IV. LOCAL TAXATION: GENERAL CONSIDERATIONS

Trainers' notes

This chapter deals with local taxation. Three sections describe the types of tax levied by governments in different countries, classified under taxes on property, income and expenditure. The second half of the chapter identifies the major criteria for evaluating local taxes - adequacy and elasticity, equity, administrative capacity, political acceptability and suitability for local administration - and discusses their application to the individual types of tax described earlier.

The chapter assumes that participants will be interested in ways of improving their local tax systems or even changing the local tax base altogether. The object of the chapter is to acquaint them with the full range of available options as shown by international experiences together with the framework for assessing their potential suitability. The final section, on international experience, emphasizes that financially-strong urban governments tend to exploit taxes which are buoyant and do not arouse severe political resistance.

How this chapter is used depends upon the time available and the range of experience of local taxes represented among the course participants. It will be important to go through the evaluation criteria in open session and ensure that they are fully understood. In an international course, participants may then be invited to describe the taxes levied locally in their own countries and analyse them according to the criteria. A single-country course may simply analyse the existing local tax base and discuss the possibilities of reform. The important thing in either case is to get course members thinking analytically about the local tax base - about how the burden of taxation is distributed and its fairness - and to be realistic about the potential of any given tax base.

A. Introduction

1. Local taxation can be interpreted in four ways, *viz*.,

   (a) Taxes which municipalities impose by their own legislation;

   (b) Taxes levied under national legislation but with tariffs determined by municipalities (either freely or within statutory limits);

   (c) Taxes which municipalities assess and/or collect;

   (d) Taxes which are levied and administered by central government, but whose proceeds are given to, shared with, or surcharged by municipalities.

   Discussion in this Manual is concerned with all these categories. A tax source is of interest if local authorities specifically derive revenue from it, whether or not they levy or administer it, or decide its tariff. However, the Manual is also concerned with the suitability of taxes for levy or administration by municipalities, since they often wish or are expected to play a part in raising the money they spend.

2. If the existing local tax base is unsatisfactory, i.e., it is not yielding sufficient revenue, or its incidence is perceived as unfair, reform can either concentrate on improving administration of the existing taxes or search for other local taxes. It can, of course, seek to do both. This chapter will look primarily at different forms of local tax and their advantages and disadvantages. Taxes will be examined under three headings:

   (a) Taxes on property;
   (b) Taxes on income;
   (c) Taxes on expenditure.

   These will be described in turn and then evaluated according to general criteria.

B. *Urban property taxes*

3. Taxes on land and buildings are the most common form of direct revenue for local authorities in urban areas. They are normally general-purpose revenues, contributing to a range of urban services, particularly to physical infrastructure, such as roads, drainage, and refuse-collection. Property-tax valuations, however, are also used frequently as a base for special taxes or charges, to meet the costs of individual services such as water supply or street lighting.

1. Coverage

4. Taxes on land and/or buildings are normally imposed on all kinds of property - commercial, industrial, institutional and residential - but there are usually some exemptions, often including places of worship and charitable institutions. Governmental properties are customarily exempt, but a grant is often paid to local authorities in lieu of the tax. Some countries exempt properties below a stipulated value; this might be a legal exemption or, simply, an administrative or political choice to ignore squatter settlements etc.

2. Tax assessment

5. Property taxes are normally assessed by applying a tariff (a percentage) to a valuation. Tariffs might be prescribed by law or left to the discretion of the local authority. Such discretion may, again, be restricted by statutory minimum or maximum levels. The tariff in any one locality is normally a uniform percentage; however, it may differentiate between types of property, e.g., being heavier on industrial or commercial than on residential properties. or higher on rented buildings than on those occupied by the owner.

3. Valuation

6. Valuation may be based on:
   (a) Annual rental values, i.e., the potential income to the owner from renting a property (whether it is actually rented or not);

   (b) Capital improved site values, i.e., the potential market sale price of the land or the land and its improvements (meaning the buildings, infrastructure and amenities developed on the land);

   (c) Unimproved site values, i.e., the potential market sale price of the land as if it were vacant, disregarding any actual development on it.

The differences are described below.

Annual rental values

7. Rental values are normally calculated on the basis of "a fair rent", after deducting a standard percentage representing the notional cost of repairs and maintenance. In theory, rental values are closely linked to income and, therefore, provide a fair and readily explained basis for taxation. This assumes, however, that there is a substantial

and fair rental market, and that the valuers have clear evidence of prevailing rent levels. Rental values may be hard both to calculate and to justify where:

(a) The private rental market is relatively small (e.g., in the United Kingdom), or difficult to determine as in most developing countries;

(b) Rent levels are subject to violent fluctuation or severe distortion by conditions of scarcity;

(c) Rent-control legislation is in force which might cause a substantial disparity between official rents used for purposes of valuation and those really paid by tenants.

The most obvious way of assessing rental values is to extrapolate from a large-scale survey of actual rents paid for different types of property in different localities. Where such evidence is difficult to obtain, rental valuations are often based on a notional percentage return upon capital values. In such cases, the distinction between annual-rental and capital-value taxation becomes somewhat artificial.

