



**TRAINING MANUAL**  
**ON**  
**URBAN LOCAL GOVERNMENT FINANCE**  
**FOR**  
**SOUTH ASIAN COUNTRIES**

**READINGS AND CASE STUDIES  
IN URBAN FINANCE**

**ECONOMIC DEVELOPMENT INSTITUTE  
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## FOREWORD

The United Nations Centre for Human Settlements (Habitat) and the Economic Development Institute of the World Bank place high priority on training as an element of human settlements strategies. As one of their activities in this area, they organize training courses and workshops, conducted in collaboration with local training institutions in developing countries and, often, sponsored jointly with other agencies, such as the United Nations Development Programme (UNDP), the United States Agency for International Development (USAID) and Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ). The principal objectives of these training programmes are to promote new approaches and techniques, to train trainers, and to develop and test training materials.

An important element of the Centre's training strategy is the strengthening of local-government financial-management capabilities. Municipal governments in many developing countries face immense challenges, having to cope with the physical and social costs of rapid urbanization from a low economic base. Efforts to improve living conditions in urban areas are frequently undermined by poor financial management, aggravating the problem of the scarcity of resources by misusing those that exist. Financial mismanagement is translated into inadequate services and a deteriorating environment - potholed roads, low water pressure, and drains choked with refuse, among other things.

Sound financial management is, therefore, an integral part of any human settlements development strategy. This manual describes the components of sound financial management - revenue generation, budget formulation and execution, financial information and control - and prescribes and illustrates a strategy for reform - a process by which central and local governments understand and commit themselves to a series of comprehensive measures to provide a sound financial base for municipal government over time by planned and feasible stages. An illustration is provided by a case study, which runs through the various stages of this Manual. Readers are asked to go through stages of analysis, calculation and choice aimed at putting an imaginary - but not too imaginary - city "back on its feet", not just in terms of finance but in terms of the services which money can buy.

Sound settlements management is seen as a key element in placing developing countries on a sustainable path to economic, social and physical improvement and in achieving the goals of the International Development Strategy for the Fourth United Nations Development Decade, 1991-2000. Expanding the human resources required for settlements management is a fundamental requirement, and this Manual is one of a series intended to assist training institutions in developing countries in the strengthening of their curricula in the human settlements sector.

This training manual, titled "Readings and Case Studies in Urban Finance" has been developed and tested in two courses in South Asia, jointly sponsored by the United Nations Centre for Human Settlements (Habitat), the Economic Development Institute of the World Bank and assisted by United Nations Development Programme. One of these courses also benefited from assistance of the Government of the Netherlands. A similar training manual has been produced and tested in three training programmes in Eastern and Southern Africa. The original training materials were produced by a team consisting of Professor Kenneth Davey, David Gossman and Philip Gidman, and they have been edited by Professor Davey in collaboration with the staff of the UNCHS (Habitat) Training Unit.

Dr. A. Ramachandran  
Under-Secretary-General  
Executive Director

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## INTRODUCTORY TRAINER'S NOTES

This volume contains material for use in courses on urban financial management, particularly in relation to the rapidly growing cities and towns in Africa. Such courses may be of different types and durations. On one hand they may be part of a larger curriculum for a post-graduate degree/diploma or a professional qualification. In such cases the course will be one of a number running concurrently, and the subject matter may occupy one or two sessions a week over one or two terms or semesters: candidates will be subject to some form of individual assessment. On the other hand, urban financial management may be the focus of a short seminar or course for central- or local-government officials, lasting perhaps from a week to a month, but not leading to any specific qualification: there will be no individual assessment and the emphasis will be on group discussion and problem-solving.

The material can be used in either context. By using the case exercises selectively, the subject matter could be compressed into a course of 10 days. Candidates preparing for a post-graduate or professional qualification, however, would be expected to read a wider literature, as this volume provides only a basis of lecture notes and illustrative exercises.

The volume has two components. The first is a set of readings on each of the main elements or topics of municipal financial management, including principles of revenue generation, individual types of municipal revenue, the various stages of the budgetary process, financial control and auditing. These readings are designed as a preface to seminar discussion. Ideally, participants would be asked to read the appropriate chapters the night before each day's discussions and to prepare contributions to the debate linked to their own experience.

The second component is made up of the case studies. These comprise an interlinked series of exercises covering the process of financial reform in an imaginary city (the city is not entirely imaginary; data from a number of real cities have been combined). The purposes of the case studies are:

- (a) To illustrate the processes described in the readings;
- (b) To give participants confidence in undertaking simple numerical analysis and to overcome any insecurity in considering the use of the processes of financial management;
- (c) To illustrate the concept of a strategic, medium-term approach to improving the financial performance of a municipal government;
- (d) To introduce variety into a curriculum.

The case studies are designed for small group work. However, they can be undertaken as individual written assignments and assessed for post-graduate or professional qualifications. Group work can be combined with individual assignments; for example, stage II (chapter X) involves a number of self-contained exercises which can be farmed out to individual members of a working group to undertake and report back.

The case studies do not have to be undertaken in their entirety. They can be used selectively according to the time available and the seniority and experience of the participants. For example, at stages II and III, only one of the service-costing exercises (education, refuse collection or roads and street lighting), might be undertaken to illustrate a zero-based, unit-costing approach. Tutors can simply feed in the results of the other exercises when needed in stage IV. Stage IV can be shortened by requiring participants to complete profiling in respect of one or two items only; the remainder can then be supplied for use in the budget-monitoring exercise.

It is difficult to predict accurately the amount of time required for the group work. Experience suggests that it is better to timetable group exercises in the afternoon with report-back, plenary sessions at the beginning of the following morning. This gives groups the opportunity to extend work into the evening if necessary; this type of activity also tends to command more attention after lunch than does general discussion.

The case studies are, of necessity, oversimplified to fit into the constraints of a curriculum. Undertaking these processes in real life would involve far more detailed information and far more time. This should be mentioned to participants at the outset, though it is readily understood by them.

