/88, approximately 60% of outlays in the Sixth Plan and 21% in the Seventh must be earmarked for Bank-assisted urban development projects (see line 17). Since there is substantial agreement between the Bank, the Government of Tamil Nadu and Madras on the program of Plan investments in MMA, the proportions earmarked are in line with government spending priorities.

6.83 Tamil Nadu Nutrition Project is the only exception, where project outlays imply a six-fold increase in the level of expenditures under this head between the opening and closing years of the Sixth Plan. However, the absolute amounts are very small: the project implies an increase in the proportion of Plan outlays allocated to this subsector from 0.2% in the Fifth Plan to 1.6% in the Sixth Plan. Since the amounts are so small, they do not come at the expense of outlays in other subsectors. The State commitment to the innovative nutrition program is in any case very strong. The relevant proportions of sectoral outlays, when additionality is added to the outlays under the respective Plan heads is shown in line. Additionality, assuming it is channelled by the State Government to the project-implementing department, lowers the proportion of departmental outlays which must be earmarked for project outlays. 1/ It would not directly affect either the MWSSB or the Madras Corporation, although indirectly, the funds would reach them, via the department's newly possible largesse. 2/

1/ Questions of fungibility, and whether additionality funds are (i) indeed earmarked for the department concerned, or whether they amount to a free resource since the State would have allocated to the department in any case and (ii) whether within the Department the additionality contributes to financing the project on behalf of which funds are received, clearly spring to the fore. This discussion assumes that additionality does supplement departmental resources.

2/ If it is assumed that Departments in turn earmark additional funds for the project in question, enabling a larger program to be carried out.

Table 9

TAMIL NADU PROJECTS IN RELATIONS TO STATE PLAN 5120 (Rs millions)

	1978/79	1979/80	1980/81	1981/82	1982/83 5/	VI Plan 4/	1983/84	1984/85	1985/86	1986/87	VII Plan
Total Plan Size	3224	3854	4503	4500	4500	21500					43000
Social Services	701	786	1037	1300	1535	5459					10750
Water Supply	224	298	341	475	647	1986					3910
Nutrition	412	10.6	18.6	130	193	360					709
Housing and Urban TN	167	202	221	300	376	1261					2481
Other Social Services	305	375	456	395	319	1852					
Project Outlays	33	159	123	299	545	1159	933	1090	543	1.0	2725
MWSS 1/	-	-	-	22	310	332	664	852	390	-	1906
Nutrition 2/	-	-	-	45	52	97	72	103.5	119.6	1.0	295
Urban TN 3/	-	-	-	105	146	251	192	134	33	-	359
Urban MMC 3/	-	-	-	4.4	7.2	11.6	5.7	-	-	-	5.7
Ongoing Urban	33	159	123	123	30	468	-	-	-	-	157
Projects as % of Plan Outlays											
Projects as % of Social Services Plan	0.47	18.0	11.8	23.2	35.0	21.0					
Water Supply as % of Water Supply Plan	-	-	-	4.6	48.0	17.0					
Nutrition as % of Nutrition Plan	-	-	-	34.6	26.9	27.0					
Urban as % of Urban Plan	19.7	78.7	55.0	77.0	49.0	58.0					
Projects as % of Plan Outlays*											
*Additionality imputed											
Projects as % of Social Services Plan*	0.47	18.0	11.8	21.9	31.8	20.0					23.3
Water Supply as % of Water Supply Plan*	-	-	-	4.6	41.0	15.3					41.6
Nutrition as % of Nutrition Plan*	-	-	-	30.8	24.6	24.6					36.0
Urban as % of Urban Plan*	19.7	78.7	55.0	68.5	34.9	54.0					19.7

1/ Appraisal Report.
2/ Appraisal Report.
3/ Appraisal Report.
4/ Plan totals from GTN.
5/ Plan Year 1978/79 - 1980/87, from GOTN.

NB: Figures 1981/82 - 1986/87 are projected estimates.

Madras Corporation

6.84 The Madras Corporation is responsible for implementing components of MUDP II, including street lighting, drains, land acquisition and solid waste management. The financial strengthening of MMC, a pre-condition of MUDP II is quite crucial to the overall project objectives of expanding the capacity of institutions in Madras to provide urban services and subsequent maintenance of infrastructure facilities. As has already been mooted, the Madras Corporation, like many other cities in India, is severely constrained in regard to revenues, with current revenues usually insufficient to cover even the low level of revenue expenditure which the city does undertake. Because of the inadequacy of its own revenues, all capital and some revenue expenditures are financed by the Tamil Nadu Government through the budget of the Rural Development and Local Administration Department (the department responsible for all local bodies under the urban development and housing heads of Plan outlay). The procedure has been described in Section V: After funds for existing commitments have been allocated to State Departments, the balance is allocated across departments in line with their budget proposals and State priorities. Since the Finance Department reviews the RDLA proposals on a project by project basis, and proposals for MMC capital expenditures are also closely scrutinized. MMC thus competes with all other entities in the State for budgetary assistance--it is, after all, only one of the many demands in the finite RDLA budget. A financial strengthening of MMC is, therefore, a sine qua non for Madras' ability to provide a higher standard of urban services; its financial weakness, however, does not appear to threaten implementation of project components in the narrow sense for the reason that the necessary budget allocations will be made by the State Government.

6.85 The final issue is the implications of these three projects for State investments in MMA in relation to investments in the rest of the State. The two projects, MUDP II and Madras Water Supply, when added to the ongoing MUDP I, do substantially shift the balance of investments between MMA and the rest of the State, doubling the investment in MMA from about 8% of State investment in the Fifth Plan to 22% by the end of the sixth. It is important, because a shift on account of these projects, without the full support of the State Government and the Planning Commission, could give rise to pressures which might cause the State to back off from its original commitment.

6.86 The balance of outlays was an issue in the discussions between the Planning Commission and Tamil Nadu in the annual Plan discussions which ended in February 1980. The case made by the State Government in support of this shift gave the reasoning that the past investment program has given priority to rural areas of the State, to the detriment of MMA. According to a study by ORG, a consulting firm involved in preparation of MUDP I and II, the share of State public investments benefitting MMA has declined from 17% in 1970/71 to about 8% in 1979/80, and its share is now less than MMA's 10% share in the State population. Moreover, relative to other States, the quality of rural life in Tamil Nadu is high: all villages have been electrified, health infrastructure standards are high, investment in roads and transport, and education, all serve rural areas well in relative terms. Issues of rural subsidization of urban areas do not complicate this, since the bulk of Tamil Nadu revenues are collected in MMC.

6.87 To right this balance and stem the decline in the level of urban services, the State Government is fully convinced that the projects are justified. Moreover, continued development of Madras as the principal urban center of the south--and the fact that it is the fastest growing of the large metropolitan centers in India--also provide justification for these investments.

6.88 In sum, the three future projects do not appear to pose any difficulties for the State or municipal government from a financing point of view. Moreover, they are consistent with past trends in outlays of Tamil Nadu's development Plan as well as with the need to stem the growing deficiency in urban services in the Madras Metropolitan area.

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