Capital values

8. Assessment of capital improved site values may be based upon one of three methods of calculation, *viz*.,

(a) A comparison of actual sales of different types of property in different localities;

(b) A capitalization of rental incomes (assuming a current market rate of return upon investment of capital but allowing for depreciation);

(c) Current costs of the land plus current replacement costs of the buildings.

The most common method is extrapolation from comparable sales.

9. Calculations to arrive at capital values based on comparable sales should include the following variables:

(a) Size of plots, with weightings for depth and frontage;

(b) Topography (particularly for industrial/commercial uses);

(c) Actual land use or permitted land use under planning legislation;

(d) The form of land tenure;

(e) Standards of construction, including types of materials, age, facilities (lifts, sanitation, heating, garages etc.), quality of finish and the number of storeys (which may be treated as an increasing or reducing factor according to planning policy);

(f) Location, including infrastructure, amenities (or, negatively, nuisances) and general neighbourhood quality.

Calculation of these variables provides a set of coefficients which are then applied to the square metrage of the land and/or the buildings. The range and degrees of variation taken into consideration (and, thereby, the accuracy of the whole valuation) must, however, depend upon the technical capacity of the valuation staff. It is normally desirable to compare evidence on current values from a variety of sources, such as official records of land transfers, owners' declarations, estate agents and brokers' estimates and local administrators' judgements.

Unimproved site values

10. In some countries, capital valuations are based upon “unimproved site values", i.e., the value of the land and its best possible development, not its current state of development. This system has the notional advantage of encouraging owners to develop their land, since they will not incur any more tax in doing so; indeed, the taxation penalizes any underdevelopment. It also ensures that local authorities do not lose revenue through any lack of potential development. These potential advantages might not be realized in practice for a number of reasons:

(a) Property-tax liability is only one and, rarely, the most important of the factors which influence the investment decisions of a landowner;

(b) Unimproved site valuation requires evidence of “the best potential development” of a particular plot, which is hard to establish;

(c) The incentive element can only work on the assumption that an owner either develops his land or vacates it, so that effective application of this principle would lead to the concentration of desirably located property in the hands of those with the greatest capital.

The application of unimproved site valuation is often modified in practice, to offset the difficulties and potential hardships which have been described. This means assessing property below the value of its “best potential development” or keeping tariffs at a low, effective rate. Either method, however, restricts the real incidence of property tax on expensive developments, leading to a considerable loss of potential revenue. Some countries have attempted to find a reconciliation between the advantages and disadvantages of this system, by imposing a dual tariff on the values of a site and of its improvements, with a heavy weighting on the site value.

C. Taxes on income

11. Income tax is almost invariably a national-government tax source, jealously guarded by the central treasury. Nevertheless, there are a number of ways in which local governments, in different parts of the world, derive revenue from the taxation of income. These will be described in the following paragraphs.

Separate local income taxes

12. In a few cases, local governments are permitted by law to impose an income tax which is assessed and collected by themselves and which is parallel to but distinct from the national income tax. An entirely separate, tax administration is used, and calculation of local, liability is not related to the national system of rates, personal allowances etc. Local authorities in Finland have this power. The main example, however, is in the United States of America, where the Federal and state Governments have concurrent powers of taxing income; in several states, the cities and counties are also permitted to levy a separate income tax, so that, in New York City, for example, a citizen will be paying a separately assessed and collected tax on income to three levels of government.

Surcharge on national income tax

13. A more common system than a separate tax is for local authorities to impose a surcharge on the national income tax, i.e., a percentage addition to the tax liability as assessed and collected by the central government. Local authorities in Japan and a number of European countries - Belgium, Denmark, Italy, Norway, Sweden and Switzerland - have this power. A rate of surcharge may be:

(a) Fixed by law, as in Switzerland;

(b) Fixed by each local authority within a range prescribed by law (as in Belgium, Italy and Norway);

(c) Prescribed by each local authority without limit, as in Denmark or, by each of three levels of local government, as in Sweden.

The surcharge is normally a flat percentage rate charged on taxable income (i.e., net of personal allowances etc.), but a progressive tariff operates in Switzerland.

Assignment of national income tax

14. In several countries, the central government assigns, to local authorities, a fixed percentage of the national income tax collected. In Germany, the Philippines, the Republic of Korea and Turkey, the percentage pertains to the tax collected within the municipality's boundaries; in Brazil, the Netherlands and Nigeria, the percentage share is pooled and distributed by formula.

A tax on professions

15. In certain countries, such as France and India, a tax is imposed upon the pursuit of a particular profession (e.g., medicine or law), payable to local authorities. The tax might consist of a percentage applied to payroll or turnover, or a fixed rate for each profession. In the latter case, the tax operates very much like a licensing fee. The French tax, known as *patente,* is replicated in a number of French-speaking African countries; big businesses are assessed on a fixed multiplier for the type of operation applied to the property-tax valuation. A tax on professions and trades can be an effective means of generating local revenue. It is relatively easy to identify the tax base and cheap

to collect. It is also particularly well suited for informal-sector or quasi-formal activities such as small shops and trades. Problems which should be avoided include complicated assessment formulae as is the case in French-speaking African countries and the regressive nature of over-simplified flat rates.