# PART ONE: INTRODUCTION

## I. REFORMING MUNICIPAL FINANCE

### **Trainers' notes**

This chapter sets urban financial management in its context and outlines the agenda of issues to be examined in the course. It should be used as preparation for a discussion in which participants analyse and compare:

- (a) The general problems of urbanization
- (b) The system of urban government
- (c) The specifically financial problems of their own countries and cities.

Oral presentation may be invited in respect of each city or country represented, using the chapter as a framework.

If the course is international, it is particularly important that institutional differences in the various systems of urban government are identified in this initial discussion. Later discussion of individual issues can be very confused if participants do not realise that systems are not uniform: e.g., that water supply is a municipal responsibility in country A but that of a State-level enterprise in B.

Finally, this chapter aims to make participants conscious, from the outset, of the multi-faceted nature of urban finance and the usual need for reform on a broad front. It introduces the idea of strategic management; i.e., of a comprehensive multi-year approach to strengthening financial management. Changes which might encounter resistance may be acceptable when planned to take place in progressive stages over a number of years.

### **A. The urban context**

1. During the last quarter of the twentieth century, the population of urban areas in developing countries is likely to grow by 1 billion. Some individual cities are growing by 250,000 to 500,000 people annually. Whether this is good or bad is academic; measures to stem population growth or rural-urban migration might or might not reduce the rate of urbanization, but its scale over the next two decades will still be massive and unprecedented.
2. Urbanization involves costs to the public sector, which amount to large shares of total public spending. Dense human settlements require levels of servicing - for health reasons, if no other - which are not essential elsewhere. Rising incomes increase demands for water, electricity, road space, telephones and similar public services. Expectations for urban amenities and appearances are high, and the costs of providing them are also high. The growth of large cities often involves diseconomies of scale in some types of infrastructure - long pumping distances for water and travelling distances for commuters, for example. In some of the largest metropolitan areas, geographical shape and terrain accentuate the costs of growth: Bangkok, Lagos and Rio de Janeiro are cases that come to mind.
3. As a result, urban areas in developing countries are demanding rates of investment that are far higher than those achieved (or needed) by the cities of Europe and North America during their periods of rapid growth. Heavy investments give rise to high levels of current expenditure, and these combined demands pose considerable problems for national and local governments. They place heavy strains upon absolute levels of public resources: they add to political conflicts over the allocation of resources between regions or between town and country: they may endanger national investment priorities, particularly efforts to contend with the conditions of rural poverty which produce much pressure upon urban areas.



4. The financial consequences of urbanization and the dangers of over investing national resources in urban services have two implications, which will provide themes for this Manual. The first is the need for cities, as a whole, and urban government agencies, in particular, to generate as much as possible of the resources they need for investment and current spending. The second is the need for public agencies to make the most effective use of resources - to seek low-cost solutions to problems wherever possible, to diffuse the benefits of investment as widely as possible, and to avoid waste and leakage.
5. There is a further dimension to these two points. Most large cities have big concentrations of poverty. Wide disparities in standards of living are not unique to cities, but they are highly visible and have often been accentuated by past practices in public-sector policy and the provision of services. It is a matter of great and growing concern that attempts to generate public revenue in cities should not add, at least disproportionately, to the burdens of the poor and that priority in public expenditure should be given, wherever feasible, to those types and methods of service provision which will benefit the poor.
6. It is likely that this context and these objectives of urban financial policy will be widely understood and accepted by readers. It will not be necessary, therefore, to devote further time to discussing or defining them in general. They will, however, underlie the content and the discussion of individual financial issues and practices.

## **B. The role of municipal government**

7. Despite tremendous variations in its character, municipal government is a worldwide institution. Almost all towns and cities have a representative or quasi-representative system of local government. There are many differences, however, in characteristics. Important variations are as follows:
  - (a) *The relationship of municipal boundaries to urban settlements.* In cities such as Bombay, Lusaka and Nairobi, a single local authority has been responsible for the core city and virtually all suburban development. Cairo, Calcutta and Manila, by contrast, represent cities fragmented between a number of municipal jurisdictions.
  - (b) *The extent of municipal functions.* Refuse collection, market administration, local road maintenance, cleansing, drainage, lighting, parks and recreation are virtually always municipal responsibilities. What varies widely is municipal involvement in:
    - (i) Public utilities, chiefly water and sewerage (provided, sometimes, by a national corporation, or typically by a metropolitan corporation or, a municipally controlled enterprise) and electricity (usually a national utility responsibility, but, sometimes, a function of local government);
    - (ii) Social services (municipalities often provide primary schools and clinics, but less frequently secondary schools and hospitals);

- (iii) Public protection (fire services are frequently municipal, but police forces infrequently so outside Europe and North America);
  - (iv) Trunk roads, which can be a national, provincial or local responsibility;
  - (v) Provision of rental or purchase housing or serviced sites (sometimes a municipal activity, sometimes that of a special purpose authority);
  - (vi) Regulation of land use and development (usually, a municipal but, on occasion, provincial or metropolitan authority function).
- (c) *The degree of integration in a vertical chain of administration.* American, British and (to some extent) Spanish traditions treat municipalities as separate political, legal and administrative entities, albeit subject to varying degrees of external supervision. French and Ottoman traditions place local government within a vertical hierarchy of governmental institutions; locally elected assemblies have legislative powers, but executive responsibility is often exercised by administrators (governors, prefects, etc.) with a dual responsibility to central and local government. (This pattern is changing within France itself but is still prevalent in French-speaking African countries).
- (d) *The location of executive as opposed to legislative responsibility.* This may be vested in an elected leader, governor or mayor, an administrator appointed by central or local government, or the elected representatives who, as a body, directly supervise their professional staff.
- (e) *The extent of external supervision.* This applies particularly to the requirement for central- or provincial-government approval of budgets, revenue tariffs, staff appointments, contracts and development plans.
- (f) *The nature and buoyancy of revenue sources.* These will be discussed in Part Two.

### ***Non-municipal authorities and enterprises***

8. A further variable is the existence of parastatal authorities or enterprises at city (as opposed to national) level. These may have three types of function:
- (a) The provision of specific urban services, such as water supply, sewerage or public transport;
  - (b) Comprehensive development of new areas for residential, commercial or industrial occupation;
  - (c) Metropolitan planning and development control.

Occasionally, a single authority performs two or all of these functions. The Karachi Development Authority, for example, is responsible for master planning and new area development (and, until recently, for bulk water supply).

### ***Private-sector involvement***

9. A final variation is the role of the private and voluntary sectors in the provision of urban services. Private enterprise, in many cities, provides, totally or partly, services which, in other cities, are run by the public sector. Examples are public transport, medical services, nursery education and commercial refuse collection. Furthermore, public-sector responsibilities may be contracted out to private-enterprise or voluntary bodies. Examples are refuse collection, road maintenance or the operation of sporting and other recreational amenities. Inputs to services may also be contracted out in this way, such as architectural design or office cleaning. Although private-sector involvement in urban services has a long history, preceding, in many cases, the growth of municipal government and public enterprise, there is much current interest in its expansion. Privatization is seen as a device for eliminating a whole area of public expenditure; alternatively, contracting out is intended to reduce costs, through competition or use of voluntary effort, while maintaining overall public responsibility.

### Box 1

Faced with continuing urbanization and severe economic constraints, several governments are increasing the role of municipal government in urban management. Objectives include improvements in investment decisions; execution of projects through the involvement of local knowledge, preference and accountability; mobilising extra resources from local revenues and communal participation.

Mexico, for example, amended its Constitution in 1983 to give municipal administrations prime responsibility for land-use planning and development control, water supply and sanitation, cleaning, roads, parks, markets and street lighting. Property tax revenues were vested in municipalities by the same amendment and they had already been given statutory shares in federal revenues. The 1988 Constitution in Brazil considerably increased both municipalities' shares of federal and state taxes and their own taxing powers; a number of additional responsibilities are being transferred to them particularly in the field of public health. In Turkey, a series of legal amendments between 1983 and 1988 increased municipal taxing powers and shares of national revenues, and established powerful, elected metropolitan authorities in the larger cities. In India, constitutional amendments to protect the existence and powers of municipal bodies were introduced in Parliament in 1989.

### Conclusion

10. Two features of this brief analysis have financial implications, *viz.*,
  - (a) Very wide variations between countries (and even, within countries) in the structure of urban government and the allocation of responsibility for individual urban functions;
  - (b) Considerable fragmentation of responsibility between levels of government between general and special purpose authorities, between territorial jurisdictions and between public and private sectors.

Numerous attempts have been made to rationalize the institutional framework, to extend municipal boundaries, to amalgamate municipalities, and to superimpose metropolitan-wide co-ordinating or planning authorities, among others. All such attempts meet institutional resistance; all reorganisations are very costly, and few have yielded more than partial success. The system of urban finance has to live within the specificities of governmental structure.

### C. **Municipal financial management**

11. The main purposes of financial management in municipal government are:
  - (a) To keep the municipality solvent;
  - (b) To ensure it enough revenue to carry out its main responsibilities to the community;
  - (c) To see that the burden of financing the municipality, through taxes, charges etc., is fairly apportioned;
  - (d) To ensure that the municipality's resources are used in accordance with its priorities;
  - (e) To see that resources are used legally and honestly;
  - (f) To provide those who run the municipality with adequate information for discharging their responsibilities.



*Municipality must be Solvent*

12. All too often, financial management fails on some, or even all, of these tests. Municipal government is undermined by weakness in its financial management. A look at the finances of a particular municipality might reveal that:
- (a) *It is in debt:* suppliers' invoices take three months or more to get paid; income tax is deducted from staff salaries but not paid over to the central government; the electricity corporation is owed large sums for street lighting; the bank account is overdrawn to the limit of its credit for most of the year;
  - (b) *It is basically under financed:* revenue has not grown at a rate commensurate with the demands being made on the municipality for extra spending - demands arising from inflation, from growth in population, or from an expanding economy which puts more traffic on the municipal roads, uses more water, creates more refuse than before;
  - (c) *The fiscal burden is unfairly distributed:* large properties are significantly undervalued for tax, people dependent on public standpipes pay more per litre to water carriers than those with house connections;
  - (d) *Patterns of expenditure do not reflect a defensible set of priorities:* in particular, spending on civic and administrative overheads is rising more sharply than that on direct services to the public;
  - (e) *Little concern is shown for cost-effectiveness or the avoidance of waste:* staff productivity is low through lack of training or equipment, water pressure inadequate because of serious leakage, machinery in disrepair through lack of simple, regular maintenance.
  - (f) *Financial controls are ineffective:* there is suspicion of collusion between property owners and assessors in under valuation, between clerks and drivers over misuse of petrol, between engineers and contractors over substandard construction;
  - (g) *Financial information is too late, too little or too obscure:* managers are unable to keep strictly to their budgets or adjust them sensibly to changes in circumstance.

#### **D. The financial components of an urban development programme**

13. Fast-growing cities often need public action on a broad front, to open up new areas for settlement, to arrest decay in the historic city, to extend infrastructure, to rehabilitate existing networks, to expand services and to improve operating efficiency. All this needs finance, and much or most of the finance might have to be found within the city, by local taxation, consumer charging, private-sector contributions and waste elimination. Development will depend upon improving the efficiency of the main urban public agencies.
14. A comprehensive urban development programme will, therefore, have several financial measures, which might include:
- (a) Generating capital finance for investment purposes (e.g., trunk roads, reservoirs, pipelines);
  - (b) Increasing expenditure on operation and maintenance, and on essential staffing, supplies and equipment (e.g., refuse trucks, buses);
  - (c) Diverting resources from unnecessary and extravagant forms of expenditure;
  - (d) Increasing local cost-recovery through increased taxes and charges or effective assessment and collection of property rates;
  - (e) Reforming financial relations between levels of government and different public agencies, to ensure a fair distribution of costs, to provide for any justifiable transfer of resources to poor areas and to avoid one agency's activities imposing insupportable costs on another;
  - (f) Improving budgetary control, financial information and audit, to ensure that financial targets are met.

15. These measures are likely to be interdependent. Financial reform, as with urban development generally, usually needs an attack on several fronts. There has to be a strategy, just as there might need to be a strategy for physical growth or urban transport. Its components will need to include:
  - (a) A thorough analysis of the municipality's financial performance, so that the nature and extent of its financial weaknesses are understood;
  - (b) A comprehensive set of measures which tackle the various defects together (including all the elements detailed in the previous paragraph);
  - (c) A planned approach which seeks to implement improvements over time, so that executive capacity and political support are not overstrained;
  - (d) A sense of commitment by central and local government to the planned reforms.
16. The first stage of reform is that of analysis, i.e., of understanding the problems. This is illustrated by the following chapter in stage I of the case study.

## **II. CASE STUDY: DAGPUR MUNICIPAL COUNCIL**

### **Stage I: Analysis and Strategy**

#### ***Timing: Beginning of 1989***

#### ***Trainers' notes***

Stage I of the case study is designed to open up all the major issues of municipal financial management, which will be dealt with individually later in the curriculum. On occasion this exercise has been used as the very first item in a seminar programme so that participants establish an agenda of issues through a case study and a participative style is developed from the outset.

The exercise is also intended to illustrate a particular process of analysing the financial performance of a municipality, namely by looking at trends in revenue and expenditure over time, and making comparisons at constant prices per capita. This is necessary in order to understand the extent to which the municipality is coping with the impact of inflation and population growth. Train may have to ensure that all participants understand how to convert figures from current to constant prices before the groups commence work.

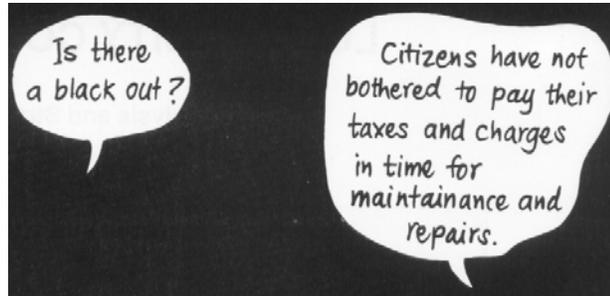
The major problem issues become clear once the numerical analysis is done. Financial trends should be related by groups to the details of service performance given in the introductory text; e.g., the deterioration in refuse collection and road maintenance can be associated with a decline in real per capita expenditure on these functions. One issue that may escape attention is the nature of budgetary control. Table 1 shows that whereas expenditure has been exceeding revenue (and leading to the accumulated deficit), it has not exceeded budgeted levels. This illustrates a common weakness of budgetary control, which is usually devoted to keeping the expenditure within legally authorised limits, but not within the limits of realised (as opposed to estimated) revenue.

#### ***A. Introduction***

#### ***Assignment***

1. Urban development has usually been associated with the expansion of services and infrastructure through capital investment, but improved operation and maintenance of existing services might be equally important to the welfare of the urban population, and both lines of development might be dependent on improving the efficiency of the public agencies responsible for operating and expanding services. The financial components of an urban development programme might include:
  - (a) Capital investment;
  - (b) Increased expenditure on operation and maintenance, and on essential staffing, supplies and equipment;
  - (c) Diversion of resources from unnecessary, wasteful forms of expenditure;

- (d) Increased recovery of costs through higher taxes or charges, or improved assessment and collection procedures;
- (e) Reformed financial relationships between levels of government and different public agencies;
- (f) Improved budgetary control and financial information to ensure that financial targets are met.



- 2. To illustrate this comprehensive approach, readers are asked to read the attached case study of Dagpur, an imaginary city but one with characteristics of a number of real Eastern African cities. They will need to analyse the financial tables, looking at trends in revenue, expenditure and overall financial performance. It would be advisable to reproduce the tables in per capita terms at constant prices, to show how far revenue and expenditure have kept pace with inflation and the demands consequent on population growth.
- 3. Readers are asked to imagine that they are part of a governmental team framing a medium-term urban development programme for Dagpur and to identify:
  - (a) The main financial issues which need to be tackled.,
  - (b) The financial reforms which need to be included. “Financial reform” may be taken to include any of the components listed in paragraph 1.

**B. General description**

**Location and population**

- 4. Dagpur is the second major city in a South Asian country. The national population was 95 million in 1988. A number of small urban areas are distributed relatively evenly over the country.
- 5. The City of Dagpur has a resident population of 1.5 million people, and another 300,000 travel in daily from surrounding rural areas for work. Dagpur is located in low-lying marshland surrounding a natural harbour at the mouth of the country's major river. It is the largest port, handling some 60 per cent of external trade. It was formerly the national capital, but this was moved to a new inland site some 25 years ago.
- 6. Apart from the port, the city has major industries including textiles, cement, oil refineries and food processing, and remains the headquarters of many commercial firms. Average densities range from 200-500 persons per hectare. Owing to growing pressure on agricultural land in the country's interior, some political strife in border areas, natural growth and attractions of city employment, the city's population has been growing at the average rate of 5.2 per cent per annum over the past decade.

**Institutions**

- 7. Dagpur has a Municipal Corporation (the DMC). It is governed by a council, consisting of 33 members elected from individual wards. They, in turn, elect the mayor. The Council's permanent staff is headed by a Commissioner, seconded from the civil service, who is assisted by a number of chief officers including a treasurer and engineer. The Corporation is responsible for roads, street lighting, footpaths, primary education, markets, fire protection, water supply, and sewerage, public health, refuse collection, medical services, parks, libraries and recreational facilities.

8. The Dagpur Development Authority is responsible for planning the city and peri-urban area, and also for improving housing and developing land. It is a parastatal organization; the members of the Authority are appointed by the national government, though they include the Mayor of Dagpur. Separate public corporations under the control of the central government are responsible for electricity, public transport, posts and telecommunications, the port and the railways.

### **C. City services**

#### **Water supply and sanitation**

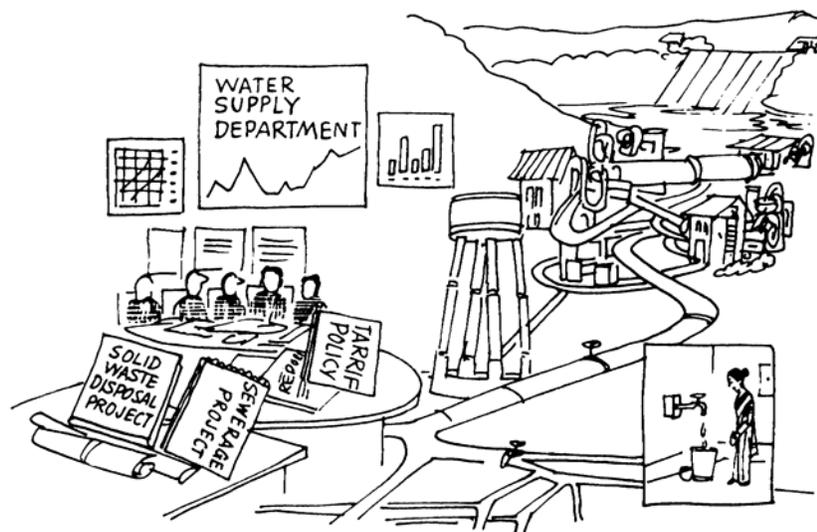
9. Water supply and sewerage are the responsibility of the Dagpur Water and Sewerage Board, a self-financing subsidiary of the Municipal Corporation. The main source of water is an inland lake some 50 miles from the city. Rapid population and industrial growth have outstripped the capacity of the present plant, last augmented in 1959. As a result, water pressure is low, and some areas receive supplies for only four hours a day. It has not been possible to provide piped water to some new outlying suburbs, which are supplied by tubewells and water trucks. The groundwater is brackish due to the coastal location and the tubewells are only a temporary solution to demand. Only about half the city is connected to the sewerage supply. Most of the rest is served by septic tanks and nightsoil cartage, but some squatter settlements are totally unserved by municipal sanitation and the residents resort to open drains and channels.

#### **Roads**

10. The Municipal Corporation is responsible for all roads in the city limits. Although the basic network of roads has been sufficiently developed to avoid major traffic congestion, maintenance is a serious problem, due both to the marshy and low-lying nature of the terrain and to the rapid increase in heavy traffic, particularly to the port. There has been a marked deterioration in surfaces in recent years.

#### **Solid-waste disposal**

11. The Council is responsible, through a specific Department, for solid-waste collection and disposal. The system is irregular and inadequate, because the vehicle fleet has not expanded in line with the city's growth. Moreover, expenditure on new vehicles has been cut back in recent years, and over half the fleet is near or over its normal working life, resulting in frequent breakdowns.



#### **Education**

12. Free primary education is provided by the Municipal Corporation with the help of a grant from central government towards recurrent costs. Secondary schooling and further education are provided by a mixture of central-government and private bodies. New primary schools are constructed by the Council but again with grant aid and some voluntary contribution. A rapid expansion has been necessary, both to meet the city's population growth and to implement a national policy of providing school places for all children of primary-school age. Because the city's schools are generally better, many children come into them from adjoining rural areas. Staffing is adequate, but

there are occasional shortages of books, and facilities, such as laboratories, have only been developed with parental help in schools in wealthy suburbs.

### **Health services**

13. Central government maintains a specialist teaching hospital attached to the university, and there are two other hospitals run by charitable foundations. The Municipal Corporation runs a maternity hospital and a network of neighbourhood health centres and clinics. Its facilities are well staffed, but are frequently handicapped by shortages of money for drugs and basic equipment, such as sheets and bandages, etc. The Public Health Department runs the hospitals, public health centres, clinics and preventive services.

### **Housing development**

14. Rapid population growth has led inevitably to shortage of housing, overcrowding and illegal squatting. The Development Authority has been developing new residential areas for some 20 years on a commercial basis, building on substantial amounts of public land on the periphery of the historic city. Most of these areas have been for middle-class and upper-class residents. The Authority has been successful in generating surpluses of its plot sales for investing in further development, but there have been financial problems for the Municipal Corporation, however, which has to provide schools, clinics and other community facilities in the new estates. Moreover, it has had to take over most of the maintenance of the infrastructure some years before the purchasers of plots have finished building houses, shops etc., and have started to pay property tax.
15. The Development Authority has recently engaged in upgrading services in shanty areas. Squatters are provided with basic services, improvement loans and security of tenure, but are obliged to pay a consolidated service charge to the Authority. The revenue from this charge is supposed to be divided to cover the operating costs of the Water and Sewerage Board, the operating costs of the Municipal Corporation and the recovery of the Authority's own capital outlay. Recovery so far has only been approximately 55 per cent of the amount due, and the Authority is giving first priority to repayment of its own external debt for the improvement projects.

### **Public transport**

16. Public transport services are provided by DCPTC, a State-owned company with 70 mostly dilapidated, buses. The company has to rely on government subsidies and, because of a general shortage of funds, has not been able to renew or properly maintain its rolling stock. As a consequence, only half the fleet is regularly operating, which results in bus overloading and excessive waiting times. Faced with much complaint about the quality of the service, the government has rejected proposals from the company's directors for an increase in fares which have been static since 1978. In view of this public transport shortage, the government has tolerated the growth of illegal taxis and converted vans which transport an estimated third of the city's passengers (with fares roughly 50 per cent higher than those of DCPTC).

## **D. LCC Finances**

### **Revenue and expenditure**

17. Details of revenue and expenditure of the DMC over the past five years (1984-1988) are given in tables I-III annexed.

### **Tax revenues**

18. The DMC collects three taxes, viz.,
  - (a) *Property tax* is levied on the rental value of land and buildings. Yields have been restricted by a number of factors:
    - (i) There has been no general revaluation since 1974. Assessments are based upon the evidence of actual rent payments or the assessors' judgement of potential rental based upon physical visitation;
    - (ii) The DMC's tax rate (17.5 per cent) has reached the maximum level permitted by law. Requests to the government to increase the rate level or carry out revaluation have not been successful so far. (The government is thought to be reluctant to increase taxes with municipal elections due in 1989 and a general election in 1990);

- (iii) Collections raise approximately 73 per cent of demand. Collectors experience difficulty in tracing the owner of buildings with multiple occupation. The automatic penalty for late payment is a surcharge of 10 per cent per annum. Legal procedures in case of default are slow, and the courts unsympathetic. The DMC is reluctant to apply for the ultimate sanction of distraint on goods or eviction.
- (b) *Motor vehicle taxes.* The annual tax on all vehicles registered in the city accrues to the DMC. The tax is based upon a formula assessment of value, taking into account weight, age, engine capacity and usage. The formula is revised every year by the national Government. There is continuing controversy over the assignment of the motor vehicle tax revenues to the DMC. Surrounding local authorities complain that the bulk of the commercial vehicles using their roads pay tax to the DMC, not to themselves, since they are owned by companies with headquarters within the city. The DMC has a counter-argument that many of the private cars (and taxis) commuting into the city by day are registered in outlying municipalities. The Ministry of Finance has argued for central collection of the tax to avoid these conflicts and has offered a compensatory grant at the level of the current collections. The Ministry of Local Government has, so far, resisted this proposal on the local authorities' behalf.
- (c) *Entertainment tax* is collected at the rate of  $33\frac{1}{3}$  per cent on the value of cinema tickets and 15 per cent on entry fees for theatres, sporting events and other commercially-run entertainment. Control is maintained through the central printing and supply of tickets by the DMC.

### **Grants**

19. The DMC receives a grant, which is intended to meet 50 percent of the cost of primary education. This consists of two elements. The first meets half the cost of teachers' salaries, calculated on an establishment which increases each year, to take account of school expansion and national salary settlements. The second element consists of a capitation grant per pupil, to meet non-teaching costs. The capitation element is reviewed every five years, the current level having been fixed in 1984. DMC also receives capital construction grants for new schools based upon a national standard formula. The grant is meant to meet two thirds of the cost, but the amount equals as little as 30 per cent of the true costs in Dagpur because of its above-average land costs.

### **Other revenues**

20. Major categories of other revenues are:
- (a) Licenses for registration of shops, hotels, trades etc.;
  - (b) Rent of markets and other municipal properties;
  - (c) Charges for free-paying services and hospitals, sports centres etc.;
  - (c) Income on investments.

### **Capital finance**

21. Most capital expenditure is financed from revenue. However, loans for construction of roads, markets and medical units are available from a national Municipal Development Bank. As already mentioned, grants contribute to school building.

### **Financial position**

22. A summary of the financial performance for the DMC over the five years 1984-1988 is given in table I. The Corporation's balance sheet at 31 December 1988 is given in Table IV.

### **Assignment**

23. Readers should now undertake the analysis of problems and identification of objectives for reform set out in paragraphs 2 and 3.

## Appendix A FINANCIAL OPERATION OF DMC

<b>Table I DMC total revenue and expenditures 1984-1988 (millions of rupees)</b>										
ITEM	1984		1985		1986		1987		1988	
	Approved	Actual								
Recurrent revenue	220	200	260	236	300	272	350	308	380	330
Total revenue	234	210	276	252	320	292	370	324	402	350
Recurrent expenditure	144	140	180	174	210	200	240	236	270	264
Capital expenditure	90	80	96	92	110	78	130	100	132	96
Total expenditure	234	220	276	266	320	278	370	336	402	360

Note: Surplus/Deficit balances incurred during a financial year are not carried forward into the Revenue or Expenditure for the following year, but accumulated in the General Fund Balance.

<b>Table II. DMC revenue, 1982-1986 (millions of rupees)</b>					
	1984	1985	1986	1987	1988
<b>Recurrent revenues:</b>					
Property tax	85.0	90.0	92.0	94.5	95.0
Motor vehicle tax	55.0	73.0	89.5	108.0	125.0
Entertainment tax	18.0	20.0	27.0	29.0	31.0
Licence fees	11.0	13.0	18.0	24.0	25.0
Rent and charges	7.0	9.0	8.0	9.5	10.0
Interest	4.0	5.0	5.5	6.0	5.0
Education grants	15.0	19.0	25.0	29.0	32.0
Miscellaneous	5.0	7.0	7.0	8.0	7.0
Sub-total	200.0	236.0	272.0	308.0	330.0
<b>Capital receipts:</b>					
Loans	3.0	6.0	5.0	3.0	8.0
Grants	6.0	8.0	13.0	10.0	10.0
Sales of capital assets	1.0	2.0	2.0	3.0	2.0
Sub-total	10.0	16.0	20.0	16.0	20.0
Total	210.0	252.0	292.0	324.0	350.0

<b>Table III. DMC expenditure, 1984-1988 (millions of rupees)</b>					
	1984	1985	1986	1987	1988
<b>Recurrent revenues:</b>					
General administration	5.0	8.0	9.5	12.5	18.0
Financial administration	55.0	73.0	89.5	108.0	125.0
Education	37.0	49.0	61.5	72.0	84.0
Public health	25.0	33.0	37.0	47.0	54.0
Solid-waste management	20.0	24.0	25.0	26.0	26.5
Roads and lighting	33.0	38.0	42.0	48.0	48.0
Fire	4.0	4.0	5.0	6.0	7.0
Libraries	3.0	3.0	3.0	4.0	4.0
Recreation	6.5	7.0	9.0	11.0	11.0
Social welfare, admin. & miscellaneous services	2.5	3.0	3.0	3.0	4.0
Sub-total	14.0	174.0	200.0	236.0	264.0
<b>Capital expenditure:</b>					
Education	15.0	25.0	30.0	30.0	35.0
Public health	23.0	28.0	16.0	23.0	20.0
Solid-waste management	7.0	5.0	2.0	2.0	2.0

Roads and lighting	20.0	25.0	23.0	22.0	16.0
Fire	5.0	2.0	1.0	5.0	5.0
Libraries	2.0	-	1.0	2.0	2.0
Recreation	4.0	3.0	2.0	9.0	8.0
Social welfare admin. & miscellaneous services	4.0	4.0	3.0	7.0	8.0
Total capital expenditure	80.0	92.0	78.0	100.0	96.0

**Table IV. DMC balance sheet, 31 December 1988**

Liabilities	Rs. (thousands)	Assets	Rs. (thousands)
Long-term loans outstanding	40,300	Fixed assets	119,700
Capital discharged	79,400	Cash and Bank	4,075
Deposit: income tax deductions	13,210	Investments	25,700
Employees Superannuation Fund	11,106	Sundry debtors	2,120
General fund balance Dr	18,054		

**Table V. Retail Price Index, 1984-1988 for calculating constant value of revenue and expenditures (as at 1 January)**

1984	100
1985	115
1986	126
1987	136
1988	143

## Appendix B

### DAGPUR MUNICIPAL CORPORATION HOUSING DEPARTMENT FINANCE

#### 1. Rental housing

- (a) The Housing Department operates a rental housing stock of 6100 units, comprising

Two-roomed units	3,000
Three-roomed units	2,600
Four-roomed units	500

- (b) The housing was constructed between 1970 and 1977 from loan finance repayable over 20 years at average interest rates of 8 per cent. Unit costings in rupees in 1988 were:

	Two-roomed	Three-roomed	Four-roomed
Debt service	2,700	3,600	4,500
Estate operation and maintenance	1,000	1,400	1,750
Total cost per unit per annum	3,700	5,000	6,250

- (c) Total expenditure in 1988 was:

Type of unit	Number of units	Cost per unit (rupees)	Total (rupees)
Two-roomed	3,000	3,700	11,100,000
Three-roomed	2,600	5,000	13,000,000
Four-roomed	500	6,250	3,125,000
			27,225,000

- (d) Rents were last revised in 1982. They are as follows:

Type of unit	Monthly rent (rupees)	Total per year (rupees)
Two-roomed	250	3,000
Three-roomed	425	5,100
Four	575	6,900

(e) Rental income in 1988 was as follows:

Type of unit	Number of units	Rent per year (rupees)	Total (rupees)
Two-roomed	3,000	3,000	9,000,000
Three-roomed	2,600	5,100	13,260,000
Four-roomed	500	6,900	3,450,000
Sub-total			25,710,000
Less temporary vacancies			507,000
Sub-total			25,203,000
Less rent in arrears			1,261,650
Total income 1988			23,941,350

## 2. **Tenant-purchased housing**

(a) Between 1978 and 1982 the DMC constructed 400 houses for tenant purchase. They were financed by 12-year loans at 12 per cent interest.

(b) The Corporation's expenditure is confined to debt service, which averages Rs 48,000 per annum per unit. Maintenance is the responsibility of the tenant-purchasers. Expenditure in 1988 was:

400 houses at Rs 48,000 per annum = Rs 19.2 million

(c) Purchasers pay installments of capital interest to the DMC over the same period as the DMC's external debt. Annual installments average Rs 50,000 (allowing the DMC a small margin for its administrative costs).

(d) Income in rupees in 1988 was as follows:

400 houses at an average of Rs 50,000	20,000,000
Less installments in arrears	195,000
	19,805,000

## 3. **Site-and-service schemes**

(a) Since 1980 DMC has leased 1,000 serviced plots for tenant purchase. Purchasers are responsible for constructing their own houses and for maintenance.

(b) DMC has financed this scheme by an external loan repayable over 15 years at 10 per cent. Debt-service costs average Rs 1,400 per plot, with a total expenditure in 1988 of Rs 1.4 million.

(c) Purchasers repay capital and interest over the same period as the external loan with a small margin for DMC's administrative costs. Repayments and interest average Rs 1,500 per plot per annum.

(d) Income in rupees in 1988 was:

1000 plots at Rs 1,500	1,500,000
Less interest in arrears	31,000
	1,469,000

## 4. **Overall income and expenditure (rupees): 1988**

	Expenditure	Income
Rental housing	27,225,000	23,941,350
Tenant-purchase housing	19,200,000	19,805,000
Site-and-service scheme	1,400,000	1,469,000
Total	47,825,000	45,215,350

## 5. **The housing fund**

(a) The Housing Department's operations are intended to be self-financing and are conducted through a Housing Fund, separate from the Corporation's General Fund. This separation relates to the ledger accounts, but not to the bank and cash balances, which are integrated with the other operations of the Corporation.

- (b) At the beginning of 1988, the Housing Fund had an accumulated deficit of Rs 6,233,337. This deficit increased to Rs 8,842,987 at 31 December 1988.

## **PART TWO: REVENUE GENERATION**

### **III. REVENUE GENERATION: INTRODUCTION**

#### **Trainers' note**

This chapter introduces discussion of revenue generation by establishing the basic distinction between taxing and charging as methods of financing services. It makes the normal distinction between public and private goods, and introduces the concepts of equity and efficiency. It also makes a further distinction between financing by national and local taxation (national taxpayers being involved both through direct central government funding and transfers to local government).

It will normally require one session to discuss these issues and ensure that these basic principles are grasped by participants. The subject matter can be illustrated by inviting course members to describe how certain services are financed in their own countries or cities such as water supply, refuse collection or education, and analyse the possible rationale for these practices. Education is a particularly interesting case for discussion as there are often examples of considerable variation in the use of fees, and the divisions of responsibility between central, provincial and local levels of government for varying levels of schooling.

#### **A. Introduction**

1. Municipalities in most developing countries have to meet costs of constructing and maintaining services, when costs are rising because of inflation, and demand is expanding because of increasing population. The task is to raise adequate revenue for both capital investment and recurrent expenditure - employment of staff, operation and maintenance of facilities, and servicing of debt. Such revenue will only be adequate if it grows with the demands made on it, i.e., in line with rising costs.
2. However, raising enough revenue is not the only task. Raising it fairly is also important. Indeed, the two tasks are interrelated, because unfairness is, in itself, an obstacle to revenue collection; inequity increases resistance, if people are being asked to pay more in taxes or charges than they can afford, or feel that they are bearing an undue proportion of the burden, compared with others.

#### **B. Who pays?**

3. Some public services are financed by general taxation, and others by direct charging to the consumer. In the one case, every taxpayer has to contribute, regardless of his or her use of the service; in the other case payment depends directly upon provision and use. Looking purely at financing by taxation, there is a further distinction. Some services are paid for by the national taxpayer, through:
  - (a) Central government expenditures;
  - (b) Subsidies to public enterprises;
  - (c) Grants to local authorities.

Others are paid by the local taxpayer through:

- (a) Local taxes;
- (b) Local surcharges on national taxes.

#### **C. Taxing or charging**

4. What distinguishes a service financed by consumers from one funded by taxpayers? There are three important considerations or factors, which bear on the financing method to be followed. They are:
  - (a) Fairness;
  - (b) Economic efficiency;
  - (c) Administrative convenience.

#### **Fairness**

5. The first consideration is fairness: broadly speaking, those who benefit should pay. If a service or, to be specific, the unit of a service benefits one person exclusively, that person should pay for it through a consumer charge. Examples might be a domestic electricity supply or a telephone extension. If a service benefits everyone collectively and indiscriminately, as does defense or disease control, the cost should be borne by taxation.
6. Many services fall between these two categories (known, respectively, as private and public goods). A service might benefit one person particularly but, nevertheless, have impacts on others; such impacts are known as externalities and may be positive or negative. Domestic water supplies benefit the individual household, and their cost can be measured; but they reduce communicable disease and, therefore, have wider benefit. Where the benefits are both private and public, a consumer charge subsidized from taxes might be justified, if it enables or encourages a large number of people to use the service. The mix of charge and subsidy should depend upon the balance of private and public benefit. Where the impacts are negative - for example, the congestion or pollution caused by city-centre parking - the charge can be punitive, i.e., above the level of the service cost, so as to discourage consumption.
7. There is a further aspect of fairness. Some services might be largely private goods with little externality, but be, nevertheless, regarded as “merit goods”, i.e., basic human needs. Subsidization or, even, total financing from taxation might be regarded as right, to enable consumption by those who are too poor to meet a full consumer charge. This is often applied to primary education, medical care and, even, housing, the extent of subsidy depending on what an economy can afford and what contemporary values regard as a minimum standard or right. Critics argue, however, that such subsidization should be directed to general income support, so that the poor can exercise choice over the services they use.

### ***Economic efficiency***

8. A second consideration is economic efficiency. Where individuals are free to choose how much of a service they consume, charging enables the price mechanism to play a crucial role in allocation of resources through:
  - (a) Rationing demand: on the basis that those who value the item or service most will be prepared to pay most;
  - (b) Providing the incentive to avoid waste;
  - (c) Providing signals to the supplier concerning the scale of production;
  - (d) Providing the resources to the supplier to increase supply.

Without a price, demand and supply are unlikely to be brought into equilibrium, and, thus, the allocation of resources will not be economically efficient. Water supplies and medicines are examples of costly goods for which charging is particularly supported on efficiency grounds. The problem, however, is that the market mechanism does not act perfectly. In many cases, the government is a monopoly supplier and might be tempted to charge more than the necessary cost of a service, either to reallocate resources or because of inefficient provision.

### ***Administrative convenience***

9. A third factor is administrative convenience. Charges are, often, an easier form of revenue to collect than taxes, because they can, in most cases, be enforced through cutting off a service.

### ***D. National or local taxing***

10. How does one distinguish between financing from national and local taxes? There are several arguments for fiscal decentralization, i.e., for paying for services by local rather than national taxes:
  - (a) A service might be a public good but may, nevertheless, benefit only those living in a particular locality;
  - (b) Local knowledge and choice might be the most accurate guide to what services are needed, leading to efficient use of resources;
  - (c) A careful and honest use of resources might result from the direct and visible accountability of officials to a local electorate;
  - (d) Political equilibrium might be secured, by allowing some division of power between central and local governments over choices of levels and directions of taxing and spending.
11. However, there are also arguments for national financing:

- (a) A service might be clearly in the national interest: it might be impossible to distinguish between the benefits derived by individual localities and by the country as a whole;
- (b) Where comparable standards of service are desirable, national financing might be necessary, to avoid disparities arising from differences in local wealth and taxable capacity;
- (c) Technical considerations make it difficult to levy some charges at local rather than national level (customs duty or corporate profits taxes, for example).

However, again, there are limitations to central government's ability to prescribe exactly how a service is best to be provided in each area or to manage it efficiently. Hence, the frequent compromise of financing a service from national taxes but administering it through transfers to decentralised authorities.

12. So the costs of urban infrastructure and services are recovered basically from three sources, *viz.*,
- (a) From the consumer, through user charges;
  - (b) From the local taxpayer, through municipal taxes (or provincial taxes, where conurbations have provincial status);
  - (c) From the national taxpayer, through direct governmental expenditure, grants or revenue-sharing.

These are concentric rather than exclusive groups; critical attitudes to grants, for example, conveniently overlook the extent to which local taxpayers are, also, national taxpayers. Moreover, the demarcations between the three categories are not always clear. Specific-purpose property taxes, for water, conservancy etc., usually fall only on consumers, though not in proportion to consumption; revenue-sharing based on derivation is also local taxation in substance, though not in administrative or legal form.

13. Municipalities also receive loans, often for capital expenditure. However, borrowing is really a transitional form of finance, not a basic type of cost-recovery, since capital and interest will eventually be paid from charges or taxes. Borrowing might contain or conceal an element of grant, where soft terms or default are involved.
14. The remaining chapters in this Part will look at the various sources of revenue in turn.