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REPORT AND RECOMMENDATION
OF THE
PRESIDENT OF THE
INTERNATIONAL DEVELOPMENT ASSOCIATION
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED CREDIT
TO THE GOVERNMENT OF INDIA
FOR A
MADRAS URBAN
DEVELOPMENT PROJECT

February 24, 1977

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CURRENCY EQUIVALENTS
(as of January 12, 1977)

Rs 1.00	=	Paise 100
US\$1.00	=	Rs 8.91
Rs 1.00	=	US\$0.1122
Rs 1 million	=	US\$112,200

(Since September 24, 1975, the Rupee has been officially valued relative to a "basket" of currencies. As these currencies are now floating, the U.S. Dollar/Rupee exchange rate is subject to change. Conversions in the Appraisal Report were made at US\$1 to Rs 9.00).

FISCAL YEAR

April 1 - March 31

LIST OF ABBREVIATIONS AND ACRONYMS

GTN	=	Government of Tamil Nadu
MMDA	=	Madras Metropolitan Development Authority
ICICI	=	Industrial Credit and Investment Corporation of India
IDBI	=	Industrial Development Bank of India
TNHB	=	Tamil Nadu Housing Board
TNSCB	=	Tamil Nadu Slum Clearance Board
SIDCO	=	Small Industries Development Corporation
TNHDC	=	Tamil Nadu Handicrafts Development Corporation
DSW	=	Department of Social Welfare
TWAD	=	Tamil Nadu Water Supply & Drainage Board
MC	=	Madras Corporation
DHRW	=	Department of Highways & Rural Works
PTC	=	Pallavan Transport Corporation

INTERNATIONAL DEVELOPMENT ASSOCIATION

REPORT AND RECOMMENDATION OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS
ON A PROPOSED CREDIT TO INDIA
FOR THE MADRAS URBAN DEVELOPMENT PROJECT

1. I submit the following report and recommendation on a proposed development credit to India in an amount equivalent to US\$24.0 million on standard IDA terms, to help finance a project to provide improved urban services and employment opportunities for the poor in the Madras metropolitan area, and to strengthen metropolitan planning and investment programming and budgeting. The proceeds of the credit would be channelled to the Government of Tamil Nadu in accordance with the Government of India's standard terms and arrangements for the financing of state development projects.

PART I - THE ECONOMY^{1/}

2. An economic report, "Economic Situation and Prospects of India" (1073-IN dated March 29, 1976), was distributed to the Executive Directors on April 2, 1976. Country data sheets are attached as Annex I.

Background

3. India is exceptional among the Bank Group's member countries for its size and diversity; the country is divided into more than 20 States with a population of some 600 million and over 60 languages. The country's poverty and inadequate domestic savings, together with a net transfer of external resources averaging over the past five years only about US\$1.20 per person per annum, have imposed sharp limitations on the rate of growth. Account must be taken, also, of the uncertainties imposed by the erratic availability of water. A bad monsoon, which is likely to occur about two years out of every five, has a pervasive influence over the entire economy and can wipe out the results of years of efforts. Thus, the annual growth of national income over the last five years (1971/72 - 1975/76), which included two consecutive monsoon failures, has averaged only 2% per annum, less than the rate of population increase.

4. Since Independence, progress has been impressive on many fronts, but disappointing on others, and generally has fallen short of India's massive needs. The growth of the socio-economic infrastructure (transport, education, health services, etc.) has been impressive, but has often been achieved at high cost and has yielded results of variable quality. Many industrial and agricultural investment schemes have been highly successful, but others have taken excessively long to be completed and have operated well below full capacity. In some regions of the country, growth and structural change have been rapid and compare favorably with developments in many

^{1/} Parts I and II of this report are identical to Parts I and II of the President's Report for the Kerala Agricultural Development (Report No. P-1953-IN), dated February 3, 1977.

other parts of the world, but in other regions there has been stagnation and possibly even decline. Although national income has increased in most years, there has been in general little impact upon the living standards of the vast masses of the urban and rural population. In recent years, the Government has initiated a variety of programs specifically directed toward helping the lower income strata, which - conservatively measured - consist of some 200 million people with incomes of less than US\$60 per head per year.

5. The structure of the economy has been slow to change. Agriculture remains the dominant sector, with its share of national product declining only gradually from about 50% to 42% over the last twenty years. The share of industry has increased only slowly and, since the late 1960s, has remained approximately constant at about 23%. There has, however, been a shift in the composition of industrial production, with consumer, intermediate, and capital goods now contributing about one third each, compared with an overwhelming preponderance of consumer goods 25 years ago.

Recent Trends

6. India entered 1975/76 having been through one of the most difficult periods since Independence. Progress in dealing with long-term development problems had been limited by poor crops, the dramatic shifts against India in the terms of trade, and inflation. Adjustments to these immediate difficulties thus became the principal preoccupation in economic management. However, with the support of favorable weather and additional foreign assistance, it now appears that India has successfully weathered the problems of the recent past; once again there is the basis for an upturn in the growth rate of the economy.

7. Most important among the favorable factors have been a bumper harvest which followed years of poor or modest agricultural output. Foodgrain production in 1975/76, estimated at around 117 million tons, exceeded the previous record of 1970/71 by 8%. Oilseeds, sugarcane and cotton also reached new production peaks and provided ample supplies for the agro-industries. In 1976/77 a good harvest is again expected of at least 110 million tons of foodgrains. Secondly, deficiencies in the supply of basic commodities and of infrastructural inputs such as energy and transport, which had been prevalent in the past, have been eased. Electricity generation and domestic production of coal, oil, cement and steel all increased by over 10% during 1975/76 and by a further 15% in the first eight months of 1976/77. Finally, the increased supply of agricultural and industrial products and of services, together with the demand restraint imposed by the Government since mid-1974, put a virtual stop to inflation. From April 1975 to March 1976 the Wholesale Price Index fell by 8.1%. Although from April to September 1976 the Index rose by 11.0%, it was still 5% lower in September 1976 than in September 1974.

8. On the balance of payments front there have been a number of encouraging developments. Firstly, the rapid build-up of foodgrain stocks to a level of 17 million tons by December 1976 provides a buffer against the impact of a future crop failure on the balance of payments and has reduced current import requirements. Secondly, despite generally unfavorable world

trading conditions, export earnings rose by 9% in 1975/76, and seem likely to rise by more than this in 1976/77. Thirdly, the value of petroleum imports was stabilized in 1975/76 (although there is likely to be a rise in 1976/77), and steel imports have been progressively reduced in 1975/76 and 1976/77 as a result of increased domestic production. Finally, increased production and lowered world prices have reduced fertilizer import values quite sharply. As a result of these factors, imports rose only 5% in value in 1975/76 and the trade deficit fell by almost \$100 million. Development so far in 1976/77 suggest a more dramatic improvement in the trade balance this year. Moreover, since net aid rose 49% in 1975/76 and India received substantial inflows of private remittances during the past one and a half years, reserves rose by almost \$800 million in 1975/76, and are continuing to rise at a comparable rate in 1976/77. These reserves give India added flexibility in adjusting to a higher rate of growth in the future.

Development Prospects

9. While many of the most acute problems were eased during 1975/76, longer-term constraints to growth remain. Many of these have existed for some time, but their importance had been temporarily overshadowed by the more overwhelming limitations imposed by supply shortages and balance of payments problems. One such constraint is the deficiency of demand for a large segment of the manufacturing industry. Consequently, in the midst of adequate supplies during 1975/76, the use of manufacturing capacity - especially for consumer durables - remained low. In the short and medium term, the two most promising ways of stimulating demand are to boost public investment and expand exports. Both avenues are currently being pursued by the Government. During 1975/76, real Plan outlay rose by 18-20%, after having fallen during each of the previous two years. The 1976/77 Budget proposed a further increase of 16% in real terms and introduced new measures to stimulate investment in the private sector. Investment priorities remain the same as last year, namely agricultural development and increased production of critical industrial inputs, such as power, coal, oil, and iron and steel. The Budget also stresses the importance of exports as an essential condition for sustained stability in the balance of payments.

10. In agriculture, the basic problem remains that, despite the record foodgrain crop in 1975/76, the long-term growth rate of foodgrain production in India has been unacceptably low, at about 2.3% per annum over the last 15 years. This is about the same as the rate of population increase. Starting from a situation of deficit, this has meant that only in good years has there been a significant margin of production to cater to any per capita growth in consumption, and even in normal years it has been necessary to rely on stocks or imports to meet any growth in demand. With a major effort to expand the irrigated area and provide complementary inputs, the average growth rate of foodgrain production could be substantially increased. This is essential, not only because of the necessity to meet food requirements without unmanageable consequences for the balance of payments but also because of the strong influence of agriculture on the levels of activity in other sectors of the economy. Even with a higher growth rate of foodgrain production, imports will still be required. However, in relation to India's total consumption of

foodgrains, the dependence on imports has been and will remain small. In the past, domestic production has accounted for almost 100% of supplies in good weather years and about 90% when harvests were poor.

11. The energy sector in India was characterized by shortages even before the international oil crisis developed. The dramatic hike in oil prices, coinciding as it did with the accentuation of electric power shortages - caused in part by low hydroelectric generation due to poor monsoons - led to an acceleration of measures to improve performance of existing facilities and to a much higher priority for investments in the energy sector. The effects of these measures, aided by the good monsoon, are now starting to be felt. Coal production has increased by 10% or more in each of the last two years, and, partly as a result of this, power shortages and restrictions have been greatly reduced. The medium-term prospects for oil and natural gas have improved with the delineation of the offshore Bombay High field. Crude production from this field is expected to be 1 million tons in 1976/77 and to reach 6 million tons by the end of the Plan period. On this basis, petroleum imports are projected to start declining in 1978/79, as increased crude production and expanded refinery output more than offset increases in demand.

12. In the past, export growth was affected in varying degrees by inadequate profitability, lack of access to imported inputs, poor quality, instability of the policy environment and vulnerability to ad hoc decisions. In addition, for agricultural commodities export taxes were significant. For some homogeneous commodities, such as iron ore and tea, inadequate supplies or limited world demand have been important constraints. In recent years, mainly because of the large trade deficit, the Government's emphasis on export promotion has intensified. As a result, although the fundamental orientation of India's industrial and trade policy and the specific instruments of the export regime have, by and large, remained the same, a significant shift in emphasis and in the way these policies are operated has occurred. These are likely to lead to a better utilization of current export potential and reflect a willingness to make policy adjustments, when necessary, to expand exports.

13. While it is difficult to assess the impact of the new measures in an area where policy is already very complex, some improvement has already taken place and further improvement in medium-term performance seems likely. An annual real export growth rate of over 7% should be feasible, compared to an average of 5% over the last five years. However, to achieve a higher export growth over the long run, more far-reaching policy measures will be required, including the introduction of a more uniform and more stable system of export incentives. Even so, the export drive might be impeded by controls in some developed markets.

14. India's balance of payments problems should be manageable over the next few years, even with the repayment obligations resulting from recent short-term OPEC and IMF borrowings. The worldwide inflation has benefited India by reducing the proportion of export earnings that have to be devoted to debt service. India's debt service ratio has come down from 31%

in 1970/71 to 17% in 1975/76. Provided the real growth of exports remains at about 7% per annum, the debt service ratio is unlikely to rise much above 20% in the foreseeable future. On the import side, given the adequate level of stocks on hand at the end of 1975/76 and assuming normal weather conditions, annual foodgrain imports could be kept to 5-6 million tons during the next three years. Within the general category of non-food imports, India has substantial medium-term import substitution opportunities for three major items -- petroleum, fertilizer and steel -- which constituted more than 60% of imports in 1975/76. If the medium-term targets for production in these areas are achieved, the total expenditure on these three import items in 1978/79 need not be any higher than in 1975/76 and could quite conceivably be less. Provided the Government is willing to liberalize imports and donors continue to respond to India's needs, the easing in the external payments situation presents an opportunity to raise the level of investment (complemented by larger imports of capital goods, components, and raw materials) and, consequently, reach a more satisfactory level of long-term growth.

PART II - BANK GROUP OPERATIONS IN INDIA

15. Since 1949, the Bank Group has made 49 loans and 80 development credits to India totalling US\$1,751 million and US\$4,112 million (both net of cancellation), respectively. Of these amounts, US\$785 million has been repaid, and US\$1,651 million was still undisbursed as of December 31, 1976. Annex II contains a summary statement of disbursements as of December 31, 1976, and notes on the execution of ongoing projects.

16. Since 1957, IFC has made 14 commitments in India totalling US\$58.4 million, of which US\$11.9 million has been repaid, US\$7.6 million sold and US\$6.9 million cancelled. Of the balance of US\$32.0 million, US\$25.5 million represents loans and US\$6.5 million equity. A summary statement of IFC operations as of December 31, 1976, is also included in Annex II (page 2).

17. In recent years, the emphasis of Bank Group lending has been on agriculture. The Bank Group has been particularly active in supporting minor irrigation and other on-farm investments through agricultural credit operations. Major irrigation, marketing, seed development, and dairying are other agricultural activities supported by the Bank Group. Also, the Bank Group has been active in financing the expansion of output in the fertilizer sector and, through its sizeable assistance to development finance institutions, in a wide range of geographically scattered medium- and small-scale industrial enterprises. IDA financing of industrial raw materials and components for selected priority sectors has been instrumental in facilitating better capacity utilization in industry. The Bank Group has also been active in supporting infrastructure development for power, telecommunications, and railways. Family planning, education, water supply development, and urban investments have also received Bank Group support in recent years.

18. The direction of assistance under the Bank/IDA program has been consistent with India's needs and the Government's priorities. The emphasis of the program on agriculture, industry, power, urban development and water supply remains highly relevant. Projects designed to foster agricultural production through the provision of essential inputs such as credit for on-farm investments, command area development of existing irrigation schemes, intensification and streamlining of extension systems, and seed production form an important aspect of the Bank Group's program for the next several years. Special emphasis will be given to projects benefitting small farmers. Projects supporting water supply, sewerage, and urban development also form an integral part of the Bank's lending strategy to India for the next several years. Lending in support of infrastructure and industrial investments will focus on agriculture-, export- and energy-related projects.

19. The need for a substantial net transfer of external resources in support of India's economy has been a recurrent theme of Bank economic reports and of the discussions within the India Consortium. Thanks in large part to the response of the aid community, India has successfully adjusted to the changed world price situation. However, the basic need for readily usable foreign exchange assistance, to augment domestic resources, stimulate investment and accelerate economic growth, remains. Bank Group lending for critical industrial raw materials and components continues to be an important element within the overall program of assistance. As in the past, Bank Group assistance for projects in India should include, as appropriate, the financing of local expenditures. India imports relatively few capital goods because of the capacity of the domestic capital goods industry. The import component of projects tends to be especially low in such high-priority areas as agriculture, education, and family planning. For the Bank Group to be able to make an appropriate contribution to the financing of projects in these sectors, it is important to cover a proportion of local expenditures.

20. It is clear from the review of the Indian economy that as much as possible of India's external capital requirements should be provided on concessionary terms. Accordingly, the bulk of the Bank Group assistance to India has been, and should continue to be, provided from IDA. However, the amount of IDA funds that can reasonably be allocated to India remains small in relation to India's needs for external support, and some Bank lending to India, for which the country is creditworthy, is appropriate. As of December 31, 1976, the loans to India held by the Bank totaled US\$988 million, of which US\$510 million remained to be disbursed, leaving a net amount outstanding of US\$478 million.

21. Of the external assistance received by India, the proportion contributed by the Bank Group has grown significantly. In 1969/70, the Bank Group accounted for 34% of total commitments, 13% of gross disbursements, and 12% of net disbursements as compared with an estimated 58%, 24% and 29%, respectively, in 1975/76. On March 31, 1976, India's outstanding and disbursed external public debt was US\$13.1 billion, of which the Bank Group's share was 25%. The Bank Group's share is expected to remain around this level in the future. Because Bank Group assistance to India is predominantly in the form of IDA credits, debt service to the Bank Group will rise slowly. In 1975/76, about 15% of India's total debt service payments were to the Bank Group.

PART III - TAMIL NADU AND MADRAS

22. Tamil Nadu, with a population of 45 million in 1976, is the third most densely populated state in India and the second most urbanized state (30% urban population). Madras, the capital of Tamil Nadu, is the fourth largest city in India and the largest in the four-state Southern Region.

23. Tamil Nadu is characterized by a relatively small agricultural sector and a relatively large manufacturing sector. Trade is also important, mainly reflecting the role of Madras as the commercial center of South India. In agriculture the state has the third highest total rice production of the Indian states and has achieved the highest rice yield per hectare, almost twice the national average. Tamil Nadu lacks natural resources for its manufacturing sector, which is characterized by the predominance of small establishments of recent origin, compared to the leading states in the sector, Maharashtra and West Bengal. Manufactures of textiles, electrical machinery and transport equipment are of major importance.

24. Given its high urbanization rate, Tamil Nadu scores lower than expected in terms of per capita income. Average per capita income in the state is no higher than the national average. At the same time, its record on social development is impressive. It has the second highest literacy rate among the states (40% in 1971, versus the Indian average of 29%) and its infant mortality rate of 55 per 1,000 live births in 1971 is less than half the national average.

25. The present Madras metropolitan area population is estimated at about 4.4 million growing by over 200,000 annually. Expansion of the manufacturing sector is a major reason behind the rapid population growth in Madras over the past 25 years. A large number of public sector undertakings have been located in Madras, and many private sector companies have also been attracted to Madras. The Port of Madras has been expanded to an annual capacity of about 7.0 million tons of throughput. A fisheries port is being built to accommodate about 150 trawlers and 500 smaller boats. Most major banks and stock companies of South India have located their head offices in Madras. Still, most employment is in smaller establishments to which the Government of Tamil Nadu (GTN) is giving particular attention and support. New manufacturing establishments are predominantly being located north and west of the city center, while the expansion of trade and commerce is taking place in the center itself and towards the south.

26. Annual per capita income in the Madras metropolitan area in 1970-71 averaged Rs 855 (US\$95) compared with the average of Rs 624 (US\$69) for the state as a whole. It was, however, considerably less than the per capita income in many other metropolitan areas in India. About 56% of the total income is derived from the tertiary sector and 39% from the secondary sector. Unemployment statistics are unreliable but, according to the 1971 census, the work force participation rate in the Madras area was only about 28%, versus 37% in Bombay and 33% in Calcutta.

development of the metropolitan area. One of the members serves as chief executive officer. MMDA employs a staff of about 270, including 35 planners, architects and engineers.

32. MMDA's activities so far have been focused on physical planning and land use control. It has recently updated the master plan for the area and is involved in detailed area planning and in planning and development of new townships in the metropolitan area. It is beginning to reorient its activities toward a more comprehensive approach to urban planning, with increased emphasis on social and economic development. In addition, MMDA is attempting to perform an investment programming and budgeting function for the Madras area and is compiling overall estimates of public investments in key sectors by different agencies; this is expected to form the basis for a public investment strategy for the area. To help implement these responsibilities, a two-year work program has been agreed by MMDA and IDA, and a reorganization of the Authority is underway. In addition, the proposed project would provide technical assistance to MMDA, including long-term advisors, short-term consultants' services and training of staff.

33. Other Bank Group lending which has benefitted Madras and Tamil Nadu includes Loan 199-IN for the Port of Madras, Credit 572-IN for rural electrification, and Loan 416-IN and Credits 377-IN and 604-IN for power transmission. Lending for railways has had a favorable impact on both the Madras suburban railway system and on the two large manufacturing units of Indian Railways located in the area. The industrial sector has also benefitted from Bank Group lending to ICICI and IDBI as well as for industrial imports.

PART IV - THE PROJECT

34. The proposed project was appraised by a mission which visited India in May 1976. A report entitled "Appraisal of Madras Urban Development Project" (No. 1320a-IN, dated February 15, 1977) is being distributed separately to the Executive Directors. Negotiations were held in Washington in January 1977. The Government of India was represented by Messrs. Pande (Ministry of Finance) and Chaudhuri (Ministry of Works and Housing), the Government of Tamil Nadu by Messrs. Karthikeyan (Chief Secretary), Guhan (Commissioner and Secretary of Finance) and Mani (Commissioner and Secretary of Housing), and the Madras Metropolitan Development Authority by Mr. Vaz (Member Secretary). Attached as Annex III is a Credit and project summary.

Project Description

35. The proposed project is designed to develop and promote, over the period April 1, 1977 to March 31, 1981, low-cost solutions to the problems of providing improved services to the urban poor in the Madras metropolitan area, and to strengthen metropolitan planning and investment programming and budgeting. The following four components, which account for about 40% of the

project cost, are designed directly to benefit low-income areas located north and west of the city center 1/:

- (a) Sites and Services (US\$7.8 million) - development of about 175 ha of land at three sites, including the preparation and servicing with roads, drainage and individual water supply and sewerage connections of about 13,500 plots of varying sizes 2/ (serving a total population of about 74,000 persons); the construction of about 9,800 core housing units (partially completed houses which can be completed and/or expanded by the owners); preparation and servicing of about 9.5 ha of commercial and 11.4 ha of industrial land; provision of building materials for self-help completion of the core housing units; construction on each of the three sites of community facilities (schools, clinic/health center, community hall).
- (b) Slum Improvement (US\$4.9 million) - provision of basic infrastructure improvements (e.g., new and improved roads, footpaths, drainage, water supply, public latrines and washing facilities, and community facilities such as schools) in 85 slums with a population of about 23,000 families (126,500 persons); and the provision of open serviced plots of various sizes in relatively low-density slums to enable about 7,500 of the poorest families in Madras (41,250 persons) to erect basic shelters with self-help.
- (c) Small-Scale and Cottage Industry (US\$2.4 million) - provision of about 120 plots with worksheds and of loans for the purchase of machinery and equipment for businesses expected to employ a total of about 4,000 persons at the three sites and services project areas; and construction of about 100 training-cum-worksheds, for one-year training of about 50 persons at each, to be followed by production under cooperative arrangements, which (together with the provision of the necessary equipment) is expected to create about 5,000 jobs in the homes of the 44,000 households living in the sites and services and slum improvement project areas.

1/ Figures in parenthesis are total estimated cost of each component, excluding contingencies, not amounts allocated under the proposed credit.

2/ Over 70% of these plots would be less than 47 m².

- (d) Maternal and Child Health (US\$0.7 million) - training, equipment, buildings and recurring expenditures during the three-year project period to provide supplementary nutrition, health examinations and immunizations to an estimated 17,000 children under six years old and some 7,000 expectant and nursing mothers, and health, nutrition and family planning education and functional literacy training to about 20,000 adult women from the beneficiary households in the sites and services and slum improvement project areas.

The four remaining components are designed to meet pressing needs of the Madras area by eliminating bottlenecks in the water supply and transport sectors and by strengthening metropolitan planning:

- (e) Water Supply and Sewerage (US\$9.0 million) - construction or rehabilitation of specific works which are consistent with the long-term recommendations of the UNDP/WHO study (see para 27 above) and which are needed to bring early relief to areas with inadequate water supply, particularly slum areas and others relying on public standpipes. Although Bank staff are very familiar with the water supply situation in Madras, and a large number of sub-projects are fully prepared, the UNDP/WHO study will help to ensure that this component is consistent with the long-term strategy for sectoral development. Accordingly, GTN has agreed that the final selection of the works to be undertaken, the final engineering design of such works, and the arrangement for their implementation will all be agreed to by IDA, following the submission of an interim UNDP/WHO report (Section 2.11 of Project Agreement). An IDA follow-up mission is scheduled for April/May 1977. Agreement on these matters would be a condition of disbursement for this component (paragraph 4 of Schedule 1 to Development Credit Agreement). The state of readiness of the sub-projects and the timing of the review will help to ensure that this approach will not delay overall project implementation or disbursements.
- (f) Road and Traffic Improvements (US\$7.7 million) - construction of about 12 km of the Inner Ring Road linking important areas of new industrial development with major residential developments, and various other road traffic improvements (e.g., pedestrian subways, minor bridges for river and canal crossings, grade separation at two road/rail intersections, street lighting at 24 intersections, and about 200 km of footpaths and 50 km of cycle tracks) designed to benefit primarily pedestrians, cyclists and bus riders, who together undertake about 84% of all trips in the metropolitan area.

- (g) Bus Transport (US\$5.9 million) - replacement of some 285 over-aged buses; construction of three depots for bus repairs and servicing, of eight bus terminals and of 400 passenger shelters; and implementation of various measures to reduce peak demand and to improve fleet utilization (see para 48 below).
- (h) Technical Assistance (US\$0.8 million) - provision of five advisors for two years and various short-term consultants' services, training of staff, aerial photography services and related equipment, to assist MMDA in development planning, capital programming, and project monitoring and evaluation; and the provision of consultants' services required by the Madras Corporation.

Project Implementation

36. GTN has designated MMDA as its representative for coordinating the implementation of the project (Section 2.01 (b) of Project Agreement). The individual project components would be executed by the following agencies:

- (a) Sites and Services Tamil Nadu Housing Board (TNHB)
- (b) Slum Improvement Tamil Nadu Slum Clearance Board (TNSCB)
- (c) Small-Scale Industry Small Industries Development Corp. (SIDCO)
Cottage Industry Tamil Nadu Handicrafts Development Corp. (TNHDC)
- (d) Maternal-Child Health Department of Social Welfare (DSW)
- (e) Water Supply & Sewerage Tamil Nadu Water Supply & Drainage Board (TWAD) and Madras Corporation (MC)
- (f) Roads & Traffic Improvements Department of Highways & Rural Works (DHRW), Madras Corporation (MC) and Police Department
- (g) Bus Transport Metropolitan Wing of Pallavan Transport Corp. (PTC)
- (h) Technical Assistance Madras Metropolitan Development Authority (MMDA)

With agreed increases in staff, these agencies all have the necessary capability to carry out their obligations under the proposed project. Moreover, a number of steps have been agreed with a view to improving their financial and administrative situation (see paras 49 and 50 below). The project represents about 50% of the public investments planned for the key sectors in the metropolitan area over the three-year project period. The project involves no relocation of families, except in slum improvement areas, where less than 4% of the total number of families will have to be relocated to make room for infrastructure facilities. To the limited extent that such relocation will be necessary, families will be resettled, as part of the project, in close proximity to their present locations. GTN has agreed to make satisfactory arrangements to assist in relocating anyone who is required to move as a result of project implementation (Section 3.04 of Project Agreement).

Project Costs and Financing

37. The total cost of the proposed project is estimated at US\$52.0 million equivalent, of which about US\$8.0 million represents direct and indirect foreign exchange costs. This estimate includes physical contingencies of 10% for all items except for buses and for land; it also includes price contingencies of 8% per annum for equipment and 12% per annum for civil works.

38. The proposed credit would finance about 50% of the project cost excluding taxes and duties (US\$2.9 million) and expenditures on bus bodies (US\$1.1 million), which would not be procured through competitive bidding (see para 41 below). Funds equivalent to the credit proceeds, together with the balance of the financing required, would be made available in the form of loans and grants from the Government of Tamil Nadu (GTN) to the various implementing agencies.

39. The terms of GTN loans, which are consistent with prevailing practice, would be as follows: (i) to the Tamil Nadu Water Supply and Drainage Board and the Madras Corporation (US\$12.4 million, of which 50% loan and 50% grant) for the water supply and sewerage component, and to the Madras Corporation (US\$5.0 million) for footpaths, cycle tracks and road improvements, for 20 years, including 3 years' grace, at 11% interest; and (ii) to PTC for the bus transport component (US\$7.3 million), for 15 years, including 1 year's grace, at 10.5% interest. Funds would be made available to the Tamil Nadu Housing and Slum Clearance Boards (US\$10.0 million and US\$6.3 million, respectively, for the sites and services and slum improvement components) on a grant basis to permit these agencies to set up revolving funds from cost recoveries (see paras 43 and 44 below) to finance continuing sites and services and slum improvement programs 1/; to MMDA (US\$1.0 million) for technical assistance, on a grant basis; and to the Department of Social Welfare (US\$0.9 million) for the maternal and child health component and to the Department of Highways and

1/ Current GTN practice is to give loans to the Housing Board and grants to the Slum Clearance Board.

Rural Works (US\$4.7 million) and the Police Department (US\$0.4 million) for their parts of the road and traffic improvement component, as direct GTN departmental expenditures. The cost of vocational training for the cottage industry component (US\$0.6 million) would be provided as a grant to the Tamil Nadu Handicrafts Development Corporation (TNHDC), and the cost of production centers and equipment for cottage industries would be recovered from TNHDC at 11% over 15 years, including one year's grace. Loans for the small-scale industry component (US\$2.1 million) would be made to prospective entrepreneurs through the Small Industries Development Corporation (SIDCO) for nine years at 11%, which includes a 2.5% spread to cover SIDCO's costs of administration.

Procurement and Disbursement

40. Procurement of equipment with an estimated total value of US\$5.0 million (bus chassis and water supply equipment, such as pumps, water treatment equipment and steel pipes) would be on the basis of international bidding in accordance with IDA guidelines. Indian suppliers competing under international competitive bidding would be granted a preference margin of 15% or the current rate of import duty, whichever is less.

41. Contracts for all civil works, with an estimated total value of US\$33.0 million -- for sites, and services, slum improvement, water supply and sewerage, construction and improvement of roads, footpaths, cycle tracks and minor bridges, worksheds for small businesses, child welfare centers, bus depots, bus terminals and passenger shelters -- will be individually small and scattered. About 200 individual contracts, ranging in value from US\$10,000 to US\$1.0 million, with the bulk of the contracts below US\$100,000, will be awarded over the three-year project period. Although civil works contracts in the same area will be combined as far as practical, even then only two contracts are expected to have a value of about US\$1.0 million each. Moreover, eight different agencies will be responsible for works in their respective sectors, and construction of several works will require implementation schedules that are carefully balanced locationally and over time. These works are not likely to attract any foreign contractors, particularly as the domestic contracting industry is well developed and mobilized, executing similar works in the metropolitan area. These civil works contracts, together with contracts totalling US\$4.5 million for self-help building materials, the remainder of equipment and supplies for water supply and sewerage, traffic engineering and control equipment, and medical supplies will be procured under GTN procedures of local competitive bidding, acceptable to IDA. The materials and equipment contracts would be either of small sizes and unattractive to foreign suppliers, or unsuitable for international competitive bidding by reasons of high transportation costs. Bus bodies will be built by a workshop of the Pallavan Transport Corporation, and they would not be financed under the proposed credit. The workshop, which has about 30 years' experience of bus body construction, is highly competitive and produces about 400 bodies annually for Pallavan Transport as well as for other Indian bus companies.

42. The proceeds of the proposed credit would be disbursed against 100% of the cost of goods procured through international competitive bidding,

Rural Works (US\$4.7 million) and the Police Department (US\$0.4 million) for their parts of the road and traffic improvement component, as direct GTN departmental expenditures. The cost of vocational training for the cottage industry component (US\$0.6 million) would be provided as a grant to the Tamil Nadu Handicrafts Development Corporation (TNHDC), and the cost of production centers and equipment for cottage industries would be recovered from TNHDC at 11% over 15 years, including one year's grace. Loans for the small-scale industry component (US\$2.1 million) would be made to prospective entrepreneurs through the Small Industries Development Corporation (SIDCO) for nine years at 11%, which includes a 2.5% spread to cover SIDCO's costs of administration.

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of the work program is to prepare by June 30, 1978 a program for improving all of Madras' slums (see para 44 above). GTN has agreed to establish by July 1, 1977, a traffic engineering unit in DHRW and a traffic management unit in the Police Department (Section 2.13 of Project Agreement). The Madras Corporation has agreed to review by December 31, 1977, its road maintenance organization to ensure that uniform and satisfactory maintenance standards are applied and to establish by July 1, 1977, a new traffic engineering unit with responsibility for improvement and construction of footpaths and cycle tracks (Section 2.12 of Project Agreement). In addition, GTN has agreed to a number of measures to improve the Corporation's financial situation, including (a) the establishment by July 1, 1977, of a Financial Management Department headed by a Financial Advisor who would inter alia be responsible for the revision of the Corporation's accounting system by April 1, 1978, to reflect more accurately the cost, including depreciation, of its different services; (b) an increase in the Corporation's self-generated revenues (excluding water supply and sewerage taxes and charges) by a minimum of 8% annually over the project period, over and above revenue increases achieved through the regular revision of property values; and (c) the maintenance of the debt service of the Corporation in any year at not more than 20% of its self-generated revenues which is approximately the 1976/77 level (excluding water supply and sewerage debts and revenues) (Section 4.03 of Project Agreement). The audits of the accounts of the Madras Corporation will be brought up to date in accordance with an agreed schedule (Section 4.01 of Project Agreement).

50. MMDA will establish a project monitoring and evaluation system (Section 3.03 of Project Agreement); each agency will maintain separate project accounts, and MMDA will maintain consolidated project accounts (Section 4.01 of Project Agreement). MMDA will submit to IDA quarterly progress reports on the project (Section 2.01(c) of Project Agreement).

Benefits and Risks

51. The economic rate of return for the proposed project is estimated at about 21% on the average for those components with quantifiable benefits (accounting for about 55% of total project cost). The rates of return for the individual components are: 15% for sites and services (total cost US\$10.4 million); 18% for slum improvement (total cost US\$6.7 million); 28% for road and traffic improvements (total cost US\$10.1 million); and 39% for the bus improvement program (total cost US\$7.3 million). Many vital steps are being taken under the proposed project to initiate development programs that are financially sustainable and responsive to the needs of Madras' low-income population. By shifting the emphasis from costly slum clearance (US\$1,100 per household) to low-cost slum improvement (US\$145 per household), the growth in the population living in unimproved slums in Madras would be halted during the project period and all slum areas would be improved by 1985. In the housing sector, the project provides shelter and services affordable by households at the 10th percentile on the Madras income distribution. Housing unit costs have been reduced by about 75%, compared to present programs, through more efficient designs and through reliance on self-help housing construction. Low-cost job

creation and health, nutrition and family planning services form part of the slum improvement and sites and services programs. The transport components are designed to benefit mainly pedestrians, cyclists and bus passengers. In the water supply and sewerage sectors, the project will prevent a further deterioration in the already critical situation by providing short-term physical improvements at low cost. In each sector, the project includes specific steps to ensure that future revenues raised from beneficiaries are sufficient to allow proper operation, maintenance and replacement of facilities.

52. The only major risk to the project relates to the dependence of MMDA on strong support from Government if the long-term objectives of the project are to be fulfilled. The specific assurances received from GTN with regard to MMDA's role and responsibilities under the project and the agreements reached on a detailed two-year work program for MMDA and on terms of reference for the preparation of a long-term slum improvement program attest to the strength of GTN's support. Continuation of this support is essential. With regard to specific project components, certain risks exist, particularly in the small business components. Although the demand for plots and work sheds under the small industry component is strong, with more than 300 applications already received for the 120 plots, and full occupancy therefore is expected, the viability of the small enterprises to be located on these plots remains to be established. Also, default rates may be higher and extension services costlier than now envisaged, so that the 2.5% spread in interest rates (para 39) may prove insufficient. In cottage industry, it is uncertain how successful the proposed cooperatives will be. In view of the desirability of creating productive employment through the development of small-scale and cottage industries, it is believed that this risk is justified.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

53. The draft Development Credit Agreement between India and the Association, the draft Project Agreement between the Association and the state of Tamil Nadu, the Recommendation of the Committee provided for in Article V, Section 1(d) of the Articles of Agreement, and the text of a draft Resolution approving the proposed development credit are being distributed to the Executive Directors separately.

54. Special conditions of the Project are listed in Section III of Annex IV.

55. A special condition of disbursement for the water supply and sewerage component is that the final proposals for the composition and implementation of investments to be undertaken by TWAD and MC be agreed upon by the Association (para 4 of Schedule 1 to the Development Credit Agreement).

56. I am satisfied that the proposed credit would comply with the Articles of Agreement of the Association.

PART VI - RECOMMENDATION

57. I recommend that the Executive Directors approve the proposed credit.

Robert S. McNamara
President

by J. Burke Knapp

February 24, 1977

LAND AREA (THOU KM ²)		INDIA -- SOCIAL INDICATORS DATA SHEET						
		INDIA			REFERENCE COUNTRIES (1970)			
TOTAL	3280.5	MOST RECENT			INDONESIA	PHILIPPINES	BRAZIL**	
AGRIC.	1781.1	1960	1970	ESTIMATE				
GNP PER CAPITA (US\$)		70.0	110.0	160.0	110.0	230.0	540.0	
POPULATION AND VITAL STATISTICS								
POPULATION (MID-YR, MILLION)		429.0	542.7	609.6	116.3	36.9	92.8	
POPULATION DENSITY								
PER SQUARE KM.		131.0	165.0	186.0	61.0	123.0	11.0	
PER SQ. KM. AGRICULTURAL LAND		245.0	290.0	319.0 /a	405.0	279.0	66.0	
VITAL STATISTICS								
CRUDE BIRTH RATE PER THOUSAND		43.2	42.7	39.9	45.9	44.2	38.4	
CRUDE DEATH RATE PER THOUSAND		23.9	18.8	15.7	20.6	13.2	9.9	
INFANT MORTALITY RATE (/THOU)		139.0 /a	..	120-140.0 /b	..	80.0	110.0	
LIFE EXPECTANCY AT BIRTH (YRS)		41.7	47.2	49.5	45.0	55.6	59.7	
GROSS REPRODUCTION RATE		3.2	2.9	2.8	3.2	3.3	2.6	
POPULATION GROWTH RATE (%)								
TOTAL		1.8	2.4	2.4	2.0	3.0	2.9	
URBAN		2.5 /b	3.2	3.1	3.7 /a	4.0	5.0	
URBAN POPULATION (% OF TOTAL)		17.9	19.8	20.6	17.0 /b	27.6	56.0	
AGE STRUCTURE (PERCENT)								
0 TO 14 YEARS		41.0	41.6	40.1	44.0	45.6	42.0	
15 TO 64 YEARS		55.9	55.3	56.7	53.5	51.6	55.0	
65 YEARS AND OVER		3.1	3.1	3.2	2.5	2.8	3.0	
AGE DEPENDENCY RATIO		0.8	0.8	0.8	0.9	0.9	0.8	
ECONOMIC DEPENDENCY RATIO		1.3 /c	..	1.2 /b,c	..	1.5	1.5	
FAMILY PLANNING								
ACCEPTORS (CUMULATIVE, THOU)		1000.0 /d	11308.0	26566.0	259.3	354.0	250.0	
USERS (% OF MARRIED WOMEN)		..	..	15.8 /d	..	2.0	1.6
EMPLOYMENT								
TOTAL LABOR FORCE (THOUSAND)		189000.0	..	221000.0 /b,e	..	12300.0	29600.0	
LABOR FORCE IN AGRICULTURE (%)		73.0	..	72.0 /b	..	55.0 /a	44.0	
UNEMPLOYED (% OF LABOR FORCE)		1.0 /e	..	2.0 /b,f	..	7.0	..	
INCOME DISTRIBUTION								
% OF PRIVATE INCOME REC'D BY-								
HIGHEST 5% OF HOUSEHOLDS		26.7	25.0 /a	..	..	..	35.0 /a
HIGHEST 20% OF HOUSEHOLDS		51.7	53.1 /a	..	..	..	62.0 /a
LOWEST 20% OF HOUSEHOLDS		4.1	4.7 /a	..	..	..	3.0 /a
LOWEST 40% OF HOUSEHOLDS		13.6	13.1 /a	..	..	..	10.0 /a
DISTRIBUTION OF LAND OWNERSHIP								
% OWNED BY TOP 10% OF OWNERS		..	..	..	..	..	45.0
% OWNED BY SMALLEST 10% OWNERS		..	..	..	..	..	1.5
HEALTH AND NUTRITION								
POPULATION PER PHYSICIAN		5800.0 /f	4800.0	4620.0 /a	27650.0	..	1950.0	
POPULATION PER NURSING PERSON		1220.0 /f,g	5110.0	4260.0 /a,g	8010.0	..	3300.0 /b	
POPULATION PER HOSPITAL BED		2600.0 /h	1620.0	..	1720.0	850.0	260.0	
PER CAPITA SUPPLY OF -								
CALORIES (% OF REQUIREMENTS)		95.0	93.0	94.0 /h	89.0	100.0	109.0	
PROTEIN (GRAMS PER DAY)		55.0	53.0	52.0 /h	43.0	45.0	64.0	
-OF WHICH ANIMAL AND PULSE		19.0 /i	16.0	..	14.0	22.0	39.0	
DEATH RATE (/THOU) AGES 1-4		44.0	..	..	..	9.0	..
EDUCATION								
ADJUSTED ENROLLMENT RATIO								
PRIMARY SCHOOL		38.0 /j	68.0 /b	79.0 /b	69.0	108.0 /b	87.0	
SECONDARY SCHOOL		9.0 /j	..	28.0 /b	12.0	48.0 /b	28.0 /c	
YEARS OF SCHOLING PROVIDED (FIRST AND SECOND LEVEL)		12.0	12.0	..	12.0	10.0	13.0	
VOCATIONAL ENROLLMENT (% OF SECONDARY)		8.0	6.0 /a	..	29.0	6.0 /c	17.0	
ADULT LITERACY RATE (%)		24.0	33.0	36.0 /b,i	..	..	68.0
HOUSING								
PERSONS PER ROOM (AVERAGE)		2.6 /k	..	2.8 /b,i	..	..	1.0
OCCUPIED DWELLINGS WITHOUT PIPED WATER (%)		..	..	..	..	66.0 /d,e	73.0 /d
ACCESS TO ELECTRICITY (% OF ALL DWELLINGS)		..	..	..	..	23.0 /d	48.0
RURAL DWELLINGS CONNECTED TO ELECTRICITY (%)		..	..	..	..	6.0 /d	8.0
CONSUMPTION								
RADIO RECEIVERS (PER THOU POP)		5.0	21.0	23.0 /a	114.0	45.0	60.0	
PASSENGER CARS (PER THOU POP)		0.7	1.0	1.0 /a	2.0	8.0	25.0	
ELECTRICITY (KWH/YR PER CAP)		46.0	114.0	129.0	20.0	235.0	491.0	
NEWSPRINT (KG/YR PER CAP)		0.2	0.3	0.3	0.2	1.2 /f	2.7	

SEE NOTES AND DEFINITIONS ON REVERSE

NOTES

Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961, for 1970 between 1968 and 1970, and for Most Recent Estimate between 1973 and 1975.

** Brazil has been selected because of its size and comparable problems of regional inequality.

<u>INDIA</u>	1960	/a	1951-61 average; /b	1951-60, /c	Ratio of population under 15 and 60 and over to labor force aged 15-59, /d	1964;
		/e	Registered applicants for work, /f	1962; /g	Including midwives; both nurses and midwives registered, not all practicing in the country, /h	1957, /i
					1960-62, /j	6-13 and 14-19 years of age respectively, /k
						Households.
	1970	/a	1967-68, /b	5-10 years of age, /c	1967.	
	<u>MOST RECENT ESTIMATE</u>	/a	1972, /b	1971, /c	Ratio of population under 15 and 60 and over to labor force aged 15-59;	
		/d	National program only; /e	AID estimate of labor force in age group 15-59. IBRD report gives a figure of 180.4 million based on the 1971 population census. The difference is due to changes in the definition of a worker. In the 1971 census, persons were classified only on the basis of their main activities. This led to the exclusion of several categories, such as housewives; /f	Registered applicants for work, /g	Including midwives, /h
					1969-71 average; /i	Population 10 years and over; /j
						Households.
<u>INDONESIA</u>	1970	/a	1961-71, /b	1971.		
<u>PHILIPPINES</u>	1970	/a	As percentage of employment, /b	7-12 and 13-16 years of age respectively; /c	Not including private vocational schools or vocational short term courses; /d	1967, households; /e
						Inside only.
<u>BRAZIL</u>	1970	/a	Economically active population, /b	Hospital personnel; /c	12-18 years of age; /d	Inside only.

R9, July 21, 1976

DEFINITIONS OF SOCIAL INDICATORS

Land Area (thou km²)

Total - Total surface area comprising land area and inland waters.

Agric. - Most recent estimate of agricultural area used temporarily or permanently for crops, pastures, market & kitchen gardens or to lie fallow.

GNP per capita (US\$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1973-75 basis); 1960, 1970 and 1975 data.

Population and vital statistics

Population (mid-yr. million) - As of July first; if not available, average of two end-year estimates; 1960, 1970 and 1975 data.

Population density - per square km - Mid-year population per square kilometer (100 hectares) of total area.

Population density - per square km of agric. land - Computed as above for agricultural land only.

Vital statistics

Crude birth rate per thousand, average - Annual live births per thousand of mid-year population, ten-year arithmetic averages ending in 1960 and 1970, and five-year average ending in 1975 for most recent estimate.

Crude death rate per thousand, average - Annual deaths per thousand of mid-year population; ten-year arithmetic averages ending in 1960 and 1970 and five-year average ending in 1975 for most recent estimate.

Infant mortality rate (/thou) - Annual deaths of infants under one year of age per thousand live births.

Life expectancy at birth (yrs) - Average number of years of life remaining at birth; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Gross reproduction rate - Average number of live daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.

Population growth rate (%) - total - Compound annual growth rates of mid-year population for 1950-60, 1960-70 and 1970-75.

Population growth rate (%) - urban - Computed like growth rate of total population; different definitions of urban areas may affect comparability of data among countries.

Urban population (% of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries.

Age structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population.

Age dependency ratio - Ratio of population under 15 and 65 and over to those of ages 15 through 64.

Economic dependency ratio - Ratio of population under 15 and 65 and over to the labor force in age group of 15-64 years.

Family planning - acceptors (cumulative, thou) - Cumulative number of acceptors of birth-control devices under auspices of national family planning program since inception.

Family planning - users (% of married women) - Percentages of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

Employment

Total labor force (thousand) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc.; definitions in various countries are not comparable.

Labor force in agriculture (%) - Agricultural labor force (in farming, forestry, hunting and fishing) as percentage of total labor force.

Unemployed (% of labor force) - Unemployed are usually defined as persons who are able and willing to take a job, out of a job on a given day, remained out of a job, and seeking work for a specified minimum period not exceeding one week; may not be comparable between countries due to different definitions of unemployed and source of data, e.g., employment office statistics, sample surveys, compulsory unemployment insurance.

Income distribution - Percentage of private income (both in cash and kind) received by richest 5%, richest 20%, poorest 20%, and poorest 40% of households.

Distribution of land ownership - Percentages of land owned by wealthiest 10% and poorest 10% of land owners.

Health and Nutrition

Population per physician - Population divided by number of practicing physicians qualified from a medical school at university level.

Population per nursing person - Population divided by number of practicing male and female graduate nurses, "trained" or "certified" nurses, and auxiliary personnel with training or experience.

Population per hospital bed - Population divided by number of hospital beds available in public and private general and specialized hospital and rehabilitation centers; excludes nursing homes and establishments for custodial and preventive care.

Per capita supply of calories (% of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day, available supplies comprise domestic production, imports less exports, and changes in stock; net supplies exclude animal feed, seeds, quantities used in food processing and losses in distribution; requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distributions of population, and allowing 10% for waste at household level.

Per capita supply of protein (grams per day) - Protein content of per capita net supply of food per day; net supply of food is defined as above, requirements for all countries established by USDA Economic Research Services provide for a minimum allowance of 60 grams of total protein per day, and 20 grams of animal and pulse protein, of which 10 grams should be animal protein; these standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.

Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day.

Death rate (/thou) ages 1-4 - Annual deaths per thousand in age group 1-4 years, to children in this age group; suggested as an indicator of malnutrition.

Education

Adjusted enrollment ratio - primary school - Enrollment of all ages as percentage of primary school-age population; includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education, enrollment may exceed 100% since some pupils are below or above the official school age.

Adjusted enrollment ratio - secondary school - Computed as above; secondary education requires at least four years of approved primary instruction, provides general, vocational or teacher training instruction for pupils of 12 to 17 years of age, correspondence courses are generally excluded.

Years of schooling provided (first and second levels) - Total years of schooling; at secondary level, vocational instruction may be partially or completely excluded.

Vocational enrollment (% of secondary) - Vocational institutions include technical, industrial or other programs which operate independently or as departments of secondary institutions.

Adult literacy rate (%) - Literate adults (able to read and write) as percentage of total adult population aged 15 years and over.

Housing

Persons per room (urban) - Average number of persons per room in occupied conventional dwellings in urban areas; dwellings exclude non-permanent structures and unoccupied parts.

Occupied dwellings without piped water (%) - Occupied conventional dwellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied dwellings.

Access to electricity (% of all dwellings) - Conventional dwellings with electricity in living quarters as percent of total dwellings in urban and rural areas.

Rural dwellings connected to electricity (%) - Computed as above for rural dwellings only.

Consumption

Radio receivers (per thou pop) - All types of receivers for radio broadcasts to general public per thousand of population; excludes unlicensed receivers in countries and in years when registration of radio sets was in effect; data for recent years may not be comparable since most countries abolished licensing.

Passenger cars (per thou pop) - Passenger cars comprise motor cars seating less than eight persons, excludes ambulances, hearses and military vehicles.

Electricity (kwh/yr per cap) - Annual consumption of industrial, commercial, public and private electricity in kilowatt hours per capita; generally based on production data, without allowance for losses in grids but allowing for imports and exports of electricity.

Newspaper (kg/yr per cap) - Per capita annual consumption in kilograms estimated from domestic production plus net imports of newspaper.

ECONOMIC DEVELOPMENT DATA

GNP PER CAPITA IN 1974 ^{a/} US\$140

	GROSS NATIONAL PRODUCT IN 1975/76 ^{b/}		ANNUAL RATE OF GROWTH (% constant prices) ^{c/}		
	US\$ Bln.	%	1961/62-1964/65	1965/66-1969/70	1970/71-1973/74
GNP at Market Prices	80.4	100.0	3.4	3.7	1.9
Gross Domestic Investment	15.1	18.8			
Gross National Saving	13.9	17.3			
Current Account Balance	-2.0	-2.3			
Resource Gap	-1.2	-1.5			

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1971

	Value Added (at factor cost)		Labor Force		V.A. Per Worker	
	US\$ Bln.	%	Min.	%	US\$	% of National Average
Agriculture	24.5	46.6	130.0	72.1	188	64
Industry	11.8	22.3	20.2	11.2	582	199
Services	16.3	31.1	30.2	16.7	542	186
Total/average	52.6	100.0	180.4	100.0	292	100

GOVERNMENT FINANCE

	General Government ^{d/}			Central Government		
	(Rs. Bln) 1975/76	% of GDP		(Rs. Bln) 1975/76	% of GDP	
		1975/76	1973/74-1975/76		1974/75	1972/73-1974/75
Current Receipts	107.63	18.2	17.3	112.17	9.1	9.2
Current Expenditures	98.99	16.9	16.3	112.17	8.2	8.7
Current Surplus/Deficit	8.64	1.3	1.0	-	0.9	0.5
Capital Expenditures ^{e/}	40.40	5.8	5.4	85.23	4.3	4.1
External Assistance CPP (net)	10.17	1.4	1.0	10.17	1.4	1.0

	1965/66	1970/71	1971/72	1972/73	1973/74	1974/75	March 1975	March 1976	
		(Billion Rs outstanding at end of period)							
Money and Quasi Money	61.4	105.7	122.4	142.2	169.1	187.4	187.2	213.6	
Bank Credit to Public Sector	40.8	56.9	69.0	82.5	92.9	102.0	102.6	107.3	
Bank Credit to Private Sector	28.1	56.7	64.4	76.0	90.1	100.5	109.5	134.2	
		(Percentage or Index Numbers)						June 1975	June 1976
Money and Quasi Money as % of GDP	24.0	24.4	26.3	27.9	27.2	25.5			
Wholesale Price Index (1961/62 = 100)	131.6	181.1	138.4	207.1	254.2	313.0	316.0	290.5	
Annual percentage changes in:									
Wholesale Price Index	7.7	5.5	4.0	9.9	22.7	23.1		-8.1	
Bank Credit to Public Sector	12.9	8.6	21.3	19.6	12.6	9.8		4.8 ^{f/}	
Bank Credit to Private Sector	12.8	17.4	13.6	18.0	18.5	11.5		22.9 ^{g/}	

^{a/} The per capita GNP estimate is at 1974 market prices, calculated by the conversion technique used in the 1976. World Atlas. All other conversions to dollars in this table are at the average exchange rate prevailing during the period covered.

^{b/} Quick Estimates.

^{c/} Computed from trend line of GNP at factor cost series, including one observation before first year and one observation after last year of listed period.

^{d/} Transfers between Center and States have been netted out.

^{e/} All loans and advances to third parties have been netted out.

^{f/} Credit to Government.

^{g/} Credit to Commercial Sector.

<u>BALANCE OF PAYMENTS</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u> ^{h/}	<u>MERCHANDISE EXPORTS (AVERAGE 1973/74-1975/76)</u>		
					<u>US\$ Mn.</u>	<u>%</u>	
Exports of Goods	2,558	3,239	4,143	4,555	Jute Manufacturers	299	9
Imports of Goods	-2,682	-3,971	-5,739	-6,102	Tea	247	7
Trade Balance	- 124	- 732	-1,596	-1,547	Cotton Textiles	391	11
NFS (net) ^{i/}	- 146	n.a.	n.a.	n.a.	Engineering Goods	390	11
<u>Resource Gap</u>	- 270	n.a.	n.a.	n.a.	<u>Others</u>	<u>2,134</u>	<u>62</u>
Interest Payments (net)	- 237	- 233	- 260	- 261	<u>Total</u>	<u>3,461</u>	<u>100</u>
Other Factor Payments (net) ^{i/}	- 8	n.a.	n.a.	n.a.	<u>EXTERNAL DEBT, MARCH 31, 1976</u> ^{h/}		
Net Transfers ^{i/}	- 50	n.a.	n.a.	n.a.	<u>US\$ Mn.</u>		
<u>Balance on Current Account</u>	- 565	n.a.	n.a.	n.a.	Repayable in foreign currency	11,247.7	
Official Aid					Repayable through export of goods	635	
Disbursements	955	1,249	1,766	2,249	Total Outstanding and Disbursed	11,882.7	
Amortization	-445	-459	-519	-522	<u>DEBT SERVICE RATIO FOR 1975/76</u>	17.2 percent	^{h/k/}
Transactions with IMF		75	530	205	<u>IBRD/IDA LENDING, June 30, 1976</u> (US\$ Mn.)		
All Other Items	89	205	41	500		<u>IBRD</u>	<u>IDA</u>
Increase in Reserves (-)	- 34	-105	38	-794	Outstanding and Disbursed	435	2,948
Gross Reserves (end year)	1,311	1,416	1,378	2,172	Undisbursed	266	1,236
Net Reserves (end year)	1,311	1,341	773	1,474	Outstanding including Undisbursed	701	4,184
<u>Fuel and Related Materials</u>							
Imports	265	720	1,451	1,417	After end June 1972 : Floating Rate		
of which Petroleum	265	719	1,451	1,417	Spot Rate December 31, 1976		
Exports	41	20	26	n.a.	approx. US\$1.00 = Rs 8.901		
of which Petroleum	37	16	17	n.a.	approx. Rs 1.00 = US\$ 0.112		
<u>RATE OF EXCHANGE</u> ^{i/}							
Prior to mid-December 1971	: US\$1.00 = Rs 7.5						
	: Rs 1.00 = US\$0.133333						
Mid-December 1971 to end June 1972	: US\$1.00 = Rs 7.27927						
	: Rs 1.00 = US\$0.137376						

h/ Estimated.

i/ For 1973/74 to 1975/76, included with 'All other Items'.

j/ Aid and trade figures converted to US dollars using exchange rates and IMF trade conversion factors as indicated in inside front cover of this report or notes to individual tables.

k/ Amortization and interest payments (excluding IMF transaction) as a percentage of merchandise exports.

THE STATUS OF BANK GROUP OPERATIONS IN INDIA

A. STATEMENT OF BANK LOANS AND IDA CREDITS
(As of December 31, 1976)

Loan or Credit No.	Year	Borrower	Purpose	US\$ Million ^{1/}		
				(Net of Cancellation)		
			BANK	IDA	Undisbursed	
38 Loans/ 40 Credits fully disbursed			1,032.5	2,213.9		
614-IN	1969	India	Tarai Seeds	13.0	-	3.8
203-IN	1970	India	Punjab Agricultural Credit	-	27.5	10.7
226-IN	1971	India	Andhra Pradesh Agricultural Cr.	-	24.4	3.3
242-IN	1971	India	Power Transmission II	-	75.0	19.4
249-IN	1971	India	Haryana Agricultural Credit	-	25.0	0.1
250-IN	1971	India	Tamil Nadu Agricultural Credit	-	35.0	5.8
264-IN	1971	India	Cochin II Fertilizer	-	20.0	1.0
267-IN	1971	India	Wheat Storage	-	5.0	3.7
789-IN	1971	ICICI	Industry DFC IX	59.0	-	2.5
278-IN	1972	India	Mysore Agricultural Credit	-	40.0	5.6
294-IN	1972	India	Bihar Agricultural Markets	-	14.0	11.6
312-IN	1972	India	Population	-	21.2	10.3
342-IN	1972	India	Education	-	12.0	11.4
356-IN	1972	India	IDBI	-	25.0	16.4
377-IN	1973	India	Power Transmission III	-	85.0	49.8
378-IN	1973	India	Mysore Agricultural Markets	-	8.0	7.6
902-IN	1973	ICICI	Industry DFC X	70.0	-	10.2
390-IN	1973	India	Bombay Water Supply	-	55.0	43.4
391-IN	1973	India	Madhya Pradesh Agricultural Cr.	-	33.0	2.9
392-IN	1973	India	Uttar Pradesh Agricultural Cr.	-	38.0	18.0
403-IN	1973	India	Telecommunications V	-	80.0	25.8
427-IN	1973	India	Calcutta Urban Development	-	35.0	18.5
440-IN	1973	India	Bihar Agricultural Credit	-	32.0	20.2
456-IN	1974	India	HP Apple Processing & Marketing	-	13.0	11.7
481-IN	1974	India	Trombay IV	-	50.0	28.3
1011-IN	1974	India	Chambal (Rajasthan) CAD	52.0	-	42.4
482-IN	1974	India	Karnataka Dairy	-	30.0	30.0
502-IN	1974	India	Rajasthan Canal CAD	-	83.0	59.4
520-IN	1974	India	Sindri Fertilizer	-	91.0	51.2
521-IN	1974	India	Rajasthan Dairy	-	27.7	27.5
522-IN	1974	India	Madhya Pradesh Dairy	-	16.4	16.4
526-IN	1975	India	Drought Prone Areas	-	35.0	32.9
1079-IN	1975	India	IFFCO Fertilizer	109.0	-	94.4
1097-IN	1975	India	Industry DFC XI	100.0	-	75.4
532-IN	1975	India	Godavari Barrage Irrigation	-	45.0	38.1
540-IN	1975	India	ARC Credit	-	75.0	43.8
541-IN	1975	India	West Bengal Agrc. Dev.	-	34.0	33.5
562-IN	1975	India	Chambal (Madhya Pradesh) CAD	-	24.0	22.1
572-IN	1975	India	Rural Electrification	-	57.0	57.0
582-IN	1975	India	Railways XIII	-	120.0	56.0
585-IN	1975	India	Uttar Pradesh Water Supply	-	40.0	40.0
598-IN	1975	India	Fertilizer Industry	-	105.0	103.7
604-IN	1975	India	Power Transmission IV	-	150.0	150.0
609-IN	1975	India	Madhya Pradesh Forestry T.A.	-	4.0	4.0
610-IN	1976	India	Integrated Cotton Development	-	18.0	18.0
616-IN	1976	India	Industrial Imports XI	-	200.0	31.4
1251-IN(TW)	1976	India	Andhra Pradesh Irrigation	145.0	-	145.0
1260-IN	1976	India	IDBI II	40.0	-	40.0
1273-IN	1976	India	National Seed	25.0	-	25.0
1313-IN	1976	India	Telecommunications VI	80.0	-	71.6
1335-IN	1976	India	Bombay Urban Transport	*25.0	-	25.0
Total			1,750.5	4,112.1		
of which has been repaid			762.5	22.2		
Total now outstanding			988.0	4,089.9		
Amount sold			111.5			
of which has been repaid			111.5			
Total now held by Bank and IDA			988.0	4,089.9		
Total undisbursed (including *)			510.3	1,140.5	1,650.8	

* Not yet effective

^{1/} Prior to exchange adjustments.

B. STATEMENT OF IFC INVESTMENTS
(As of December 31, 1976)

<u>Fiscal</u> <u>Year</u>	<u>Company</u>	<u>Amount (US\$ million)</u>		
		<u>Loan</u>	<u>Equity</u>	<u>Total</u>
1959	Republic Forge Company Ltd.	1.5	-	1.5
1959	Kirloskar Oil Engines Ltd.	0.9	-	0.9
1960	Assam Sillimanite Ltd.	1.4	-	1.4
1961	K.S.B. Pumps Ltd.	0.2	-	0.2
1963-66	Precision Bearings India Ltd.	0.7	0.3	1.0
1964	Fort Gloster Industries Ltd.	0.8	0.4	1.2
1964-75	Mahindra UGINE Steel Co. Ltd.	11.8	1.0	12.8
1964	Lakshmi Machine Works Ltd.	1.0	0.3	1.3
1967	Jayshree Chemicals Ltd.	1.0	0.1	1.1
1967	Indian Explosives Ltd.	8.6	2.9	11.5
1969-70	Zuari Agro-Chemicals Ltd.	15.1	3.8	18.9
1976	Escorts Limited	<u>6.6</u>	<u>-</u>	<u>6.6</u>
	TOTAL	49.6	8.8	58.4
	Less: Sold	6.0	1.6	7.6
	Repaid	11.9	-	11.9
	Cancelled	<u>6.2</u>	<u>0.7</u>	<u>6.9</u>
	Now Held	25.5	6.5	32.0
	Undisbursed	10.6	-	10.6

C. PROJECTS IN EXECUTION^{1/}

Generally, the implementation of projects has been proceeding reasonably well. Details on the execution of individual projects are below. The level of disbursements was US\$551 million in FY76 or 62% of Bank Group commitments to India in that year. The undisbursed pipeline of US\$1,640.8 million as of December 31, 1976, corresponds roughly to commitments over the preceding two-year period and reflects the leadtime which would be expected given the mix of fast and slow-disbursing projects in the India program.

Ln. No. 902 Tenth Industrial Credit and Investment Corporation of India Project; US\$70.0 million loan of June 8, 1973; Effective Date: August 16, 1973; Closing Date: December 31, 1978

Ln. No. 1097 Eleventh Industrial Credit and Investment Corporation of India Project; US\$100 million loan of April 2, 1975; Effective Date: July 1, 1975; Closing Date: December 31, 1980

These loans have supported industrialization in India through a well-established development finance company. Loan 902-IN is fully committed and commitments are progressing satisfactorily for Loan 1097-IN. Disbursements under Loan 902-IN are ahead of schedule. A proposal for a twelfth loan is under consideration.

Ln. No. 614 Tarai Seeds Project; US\$13.0 million loan of June 18, 1969; Effective Date: September 12, 1969; Closing Date: December 31, 1977

This loan to the Tarai Development Corporation is to assist in the production, processing and marketing of certified seeds of high yielding varieties. The corporation is working effectively and has developed an excellent reputation for quality seed. Expansion of three processing plants is well under way. Delivery of some equipment in damaged condition, and retendering, because of poor response for some others, has delayed delivery schedules necessitating an extension of the Closing Date by one year to December 31, 1977.

^{1/} These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

- Cr. No. 203 Punjab Agricultural Credit Project; US\$27.5 million credit of June 24, 1970; Effective Date: September 4, 1970; Closing Date: June 30, 1977
- Cr. No. 226 Andhra Pradesh Agricultural Credit Project; US\$24.4 million credit of January 8, 1971; Effective Date: May 10, 1971; Closing Date: June 30, 1977
- Cr. No. 249 Haryana Agricultural Credit Project; US\$25.0 million credit of June 11, 1971; Effective Date: November 2, 1971; Closing Date: June 30, 1977
- Cr. No. 250 Tamil Nadu Agricultural Credit Project; US\$35.0 million credit of June 11, 1971; Effective Date: November 2, 1971; Closing Date: June 30, 1977
- Cr. No. 278 Mysore Agricultural Credit Project; US\$40.0 million credit of January 7, 1972; Effective Date: September 25, 1972; Closing Date: June 30, 1977
- Cr. No. 391 Madhya Pradesh Agricultural Credit Project; US\$33.0 million credit of June 8, 1973; Effective Date: October 10, 1973; Closing Date: December 31, 1977
- Cr. No. 392 Uttar Pradesh Agricultural Credit Project; US\$38.0 million credit of June 8, 1973; Effective Date: October 31, 1973; Closing Date: December 31, 1977
- Cr. No. 440 Bihar Agricultural Credit Project; US\$32.0 million credit of November 29, 1973; Effective Date: March 29, 1974; Closing Date: June 30, 1977
- Cr. No. 540 Agricultural Refinance and Development Corporation (ARDC) Project; US\$75.0 million credit of April 28, 1975; Effective Date: August 5, 1975; Closing Date: December 31, 1977

Apart from the Punjab project, which consists of mechanization equipment only, all the above agricultural credit projects are similar in structure, being designed to provide long- and medium-term credit to farmers through credit institutions for such on-farm investments as tractors, minor irrigation and land-leveling. Disbursement of the minor irrigation components are on schedule. Tractor procurement was delayed following changes in both the supply and demand situations after the projects were originally appraised, which prompted GOI to request that indigenous as well as imported models should be eligible for IDA financing under these credits. The Executive Directors approved this request in December 1973 and those credits which have tractor components have been amended accordingly. Tractor procurement is proceeding satisfactorily. Credit 540 is a continuation nationwide of the previous program of agricultural credit projects, which were confined to individual states. ARDC will continue to act as the financial intermediary for refinancing agricultural credit.

Cr. No. 267 Wheat Storage Project; US\$5.0 million credit of August 23, 1971; Effective Date: November 14, 1972; Closing Date: September 30, 1978

The Food Corporation of India is making satisfactory progress in the execution of this project. Piling and foundation work is nearly completed. Silo construction has begun and staff training is in progress.

Cr. No. 456 Himachal Pradesh Apple Processing and Marketing Project; US\$13 million credit of January 22, 1974; Effective Date: September 26, 1974; Closing Date: December 31, 1978

This project was designed to promote the development of apple processing and marketing in Himachal Pradesh, and comprises grading and packing centers, cold storages, a juice processing plant, road improvements and cableways. The project encountered initial delays due to managerial and technical problems, however, remedial measures have been taken to overcome these difficulties. A recent review mission found a satisfactory improvement in the prospects for successful project implementation.

Cr. No. 403 Telecommunications V Project; US\$80.0 million credit of June 25, 1973; Effective Date: July 30, 1973; Closing Date: December 31, 1977

Material supply problems which delayed the start of this project have been resolved and physical achievements were at record levels during fiscal year 1976. However, to cover the delivery and installation of imported transmission and switching equipment, the closing date was extended by one year to December 31, 1977.

Cr. No. 242 Power Transmission II Project; US\$75.0 million credit of May 3, 1971; Effective Date: July 29, 1971; Closing Date: March 31, 1977

Cr. No. 377 Power Transmission III Project; US\$85.0 million credit of May 9, 1973; Effective Date: October 10, 1973; Closing Date: September 30, 1977

Cr. No. 604 Power Transmission IV Project; US\$150.0 million credit of January 22, 1976; Effective Date: October 22, 1976; Closing Date: June 30, 1981

Power Transmission II suffered initial delays because of problems associated with the preparations for international bidding and the analysis of a very large number of bids involved. All contracts have now been awarded. Due to variations in exchange rates, an undisbursed balance of about US\$2 million, by the Closing Date, is likely. For Power Transmission III, virtually all equipment has been ordered; there will be a substantial cost overrun due to international price increases, part of which is being met from Power Transmission IV. For power Transmission IV, bids for most of the equipment have been invited.

- Cr. No. 264 Cochin II Fertilizer Project; US\$20 million credit of July 30, 1971; Effective Date: December 2, 1971; Closing Date: June 30, 1977
- Cr. No. 481 Trombay IV Fertilizer Expansion Project; US\$50.0 million credit of June 19, 1974; Effective Date: August 21, 1974; Closing Date: December 31, 1977
- Cr. No. 520 Sindri Fertilizer Project; US\$91 million credit of December 18, 1974; Effective Date: February 27, 1975; Closing Date: September 30, 1978
- Ln. No. 1079 IFFCO Fertilizer Project; US\$109 million loan of January 24, 1975; Effective Date: April 28, 1975; Closing Date: March 31, 1979
- Cr. No. 598 Fertilizer Industry Project; US\$105.0 million credit of December 31, 1975; Effective Date: March 1, 1976; Closing Date: June 30, 1980

The Cochin Fertilizer Project is being commissioned, about 31 months behind the appraisal estimate. Progress on the Trombay IV project has been good although project completion may be delayed by about four months because of longer than expected delivery times for critical equipment. Under the Sindri project plant construction and erection is proceeding generally according to schedule except for a one-month delay due to anticipated delays in receipt of some materials. Commencement of commercial production is expected by March 1978. The anticipated cost to complete the project is presently running within budget. The IFFCO project was delayed by about a year as a result of a change in feedstock from fuel oil to naphtha and delays in completion of engineering contracts. The project is now progressing satisfactorily based on naphtha as feedstock. Site work has begun, process- and time-critical equipment is being ordered, and engineering work is well under way. Credit 598-IN is designed to increase the utilization of existing fertilizer production capacity. The project has encountered delays in sub-project preparation and investment approvals by the Government. Further, some of the sub-projects identified earlier may not materialize because of reconsideration by the Central and State governments. The Central Government has submitted a list of sub-projects to replace the ones that are likely to be dropped. Because of the above, the project is likely to be delayed by 6-12 months.

- Cr. No. 294 Bihar Agricultural Markets Project; US\$14.0 million credit of March 29, 1972; Effective Date: July 31, 1972; Closing Date: December 31, 1978
- Cr. No. 378 Karnataka Wholesale Agricultural Markets Project; US\$8.0 million credit of May 9, 1973; Effective Date: September 7, 1973; Closing Date: December 31, 1979

These projects were designed to help with establishment of wholesale markets in a number of towns in Bihar and Karnataka. Progress under the Bihar project has generally been satisfactory. Markets construction in Bihar was delayed due to legal challenges arising out of the state's acquisition of land for market sites; however, these difficulties have been satisfactorily resolved. Construction of markets is well advanced and a number have opened for business. Progress under the Karnataka project is much less satisfactory, however, largely due to deficiencies in market planning, design and construction. These problems and remedial actions have been brought to the attention of the State and Central Government. The project is being monitored closely to try and bring about the necessary improvements in implementation.

Cr. No. 312 Population Project; US\$21.2 million credit of June 14, 1972; Effective Date: May 9, 1973; Closing Date: June 30, 1978

This credit is designed to finance an experimental and research oriented population project in Karnataka and Uttar Pradesh. The project's infrastructure, which would provide the optimum facilities (buildings, equipment, staff and transport) according to GOI standards in selected districts in each state, is almost complete. The two Population Centers, which will design and monitor research aimed at improving the family planning program, are now functioning.

Cr. No. 342 Agricultural Universities Project; US\$12.0 million credit of November 10, 1972; Effective Date: June 8, 1973; Closing Date: December 31, 1979

The project involves the development of the agricultural universities in Assam and Bihar. Initial lag in implementation on account of late appointments of project staff has been overcome. Campus plans have been approved, and construction has started in Assam and is scheduled to start in Bihar by mid 1977. Disbursement which has been slow because of initial delays should accelerate now that construction and equipment procurement are under way.

Cr. No. 356 Industrial Development Bank of India Project; US\$25.0 million credit of February 9, 1973; Effective Date: June 22, 1973; Closing Date: June 30, 1977

Loan No. 1260 Second Industrial Development Bank of India Project; US\$40.0 million loan of June 10, 1976; Effective Date: August 10, 1976; Closing Date: June 30, 1981

The first IDBI Project (Cr. 356) had a slow start mainly due to institutional problems in the participating State Financial Corporations. However, the credit is now fully committed. In order to continue Bank Group's involvement in assisting small and medium scale industries, the second operation (Ln. 1260) was approved on June 10, 1976.

Cr. No. 390 Bombay Water Supply and Sewerage Project; US\$55.0 million credit of January 22, 1974; Effective Date: March 13, 1974; Closing Date: December 31, 1978

A substantial cost overrun on the project from US\$158 million equivalent to about US\$375 million equivalent has been caused by inflation and price increases resulting from delays in appointment of engineering consultants and redesign of certain project components. The project has been redefined and rephased to fit the financing available from the Credit, local loans and bonds, and internal cash generation of the project entity. The revised cost estimates for the implementation period 1975/76 to 1979/80 amount to US\$266 million equivalent excluding interest during construction. All major contracts for civil works, equipment and materials have been awarded. This is expected to considerably speed up disbursements which has been slow. Financial performance of the project entity during 1975/76 was satisfactory, and major rate increases from April 1, 1976 should ensure continuing financial viability of the project entity.

Cr. No. 616 Eleventh Industrial Imports Project; US\$200.0 million credit of February 24, 1976; Effective Date: April 1, 1976; Closing Date: June 30, 1977

This credit was signed on February 24, 1976, and became effective on April 1, 1976.

Cr. No. 427 Calcutta Urban Development Project; US\$35.0 million credit of September 12, 1973; Effective Date: January 10, 1974; Closing Date: December 31, 1978

Following considerable increases in project costs, GOI and IDA finalized a project redefinition in April 1976, to accommodate the project to funding available. It is now expected to be substantially completed by March 1979. Agreements have been reached on consultants services and technical assistance, as provided for under the project.

Cr. No. 482 Karnataka Dairy Development Project; US\$30 million credit of June 19, 1974; Effective Date: December 23, 1974; Closing Date: September 30, 1982

Cr. No. 521 Rajasthan Dairy Development Project; US\$27.7 million credit of December 18, 1974; Effective Date: August 8, 1975; Closing Date: December 31, 1982

Cr. No. 522 Madhya Pradesh Dairy Development Project; US\$16.4 million credit of December 18, 1974; Effective Date: July 23, 1975; Closing Date: June 30, 1982

These three credits totalling US\$74.1 million support dairy development projects organized along the lines of the successful AMUL dairy cooperative scheme in Gujarat State. The Karnataka Project which got off to a slow start has begun to show improvement under new management appointed

recently. Farmer response has been good and about 250 dairy cooperatives with small farmer participation are functioning effectively. Two Dairy Unions have been established. Close supervision is being maintained. In Madhya Pradesh good progress has been made. About 110 new dairy cooperatives societies have been established. Detailed design studies for plant construction are complete. Technical services investments are being made. Contracts have been placed for livestock imports. The Rajasthan project is also doing well. Four milk unions have been formed and excellent progress has been made in organizing the servicing of nearly 350 dairy cooperatives at the village level. Plant-designs are ready, and procurement is to start soon. KDDC decision to procure plant equipment jointly with RDDC and MPDDC on the same tender should lead to a recovery of considerable time lost earlier.

Cr. No. 532 Godavari Barrage Project; US\$45 million credit of March 7, 1975; Effective Date: June 9, 1975; Closing Date: June 30, 1980

Both the civil works and equipment tenders have been awarded after international competitive bidding. Work is in progress.

Ln. No. 1011 Chambal (Rajasthan) Command Area Development Project; US\$52 million loan of June 19, 1974; Effective Date: December 12, 1974; Closing Date: June 30, 1981

Cr. No. 502 Rajasthan Canal Command Area Development Project; US\$83 million credit of July 31, 1974; Effective Date: December 30, 1974; Closing Date: June 30, 1981

Cr. No. 562 Chambal (Madhya Pradesh) Command Area Development Project; US\$24 million credit of June 20, 1975; Effective Date: September 18, 1975; Closing Date: December 31, 1979

Ln. No. 1251 Andhra Pradesh Irrigation and Command Area Development
(TW) Composite Project; US\$145.0 million loan (Third Window)
of June 10, 1976; Effective Date: September 7, 1976;
Closing Date: December 31, 1982

These projects, based on existing large irrigation systems, are designed to improve the efficiency of water utilization and, where possible, to use water savings for bringing additional areas under irrigation. Canal lining and other irrigation infrastructures, drainage, and land shaping are prominent components of these projects. In addition, provisions have been made to increase agricultural production and marketing by reforming and upgrading agricultural extension services and by providing processing and storage facilities and village access roads. Progress of these projects is generally satisfactory and particularly successful with respect to agricultural extension.

Cr. No. 541 West Bengal Agricultural Development Project; US\$34 million credit of April 28, 1975; Effective Date: August 28, 1975; Closing Date: March 31, 1980

The project became effective on July 31, 1975. Successful reorganization of agricultural extension services has been a major achievement, but preparations for lending operations have been slow mainly due to poor coordination of project agencies. IDA and the government of West Bengal have agreed on measures to improve coordination and on a timetable covering a range of project activities. Progress with preliminaries for procurement of equipment, markets construction and riverlift completions are satisfactory.

Cr. No. 526 Drought Prone Areas Project; US\$35.0 million credit of January 24, 1975; Effective Date: June 9, 1975; Closing Date: June 30, 1980

Progress varies among components but overall is satisfactory. Expenditure to date is less than anticipated but is reasonable because price inflation has been much less than expected. Disbursement performance is poor and the Borrower has been requested to expedite claims. Greater attention is now being paid to data collection to measure project performance. This is essential since several components are innovative. The Systems Research Institute of Poona has been contracted to design an information system to facilitate monitoring and evaluation.

Cr. No. 572 Rural Electrification Project; US\$57.0 million credit of July 23, 1975; Effective Date: October 23, 1975; Closing Date: December 31, 1979

Eleven states have now fulfilled the conditions of eligibility for on-lending under this project [compared with six at the time of appraisal]. The project got off to a slow start, due principally to the need to adapt specifications and tender documents to international competitive bidding procedures, but these problems have been overcome. As of September 1976, orders had been placed for 60 approved rural electrification schemes, and tenders had been invited or were in the course of preparation for others.

Cr. No. 582 Railways XIII Project; US\$110.0 million credit of August 26, 1975; Effective Date: October 10, 1975; Closing Date: September 30, 1977

The project is intended to cover most of the foreign exchange requirements of Indian Railway's (IR) investment program from April 1, 1975, through March 31, 1977. Since the approval of the project, increased production in steel products in India and further developments in IR's indigenization program have resulted in a less than anticipated foreign exchange requirement. It is expected, therefore, that of a total Credit of US\$110 million, some US\$30-40 million may be undisbursed at the end of the current project period. During the year 1975/76, IR carried 223 million tons of freight traffic, 6% more than forecasted. The project is being implemented satisfactorily.

Cr. No. 585 Uttar Pradesh Water Supply and Sewerage Project; US\$40.0 million credit of September 25, 1975; Effective Date: February 6, 1976; Closing Date: June 30, 1980

The project had a slow start due to delays in preparation of technical reports for regional and local water authorities. The technical reports for about a third of the project have now been finalized and construction works started in October 1976, about one year behind schedule. All consultants for engineering, organization, management and accounting services for the Jal Nigam (Water Supply Development Corporation) and the Jal Sansthan (water authorities) have been engaged. Significant institutional development can be expected only after the consultants submit their final recommendations. The project is expected to be completed by March 1980, approximately 9 months behind schedule.

Cr. No. 609 Madhya Pradesh Forestry Technical Assistance Project; US\$4.0 million credit of February 26, 1976; Effective Date: May 26, 1976; Closing Date: December 31, 1981

This project will identify a sound resource base for pulp and paper manufacture and related industries, develop suitable logging systems, and undertake a feasibility study to determine optimal use of the existing wood resources in the Bastar District of southern Madhya Pradesh. It also includes a study of ways to integrate the area's tribal population with future development. After initial delays due to difficulties in employing key personnel, project implementation is now satisfactory. For the feasibility study, project authorities have prepared a short list of three foreign consulting firms, who are now being asked to prepare detailed proposals. On the basis of these proposals, the final selection will be made shortly.

Cr. No. 610 Integrated Cotton Development Project; US\$18.0 million credit of February 26, 1976; Effective Date: November 30, 1976; Closing Date: December 31, 1981

Ln. No. 1273 National Seed Project; US\$25.0 million loan of June 10, 1976; Effective Date: October 8, 1976; Closing Date: June 30, 1981

Good progress has been made since negotiations. The National Seeds Corporation (NSC) has withdrawn from seeds production as planned, having handed over to State Seeds Corporation (SSC). Detailed production programs, by variety and responsible institution, have been prepared for breeder, foundation and certified generations. GOI and State Governments have made equity contributions to SSC thus ensuring financing of major project activity. Orders will shortly be placed for processing machinery to provide bridging capacity pending the construction of new processing plants. Tender documents for the first purchases of farm machinery have been finalized.

Ln. No. 1313 Sixth Telecommunications Project; US\$80.0 million loan of July 22, 1976; Effective Date: September 14, 1976; Closing Date: March 31, 1980

Disbursements have commenced and the project is progressing satisfactorily.

Ln. No. 1335 Bombay Urban Transport Project; US\$25.0 million loan of December 20, 1976; Effective Date: March 21, 1977 (expected); Closing Date: June 30, 1980

Procurement work is well in hand. Contracts for 275 single and 175 double deck bus chassis have been awarded and bidding for corresponding bus bodies is in progress. Civil works for bus facilities have been partly commissioned and bidding for 18 of 31 traffic engineering schemes is in progress. Preparations for technical assistance envisaged under the project are under way.

INDIA - MADRAS URBAN DEVELOPMENT PROJECT
CREDIT AND PROJECT SUMMARY

BORROWER: India, acting by its President.

<u>BENEFICIARIES AND</u> <u>AMOUNTS ALLOCATED:</u>	(US\$ million)
(a) Tamil Nadu Housing Board	4.2
(b) Tamil Nadu Slum Clearance Board	3.0
(c) Small Industries Development Corp.	1.5
(c) Tamil Nadu Handicrafts Development Corp.	0.2
(d) Department of Social Welfare	0.2
(e) Tamil Nadu Water Supply & Drainage Board and Madras Corporation	5.2
(f) Madras Corporation	2.0
(f) Department of Highways & Rural Works	2.0
(f) State Police	0.2
(g) Metropolitan Wing of Pallavan Transport Corporation	4.5
(h) Madras Metropolitan Development Authority	1.0

AMOUNT: US\$24.0 million.

TERMS: Standard.

ON-LENDING TERMS: India to Government of Tamil Nadu (GTN), standard terms and conditions.

GTN to implementing agencies, grants (US\$33.5 million) and loans (US\$18.5 million) with maturities of 15 and 20 years, including grace periods of 1 and 3 years, respectively, and interest rates of 10-1/2% and 11% per annum.

PROJECT

DESCRIPTION:^{1/}

The provision of:

- (a) sites and services for about 13,500 families at three sites covering a total area of about 175 ha;
- (b) basic infrastructure services and community facilities in 85 slum areas covering an area of 185 ha with a population of about 23,000 families, with open plots to be developed for an additional 7,500 families;
- (c) sheds, equipment, finance and training to create about 4,000 jobs in small-scale business and about 5,000 jobs in cottage industry in the sites and services and slum improvement project areas;
- (d) buildings, equipment and training to provide supplementary nutrition, health examinations, immunization, health and nutrition education and functional literacy training for about 17,000 pre-school age children and 20,000 women from the beneficiary households in the sites and services and slum improvement project areas;
- (e) measures to rehabilitate the existing water supply and sewerage systems;
- (f) construction of about 12 km of an Inner Ring Road and of pedestrian walkways, bicycle tracks and other road and traffic improvements and traffic engineering measures;
- (g) replacement of 285 over-aged buses and construction of depots, terminals and passenger shelters; and
- (h) technical assistance to assist in development planning capital programming, financial management, project monitoring and evaluation, and staff training.

^{1/} Components are described in the same order as under "beneficiaries and amounts allocated" (Annex III, page 1).

<u>ESTIMATED COST:</u>	(US\$ million)		
	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
(a) Sites and Services	6.8	1.0	7.8
(b) Slum Improvement	4.3	0.6	4.9
(c) Small-Scale Business/ Cottage Industry	2.2	0.2	2.4
(d) Maternal & Child Health	0.7	-	0.7
(e) Water Supply & Sewerage	7.4	1.6	9.0
(f) Road & Traffic Improvement	6.2	1.5	7.7
(g) Bus Transport	5.3	0.6	5.9
(h) Technical Assistance	<u>0.4</u>	<u>0.4</u>	<u>0.8</u>
Subtotal	33.3	5.9	39.2
Contingency (physical)	2.6	0.5	3.1
Contingency (price)	<u>8.1</u>	<u>1.6</u>	<u>9.7</u>
Total Project cost	44.0	8.0	52.0

<u>FINANCING PLAN:</u>	(US\$ million)	
	<u>Total</u>	<u>of which IDA</u>
GTN Loans	18.5	9.1
GTN Grants	<u>33.5</u>	<u>14.9</u>
Total	52.0	24.0

<u>ESTIMATED</u>	(US\$ million)				
<u>DISBURSEMENTS:</u>	<u>FY78</u>	<u>FY79</u>	<u>FY80</u>	<u>FY81</u>	<u>Total</u>
	0.5	7.0	10.5	6.0	24.0

TECHNICAL ASSISTANCE: For MMDA

- Advisors and short-term consultancy services to assist in urban development planning, financial management, capital programming and small-scale industry promotion
- aerial photography and related equipment

186 man-months

For MC

- Consultants' services to assist in reorganization and improvement of the accounting system 152 man-months

For All Executing Agencies

- Training of staff

PROCUREMENT

ARRANGEMENTS:

Procurement of equipment with an estimated total value of US\$5.0 million (e.g., bus chassis, water supply equipment) would be on the basis of international bidding in accordance with IDA guidelines. Indian suppliers competing under international competitive bidding would be granted a preference margin of 15% or the current rate of import duty, whichever is less. Contracts for civil works, with an estimated total value of US\$33.0 million, which will be small and scattered throughout the city, together with contracts totalling an estimated US\$4.5 million for self-help building materials, some water supply and sewerage equipment, traffic engineering and control equipment and medical supplies, would be let under GTN procedures of local competitive bidding acceptable to IDA. The latter contracts would be either of small sizes and unattractive to foreign suppliers, or unsuitable for international competitive bidding by reason of high transportation cost. Bus bodies would be built by the workshop of the Pallavan Transport Corporation, and they would not be financed under the proposed credit.

ECONOMIC RATE

OF RETURN:

21% on 55% of project costs, for which benefits can be quantified.

APPRAISAL REPORT:

No. 1320a-IN, dated February 15, 1977.

INDIA - MADRAS URBAN DEVELOPMENT PROJECT

SUPPLEMENTARY PROJECT DATA SHEET

Section I Timetable of Key Events

(a) Time taken by the country to prepare the project

The proposed project was first suggested in 1973 by GOI and GTN and has subsequently been prepared by MMDA assisted by state and local government agencies.

(b) The agency which has prepared the project

MMDA, assisted by the implementing agencies.

(c) Date of first presentation to the Association and date of first mission to consider the project

April 1975.

(d) Date of departure of appraisal mission

April 24, 1976.

(e) Date of completion of negotiations

January 14, 1977.

(f) Planned date of effectiveness

June 30, 1977.

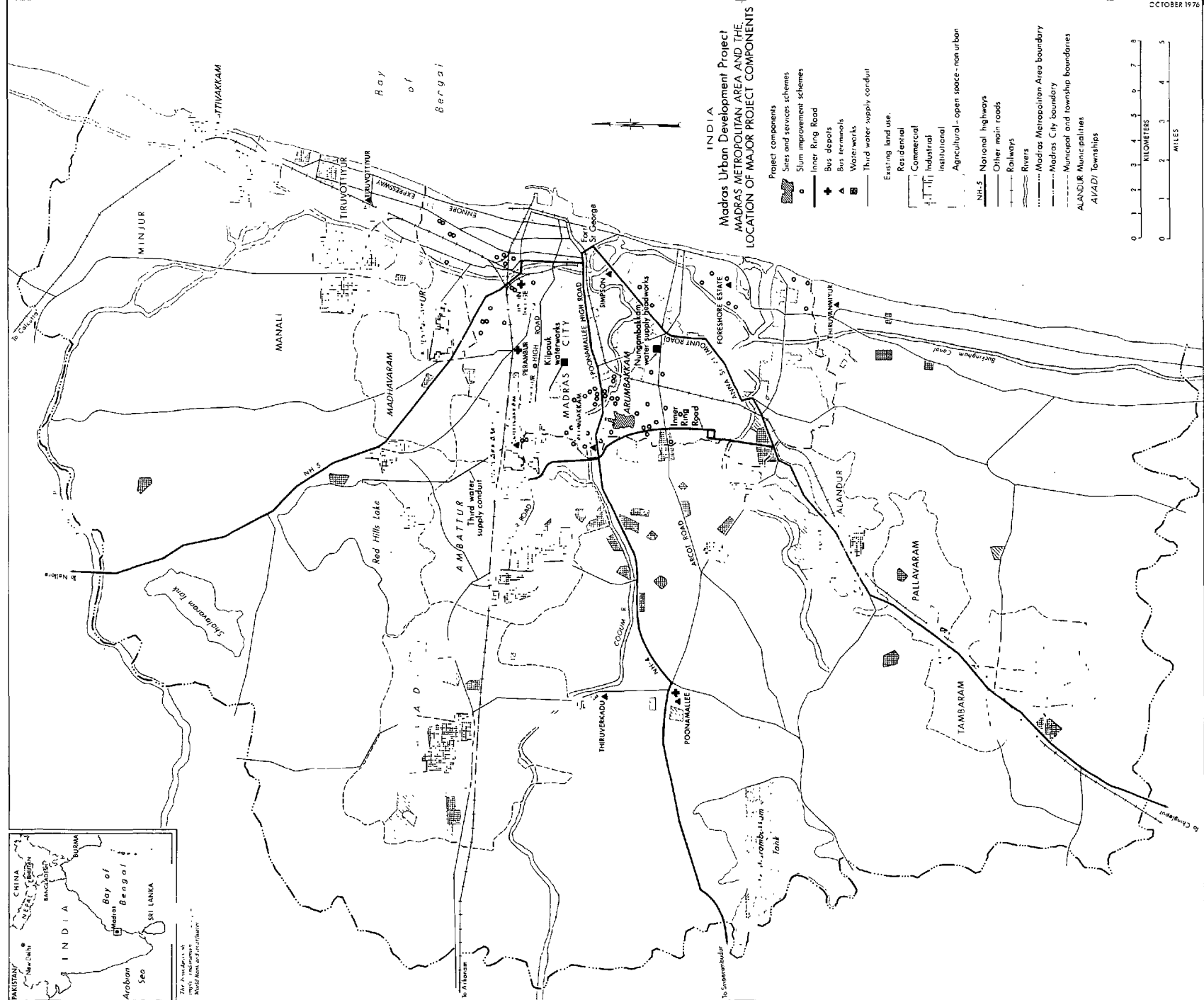
Section II Special IDA Implementation Actions.

Mission in early March 1977 for detailed discussions on procurement and on implementation schedules.

Section III Special Conditions

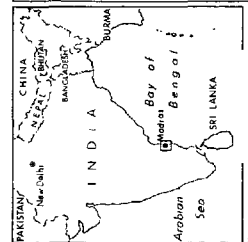
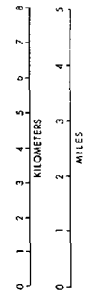
- (a) Selection of works, final engineering design, and implementation arrangements for water supply and sewerage component to be satisfactory to IDA (para 35).

- (b) Arrangements satisfactory to IDA will be made for relocation of people required to move as a result of the project (para 36).
- (c) Establishment of revolving funds to finance further investments in sites and services and slum improvement (paras 43 and 44).
- (d) Undertaking of an income survey to ascertain levels to which rents in flats constructed under the slum clearance and resettlement program could reasonably be raised (para 44).
- (e) Additional GTN contribution to revolving fund to improve by March 31, 1985, all slum areas in Madras (para 44).
- (f) Ceiling on annual expenditures on slum clearance of Rs 37.5 million by TNSCB (para 44).
- (g) Issuance of freehold titles and collection of monthly charges of Rs 10 per plot under the slum improvement component (para 44).
- (h) Preparation of a long-term slum improvement program by June 30, 1978 (para 44).
- (i) Levying of water and sewerage taxes and charges sufficient to meet annual expenditures and provide adequate working capital for these services (para 46).
- (j) Minimum debt service ratio and maximum operating ratios for PTC (para 48).
- (k) Establishment of a Financial Management Department within MC, appointment of a Financial Advisor, increase in MC's self-generated revenues, maximum debt service level for MC (para 49).
- (l) Establishment and maintenance of project monitoring and evaluation system within MMDA, separate project accounts by each implementing agency and consolidated project accounts by MMDA (para 50).
- (m) Establishment of traffic engineering units in MC and DHRW and a traffic management unit by Police (para 49).



INDIA
Madras Urban Development Project
MADRAS METROPOLITAN AREA AND THE
LOCATION OF MAJOR PROJECT COMPONENTS

- Project components**
- Shaded area: Sites and services schemes
 - Hatched area: Slum improvement schemes
- Other symbols:**
- Circle with dot: Inner Ring Road
 - Triangle with dot: Bus depots
 - Circle with cross: Water works
 - Circle with vertical lines: Third water supply conduit
- Land Use and Infrastructure:**
- Thick solid line: Existing land use
 - Thin solid line: Residential
 - Thin solid line with dots: Commercial
 - Thin solid line with vertical lines: Industrial
 - Thin solid line with horizontal lines: Institutional
 - Thin solid line with diagonal lines: Agricultural - open space - non urban
- Transportation:**
- Double line: NH-5 National highways
 - Single line: Other main roads
 - Line with cross-ticks: Railways
 - Wavy line: Rivers
- Boundaries:**
- Dotted line: Madras Metropolitan Area boundary
 - Long-dashed line: Madras City boundary
 - Short-dashed line: Municipal and township boundaries
- Administrative:**
- Thin solid line: ALANDUR Municipalities
 - Thin solid line: AIVADI Townships



This map is based on the 1964-65 Madras Metropolitan Area Survey. Road shown are 1:100,000 scale.