Mass personal taxes

16. In some developing countries, local authorities have levied a general personal tax on incomes which fall below the point at which liability for national income tax begins. This has operated in countries where only a relatively small minority pay national income-tax, partly because most incomes do not reach the exemption level and partly because the national income-tax administration is not geared to cover a mass of peasant farmers, small traders etc. The local personal taxes have normally attempted to cover the entire adult population and have been characterized by:

(a) A basic minimum rate of tax for which every able-bodied adult is liable, regardless of income:

(b) A fairly low maximum tax rate acting as a cut-off point below the incidence of national income tax;

(c) A series of "stepped" rates between the minimum and maximum, applying to ranges of income;

(d) The use of crude "imputed" or "presumptive" income criteria, to estimate earnings from common sources of livelihood, such as cultivation, livestock ownership and trading.

These mass personal taxes have operated mainly in tropical Africa, where traditions of communal land ownership have made land taxation an unsuitable base for taxation. Although mass personal taxes are regressive by nature, and thus unfair, they provide a major advantage over all other prevailing forms of taxation in developing Countries, i.e. everybody pays.

Box 2

In 1989 a new local service charge was introduced in Kenya as a source of local-government revenue. It consists of three elements:

(a) A graduated levy on wages and salaries of employees up to a fixed maximum and collected at source by employers;

(b) A levy on the value of marketed agricultural produce, collected through marketing agencies;

(c) A levy on all licensed businesses and occupations.

Together, these elements constitute a comprehensive levy on incomes from most forms of economic activity. The different methods of assessment and collection represent a pragmatic response to the difficulties of income taxation in an economy with substantial numbers of self-employed persons and small businesses.

D. Taxes on expenditure

17. This category comprises a broad sweep of local sales taxes, royalties, entertainment taxes, vehicle taxes etc. which are often described as "indirect taxes", because they can usually (but not invariably) be passed on by the payer to someone else, normally the end-user.

Sales of goods

18. General taxes on sales of goods are normally levied by central governments or by the state governments in a federation. There are a few exceptions. About 3000 local authorities in the United States of America impose a surcharge on state sales tax. In the Netherlands and the Philippines, municipalities receive a share of national sales tax, and Brazilian municipalities receive 25 per cent of value-added tax. A local surcharge on petroleum sales taxes operates in some cities in Japan and in both North and South America.

Sale of services

19. There is a variety of local taxes on sales of individual services. Most common are taxes on:

(a) Entertainment, including cinemas, theatres and sports;
(b) Hotels and restaurants (e.g., in Indonesia);
(c) Public utility bills, e.g., electricity, gas and telephone.

Movement of goods

20. The majority of municipalities in India, Nepal and Pakistan (and, formerly, in Bangladesh) impose a tax, known as octroi, upon the value of goods entering a town for use, consumption or sale. It is collected by the equivalent of customs posts on the borders of cities and towns. The practical inconveniences involved have occasioned many recommendations for the abolition of octroi, but it has proved impossible to find an alternative source, which matches the scale and buoyancy of its yields. One Indian state, Madhya Pradesh, has abolished it, but West Bengal has recently adopted it. Octroi is customarily levied according to the weight of goods or per unit. Several cities, such as Ahmedebad and Bombay, now impose it on the value of goods as invoiced (reserving discretion to assess value independently if the invoice is suspect); this is generally found to yield significantly higher revenues than other means. A variable tariff may be imposed, with a low rate (or total exemption) for essential foodstuffs and high rates for consumer durables. Rates of tax are generally very low, usually under 3 per cent of value. A form of octroi also exists in the United States of America for tobacco and liquor goods.

Taxation of vehicles

21. Almost all countries impose a substantial annual vehicle-licensing tax, which considerably exceeds any registration costs. National governments often claim these revenues, because of their size as they argue that vehicles do not stay in one region. Local authorities often have an equally valid claim upon them, insofar as they have to meet the costs attributable to motoring - road construction and maintenance, and parking provision, in particular. A number of countries recognize this and assign vehicle taxes to municipal authorities; Colombia, Egypt, the Republic of Korea, Spain and Zimbabwe are examples. In the United Republic of Tanzania half the taxes accrue to the urban authorities. In some countries, such as India, Indonesia and Pakistan, taxes on motor vehicles are reserved to state or provincial authorities but local authorities tax non-motor vehicles, such as bicycles, bullock carts and rickshaws - a dubious, ill-rewarding privilege. A few city governments also receive a substantial tax on the initial registration of vehicles or on subsequent changes of ownership. This is usually a flat fee, but, in Indonesia, it is a percentage of the sale value.

22. The assessment of annual motor vehicle taxes varies considerably. In some countries, a flat rate applies to each class of vehicle - private passenger, public passenger, light commercial etc. Other countries have graduated tariffs, depending on such variables as weight, engine capacity, distance between axles or age.

23. Parking fees are normally regarded as charges rather than taxes.

E. Evaluation

24. To judge the potential and performance of taxes, criteria are needed: these are set out under six headings. Five - adequacy and elasticity, equity, administrative feasibility, political acceptability and economic efficiency - apply to all revenue sources - tax or non-tax, central or local. The sixth concerns the suitability of a tax for levy and administration by local rather than national government.

Box 3

Harare City Council in Zimbabwe reassesses property tax values every five years. In the interval between revaluations it raises the rate of tax each year in the light of inflation; the Council has unrestricted rights to set tax rates under the law. When a revaluation is completed the tax rate is reduced; in this way tax liabilities are maintained at a relatively constant real level in cash terms. The Council also levies a 5-per cent tax on electricity consumption and collects the licensing fees for motor vehicles. These three sources provide considerable buoyancy in municipal revenue.

Adequacy and elasticity

25. The first and most obvious requirement for revenue sources is that they should be adequate to meet the costs of the services which they are intended to finance. Small, multiple levies, which neither can, nor do yield substantial revenues, are expensive in money, time and public patience. It is usually desirable to concentrate effort on taxes which can raise a substantial portion of the cost of the services to which they are devoted.

26. The costs of services are not static, however. They increase because inflation raises prices, because population is growing, particularly in urban areas, because rising standards of living inspire demands for higher standards of services (e.g., by generating additional traffic or use of water), and because national development plans expect services to be improved and expanded. It is, therefore, highly desirable that revenue sources should show "elasticity", i.e., that their capacity to yield additional revenue should respond to the same pressures as the increasing demands upon public expenditure, and that the tax base should grow automatically when prices rise, the population increases, the economy expands etc.

27. Some revenue sources are far more responsive in these terms than others. Property tax revenues are frequently substantial, stable and predictable - the most substantial tax sources for municipal government, taking a worldwide view. However, the elasticity of property taxes is poor in relation to growth in prices, population and incomes. Real increases in rents or market values are only reflected in the growth of the tax base when revaluations are carried out - often an infrequent process, inefficiently executed. In between revaluations, revenues can only be kept in line with prices by tariff increases which can be politically difficult. Automatic indexation of taxable values improves buoyancy, but this practice is largely confined to some cities in the United States and does not obviate the need for regular revaluation to maintain equity. Population increase does give rise to increases in the tax base, but this is rarely commensurate with the rate of population growth, since many new households are absorbed by overcrowding in existing buildings or illegal construction.

28. National income taxation is buoyant, certainly as far as inflation and economic growth are concerned, and this benefits local authorities which exploit it through surcharging or tax-sharing. Whether it is responsive to population growth depends upon the structure of employment and the extent to which income taxation extends to the informal economy. The other types of local taxation of income, such as occupation taxes, are inelastic, since they normally depend upon discretionary increases in tariffs to keep pace with inflation. They do, however, capture growth in population and business.

29. Taxes on expenditure are perhaps the most buoyant of all, particularly if tariffs are expressed in percentages of prices and not on a unit price basis. The volume of business taxed (or of traffic, in the case of vehicle taxation) should automatically reflect growth in population or personal incomes. Local tax sources, such as octroi in India and Pakistan and motor vehicle tax in Indonesian provinces, have proved extremely elastic. Between 1975 and 1985, octroi revenues in Bombay increased eightfold, while property tax rose by only 50 per cent. The only drawback is that yields will respond to recession as well as growth.

Equity

30. A second requirement is that of equity – that the burden of maintaining public expenditure should be borne by sections of the community in proportion to their wealth. By these standards, taxation is good if it-is progressive, i.e., if the percentage of a person's income paid in tax increases with the level of that income, tolerable if it is proportionate (i.e., if the percentage of income paid in tax is constant at all levels) and bad if it is regressive (i.e., if the percentage of income paid in tax declines with rising income levels). In terms of local taxation, the question of equity has to be seen in three dimensions. First, the incidence of tax should be equitable as between people of different income levels (“vertical” equity). Secondly, it should be equitable between different sources of income; a salaried person should not pay more than one with an identical income derived from business or-self-employment. Thirdly, the incidence of taxation should be fair as between different geographical areas: people should not be taxed more heavily in one area than another.

31. Equity has to be seen, however, in relation to both revenue and expenditure. It might not necessarily be unfair to tax people highly, if they live in an area which has an exceptional level of services. The worst inequities occur when people are taxed heavily in relation to their income and, yet, experience a low or substandard level of services.

32. A progressive tax structure is desirable on grounds of social justice. It does mean, however, that people in the lowest income groups should be subject to very light taxation. This is easy to achieve in well-developed economics, where the bulk of the population is in the middle-income brackets, but difficult in poor societies where most of the population is in the low-income range. In the latter case, the tax base provided by the middle-income and high-income groups might be too small to bear the bulk of public expenditure (the constraints usually being both economic and political).

33. The equitable incidence of a tax is affected by its coverage, by its rate structure and by its methods of assessment. Injustice arising from imperfections in assessment methods will obviously hurt most, if tax rates are high rather than low. As tax rates increase, so does the volume of complaint over any crudity in assessment methods. This means that deficiencies in the system of assessment are a serious constraint to the equitable incidence of a revenue source.

34. Property taxes are crudely equitable, in that there is usually a rough correlation between the income of individuals and businesses and the value of the premises they occupy. There are, however, a number of factors, which impair equity, *viz*.,

(a) Market forces might result in considerable differences in rental or capital values, which depend upon location rather than the quality of the premises or the incomes of the occupants;

(b) The rental or purchase costs of housing or business premises upon which the tax is based might represent a higher percentage burden on the income of the poor than on that of the rich;

(c) Assessment methods might include an inequitable bias;

(d) Differences in the size and value of the premises occupied by business firms might reflect the of business more than its profitability (selling cement needs a bigger shop than selling jewellery).

35. Income taxation is potentially the fairest form and can most readily be made progressive. The problem, however, is to achieve horizontal equity, i.e., to achieve equal taxation of people with incomes that are equal but derived from different sources. Assessing salary earners is easy, assessing the self-employed difficult. Two devices are common - self-assessment or the use of presumptive income criteria.

36. The equity of taxes on expenditure is difficult to determine, because of uncertainty as to who really bears the tax. In so far as such taxes are passed on to the consumer, it can be argued that equity is preserved, since expenditure is a reflection of ability to pay. Evidence suggests, however, that expenditure taxes are highly regressive, where they extend to mass-consumption goods, such as food and clothing, since purchase of taxed goods takes a higher proportion of the income of the poor than that of the rich. This rarely, however, constitutes a criticism of local expenditure taxes, such as octroi, since their incidence on final price is normally insignificant compared with that of national levies.

37. Taxation of private vehicles can be highly progressive, particularly if graduated by size, cost, engine power or other appropriate measure.

Box 4

In 1986/87, the Delhi Municipal Corporation increased its revenue from property tax by 96 per cent over the previous year without any general change in rates or assessments. Several measures pertaining to collection contributed to this result, including:

(a) Freezing the bank accounts of defaulters,

(b) Persuading the Income Tax Department not to grant deductions in income tax assessments for property tax payments by businesses unless the tax and arrears had been paid;

(c) Incentive-scheme for tax collection staff based on fulfillment of targets;

(d) Permitting payment through banks and zonal cash offices, and issuing pass books to taxpayers so that they had evidence of payments made;

(e) Computerizing tax records.

Administrative capacity

38. The third consideration in the assessment of revenue sources is administrative capacity. Revenue sources vary in the amount of skill, integrity and determination required in their administration. They also vary in the amount of time and money involved in collecting them, compared with the yield. In many developing countries, the bulk of the population is self-employed or working for small "informal-sector" businesses without clearly assessable income. The administrative costs of assessing and collecting any direct property or income tax from such a population are very high, although the average amount that can be collected per capita might be low. Yet a very substantial revenue might be collected through a duty on petroleum, for example, at negligible administrative cost. In such economics, there is a heavy bias of administrative convenience towards dependence upon indirect

revenues which can be levied on formal-sector commercial transactions through large manufacturers, importers, distributors etc. This is not necessarily consistent, however, with considerations of equitable incidence.

39. The administrative merit of property taxation is that liability is or should be obvious: i.e., one cannot conceal a plot or a building. Even so, considerable effort is necessary to keep cadastral surveys and taxrolls up to date. Cadastral surveys are expensive in themselves.

40. The biggest administrative problem with property taxation is assessment. This requires technical skill which is often in short supply, though pooling valuers at national level or use of consultants might help. The second problem is that the process often involves a high degree of personal judgement and of contact between assessors and taxpayers which offers wide temptation to collusion in undervaluation. Simple systems, which limit site visits to physical measurement and apply standard formulae, perhaps by computer, may be effective.

41. Collection of property taxes can also prove difficult, if liability attaches to elusive owners rather than occupants, if records are not kept up to date and if sanctions are not punitive or strictly enforced.

42. Income taxation is relatively simple to administer, as far as wage and salary earners are concerned, if employers are required to deduct at source. Assessment of and collection from the self-employed are difficult, and collection costs can be high. Use of presumptive incomes helps assessment, but the resulting inequity is only tolerable where the incidence of the tax is low. If the tax is a mass tax, i.e., not confined to the wealthy, a highly localized administrative network is needed to identify taxpayers and enforce payment. Even so, the mobility of labour in large cities can lead to substantial evasion. One check on this is a requirement of tax clearance for access to public services.

Box 5

One-stop payment and ollection procedures

A major problem in many developing countries is the lack of enforcement capabilities for faulty tax and rate payers. In many instances, the lack of a land-tax cadastre, poorly maintained property registries, absence or shortage of postal boxes and addresses makes it difficult for both tax collectors to collect taxes and tax payers to pay.

Several types of solutions have been implemented in different contexts. A few examples include:

(a) One-stop payment for all local taxes and service rates at any bank, post office, social security office, electricity or water-company office and local government offices. This greatly facilitates payment procedures.

(b) Combining the above-mentioned payment procedures with punitive measures, for example freezing the postal and/or bank accounts of defaulters on property taxes and cutting off electricity supply. Disconnection of water supply is not often used for health and sanitation reasons.

(c) Other punitive and preventive measures which have been used include providing proof of having paid all outstanding taxes and rates before authorising purchase/sale of property, issuing of identity cards and exit permits to travel abroad and approval of bank loans.

43. Taxes on expenditure raise very large revenues with very little cost or difficulty, when they are collected through large marketing or manufacturing organizations, or imposed (as with vehicle taxation) through forms of licensing which the public has a strong incentive to obtain. These levies are costly and difficult to apply to commercial transactions conducted through small businesses, markets and the “informal sector”. A tax on the movement of goods, such as octroi, is relatively simple to enforce, insofar as die taxed goods “come to the collector”, though this does impose inconvenience on transporters (often much exaggerated by the transport lobby) and carries dangers of corruption.

Political acceptability

44. No tax is popular, but some taxes are more unpopular than others. Political will is needed to impose taxes, to decide questions of liability and assessment, to collect taxes physically and to enforce sanctions against defaulters. Sometimes, political sensitivity focuses on particular questions of social values (e.g., should the authorities tax land or charge for water?) or of sectional interests (of landowners, civil servants, traders etc.). Generally, taxes are least sensitive politically if they are indirect (concealed) and do not involve too many overt political decisions, such as a parliamentary/council decision to raise the rate of tax.

45. Property taxes are highly sensitive politically. There are two reasons. First, they have to be collected directly from the payers and are, therefore, seen as even more of a burden than income taxes which can be deducted by employers. Secondly, any increase in tax, whether by tariff revision or revaluation, is normally dependent upon a deliberate political decision by ministers, members of Parliament, mayors or councillors.

46. Income taxation is sensitive, in so far as it is a direct tax, but collection at source mitigates this to some extent, and increases in payment take place automatically as incomes rise. Taxation of the self-employed, however, is very sensitive, since much argument might arise in the assessment process, and effective collection may depend upon a degree of pressure which can be perceived as harassment.

47. Taxes on expenditure are usually the least sensitive politically, since they are normally indirect and subject to a measure of concealment. They might, however, encounter opposition where they are seen to contribute to price rises which foster discontent or where an attempt is made to impose high rates on luxury items which affect political and business elites.

Economic efficiency

48. Taxation has a dual purpose - to provide money for public purposes and to influence economic behaviour. Taxes affect the cost of individual decisions: e.g., a property tax affects the profitability of budding and renting a house, a sales tax affects the cost of buying a shirt, an entertainment tax affects the cost of going to the cinema. Taxes must be judged in terms of their effect upon the decisions of a taxpayer to work, consume, save and invest.

49. Economic efficiency criteria are generally more important in appraising national taxes than local taxes. There are two reasons. First, it is usual for central governments to retain responsibility for overall economic management and to use taxes to modify economic behaviour. Secondly, the scale of local taxes is usually insufficient to make a significant difference to people's choices. A national customs duty of 50 or 100 per cent will clearly affect the decision to buy a foreign car. Its local or regional version, called octroi in India, at 2.5 per cent is not going to make the same goods significantly more expensive to buy. It must be, nevertheless, of concern whether local taxes will have a significant effect - harmful or helpful - on local economic behaviour.

50. Property taxation is often debated in terms of its incentive effects on land use and construction. As already mentioned, unimproved site value taxation is frequently recommended - and occasionally adopted - to encourage high-value development and, conversely, penalize underdevelopment. It is likely that the supposed incentive and disincentive effects of property taxation in most cities are considerably exaggerated, simply because of the low ratio of the tax to the other costs and incomes which influence an owner's choice on development.

Tax administration by local authorities

51. In addition to the general considerations of types and methods of taxation discussed above, tax administration by local authorities raises specific questions of feasibility. Some, relating to the availability of administrative skills, have already been raised. Others must be mentioned here.

52. The first issue is whether it is clear to which authority a particular tax liability is due. This is rarely a problem with property taxes, since a plot or building is clearly located within a particular jurisdiction. Some argument arises over local income taxation, where an individual resides in a different jurisdiction from that in which he or she works; it is usually held that the area in which a person lives should get the tax, but some towns claim the right to tax commuters. The most difficult question arises over taxes on corporate incomes, where profits might be derived from operations in several locations. Countries with local taxes on corporate profits have developed formulae for assigning tax revenues to different municipalities, but the process is complex.

53. A second and related issue concerns the location of tax collection. Tax may be paid in one area butthe payer may effectively pass the cost to someone in another locality. For example, a sales tax may be paid by an importer at the port of entry or a manufacturer where the factory is situated; but the tax may be added to the price of the article and "shifted" to a consumer elsewhere in the country. If the sales tax were a local government tax (or shared with a local government according to its origin) the income would not necessarily go to the local authority where the eventual payer resided. It is desirable that local taxes should accrue to the local government where the taxpayer lives, but this is not easy to insure; even the property tax on a shop or factory may be "shifted" through prices charged to consumers from other localities.

54. A third issue concerns the problems associated with different tax rates or assessment rules. Ideally, a local authority should have discretion to set its own tax rates and to make its own decisions on the levels of taxation it raises and of services it offers. In the case of property taxation, no practical difficulty arises, if one town levies a higher rate than another; this practice might have effects on the local economy and on choices of location, but, at least, the local authority can decide whether to bear the consequences. The biggest problems arise with different rates on expenditure tax in different areas for the same goods. Such variations can lead to significant prices between jurisdictions and, therefore to movements in trade differences. However, one can argue that a local authority should be free to make a decision in the light of all its consequences, beneficial or adverse.

F. General experience

55. Financing by local taxes maintains the principles of local cost recovery, although the amount of individual tax liability is not always closely related to the benefits received. It enhances accountability, in so far as local representative bodies have discretion to fix tax levels and assessment criteria themselves, and to reconcile these with expenditure priorities.

56. The most widespread base for local taxation is property - the value either of land alone or of land and buildings. The clear connection between such property and the supply of physical services, such as roads and drains, gives it an obvious “local” character; and it is the least vulnerable to poaching by other levels of government. This latter immunity is chiefly due to two characteristics. The first is its high political visibility, since it is normally collected in cash from the ultimate bearer of the tax burden: the second is its inelasticity in relation to inflation, population growth or rising incomes. These weaknesses have led to a widespread decline in the percentage contribution made by property taxation to the support of urban services. In much of western Europe the tax is fast disappearing as a significant source of urban revenue.

57. Local taxes on corporate and personal income - usually by surcharge - are sources of revenue for local authorities in North America, Japan, the Republic of Korea, and parts of western Europe. In economies where the bulk of commerce is in the hands of large corporations and most people are in fixed-wage employment, income taxation offers urban government a substantial and buoyant revenue base, provided that the rates of national/state income tax are not too high to preclude a significant local income tax or surcharge. These conditions are rarely obtained in developing countries, and few of their cities directly benefit from this tax base. Kenya, Uganda and Zambia have graduated personal taxes which attempt to tax a large amount of income left unexploited by national income taxes owing to inadequate administrative coverage and high levels of exemption. These local taxes apply a series of stepped rates between a statutory minimum and maximum. The Ugandan tax uses “presumptive income” criteria to estimate personal incomes from all sources of livelihood; the Kenyan tax combines a tax on salaries, wages and business occupations with a cess on agricultural produce. Mass personal taxes are a means of exacting a contribution from all citizens, but, in urban conditions, that can be a laborious and demanding process.

58. There are several cities which draw revenues from taxes on goods, services and general business turnover. Octroi provided 67 per cent of Bombay's current revenue in 1985/86 and 71 per cent of Karachi's. These taxes can be lucrative and buoyant, but are extremely, heterogeneous and spasmodic, i.e., relatively few cities collect large revenues from taxes which vary considerably in their base and method of assessment. Quite widespread are taxes such as those on entertainment, but these finance relatively small proportions of city budgets.

59. With inflation and rapid growth, city governments might be able to cope with the costs of providing a relatively limited range of physical services - local roads, refuse collection etc. - with a revenue base of property tax and user charges only. Those which have shown the capacity to finance a wide range of services (such as education and slum improvement) and to respond energetically to growing demands have either: (a) a revenue base with at least one other substantial tax source (e.g., motor vehicles in Jakarta, motor vehicles and electricity consumption in Harare, octroi in Bombay or Karachi) which effectively exploits the buoyant features of the urban economy; and/or (b) significant and increasing transfers from national/State governments. These are not necessarily preferred options, simply descriptions of past performance. However, a substantial and wide local revenue base might be more secure in the long term than a rising level of dependence on government transfers and grants.

V. CHARGING: GENERAL PRINCIPLES AND PRACTICES

Trainers' notes

This is the first of two chapters on user charging. It is devoted to general principles. The first section describes variations in the range of urban services financed by user charging. The second section discusses three major issues in the estimation of charges - the identification of cost to be recovered, the choice between marginal and average costs, and the alternative methods of charging capital cost. The third section analyses justifications for, and methods of, subsidization. Finally charges are analysed in terms of the same criteria as taxation in chapter IV.

This chapter should be read by participants and then discussed in one or two teaching sessions. Trainers need to go through the content systematically using prepared illustrations to ensure that the principles and practices are thoroughly understood. A basically didactic approach is required.

A major weakness in user charging is the lack of automatic response to cost inflation and e political sensitivity of any major increases in tariffs. It is well to stress the importance of small but regular, annual increases to avoid growing deficits and the need for large, unpopular price rises.

A. Introduction

1. 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 whether the service is immediately available to him/her and how far he/she uses it. In the other, payment depends upon the service being provided and the use made of it. The reasons for this distinction have been discussed in chapter III.

2. In practice, this distinction becomes bluffed in two ways. First, charges might be imposed which greatly exceed the cost of the service rendered, the surplus being appropriated to a general revenue pool (as opposed to extending the service or subsidizing other users). This is typical of many charges for regulatory purposes - licensing fees, for example - and such “charges” effectively become taxes. Secondly, a service might only be partly financed by charges, the balance coming from specific or hidden subsidies from general tax revenue.

3. There is also a widely-used practice which marks a halfway stage between taxing and charging. This is the calculation of service charges as a percentage of property-tax values. Water, street lighting and drainage charges in many Indian cities have this basis. They approximate to a charge, insofar as they only fall upon taxpayers to whom the service is provided or available, but to a tax, in that their scale is not related directly to the quantity consumed by the payer.

B. The extent of charging

4. There are enormous variations in the extent of public user-charging - variations in charging for a service at all, variations in the extent of direct cost-recovery and variations in the dependence of particular public authorities upon revenue from charging.

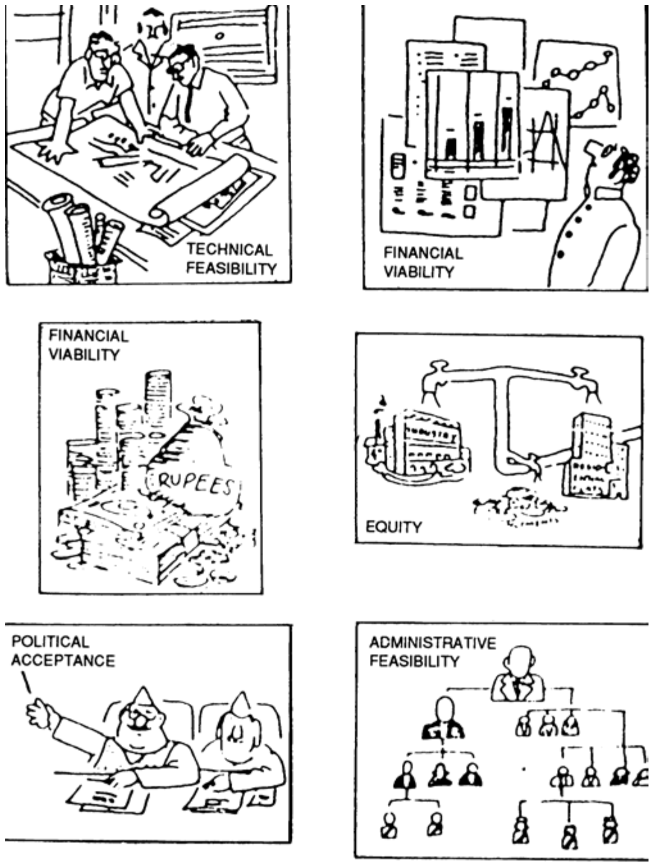
5. Taking the first dimension, there are some services for which direct user-charging (with or without subsidy) is almost universal, *viz.*,

   (a) Piped domestic and industrial water supplies are normally billed through metered consumption rates, through a rate based on property valuation or the diameter of the mains connection pipe, or through sale from public water points;

   (b) Public transport costs are recovered, partly at least, from passenger or freight fares (though subject to increasing degrees of subsidization from general revenues in Western countries);

   (c) Postal and telephone services are normally sold per unit of service;

   (d) Gas and electricity are also basically charged according to volume consumed, though unit costs often decline as the amount used increases, i.e. charges are regressive;



a) **Technical Feasibility,**
b) **Financial Viability and Yield,**
c) **Political Acceptability,**
d) **Equity,**
e) **Efficiency in the delivery of services,**
f) **Quality of service as viewed by users.**

(e) Public-housing tenants almost invariably pay rents (or tenant-purchase installments), except where subsidized housing is provided to public servants as part of their conditions of service;

(f) Some form of entrance fee is normally charged for use of certain recreational facilities, such as municipal swimming pools, golf courses or theatres, though not for others, such as parks.

Provision of public-utility services such as water, gas, electricity and telephone, is also, usually, subject to initial connection fees and, sometimes, subject to a basic standing charge, regardless of consumption.

6. There is a wide range of practices regarding the charging for services. The following are prominent examples:

(a) *Education.* Most countries now provide tuition-free education at primary level, though the costs of "extras", such as uniforms, meals and textbooks, might still be a significant burden for poor families. A minority still charge for primary tuition - mainly where the provision of school places falls far short of the school-age population - though usually at highly subsidized rates. The position at secondary level is not dissimilar, but with more countries charging and at significantly higher rates than for primary level; these charges are frequently counterbalanced by provision of exemptions or scholarships for poor students. In tertiary education, charging can be regarded as the rule; what varies is the extent of subsidization and of scholarship provision. An alternative concept in higher education is the charging of costs to a loan account which the student discharges over his/her subsequent career. Parental contribution is frequently sought for the capital costs of primary school-building through "self-help" community effort.

(b) *Roads (and related infrastructure).* Construction and maintenance of highways are typically financed from general taxation, but there is, internationally, a variety of specific user-charges for roads. Trunk roads, with limited access, are often operated as toll roads. Initial construction of estate or neighbourhood roads, together with drainage and street lighting, is frequently charged to landowners through initial service charges or to local taxpayers, as in the case of some Colombian cities, through the valorization tax system. These costs can, alternatively, be recovered from developers and residents by public acquisition, servicing and resale of land - a widespread practice by urban-development authorities or new-town corporations - or by the variant of land readjustment. Costs of city-centre roads can be recovered indirectly through parking fees or area licenses (most significantly in Singapore). Maintenance of local roads and paths in rural villages or urban neighbourhoods can depend upon obligatory communal labour or some monetary commutation.

(c) *Medical services.* Generalizations are difficult, but two basic models can be discerned. In the first, public hospitals and clinics provide a free basic service, while charging for preferential accommodation or priority treatment for non-emergency cases in hospitals; a substantially free basic service can, nevertheless, be associated with a low flat-rate fee for treatment and/or drugs, subject to exemption for children, the old or the destitute. The other model is full-cost charging by hospitals and clinics - whether publicly or privately run - but with a national medical-insurance scheme or a range of private insurance schemes, to cover patients' costs; some form of protection is usually given to those with low incomes and inadequate insurance cover by graduation of charges according to income.

(d) *Environmental health.* As a demonstrably public good, public-health services are customarily tax-borne, but there are exceptions. Sewerage or refuse collection is frequently charged to those served, occasionally by specific fees but usually, in the case of households, by a rate graduated according to property valuation. