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PROJECT PERFORMANCE ASSESSMENT REPORT

INDIA

TAMIL NADU URBAN DEVELOPMENT PROJECT
(CREDIT 1923-IND)

SECOND TAMIL NADU URBAN DEVELOPMENT PROJECT
(LOAN 4478-IND)

June 19, 2007

Sector, Thematic and Global Evaluations
Independent Evaluation Group (World Bank)

Currency Equivalents (annual averages)

Currency Unit = *Indian Rupees (INR)*

1992	US$ 1.00	INR 25.9	1999	US$ 1.00	INR 43.1
1993	US$ 1.00	INR 30.5	2000	US$ 1.00	INR 45.1
1994	US$ 1.00	INR 31.4	2001	US$ 1.00	INR 47.3
1995	US$ 1.00	INR 32.8	2002	US$ 1.00	INR 48.5
1996	US$ 1.00	INR 35.4	2003	US$ 1.00	INR 46.3
1997	US$ 1.00	INR 36.6	2004	US$ 1.00	INR 45.1
1998	US$ 1.00	INR 41.5	2005	US$ 1.00	INR 44.0

Abbreviations and Acronyms

BOT	Build Operate Transfer
CAS	Country Assistance Strategy
CMA	Commissioner for Municipal Administration
CMDA	Chennai Metropolitan Development Authority
CMWSSB	Chennai Metropolitan Water Supply and Sewerage Board
DMAWS	Department of Municipal Administration and Water Supply
G.O	Government Order
GOI	Government of India
GoTN	Government of Tamil Nadu
HDI	Human Development Index
ICR	Implementation Completion Report
IEG	Independent Evaluation Group
IEGWB	Independent Evaluation Group (World Bank)
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
lpcd	liters per capita per day
MTC	Metropolitan Transport Corporation (Chennai) Ltd
MUDP	Madras Urban Development Project
MUDP II	Second Madras Urban Development Project
NSDP	National Domestic Product
PAD	Project Appraisal Document
PMG	Project Management Group
PPAR	Project Performance Assessment Report
SAR	Staff Appraisal Report
TNHB	Tamil Nadu Housing Board
TNSCB	Tamil Nadu Slum Clearance Board
TNUDF	Tamil Nadu Urban Development Fund
TNUDP-I	Tamil Nadu Urban Development Project
TNUDP-II	Second Tamil Nadu Urban Development Project
TNUIFSL	Tamil Nadu Urban Infrastructure Financial Services Ltd
ULB	Urban Local Body
WSPF	Water and Sanitation Pooled Fund

Fiscal Year

Government: April 1 – March 31

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IEGWB Mission: Enhancing development effectiveness through excellence and independence in evaluation.

About this Report

The Independent Evaluation Group assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank's self-evaluation process and to verify that the Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, IEGWB annually assesses about 25 percent of the Bank's lending operations through field work. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming studies or country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons.

To prepare a Project Performance Assessment Report (PPAR), IEGWB staff examine project files and other documents, interview operational staff, visit the borrowing country to discuss the operation with the government, and other in-country stakeholders, and interview Bank staff and other donor agency staff both at headquarters and in local offices as appropriate.

Each PPAR is subject to internal IEGWB peer review, Panel review, and management approval. Once cleared internally, the PPAR is commented on by the responsible Bank department. IEGWB incorporates the comments as relevant. The completed PPAR is then sent to the borrower for review; the borrowers' comments are attached to the document that is sent to the Bank's Board of Executive Directors. After an assessment report has been sent to the Board, it is disclosed to the public.

About the IEGWB Rating System

IEGWB's use of multiple evaluation methods offers both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. IEGWB evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (additional information is available on the IEGWB website: http://worldbank.org/ieg).

Outcome: The extent to which the operation's major relevant objectives were achieved, or are expected to be achieved, efficiently. The rating has three dimensions: relevance, efficacy, and efficiency. *Relevance* includes relevance of objectives and relevance of design. Relevance of objectives is the extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). Relevance of design is the extent to which the project's design is consistent with the stated objectives. *Efficacy* is the extent to which the project's objectives were achieved, or are expected to be achieved, taking into account their relative importance. *Efficiency* is the extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. The efficiency dimension generally is not applied to adjustment operations. *Possible ratings for Outcome:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Risk to Development Outcome: The risk, at the time of evaluation, that development outcomes (or expected outcomes) will not be maintained (or realized). *Possible ratings for Risk to Development Outcome:* High Significant, Moderate, Negligible to Low, Not Evaluable.

Bank Performance: The extent to which services provided by the Bank ensured quality at entry of the operation and supported effective implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of supported activities after loan/credit closing, toward the achievement of development outcomes. The rating has two dimensions: quality at entry and quality of supervision. *Possible ratings for Bank Performance:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Borrower Performance: The extent to which the borrower (including the government and implementing agency or agencies) ensured quality of preparation and implementation, and complied with covenants and agreements, toward the achievement of development outcomes. The rating has two dimensions: government performance and implementing agency(ies) performance. *Possible ratings for Borrower Performance:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Contents

This report was prepared by Nilakshi De Silva, Consultant, who visited India to assess project performance during December, 2006. Romayne Pereira provided administrative support.

INDIA: TAMIL NADU URBAN DEVELOPMENT PROJECT (CR.1923)

Principal Ratings

	*ICR**	*ICR Review**	*PPAR*
Outcome	Satisfactory	Satisfactory	Moderately Satisfactory
Institutional Development Impact**	Modest	Modest	Modest
Risk to Development Outcome	-	-	Significant
Sustainability***	Likely	Likely	-
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory

Key Staff Responsible

Project	*Task Manager / Leader*	*Division Chief/ Sector Director*	*Country Director*
Appraisal	Evan Rotner	Richard Skolnik	Jochen Kraske
Completion	Hiroaki Suzuki	Jean François Bauer	Edwin R. Lim

INDIA: SECOND TAMIL NADU URBAN DEVELOPMENT PROJECT (LN.4478)

Principal Ratings

	*ICR**	*ICR Review**	*PPAR*
Outcome	Satisfactory	Moderately Satisfactory	Satisfactory
Institutional Development Impact**	Substantial	Substantial	High
Risk to Development Outcome	-	-	Moderate
Sustainability***	Likely	Likely	-
Bank Performance	Satisfactory	Satisfactory	Satisfactory
Borrower Performance	Satisfactory	Satisfactory	Satisfactory

Key Staff Responsible

Project	*Task Manager / Leader*	*Division Chief/ Sector Director*	*Country Director*
Appraisal	Hiroaki Suzuki	Frannie A. Leautier	Edwin R. Lim
Completion	K. Mukundan	Vincent Gouarne	Michael F. Carter

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible Bank department. The ICR Review is an intermediate IEGWB product that seeks to independently verify the findings of the ICR.

**As of July 1, 2006, Institutional Development Impact is assessed as part of the Outcome rating.

***As of July 1, 2006, Sustainability has been replaced by Risk to Development Outcome. As the scales are different, the ratings are not directly comparable.

Preface

This is the Project Performance Assessment Report (PPAR) for the following two urban development projects in India:

- **India: Tamil Nadu Urban Development Project** (Cr.1923-IN), for which the World Bank approved a credit of US$328.0 million equivalent on June 15, 1988. US$33.0 million equivalent and US$16.0 million equivalent of the credit were canceled on December 5, 1991 and May 1, 1993 respectively. The credit was closed on September 30, 1997, two years later than planned.

- **India: Second Tamil Nadu Urban Development Project** (Ln.4478-IN), for which the World Bank approved a loan in an amount of US$105 million equivalent on May 27, 1999. The loan was closed on schedule on November 30, 2004 and US$22.6 million equivalent was cancelled.

Assessing these to projects together adds to a two decade evaluation perspective upon the results of World Bank assistance to Tamil Nadu's urban development. It began with IEG's 1986 PPAR (report # 6330) of the First Madras Urban Development Project and continued with the 1992 PPAR (report # 10579) of the Second Madras Urban Development Project.

The report is based on a review of project documents, including Implementation Completion Reports, Appraisal Reports, Memoranda to the President, legal documents and project files, and on discussions held with Bank staff involved in the projects. An IEG mission visited India in December 2006 to review project results and met with some 80 persons including national officials and experts, local officials and project staff. The IEG mission made field visits to more than 30 project sites in four city corporations and five municipalities in Tamil Nadu. Sites visited include slum improvement schemes, housing schemes, urban roads and street widening, drainage works, street lights, solid waste landfills, public sanitary facilities, e-governance initiatives and other municipal facilities such as bus stands and shopping complexes. The mission also met with a large number of project beneficiaries during these visits to project sites. IEG gratefully acknowledges the courtesies and attention freely given by all these interlocutors, as well as the excellent planning and logistical support received from the Tamil Nadu Urban Infrastructure Financial Services Ltd, the Tamil Nadu Housing Board, the Tamil Nadu Slum Clearance Board, local authorities and the Bank's country office in New Delhi.

Following standard IEG procedures, copies of the draft PPAR was sent to government officials and agencies for their review and comments but none were received.

Summary

This is the Project Performance Assessment Report (PPAR) for two urban development projects in India, the Tamil Nadu Urban Development Project (Cr.1923-IN) and the Second Tamil Nadu Urban Development Project (Ln.4478-IN) implemented in the State of Tamil Nadu between 1988 and 2004.

Tamil Nadu is the most urbanized state in India with 44% of its 62 million population living in urban areas. About 40% of the State's urban population live in its five largest urban agglomerations which are spread along the major transportation corridors across the State. Meeting the infrastructure needs of this urban population has proved to be a challenge and, despite some improvements in coverage, the gap between demand and supply of urban services remains considerable. Tamil Nadu is considered one of the most advanced states in India in terms of implementing urban reforms and giving effect to provisions of the 74th Constitutional Amendment which mandates considerably increased powers to urban local governments including increased financial and administrative autonomy. The two projects assessed in this report were implemented during a climate of rapid decentralization and increased policy focus on urban development in Tamil Nadu.

The last of the so-called integrated urban development projects in India, the Tamil Nadu Urban Development (TNUDP-I) was a multi-sectoral, complex project, involving as many as ten implementing agencies. Its objectives were mainly to improve Tamil Nadu's capacity for efficient management and financing of urban development, check the growth of slums, improve living conditions in them, and strengthen the management of finance and services of urban public transport, with emphasis on the needs of low income households. TNUDP-I was implemented in the ten largest urban agglomerations in the Tamil Nadu including state capital Chennai.

While the name implies otherwise, the Second Tamil Nadu Urban Development Project (TNUDP-II) is not a follow-on project to TNUDP-I. On the contrary, it marked an important shift in Bank lending from government–led integrated urban development operations to market–oriented infrastructure financing operations. Its objectives were to improve urban infrastructure services in Tamil Nadu in a sustainable manner, through strengthening the managerial, financial and technical capacities of Urban Local Bodies (ULBs), mobilizing resources for basic urban infrastructure investments and securing sustainable funding sources for the urban infrastructure investment. To achieve this, the project supported the development of the Tamil Nadu Urban Development Fund (TNUDF). The line of credit component for TNUDF accounted for about 85% of both appraisal and actual costs of the project.

The overall outcome of TNUDP-I is rated as ***Moderately Satisfactory.*** While the relevance of project objectives was *substantial* because of the continuing emphasis on urban infrastructure delivery by both the central and state Governments, efficacy in achieving its objectives is rated *modest.* The project has increased the supply of serviced land through the sites and services and slum improvement schemes, and improved the state's capacity for financing urban development by establishing the Municipal Urban Development Fund (MUDF) but there were shortcomings, particularly as the project has had limited impact on urban transport and traffic management. Overall, efficiency in achieving the objectives is rated *substantial,* mainly because the outputs under the shelter objective met or exceeded targets while costs remained unchanged. The risk to development outcome is rated ***Significant*** mainly because of the declining role of public sector state-level implementing agencies such as Tamil Nadu Housing Board in the provision of urban services in the State and the current dilapidated state of bus transport in Chennai. Bank performance was strong in project preparation, particularly in relation to providing detailed

technical inputs, and was effective through to supervision, making the overall rating ***Satisfactory***. Borrower performance is also rated ***Satisfactory*** because the Government of Tamil Nadu was proactive in pursuing project innovations such as the MUDF and despite a slow start, the project management group and implementing agencies such as Housing and Slum Clearance Boards, did well to complete this complex and demanding project.

The overall outcome of TNUDP-II is rated as ***Satisfactory.*** Because it aims to improve urban infrastructure services and strengthen the capacities of ULBs, the relevance of project objectives is rated *high.* Efficacy in achieving its objectives is also rated *substantial*, mainly because the project achieved a substantial increase in ULB capacity in Tamil Nadu while mobilizing resources for infrastructure investments. Overall, efficiency in achieving the objectives is rated *substantial,* mainly because TNUDF is a more efficient vehicle to implement infrastructure investments for urban development, and also because it was able to leverage the Bank's contribution to mobilize substantial additional funds from the domestic market for such investments. The risk to development outcome is rated ***Modest***, as TNUDF has proven to be a profitable and robust institution. Bank performance was particularly strong in supervision, which was flexible and supportive, as some critical components such as e-governance were developed in line with local capacity during supervision, making the overall rating ***Satisfactory***. Borrower performance is rated ***Satisfactory***, because the Government of Tamil Nadu carried out the necessary urban reforms to facilitate the project and the capability shown by the implementing agency TNUDF.

Experience with these projects highlights the following lessons:

- The TNUDF model is a viable and effective model capable of being replicated elsewhere in India but as the model will have limited success in the absence of ULB capacity, it should be replicated with the design features which were most successful in improving ULB capacity, namely the grant fund for project preparation, and encouraging the development of close working relations between ULBs and Fund, specially as a source of easily accessible technical expertise.
- Priority infrastructural needs of the urban poor are often not the same as that of the urban population as a whole. The financial intermediary approach will have limited success in addressing the basic infrastructure needs of the poor unless the there is a de-linking between subproject financing method and the expected (monetary) returns.
- Efforts should be made to find the right balance between the financial intermediary approach and the direct provision of infrastructure approach in urban infrastructure provision, on the one hand by targeting grant funding mainly to meet the needs of the poor and on the other by encouraging financial discipline and a debt culture among ULBs.
- Cost recovery of infrastructure investments from the poor should be well thought out, implemented in a transparent manner and include a dispute resolution mechanism that the poor can access.
- The Bank is able to have a less costly but still relevant role in financing small city infrastructure needs when it is able to hand over subproject supervision to an intermediary such as the TNUDF. In such instances the Bank's role is redefined as a provider of policy advice through intellectual support and technical knowledge, a role which it performed well in TNUDP-II.
- Projects need to develop meaningful M&E frameworks at design, which focus on the development impact, and with a definite baseline and targets to measure performance as well guide project implementation.

Ajay Chhibber
Acting Director-General
Evaluation

1. Background and Context

1.1 Tamil Nadu, located in South Eastern India, has been one of the fastest growing economies among the Indian states in recent times. In manufacturing, it ranks second among India's states and its per capita income that was below the national average in the early 1980s has become the fourth highest in India. (Table 1.1). The percentage of the population below the poverty line was above 50% of the population until the early 1980s but has since recorded a dramatic decline to just over 20%. In tandem with the relatively high growth rate of its economy and above average per capita income, Tamil Nadu has also improved its human development indicators (HDI). It has made substantial progress in social sectors such as health, literacy and education; literacy levels in the State are second only to Kerala. Overall, from its rank of seventh in the HDI for Indian States in 1981, Tamil Nadu has progressed to third today.

Table 1.1: Tamil Nadu in the Indian Context

	Tamil Nadu	All India
Population (million)	62.1	1,027
Urban Population (million)	27.2	285.3
% Urban population	44	28
% Decadal growth rate in urban population (1991-2001)	43	32
Per capita Income in 1999/2000 (Rs.)	12,504	10,067
Per capita Income in 1999/2000 (US$)	278	224
Overall Incidence of Poverty[2] (%)	21.12	26.10
Urban Poverty (%)	22.11	23.62

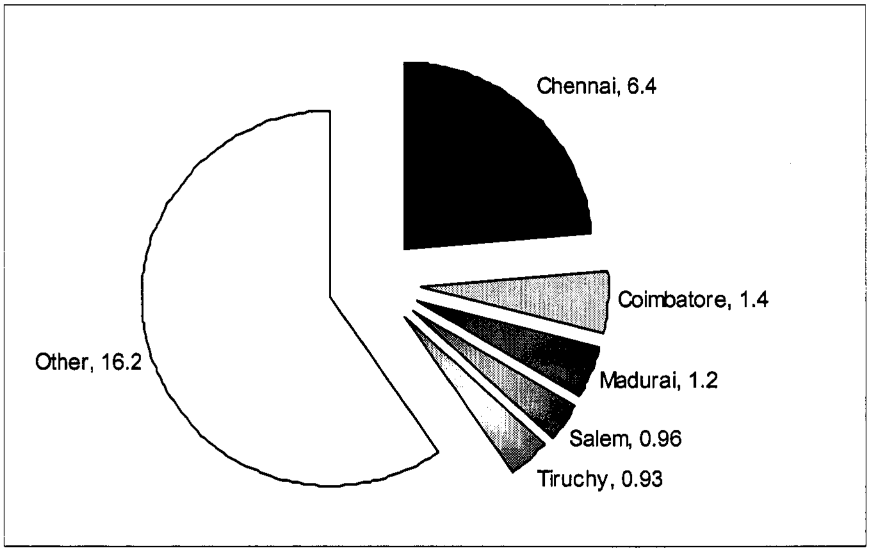
Sources: Census of India, 2001, GoTN Tenth Plan, 2002-2007

1.2 Tamil Nadu is now the most urbanized state in the country. With a total population of 62 million, its urban population of 27.2 million accounts for almost 10% of India's total urban population. Over 40% of the urban population in the State live in its five largest urban agglomerations, namely Chennai (formerly Madras[1]), Coimbatore, Madurai, Tiruchirappalli and Salem (Figure 1). These urban areas are geographically spread along the major transportation corridors across the State that converge upon the metropolitan area of the state capital Chennai. Meeting the infrastructure needs of this urban population has proved to be a major challenge. In 1995-96, the First State Finance Commission Report highlighted that only one in five municipalities provided water supply exceeding 90 liters per day (lpcd), only about 33% of the urban population had access to safe sanitation, solid waste collection rate was about 60% and barely 50% of the urban roads were paved There are some indications that *access* to urban services, particularly in the large cities, is improving, however. According to the 2001 Census, the proportion of households with access to a tap, handpump or tubewell within their premises is between 50% - 65% in the large cities. Similarly between 70% - 90% of

[1] Until the official name change in September 1994, Chennai was known as Madras. In this report, Chennai is used except where, for reasons of continuity (as with project names), it is appropriate to continue to use Madras.

households have bathroom facilities within their houses while 35% - 80% have closed drains.

Figure 1: Distribution of Urban Population in Tamil Nadu (in millions)



Source: Census of India, 2001

1.3 The urban population in Tamil Nadu live in 719 urban local bodies (ULBs) which consist of 6 City Corporations which include Chennai, Coimbatore, Madurai and Tiruchirapalli (Tiruchy), 152 Municipalities and 561 Town Panchayats[2]. The ULBs gained considerable importance with the passage of the 74th Constitutional Amendment Act of India (CAA) of 1992 which gave constitutional recognition to ULBs and substantially broadened their functions. In addition to the continued provision of civic amenities such as water and sanitation, roads and drains, street-lights and collection and disposal of solid waste, the CAA brings within the ULBs' mandate such areas as urban and town planning, regulation of land-use, planning for economic and social development, slum improvement and upgradation and urban poverty alleviation. While implementation of the 74th Constitutional amendment, through urban policy and urban institutional reforms, are said to be in an infant stage in the country as a whole, Tamil Nadu is considered one of the most advanced states in India in implementing the provisions of the CAA[3]. A series of amendments have been passed to the Tamil Nadu District Municipalities Act of 1920 and other legislation pertaining to ULBs, and elections to ULBs have been held every five years since 1996. The Tamil Nadu Urban Local Bodies Bill, which provides for greater financial and functional devolution to ULBs, was approved by the State Legislative Assembly in 1998. The GoTN has also adopted several recommendations made by the Tamil Nadu State Finance Commission to

[2] which are in transition from rural to urban characteristics.
[3] World Bank (2004). *India: Urban Finance and Governance Review,* Washington DC, Energy and Infrastructure Unit, South Asia Region.

devolve financial powers to local bodies, which has also contributed to the speed of implementing urban reforms in Tamil Nadu.

1.4 During the past three decades, the World Bank has been a continuing presence in the urban sector in Tamil Nadu. The first urban project in the state, the Madras Urban Development Project (MUDP) was approved in 1977, and was followed by MUDP II three years later. Both these projects performed satisfactorily and helped to pioneer, or gain greater acceptance for, several policy shifts in relation to urban infrastructure development in Tamil Nadu, such as, sites and services schemes to meet the demand for shelter by the urban poor in place of the Housing Board's prior emphasis on completed units; *in situ* improvements with tenure in place of the Slum Clearance Board's slum clearance activities; and the principle of cost recovery for basic infrastructure investments. In addition, the Bank has also supported two water supply, sanitation and sewerage projects and a roads project in the State. The three urban projects, Tamil Nadu Urban Development I to III are focused on infrastructure delivery and their implementation runs from 1988 through to 2011 when TNUDP III is expected to close. While the Bank urban lending in India as a whole slowed in the 1990s it remained involved in Tamil Nadu's urban sector. Overall, the Bank has committed over US$ 2.5 billion and disbursed close to US$ 1 billion in Tamil Nadu during the past twenty years, making its lending program there one of the largest in India. This involvement has contributed to the Bank's emerging strategy to assist urban development in India as a whole, a key element of which is scaling up successful elements, some of which are drawn from the Tamil Nadu experience, to the national level.

2. Tamil Nadu Urban Development Project (Cr.1923)

Objectives

2.1 Despite being appraised nearly twenty years ago, the objectives of the Tamil Nadu Urban Development Project (Box 1) still remain substantially relevant to country and Bank priorities for the urban sector today. For Tamil Nadu, given its large and growing urban population, meeting urban infrastructure needs remains a top policy priority. Similarly for GoI, which recently launched the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) aiming to encourage reforms and fast track planned development in urban infrastructure in 63 cities throughout the country including in Chennai, Coimbatore and Madurai, over a seven year period from 2005/2006. A continuing high priority for the GoI and GoTN is the focus on meeting the needs of the urban poor and the TNUDP-I aimed to check the growth of slums and to improve urban public transport for the poor. For the World Bank too, the project objectives are still substantially relevant. The Country Assistance Strategy of 2004 envisaged an expansion in lending towards infrastructure in roads, transport, water supply and sanitation and urban development – areas of intervention in TNUDP-I, although Bank attention has since been shifting more towards meeting basic needs in rural areas (CAS 2004: 34).

Box 1: Project Objectives and Components (cost figures are shown in parenthesis)

Objectives	*Components*
Original*: (a) improve Tamil Nadu's state-wide capacity for efficient management of urban and economic development; (b) increase the supply of legal, environmentally acceptable and affordable private and public serviced land and to stem the absolute number of households living in slums; (c) strengthen the procedures and institutions for revising bus fares and enhance the accountability of the Chennai bus company, and improve the identification and implementation of cost-effective urban road and traffic management schemes. Additional objective after Restructuring**: (d) continue the process of policy development and evolution by providing support for the creation of a new financial intermediary called the Tamil Nadu Urban Development Fund (TNUDF). * The statement of objectives (b) and (c) is different between the DCA and the SAR. According to the DCA these objectives read as: (b) check the growth of and improve the living conditions in slums; and (c) improve the management of finance and services of urban public transport, with emphasis on the needs of low income households. As the SAR provides a more detailed statement, this report uses the SAR statement to evaluate project performance. **Restructuring was approved by the Board but the DCA was not amended to include the revised objective (d).	at appraisal: (a) Municipal Urban Development Fund (MUDF) *(appraisal estimate US$127.0m, actual cost US$74.8m)* to establish a new source of municipal funding to provide loan and grant financing for capital projects, such as roads, storm water drains and street lighting, primarily in 80 municipalities in 10 project cities; (b) Urban management, technical assistance, training and equipment *(appraisal estimate US$9.6m, actual cost US$10.4m)* for the high level Empowered Committee, the Project Management Group (PMG), City Management Committees (CMCs) and the project's implementing agencies. This component covers the provision of computer equipment for improving management, more than 20 technical assistance studies relating to urban development and the incremental recurrent costs of the PMG and CMCs for project monitoring and coordination. (c) Land servicing program for publicly developed sites and services *(appraisal estimate US$167.3m, actual cost US$117.4m)* for construction of services residential plots, core housing and community facilities and provision of shelter loans for about 70,000 primarily low income households in the state's 10 largest cities. (d) Guided urban development program of privately developed sites *(appraisal estimate US$9.1m, actual cost US$0) for purchase* of 7,000 low-income services plots from private developers and provision of off-site infrastructure, community facilities and home loans, in Chennai. (e) Slum improvement *(appraisal estimate US$31.7m, actual cost US$13.7m)* for construction of on and off site infrastructure, provision of tenure and community facilities for 84,000 households on public and 10,000 households on private land in 10 cities. (f) Transport and traffic management *(appraisal estimate US$ 68.3m, actual cost US$71.4m)* for construction and improvement of roads, bridges, traffic signals and pedestrian facilities in 10 cities. (g) Assistance to the Pallavan Transport Corporation (PTC) *(appraisal estimate US$40.4m, actual cost US$37.0m)* for provision of 1,000 buses and related civil works and equipment such as depots, terminals, a major workshop and passenger shelter, in Chennai At Restructuring: (h) to facilitate the evolution of the successful MUDF into the TNUDF, by moving the Fund from government to corporate status and establishing a Trust with the participation of private domestic financial institutions.
Final cost: US$324.7m (27% below appraisal)	

2.2 The institutional objective of TNUDP-I focused on capacity building for managing urban service delivery at the *State-level* in particular has become somewhat less relevant today. With the rapid decentralization, the focus has shifted from national and state governments to ULBs at the city level. The GoTN's Tenth Five Year Plan for the 2002 –2007 period emphasizes, for instance, "the need for capacity building within city governments for efficient and responsive urban service delivery" (p.219). Similarly under the priority area of improving governance and service delivery, the 2004 CAS states that "support to decentralization will be an important focus of Bank work…" (p.23).

2.3 A clearer statement of objectives would have improved the project's relevance. The shelter objective (b) is worded as an output, "increase in supply of serviced land", rather than as an outcome. The transport objective (c) is unclear and differently stated in the SAR and DCA, which does not contain the sub-objective relating to urban road and traffic management contained in the SAR. Overall, the ambiguous statement of objectives particularly in relation to objectives (b) and (c) does not facilitate a clear results framework in project design.

Design and Implementation

2.4 The last of the so-called integrated urban development (IUD) projects in India, which were being increasingly criticized for their complexity[4], the TNUDP was a multi-sectoral, complex project. It was approved in June 1988, within three months of the closing of the Second Madras Urban Development Project (MUDP II). TNUDP-I was, in essence, a follow-on operation containing several components such as sites and services, slum upgrading and transport, which are very similar to those in MUDP II. In addition, despite its state-wide objectives and implementation in the ten largest urban agglomerations in Tamil Nadu, including Chennai, the project continued the MUDP emphasis on Chennai. More than 50% of the value of the project was intended for implementation in Chennai. The SAR also notes that "over 70% of the value of the project would be implemented by agencies which have proved their capacity to implement MUDP components" (p.11).

2.5 The project had limited engagement with ULBs, and implementation was mainly through agencies such as the Tamil Nadu Housing Board and the Tamil Nadu Slum Clearance Board at the state level, and the Chennai Metropolitan Development Authority and Metropolitan Transport (Chennai) Corporation Ltd[5] at the city/metropolitan area level. This lack of ULB involvement created a problem when handing over the O&M of project created assets, notably sites and services schemes, which sometimes did not meet the ULB's standards. The IEG mission noted that some infrastructure such as the roads system in the Ganapathy scheme in Coimbatore, are being resurfaced by the ULB on handing over by the TNHB. However, urban local bodies were not completely excluded in TNUDP-I. The Municipal Urban Development Fund focused on ULBs and together with limited capacity building such as provision of computer hardware to municipalities, paved the way for greater involvement with ULBs in TNUDP-II.

2.6 TNUDP-I contained several innovative design features, including one of the first municipal development funds created in India, the Municipal Urban Development Fund (MUDF). The financial intermediary approach through MUDF, driven by local demand, was implemented simultaneously with the (state) government-led IUD approach,

[4] See "*Integrated Urban Projects : Experience in Ecuador, India, and Brazil*" OED Précis, 1992

[5] formerly known as the Pallavan Transport Corporation (PTC)

providing an opportunity to assess the effectiveness of both approaches. The project continued an innovation successfully implemented in MUDP I and II in sites and services, of using a cross subsidy from the sale of a small number of lots for middle and higher income households to help finance a larger number of serviced lots reserved for low income households. Further, while the lots reserved for the poorest households, known as the economically weaker section, are less than 40 m^2 in area, the layout of these lots are an innovative use of space. The lots are distributed around small open spaces, and in practice, many households in this category use these open spaces for such activities as cooking and ablutions, which their own homes are too small, or inadequately ventilated, to accommodate.

2.7 A number of planned activities could not be completed during the implementation period. For example, instead of 590 schemes under the slum improvement scheme (SIP), only 490 slums were improved. Under the urban transport component, 4 out of 10 depots and 7 out of 10 terminal were completed and the planned workshop was not constructed at all. The widening and linking of the Inner Ring road in Chennai, one of the two major urban road and traffic management projects planned under the project was only partially completed due to difficulties in acquiring the land. Two components, namely the guided urban development component (known as GUD) and the land sharing/readjustment for private slums (known as LASER) subcomponent under the SIP, were planned as experiments to encourage private provision of shelter and land development in Chennai, but neither succeeded, due in part to lack of suitable private land and lack of interest among private developers to provide mainly low income housing schemes. The project was extended twice, to enable the completion of originally planned activities and during its extension period, it was also restructured to allow the conversion of MUDF, located within GoTN, into a corporate entity, the Tamil Nadu Urban Development Fund (TNUDF) with the participation of three local financial institutions. TNUDF was established 9 months before actual project closing and the next Bank project in Tamil Nadu's urban sector, the TNUDP II, was essentially a continuation and development of this single component from TNUDP I.

Monitoring and Evaluation

2.8 Focused on tracking implementation progress, meaning the delivery of project components, rather than the achievement of objectives, the design of the project's monitoring and evaluation arrangements was weak. Project M&E data focused on the supply side, such as the number of sites and services lots developed, number of slum improvement schemes completed, and the number and value of sub-projects approved by the MUDF. In most cases, notably the slum improvements, traffic and transport investments, the project assumed that the development impact was achieved merely on the basis of achieving supply side, physical output targets. However, monitoring these outputs, while necessary to track project performance, give no indication of whether the project had any impact on the actual housing situation particularly of low-income households. At a minimum the project could have set output targets which provide an indication of demand, such as number of lots sold and/or occupied in the sites and services, which are easy to monitor and which would have provided a better indication of project performance. In order to assess achievement of objectives, possible outcome indicators the project could have monitored include the proportion of households living in illegal or environmentally unacceptable housing in the State over time and indicators of improving operational and financial performance for MTC, the Chennai public transport company, such as net surplus from operations, fleet utilization and reduced breakdowns.

2.9 Even objectives which set measurable goals are not adequately monitored in terms of knowing the baselines and the targets. For example, one project objective was "to stem the absolute number of households living in slums" but the appraisal document does not set out the baseline of number of slums or slum populations in the project cities, nor what the projects targets are. Consistent monitoring data is particularly important to assess project achievements under this objective because slum areas are identified as such in relation to their poor layout, unsanitary conditions and other negative characteristics – the very characteristics the project-led activities are expected to improve. In the absence of consistently collected time series data showing the absolute numbers as well as the growth rate of slum areas and slum population in the State, it is difficult to assess if the results are more a reflection of changing the definition. Overall, the project's **quality of M&E** is rated ***modest***.

2.10 The monitoring of project compliance with Bank safeguard policies, particularly relating to involuntary resettlement, was uneven. In 1994/1995 the Bank suspended the credit on two occasions due to alleged irregularities in the resettlement of 1,700 households displaced due to a storm water drainage program in Madurai. The suspension was lifted when the Bank was satisfied with the action plan for resettlement of these displaced persons. However, the project was reportedly completed without any other large scale forced evictions and involuntary resettlement and the IEG mission did not find any evidence to the contrary in the sites and services and slum improvement schemes the mission visited. The mission did meet with former encroachers, for example in the sites and services scheme in Ambattur near Chennai, who had been offered land in the sites and services scheme where they have now constructed permanent dwellings. In their case, the situation has improved substantially compared to pre-displacement.

Focus on a key issue – Unintended Impacts of Cost Recovery

2.11 Cost recovery, a principle continued from MUDP I and II, is an important part of the resource mobilization plan for TNUDP-I. However, there are unintended negative impacts in recovering the cost of land and site improvements from the beneficiary slum population, which were not foreseen at project design.

2.12 At appraisal, a pricing scheme was devised to ensure that full costs of chargeable improvements would be recovered, plus a surplus of 40 percent, before formal tenure rights in the form of title deeds are issued to the beneficiaries. However, when the Government Order (G.O) was issued by GoTN in 1990 fixing the price and repayment rates, it was at lower rates than envisaged in the appraisal document. For example, the SAR envisaged that the smallest lot of less than $20m^2$ would be priced at between Rs.50 to 60 per m^2, but the G.O priced it between 30 to 45 per m^2. Thereafter, in 1993 on the recommendation of the Project Management Group, a further G.O were issued by GoTN increasing the previously fixed prices. The prices were increased again when a third G.O was issued in 1995 (which the G.O makes clear was done at the insistence of the World Bank). These increases were substantial, for example between 1993 and 1995 the price of the smallest lot of less than $20m^2$ in Chennai was increased by over 30%.

2.13 As these revisions occurred after the component had begun implementation and in a number of instances after the beneficiary has made some payments, they have resulted in many disputes between the implementing agency, the Tamil Nadu Slum Clearance Board (TNCSB) and the beneficiary population. There is substantial confusion among the beneficiaries about the amount they are required to pay to obtain tenure. The IEG mission met one elderly woman who lodged a strong complaint that despite having completed the payment as stipulated she is yet to receive her deeds giving her title to her lot. After a lengthy discussion with TNSCB officials on site, it transpired that she had made payments according to the prices fixed by the first G.O in 1993. According to TNSCB officials she still owed a substantial amount to the TNSCB before her deed could be issued. In almost all the slum improvement sites the IEG mission visited, the beneficiaries claimed that they were being asked to pay too much. While the IEG mission did not hear allegations or find any evidence of corruption during its site visits, opportunities for corrupt behavior by bill collectors exist, mainly because of the confused circumstances created by the project.

2.14 The manner of implementing this component also created a disincentive for beneficiaries to make regular payments over a period of time. On the one hand, because of the confusion regarding the amounts due, many fear that at the end of the period they may become embroiled in a dispute over the amount due, rather than receive the title deeds. Between 5% - 10% of beneficiary slum households have so far completed their payments and received their deeds. Among these however, many have done so by paying off TNSCB in a lump sum following a windfall gain such as bonus payment or, more frequently, borrowing from a money lender. On the other hand, in the case of several schemes the G.O vesting the land with the TNSCB is yet to be issued, almost 10 years after the project closed. Without the G.O., TNSCB itself has no title to the land and is unable to issue deeds to beneficiaries even when they complete their payments. In Coimbatore for example, out of 7,240 households 567 have paid full cost as per revised pricing but as many as 23% of these families have not been issued the title deeds because TNSCB is awaiting formal ownership of the scheme land from GoTN in 33 out of 59 schemes. In some of these cases the TNSCB has attempted to mitigate the adverse impact of the delay in issuing the deed by instead issuing a supporting letter to assist the beneficiary to obtain mortgages and other bank loans.

2.15 As a result of this inadequately thought out cost recovery scheme in the slum improvement component, the project has inadvertently placed many low-income beneficiaries, most of whom have an income below the poverty line, under a large debt burden. With the frequent upward revisions in prices midway through payment, several beneficiaries have stopped regular payments, incurring penalty interest. By inconsistency and lack of transparency, the project has discouraged beneficiaries from making regular payments and exposed them to exploitation, for example by money lenders, and abuse. In some reported cases when beneficiaries are not current with their payments bill collectors have locked them out of their houses ostensibly to frighten them into making payments. In the case of a dispute with the TNSCB regarding payment, the beneficiaries have no third party mechanism for redress except to appeal to the TNSCB, whose officials are appointed by the State government and not directly accountable to the beneficiaries. Overall, weak project design regarding this aspect of the component has been further exacerbated by weak implementation. The IEG mission could not find any compelling evidence why cost recovery in full was insisted on for this component, and as few beneficiaries are making regular repayments what in fact has been achieved[6].

Outcomes by Objective

2.16 In light of subsequent changes such as decentralization the project has made limited progress in achieving its objective of improving State-level capacity for efficient management and financing of urban development. This however has inevitably become a less relevant objective today. With the exception of sub-projects financed by the Municipal Urban Development Fund (MUDF) which were implemented by ULBs, the project was mostly implemented by state level institutions. These include for example, the Tamil Nadu Housing Board which has not implemented any investment project for the past five years, and has become less important with devolution of responsibility to the local level of the ULBs. The project's contribution to efficient management and financing of urban development is mainly through the MUDF and later the TNUDF, which created a viable model for locally financing urban infrastructure projects, planned and implemented at the local level. However, the Fund's, activities were limited with just Rs.13 crores (approx US$ 4 million[7]) in sanctioned loans and Rs.2.8 crores (approx. US$0.87 million) in disbursements achieved by March 1997. However, good demand for loan financing as well as high repayment rates by client ULBs proved the ongoing viability of the MUDF/TNUDF model as a financing tool for urban development.

2.17 The project has increased the supply of legal and affordable serviced land through the sites and services and slum improvement schemes. The project increased the supply of serviced land in urban and peri-urban areas by adding 87,715 serviced lots in 34 completed schemes. About 50% of these lots were reserved for poor households with incomes close to the poverty line and the IEG mission found many of these original allottees still in occupation. However, these lots are exceedingly small with between 30 to 40 m^2 in terms of area and therefore far from environmentally acceptable. In nearly all of the houses built on these lots there is no provision for windows, and natural light and ventilation is available from just one side. As artificial lighting is required even during the day, this layout results in high energy costs. Despite these shortcomings, most beneficiaries of this category the IEG mission met with at these sites were generally of the view that their current housing conditions are a significant improvement over their previous homes, which appear to have been even smaller, with fewer utilities and, most importantly, for which they paid rent.

2.18 In lots reserved for other categories of low-income households, the majority of current occupants the IEG mission met with did not have incomes below the poverty line.

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[6] Out of a targeted US$8.2 million, actual cost recovery in this component was US$1.5 million, which is about 10% of actual costs of implementing the component.

[7] Based on average exchange rate for the period 1992 - 1997

In many instances the original allottee had sold out to a higher income household even before completing payments under the purchase plan. This phenomenon is particularly noticeable in schemes close to city centers such as Velachery near Chennai, where almost none of the original low-income allottees are still in occupation. This may be an indication that the serviced lot was not affordable to the intended income category. It may also be an indication that the location of the sites was not convenient for the poor; the IEG mission came across instances where the original allottee lived close to the urban center and did not want to move to the scheme as it was further away from the urban center and provided fewer opportunities for informal sector work.

2.19 By providing basic infrastructure such as paved pathways, drains, street lights, public fountains and public baths and tenure security, the project has improved living conditions in 489 slums and benefited about 76,000 people, or 5% of the slum population, in the ten largest urban agglomerations in the state. The beneficiaries the IEG mission met with confirmed that compared to ten years ago, the living environment in their neighborhood has improved tremendously. An elderly male beneficiary who had lived in Kamaraj Nagar scheme in Tiruchy for almost fifty years, said that before the project they had lived in precarious huts made of improvised materials such as planks and reeds, and none of the roads were paved but were frequently flooded and difficult to use. Occupancy was less dense with a lot of open ground, but stagnant water gathered in many places worsening the problem of flies, rodents and mosquitoes. He pointed out that things are much better now because the roads are now paved and the area is more built up. The IEG mission also noted that with improved infrastructure such as roads and the security of tenure provided under the project, many slum dwellers had invested in upgrading their dwellings. Instead of thatched huts and other temporary structures, dwellings are now better built permanent structures, some several stories high. Another beneficiary said that she and her neighbors were no longer worried that they might be forcibly evicted from their homes through official clearance of their area as a slum. She also noted that people's health had improved. With all these improvements, another resident of the same area felt that wealthier people from other parts of the city have started to treat them with more respect.

2.20 As the Census 2001 was the first time the State's slum population was enumerated[8] and consistent time series data is not available, it is difficult to assess whether the growth in the absolute number of households living in slums has been arrested. According to the 2001 census, there are 1.4 million people, or 16% of the population, living in slums in the ten project urban agglomerations in Tamil Nadu. Available data indicates that the State's slum population continues to grow, but at a slow rate. For example, disaggregated data for Madurai indicates that the absolute number of the slum population in the city has increased, from 177,000 persons in 1985 to 199,276 persons in 2001. However, this increase in the slum population is at a slower rate than the overall population growth in Madurai over the same period.

[8] The 2001 census defines a slum as areas notified or recognized as 'Slum' by state/local government and or a compact area of at least 300 population of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities.

2.21 The project has contributed towards improving urban public transport services provided by Metropolitan Transport Corporation (Chennai) Ltd (MTC) mainly by funding the procurement of 1,595 bus chasses during the period 1988-1995, but these benefits were short-lived. The project was expected to finance a slice of MTC's medium term investment program but after the project financed procurement, MTC's yearly procurement has fallen far short of the 170 buses required to replace old buses reaching the end of their economic life. During the past five years, it has procured on average less than 75 buses per year, mainly because of financial constraints faced by the company. Consequently, out of MTC's current fleet of 2,773 buses, almost 87% are older than six years – the maximum operational life span of their buses according to MTC officials. The IEG mission noted the dilapidated condition of most MTC buses operating in Chennai and the officials confirmed that about 20% of the fleet is over twelve years old. Breakdowns per 1,000 km traveled is 0.82, significantly higher than in the other five urban bus companies in the State, which range from 0.01 to 0.12. The deterioration of urban public transport is evident by the number of private vehicles such as motorcycles, cycles, auto rickshaws and motorcars which are clogging the streets of Chennai where average travel speed has reduced from 20km/hour to 12 km/hour.

2.22 The project has made little contribution to institutional aspects of MTC. By facilitating the procurement of twenty computers to track collection, errors/faults can be detected the same day as opposed to ten days later during the audit, which has lead to an increase in efficiency. However, the project has had little impact on strengthening procedures and institutions for revising bus fares whose adjusting are infrequent, the last being in December 2001. MTC fares are said to be among the lowest in India. The company is currently operating at a loss, unable to invest in improving or expanding its services[9]. The project's contribution to MTC was more in the nature of superficial improvements, such as fleet augmentation, but in the absence of substantive improvements in the management and financing of MTC, these benefits have not proved to be sustainable.

2.23 The project also aimed improve the identification and implementation of cost-effective urban road and traffic management schemes, but only 24 out of 34 projects identified were completed and of which, as many as 17 had cost over runs. Of the two major schemes planned in the Chennai metropolitan area, only 80% of the north link of the inner ring road (begun under MUDP I) could be completed, and none at all of the south link due to difficulties in acquiring the needed land in accordance with the Bank's safeguard policy on involuntary resettlement. Many of the large cities in Tamil Nadu, including project cities such as Chennai and Madurai, have severe traffic congestion, and the project's impact on this issue is modest at best.

Ratings

2.24 The **overall outcome** of the project is rated as ***Moderately Satisfactory.*** Despite the more modest relevance of state-level institutional objectives as decentralization has

[9] MTC expects to receive substantial grant funding under the JNNURM scheme for bus procurement and fleet expansion.

proceeded, the continuing high relevance of the urban infrastructure objectives leads to an overall **relevance** rating ***substantial***. However, **efficacy** in achieving project objectives is rated ***modest.*** The project has increased the supply of serviced land through the sites and services and slum improvement schemes, and improved the state's capacity for financing urban development by establishing the MUDF but there were shortcomings, particularly as the project has had limited impact on urban transport and traffic management. Overall, **efficiency** in achieving the objectives is rated ***substantial,*** mainly because the outputs under the shelter objective met or exceeded targets while costs remained unchanged. The **risk to development outcome** is rated ***significant*** mainly because of the declining role of public sector state-level implementing agencies such as TNHB in the provision of urban services in the State and the current dilapidated state of bus transport in Chennai. **Bank performance** was strong in project preparation, particularly in relation to providing detailed technical inputs, and was effective through to supervision, making the overall rating ***Satisfactory***. **Borrower performance** is also rated ***Satisfactory*** because the GoTN was proactive in pursuing project innovations such as the MUDF and despite a slow start, the project management group and implementing agencies such as TNHB and the TNSCB did well to complete this complex and demanding project.

Table 2.1. Outcome ratings, by objective

Objective	Relevance	Efficacy	Efficiency	Outcome
(i) to improve Tamil Nadu's state-wide capacity for efficient management of urban and economic development	Modest	Modest	Modest	Moderately Unsatisfactory
(ii) to increase the supply of legal, environmentally acceptable and affordable private and public serviced land and to stem the absolute number of households living in slums	Substantial	Substantial	Substantial	Satisfactory
(iii) to strengthen the procedures and institutions for revising bus fares and enhance the accountability of the Chennai bus company, and to improve the identification and implementation of cost-effective urban road and traffic management schemes	Substantial	Modest	Substantial	Moderately Satisfactory
Overall Outcome Rating	Substantial	Modest	Substantial	**Moderately Satisfactory**

3. Second Tamil Nadu Urban Development Project (Ln.4478)

Objectives

3.1 While the name implies that the Second Tamil Nadu Urban Development Project (TNUDP-II) is simply a follow-on project to TNUDP-I its namesake, TNUDP-II marks an important shift for the Bank from lending for government–led integrated urban development to lending for private market–oriented financial intermediation for urban investment. In this form, TNUDP-II remains highly relevant to the Bank's CAS 2004 which identifies promoting private sector led growth, enabling the promotion of innovative public - private partnerships for infrastructure development, as program priorities. The focus on strengthening the managerial, financial and technical capacities of ULBs is also a central to both GoI and GoTN's decentralization policies.

3.2 The objectives of mobilizing resources and securing sustainable funding for basic urban infrastructure investments are consistent with CAS 2004, where the Bank sets out its strategy of supporting the urban reform agenda while strengthening, among other things, urban management, governance and resource mobilization. The GoI, in its Tenth Plan, recognizes that urban infrastructure cannot be funded by budgetary support alone, and that the objective of urban reforms should be to augment the resources of the ULBs to provide for adequate maintenance of civic services, and undertake expansion of infrastructure to meet growing needs.

Box 2: Project Objectives and Components (cost figures are shown in parenthesis)

SECOND TAMIL NADU URBAN DEVELOPMENT PROJECT (LN.4478)	
To improve urban infrastructure services in Tamil Nadu in a sustainable manner, through (i)strengthening the managerial, financial and technical capacities of Urban Local Bodies (ULBs); (ii) mobilizing resources for basic urban infrastructure investments; (iii) securing sustainable funding sources for the urban infrastructure investment.	**Part A : Line of Credit** *(appraisal estimate US173.0m, actual cost US$160.1 m)* for financing through the Tamil Nadu Urban Development Fund (TNUDF) basic infrastructure investments such as water supply, sanitation, solid waste management, roads, transport, sites and services, area development, and other remunerative and non-remunerative urban infrastructure, sponsored by eligible ULBs and statutory boards (e.g TNSCB) **Part B : Integrated Sanitation Program** *(appraisal estimate US$10.0m, actual cost US$15.8m)* (i) providing capital grants to beneficiaries for public sanitation and solid waste collection and disposal; and (ii) assisting project management unit (PMU) and ULBs in the preparation and implementation of sub-projects through the provision of consultants' services **Part C : Institutional Development** *(appraisal estimate US$20.95m, actual cost US$12.04m)* for (i) capacity building of ULBs; (ii) capacity building of the state Department of Municipal Administration and Water Supply (DMAWS) and PMU; (iv) technical assistance to TNUDF and selected ULBs to raise funds from the domestic capital market; and (v) establishment and operation of the PMU.
Final cost: US$188.9m (8% below appraisal)	

3.3 Unlike TNUDP-I however, TNUDP-II did not contain an explicit poverty focus. The main TNUDP-II objective, to improve urban infrastructure services in Tamil Nadu in a sustainable manner, is not focused upon meeting the needs of the urban poor in particular. Perhaps to compensate the lack of an explicit poverty focus in its objectives, the project contains a component, called the Integrated Sanitation Program (ISP), which is entirely focused on the low-income beneficiaries. This also shows a degree of recognition during appraisal that projects which aim to address the needs of an entire population may disproportionately ignore the specific needs of the poor.

Design and Implementation

3.4 Accounting for about 85% of both appraisal estimates and actual project costs, the line of credit component through the financial intermediary Tamil Ndau Urban Development Fund (TNUDF) is the most notable feature of project design. The establishment of the financial intermediary in the form of MUDF as well as its conversion into TNUDF, together with a Grant Fund facility, had already been completed in 1996 under TNUDP-I. The TNUDP-II operation was structured as a vehicle to strengthen, develop and expand the operations of this fund. As MUDF the fund functioned well during its life span, but its design contained certain limitations which constrained its future growth, such as its location within State government. When it became TNUDF, the structure of the fund with a trustee company to oversee it and a separate management company to administer it[10] might have appeared cumbersome but it has proven to be effective. Most importantly, this structure has brought the Fund legitimacy by its association with government public good priorities on the one hand and private sector pursuit of efficiency and profitability, on the other.

3.5 To help strengthen ULB capacity, the project provided training through traditional methods such as study tours mostly for elected officials, and 35 stand-alone courses for specialized groups of officials such as in double entry accrual accounting for municipal accountants. The project also provided a number of trainings related to computerization in functional areas for revenue officials, engineers and sanitary officials. This training was supplemented by technical assistance in the preparation of city plans and in the design of infrastructure projects supported by TNUDF grant funding. This twin track approach allowed ULB officials to gain the theoretical knowledge as well put this learning into practice. The project's pragmatic approach to training was appreciated by several local officials with whom the IEG mission met in the cities visited. They found the courses directly relevant and applicable to their day-to-day work.

3.6 Given the in-house implementing capacity of agencies such as TNUDF, some of which was built up during the implementation of TNUDP-I, the Bank's primary role was to provide intellectual and knowledge support to the local implementing agencies of the

[10] About 29% of the Fund's capital as well as 51% in both the trustee company Tamil Nadu Urban Infrastructure Trustee Company Ltd (TNUITCL) and the management company Tamil Nadu Urban Infrastructure Financial Services Ltd (TNUIFSL) are held by three domestic financial institutions, namely ICICI, HDFC and IL&FS, while the remainder is held by GoTN. Hereinafter in this Report, "TNUDF" is used to refer to all three entities, that is the fund, the management company and the trustee company.

project. For TNUDF the Bank performed this function well, helping the Fund execute innovative forms of resource mobilization, such as BOT schemes, municipal bond issues and pooled financing, some of them for the first time in India. The Bank's focus upon TNUDF was appropriate for a component that accounted for the vast majority of the project's costs. Other smaller project components benefited less from Bank intellectual inputs. For example, none of the supervision missions included an information technology (IT) specialist to support Tamil Nadu's e-governance initiative, for instance.

Monitoring and Evaluation

3.7 As with TNUDP-I, the project's M&E was too focused on the supply side, namely the delivery of project components. The SAR in fact identifies as *performance* indicators under the line of credit and ISP components "investment committed and disbursed". There are no baselines identified in the project M&E system and even where targets are set, such as the number of city corporate plans to be prepared and the value of investments under the line of credit component, they relate to outputs rather than outcomes. Performance indicators to assess achievements against the project objective of improving urban infrastructure services in Tamil Nadu that the project could have used include indicators of better urban environment such as a reduction in open defecation, and improvement in quality and quantity of municipal services provided with infrastructure investments supported by the project.

3.8 To some extent because a follow-on project in the form of TNUDP-III was planned, several evaluation studies were carried out to assess the impact of TNUDP-II, such as of the ISP component and the training sub component. These studies carried out by local consultants, provide in depth M&E data to assess performance including on such indicators as the incidence of open defecation before and after the project. However, there is little evidence to indicate that this data were intended or used for project steering, as the studies were commissioned within a few months of project closing.

3.9 TNUDF does not monitor sub projects it funds for their development impact. It does, of course, monitor the performance of the loans, as well as the physical progress of sub projects and the financial health of borrower ULBs. Thus, TNUDF ex-post evaluations primarily assess physical and financial outputs of sub-projects, leaving aside an assessment of their development results, as had been foreseen through the ex-post evaluation reporting on "benefits" and "social parameters" achieved, cited in the outline of policies and procedures for TNUDF contained in the project SAR. The performance monitoring that the TNUDF does carry out tends to be *ad hoc* and informal. Consequently, projects that have not had any impact on meeting urban needs or have had a limited impact, such as the bus stand complex in Tiruppur municipality completed in 2002 but still awaiting political sanction to commence operation of the facility, often pass under TNUDF radar once the ULB has fully settled the loan.

3.10 Only the larger ULBs such as city corporations collect regular and reliable information on urban service coverage and quality within their jurisdictions. In the Tiruchy Corporation, an entire wall of the Commissioner's office displays up to date and detailed data on the corporation's status and achievements in water supply per capita per day, for instance. But this is not typical for ULBs in Tamil Nadu. Most local officials met by the IEG mission admitted that they did not have consistent and reliable data on service coverage and quality in their municipality, nor did they know where such data could be found. Without such data it is difficult for ULBs to identify priority needs, or even to know what progress has been made in neighborhoods where investments have been made. The absence of data of this kind is making itself felt. In response, some steps toward generating quality M&E data have recently been taken. In its policy note of 2006-2007, the Tamil Nadu Municipal Administration and Water Supply Department (DMAWS) plans to assist ULBs in the State to prepare a Human Development Index for such basic services water supply, sanitation, health, poverty alleviation and access to basic needs. Overall, the project's **M&E quality** is rated ***Modest.***

Focus on a key issue – Financing urban infrastructure for the poor

3.11 TNUDP-II provides interesting insights into effectiveness of two different approaches for meeting the infrastructure needs of the poor. While the project objectives did not have an explicit poverty focus, projects benefits were expected to reach the poor in two ways: (i) under the integrated sanitation program (ISP), the poor are identified and directly targeted to receive project investments, and (ii) under the market driven financial intermediary approach to improve urban infrastructure, the poor are expected to benefit through projects benefiting the entirety of the urban population.

3.12 The traditional approach of directly providing infrastructure to identified groups was followed in the ISP component where public sanitary complexes, with toilets and washing areas, were constructed in under-served areas such as slums. A typical ISP complex is spacious and well designed, containing separate male and female sections, each with about 5 toilets, sometimes specially constructed children's toilets, about 5 bathing areas and several areas for washing clothes. These investments have met a felt need for sanitation among the urban poor in Tamil Nadu, particularly in the corporations and large municipalities where the new facilities tend to be better maintained, and where there are as many as 500 users per facility per day. Many of these sanitary complexes are located in or near low-income and slum settlement areas, and most users do not have private toilet facilities in their homes. In most cases, beneficiaries have previously used open spaces such as river banks, and report a substantial improvement in their quality of life with the construction of the ISP complex in their neighborhood because they have access to a functioning and well maintained toilet and washing facility.

3.13 Despite being provided through grant funding to ULBs, some elements of cost recovery are included in the ISP design. All users pay a small sum, ranging between Rs.0.50 to Rs.2.00 (less than US$0.05), each time they use the facility, which is intended to cover the cost of O&M. The low-income women's groups who manage and maintain the building have started innovative schemes such as small shops within the premises to sell washing powders and similar requirements of their clients, to generate additional revenue. With these funds the women's groups meet the operating expenses of the ISP such as electricity charge and other O&M needs of the facility. This experience provides more evidence to support the idea that (modest) cost recovery is possible for poverty focused infrastructure projects.

3.14 In contrast, the impact on the poor from the market driven financial intermediary approach to improving urban infrastructure is less apparent. Initially subprojects funded under the MUDF and later the TNUDF were mainly those which enabled revenue generation and cost recovery. While some of the earliest projects were simple revenue generating projects such as shopping complexes and bus terminal, the TNUDF in particular is increasingly funding basic infrastructure services in water supply, sanitation and roads. Many of these projects incorporate the cost recovery principle, such as toll charges in Madurai's inner ring road, and borrower contribution in Alandur's sewerage scheme. An assessment of TNUDF's portfolio shows that most projects are geared towards those beneficiaries able and willing to pay, rather than focusing specifically on the urban poor. Some local officials the IEG mission met with, particularly in the smaller municipalities, said that they do not want to consider loan financing for subprojects that do not generate sufficient revenue to repay the loan because otherwise it is difficult for the ULB to find the necessary funds to meet repayments, from other sources.

3.15 While the poverty impact of directly targeted components as the ISP is clear, the poverty impact of projects funded through loan financing is not so evident. The experience of TNUDP-II suggests that while the financial intermediary approach may be more efficient, there is still a place for direct provision of basic infrastructure for the poor to ensure that their needs are met. This however may be changing. In some larger ULBs, the IEG mission met local officials who do not see a necessary link between user charges and funding source for infrastructure investments. They insisted that as repayment of loans were made from the ULB's general revenues, there was no bar to carrying out poverty focused projects which have limited prospects of cost recovery, from debt financing. This de-linking needs to be encouraged if the financial intermediary approach is to facilitate investments focusing on the needs of the urban poor.

Outcome by Objective

3.16 TNUDP-II has contributed to improving urban infrastructure services in Tamil Nadu, directly through projects funded by TNUDF and the integrated sanitation program (ISP) component, and indirectly through revenue increases and capacity building of municipalities, which have undertaken infrastructure projects with their own funds. By March 2005, 39% of TNUDF's portfolio of projects related to investments in bridges and roads, 38% to sewerage and sanitation and 17% to water supply. The IEG mission saw many of these investments functioning well. For example, the inner ring road in Madurai financed by a municipal bond issue placed with the assistance of TNUDF, enjoys robust traffic and generates about Rs.60 million (approx. US$1.4 million[11]) per year through toll charges, which is sufficient to meet the annuity payment of Rs.21 million (US$0.48million) as well as O&M costs of the road. More than 1,500 public toilets were constructed under the integrated sanitary program, and the IEG mission could see many project sanitary complexes intensively used and functioning well. As many users had no proper facility before, the project's public toilets program is estimated to have reduced open defecation by 80%.

[11] At average exchange rate for the period 2000 to 2005

3.17 The project design, of using a financial intermediary to retail to ULBs whole Bank funds, enabled a large number of small projects to be completed, which reflects the nature of small city and town infrastructure needs. Upto March 31, 2005, the TNUDF had funded as many as 198 subprojects and covering all the 6 city corporations and more than 80 out of 102 municipalities in the state. Many of the projects funded by TNUDF, such as the improvements to the land fill sites in Tiruchy and Theni, and improvements to urban roads in Tiruppur, cost less than US$0.5 million (approx Rs.22.5 million).

3.18 Managerial, technical and financial capacities of ULBs have improved over the life of the project. All ULBs in the State have participated in training programs carried out under the project, organized under the overall supervision of the Department of Municipal Administration and Water Supply (DMAWS), and relating to, among others, accounting systems, computerization and preparation of city plans. These trainings have assisted most ULBs to effectively shift to computerized collection of municipal taxes and fees and the accrual accounting system, both of which have since been implemented statewide. Tamil Nadu is considered relatively unique among Indian states in having introduced double entry accrual accounting in all ULBs, and the project can take substantial credit for supporting this reform[12]. Exposure to success stories in other parts of India, such as the study tour of the e-governance initiative in Vaishali, Bihar, has also had a beneficial effect upon ULB officials, often galvanizing mayors and chairpersons to innovate in providing urban services.

3.19 ULB financial capacity has also improved over the life of the project, due in large part to the computerization of tax and non tax revenue collection. Tiruchy Corporation reports that due to various measures including computerized tax collection, the Corporation has increased its revenue by 60% from 2003/04 to 2004/05. It used the additional revenue to undertake new infrastructure investments of its own, such as the water supply project in the under-served Srirangam area. In Madurai Corporation, the e-governance initiative was introduced in the middle of FY2004, and the collection of property taxes alone increased by 20% between FY2004 and FY2005, compared to an increase of just 6% the previous year. The ULB revenue performance can now be monitored "real time", meaning that the day's revenue collection from a number of collection centers spread throughout the ULB is consolidated and accessible, to both decision makers at local and state levels and the public, via the ULB web page[13]. The increased and easy availability of data on payment of taxes and other municipal charges has allowed ULB staff to keep track defaulters and improve compliance. The initiative has also greatly added to the convenience of ULB taxpayers. The IEG mission met residents in collection centers in Tiruchy and Madurai, who particularly appreciated that they can now make all their municipal payments under one roof, at their own convenience.

3.20 So far, 46 ULBs have prepared a city corporate plans, up from 11 at project completion, as against the project target of 50 by project closing. Even among those ULBs who have prepared such plans, the exercise has not had the intended effect and the

[12] World Bank (2004). *India: Urban Infrastructure and Governance Review,* Washington DC, Energy and Infrastructure Unit, South Asia Region, p.30

[13] http://tnulbs.tn.gov.in

document has not become a key driver of ULB activity. It has however required a mapping of the urban infrastructure in the city, which provides important baselines for future infrastructure investment planning.

3.21 The experience of planning and implementing infrastructure projects in partnership with TNUDF is one of the most important ways in which ULB capacity has been strengthened under this project. ULBs were able to access project preparation assistance provided under the Grant Fund managed by TNUDF, as well as obtain technical inputs from interacting with TNUDF staff. The Grant Fund was set up when TNUDP-I was restructured in 1997, to encourage urban infrastructure investments targeted to the urban poor, and to finance technical assistance and resettlement and rehabilitation costs. By project closing, Rs.71.69 crores (approx. US$15.9 million) had been disbursed under the Grant Fund and 25% of this was allocated towards project preparation. Many of the larger ULBs such as Alandur and Ambattur near Chennai have used the grant fund to carry out design studies for complex projects such as underground sewerage schemes while smaller ULBs have used it for anything from designing bus stands in Cumbum to roads study in Theni. In some cases, the TNUDF has provided capacity to ULBs at its own expense. For example in Tiruchy Corporation, a solid waste management study was carried out using the grant financing arm, and based on discussions with TNUDF regarding project funding options, ULB is proposing on the basis of the study to finance a bio gas plant using a BOT mechanism. Because the grant fund was located within the TNUDF, ULBs were able to access both the external experts as well as the technical expertise now available with TNUDF staff, in particular regarding innovative funding mechanisms.

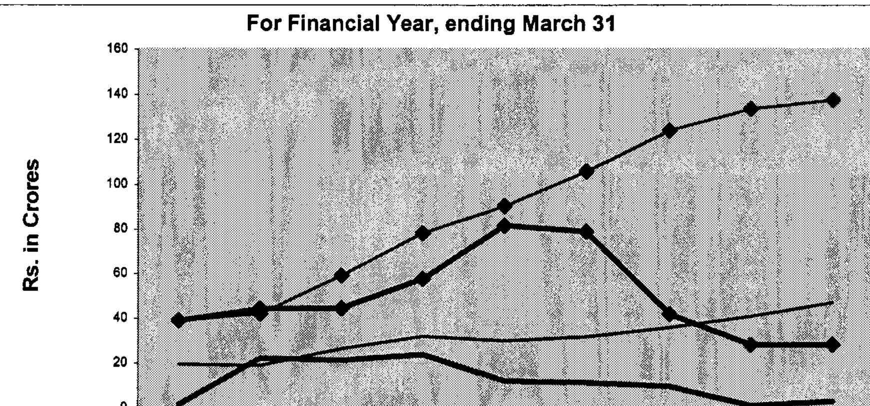
3.22 Substantial resources were mobilized for urban infrastructure investments through the project. By project closing US$160 million of investments were made directly under the project, as against US$183 million (or 20% of the capital investment requirements of corporations and municipalities) target set at appraisal. In compliance with the loan covenant requiring TNUDF to mobilize from the market US$25 million by the time US$40 million was disbursed, the fund has raised Rs.1100 million (approx US$25 million at average exchange rates) from the capital market on the basis of an LAA+ rating[14]. The Madurai Corporation, assisted by the TNUDF's management company, succeeded in raising Rs.290 million (approx.US$4.5 million) by issuing a municipal revenue bond to finance the inner ring road project which was subscribed to by a mix of public and private institutional investors including TNUDF and several domestic banks. The Water and Sanitation Pooled Fund (WSPF), managed by TNUIFSL, was set up to enable ULBs to access debt finance from markets and, has mobilized Rs.304 million (approx. US$6.7 million) through a bond issue under a USAID guarantee, which was floated in 2002-2003. Alandur Municipality, with the assistance of TNUDF successfully financed its underground sewerage system using a BOT mechanism, which is serving as a role model to other municipalities seeking to invest in similar infrastructure projects. The project has facilitated new and innovative ways for mobilizing resources for urban infrastructure investments, with some measures such as the WSPF, the first of its kind in India. The project also hoped to encourage domestic financial institutions (FIs) to increase their lending in the urban sector but the three shareholding FIs in TNUDF, who

[14] indicating "high safety" according to the rating agency ICRA Ltd Chennai

were expected to contribute US$25 million in the form of co-financing of sub-projects of the TNUDF, did not ultimately do so. A study by the Urban Institute finds however that the fact that TNUDF mobilized as much funds as it did, and that too from the capital market at large, rather than entirely from the three participating FIs, is a favorable development[15].

3.23 TNUDF has proven over its ten year existence to be a viable institution, providing a sustainable funding source for urban infrastructure investments (Table 3.1). Its annual income for the year ended March 31, 2005 was Rs.28.44 crores (approx. US$ 6.3 million), from a high of Rs.81.8 crores (approx. US$17.5 million) in 2001/02. The declining trend in total income observed since 2001/02 is due in part to a substantial drop in income from other sources but may also reflect the declining competitiveness of TNUDF on-lending which is tied to repayment rates to the World Bank. The Fund is currently attempting to address this issue by approaching cheaper lenders. Since 1998, TNUDF recorded a net surplus after tax and provision for contingency, but this has fallen below projections since 2000 which reflects the drop in income rather than an increase in expenditure. The highest profit of Rs. 24 crores (approx. US$5 million) was recorded in 2000/01 and the lowest, Rs.1.65 crores (US$0.35 million) in 2004/05.

Table 3.1 TNUDF Financial Performance Indicators (Actual and Projected) 1998-2006



	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total Income (actual)	39.02	44.52	44.73	57.91	81.82	79.06	42.18	28.44	28.68
Total Income (projected)	39.01	42.25	59.31	78.37	90.36	105.87	124.15	133.68	137.68
Profit after tax (actual)	1.65	22.31	21.41	24.04	12.36	11.57	10.02	1.41	3.42
Profit after tax (projected)	19.53	19.04	26.65	32.18	30.19	32.02	36.12	41.18	47.5

Sources: SAR and TNUDF Annual Report 2005-2006

3.24 By March 31, 2005, the Fund had approved 198 projects at a total project cost of Rs.13,150 million (approx US$ 290 million). Loans approved amount to Rs.7,524 million (approx. US$ 167 million), of which more than 65% had been disbursed by project closing. With corporatization, the fund no longer has access to GoTN's intercept facility but provision is made in loan agreements with ULBs to escrow their collection, and the

[15] Petersen, G (2003) *India: Tamil Nadu Urban Development Fund.* Washington D.C. Urban Institute

Fund continues to enjoy 100% repayment rate from its ULB borrowers. On the demand side, the TNUDF has now corrected its interest rate lag, which had meant that TNUDF responded to market shifts with a one year lag, and by adjusting its interest rates every 6 months, offers competitive rates on its products.

3.25 Through the TNUDF, the project has helped to secure other sustainable funding sources for urban infrastructure. Through the Water and Sanitation Pooled Fund, the project demonstrated the viability of tapping the private capital market by pooling the investment needs of a group of ULBs. The municipal bond issue in Madurai provides an infrastructure financing model that can be replicated by other creditworthy, larger ULBs. By supporting successful BOT operations, such as the Alandur underground sewerage system, which also demonstrated the viability of using user contributions to finance an infrastructure priority, the project supported private financing of urban investments. The project has provided a basis to generate a debt culture among ULBs in Tamil Nadu the sustainability of institutions such as the TNUDF is dependent on a culture of financial discipline which is slowly emerging, particularly among the larger ULBs in Tamil Nadu. Government, both at central and state level, should take care not to undermine this positive development by providing large and untargeted grant funding through state and central transfers to ULBs.

Ratings

The **overall outcome** of the project is rated as ***Satisfactory.*** Because it aims to improve urban infrastructure services and strengthen the capacities of ULBs, the **relevance** of project objectives is rated ***high.*** **Efficacy** in achieving its objectives is also rated ***substantial***, mainly because the project achieved a substantial increase in ULB capacity in Tamil Nadu while mobilizing resources for infrastructure investments. Overall, **efficiency** in achieving the objectives is rated ***substantial,*** mainly because TNUDF is a more efficient vehicle to implement infrastructure investments for urban development, and also because it was able to leverage the Bank's contribution to mobilize substantial additional funds from the domestic market for such investments. The **risk to development outcome** is rated ***modest***, as TNUDF has proven to be a profitable and robust institution. **Bank performance** was particularly strong in supervision, which was flexible and supportive, as some critical components such as e-governance were developed in line with local capacity during supervision, making the overall rating ***Satisfactory***. **Borrower performance** is rated ***Satisfactory***, because the GoTN carried out the necessary urban reforms to facilitate the project and the capability shown by the implementing agency TNUDF.

Table 3.1 : Outcome ratings, by objective

Objective	Relevance	Efficacy	Efficiency	Outcome
To improve urban infrastructure services in Tamil Nadu in a sustainable manner through:	High	Substantial	Substantial	Satisfactory
(i) strengthening the managerial, financial and technical capacities of Urban Local Bodies (ULBs);	High	High	Substantial	Highly Satisfactory
(ii) mobilizing resources for basic urban infrastructure investments;	Substantial	High	High	Highly Satisfactory
(iii) securing sustainable funding sources for the urban infrastructure investment.	Substantial	Substantial	Substantial	Satisfactory
Overall Outcome Rating	High	Substantial	Substantial	**Satisfactory**

4. Broader Findings

4.1 The experience of TNUDP-I and II, involving almost 20 years of continuous Bank assistance to urban development in the state of Tamil Nadu, suggests that creating municipal capacity involves customized support and a step-by-step approach over a sustained period. The main strength of the financial intermediary approach, tried in both TNUDP-I and II, is that the ULBs are given easy access to customized technical support and local officials are able to discuss and access the Fund's knowledge base of innovative funding mechanisms for urban investments. The TNUDF also provided a grant facility for project preparation which was not tied to TNUDF funding, for which there was a high demand. It brought the required funds, for example to hire consultants, as well as the expert knowledge of the TNUDF staff itself to the ULBs in one easy package. Local officials noted the key part played by these grants in preparing projects for urban development. The relationships that TNUDF staff have built up over time with client ULB officials is key to TNUDF success. As one local official said, "TNUDF is more than a funding agency. They can discuss such things as tariff setting, the scientific manner of doing an asset count and many other technical issues."

4.2 The step by step approach followed by the two TNUDP's also contributed to the effectiveness of capacity building measures. For example, the e-governance initiative begun under TNUDP-I initially involved merely the provision of basic hardware to all ULBs with the aim of creating awareness of computer applications among ULB staff. Thereafter the procurement of IT staff, the development, piloting and revising the software application and the replication of the system to all the ULBs took place over several stages of the project. This allowed time for training, and thus for ULB staff to learn the advantages of switching to computerization of municipal revenue collection for instance. Most municipal staff manning the computerized billing stations in ULBs in Tamil Nadu today do not have an IT background. Their proficiency was achieved on the job, a job in many cases that the TNUDP projects asked them to do.

4.3 The World Bank's long association with Tamil Nadu's urban sector since 1977 is marked by evolution and clarification of the Bank's role. In early projects such as MUDP

I and II, and also to some extent TNUDP-I, the Bank was very much involved in the actual identification of investments themselves, even getting involved in decisions about where the projects would be located within the urban area. In TNUDP-II the Bank played a more wholesale role, leaving micro-decisions about sub-project choice and location to the ULBs with technical advice from TNUDF. Over time, the decision making process has decentralized, moving closer to the local level in Bank funded urban projects in Tamil Nadu. This has also enabled the projects to be more responsive to small city financing needs, as costly Bank inputs are not required for local subproject supervision - which can be done locally by the TNUDF. The Bank's long term and continuous involvement has helped it to support as well as adapt to the increasingly decentralized capacity down to the ULB level.

5. Lessons

- The TNUDF model is a viable and effective model for financing urban infrastructure investments, capable of being replicated elsewhere in India. But as the model will have limited success in the absence of ULB capacity, it should be replicated with the design features which were most successful in improving ULB capacity, namely the grant fund for project preparation, and encouraging the development of close working relations between ULBs and Fund, especially as a source of easily accessible technical expertise.
- Priority infrastructural needs of the urban poor are often not the same as that of the urban population as a whole. The financial intermediary approach will have limited success in addressing the basic infrastructure needs of the poor unless the there is a de-linking between subproject financing method and the expected (monetary) returns.
- The experience of these two projects shows that there are strengths and weaknesses in both the financial intermediary approach and the direct provision of infrastructure approach. While the first is clearly more efficient, the second is often better able to meet the needs of the poor. Efforts should be made to find the right balance of these two approaches, on the one hand by targeting grant funding mainly to meet the needs of the poor and other market failure situations, and on the other by encouraging financial discipline and a debt culture among ULBs.
- Cost recovery of infrastructure investments from the poor should be well thought out and implemented in a transparent manner. Attempting to recover the full cost of infrastructure investments from the poor and strictly enforcing such cost recovery can have unintended negative impacts such as increasing their vulnerability to exploitation and abuse, for example by moneylenders. When such cost recovery mechanisms are implemented their design should include a dispute resolution mechanism that the poor can access.
- The Bank is able to have a less costly but still relevant role in financing small city infrastructure needs when it is able to hand over subproject supervision to an intermediary such as the TNUDF., In such instances the Bank's role is redefined as a provider of policy advice through intellectual support and technical knowledge, a role which it performed well in TNUDP-II.

- Projects need to develop meaningful M&E frameworks at design, which focus on the development impact, and with a definite baseline and targets to measure performance as well guide project implementation.

Annex A. Basic Data Sheet

TAMIL NADU URBAN DEVELOPMENT PROJECT (CREDIT NO.1923-IN)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Total project costs	443.7	324.7	73
Credit amount	328.0	278.3	84
Cofinancing	-	-	-
Cancellation	-	49.7	-

Project Dates

	Original	*Actual*
Board approval	06/15/1988	06/15/1988
Signing	-	09/16/1988
Effectiveness	-	11/07/1988
Closing date	09/30/1995	09/30/1997

Staff Inputs (staff weeks)

	Planned		*Revised*		*Actual*	
	Weeks	*US$*	*Weeks*	*US$*	*Weeks*	*US$*
Appraisal	-	-	-	-	68.7	125,900
Appraisal-Board	-	-	-	-	39.9	70,000
Supervision	-	-	-	-	294.5	592,200
Completion	-	-	-	-	19.0	57,400
Total	-	-	-	-	422.1	845,500

1. The table indicates n/a where information is not available from the Bank's MIS
2. Completion Actuals are final estimates
3. Approximately $70,000 and 35 s/w of supervision inputs were attributable to additional actions taken by the Bank relating to the Credit suspensions over the STOWAD scheme in Madurai.
4. Approximately $130,000 and 70 s/w of supervision inputs were attributable to supervision during the two extensions of the Credit closing date the tasks associated with project restructuring during this period.

Mission Data

	Month /year	No. of persons	Staff days in field	Specializations represented	Performance Rating: Implementation Status	Performance Rating: Development Objective
Through Appraisal	Nov.85	2	14	Economist, Municipal Engineering		
	Oct.16	3	15	Economist, Financial Analyst, Transport		
	Feb.87	6	18	Economist (2), Sanitary Engineer, Financial Analyst, Transport		
Appraisal through Board approval	Oct. 87	5	21	Economist, Municipal Engineer, Trans , Financial Analyst, Urban Planner		
Supervision	July 88	2	14	Economist, Financial Analyst	1	1
	Aug.88	1	3	Trans		
	Apr.89	5	6	Economist, Trans, Financial Analyst, Urban Planner	1	1
	Aug.89	5	10	Economist, Urban Planner, Financial Analyst, Trans, Municipal Engineer	1	1
	Mar.90	1	4	Financial Analyst		
	Jul.90	4	21	Economist, Financial Analyst, Urban Planner, Systems Analyst	1	1
	Nov.90	6	12	Economist, Trans(2), Financial Analyst, Municipal Engineer, Systems Analyst	2	2
	Apr.91	4	9	Economist, Trans, Financial Analyst, Municipal Engineer	2	2
	Sep.91	3	11	Economist, Financial Analyst, Trans	2	2
	Jan.92	4	17	Economist, Sanitary Engineer, Trans (2)	2	2
	Aug.92	3	8	Economist, Sanitary Engineer, Trans	2	2
	Mar-93	3	9	Economist, Municipal Engineer, Trans	2	1
	Dec.93	3	7	Economist, Municipal Engineer, Trans	2	1
	Sep.91	3	11	Economist, Financial Analyst, Municipal Engineer, Trans	2	2

	Month /year	No. of persons	Staff days in field	Specializations represented	Performance Rating: Implementation Status	Performance Rating: Development Objective
	Jan.92	4	17	Economist, Sanitary Engineer Trans(2)	2	2
	Aug.92	3	8	Economist, Sanitary Engineer, Trans	2	2
	Mar.93	3	9	Economist, Municipal Engineer, Trans	2	1
	Dec.93	3	7	Economist, Municipal Engineer, Trans	2	1
	Jun.94	4	14	Economist, Financial Adviser, Municipal Engineer, Trans.	S	S
	Sep.94	4	19	Economist, Financial Adviser, Municipal Engineer, Trans	S	S
	Jan.95	7	20	Economist(2), Financial Adviser, Relocation and Rehabilitation(2), Municipal Engineer, Environment	U	S
	Jul.95	2	13	Economist, Environment	U	S
	Nov.95	2	3	Economist, Environment	S	S
	Mar.96	3	4	Economist, Lawyer, Banking Specialist	S	S
	May 96	3	7	Economist, Lawyer, Banking Specialist	S	S
	Nov.96	4	7	Financial Analyst, Environmental Specialist (2), Relocation and Rehabilitation	S	S
	Feb.97	1	13	Financial Analyst	S	S
	July 97	1	11	Financial Analyst	S	S
Completion	Sep.97	6	14	Economist, Financial Analyst, Urban Planner, Banking Specialist, Environment Specialist, Municipal Engineer		

SECOND TAMIL NADU URBAN DEVELOPMENT PROJECT (LOAN NO.4478-IN)

Key Project Data *(amounts in US$ million)*

	Appraisal estimate	*Actual or current estimate*	*Actual as % of appraisal estimate*
Total project costs	205.0	189.0	92%
Loan amount	105.0	82.2	78%
Cofinancing	-	-	-
Cancellation	-	22.56	-

Project Dates

	Original	*Actual*
Negotiations	02/22/1999	02/22/1999
Board approval	05/27/1999	05/27/1999
Signing	-	07/14/1999
Effectiveness	10/13/1999	10/13/1999
Closing date	11/30/2004	11/30/2004

Staff Inputs (staff weeks)

	Planned		*Revised*		*Actual*	
	Weeks	*US$*	*Weeks*	*US$*	*Weeks*	*US$*
Identification/Preparation	-	-	-	-	-	87,889
Appraisal/Negotiation	-	-	-	-	36.1	193,759
Supervision	-	-	-	-	217.7	664,019
Completion	-	-	-	-	-	-
Total	-	-	-	-	253.8	945,668

Mission Data

	Month /year	No. of persons	Specializations represented	Performance Rating: Implementation Status	Performance Rating: Development Objective
Identification/ Preparation	03/2/1998		Team Leader (1); Urban Specialist (1); Sr. Fin. Expert (1); Fin. Expert (1); Municipal, Engineer (1); Chartered Accountant (1); Environmental Specialist (1)		
Appraisal/ Negotiation	10/23/1998	14	Team Leader (1); Urban Specialist (3); Environmental Specialist (1); Social Specialist (1); Procurement (2); FMS (1); Fin. Expert (1); Chartered Accountant (1); Municipal Engineer (1); Urban Finance SPL (1); LCS SPL(1)		
Supervision	11/05/1999	11	Team Leader/Finance(1); Urban Planner (1); Financial Management (2); Int. Sanit. Pro/Env. (1); Social Issues (1); Urban Indicators (1); Tech.$ Engineering (1); Urban Specialist (2); Research Urban Develop (1)	S	S
	11/07/2000	5	Task Leader/Finance (1); Urban Specialist (1); Municipal Engineer (1); Fin. Mgt. Specialist (1); Procurement Specialist (1)	S	S
	11/01/2001	11	Task Leader/Urban Specialist (1); Finance (1); Municipal Engineer (1); Social Development Specialist (2) Urban Specialist (2) Procurement Expert (1); Financial Mgt/Disbursement (1) Environmental Specialist (2)	S	S
	06/21/2002	7	Sr. Urban Specialist (1); Municipal Engineer (1); Financial Specialist (1); Sr. Social Dev. Special (1); Consultant (2); Sr. Financial Mgt. Specialist (1)	S	S

	Month /year	No. of persons	Specializations represented	Performance Rating: Implementation Status	Performance Rating: Development Objective
	12/16/2002	3	Sr. Urban Specialist (1); Financial Specialist (1); Consultant (1)	S	S
	06/23/2003	11	Task Team Leader (1); Financial Specialist (1); Municipal Engineer (1); Sr. Sanitary Engineer (1); Sr. Financial Analyst (1); Consultant (2); Fin. Mgt. Specialist (1); Finance (1); Land (1)	S	S
	11/23/2003	7	Sr. Urban Specialist (1); Sr. Infra. Finance. Specialist (1); Infrastructure Special (1); Sr. Social Dev. Specialist (1); Environmental Specialist (1); Consultant (1); Municipal Engineer (1)	S	S
	05/31/2004	9	Task Team Leader (1); Financial Specialist (1); Municipal Engineer (1); Environment Specialist (1); Sr. Social Dev. Specialist (1); Sr. Procurement Specialist (1); Procurement Analyst (1); Program Assistant (1); Financial Mgt. Specialist (1)	S	S
ICR	11/92004	11			

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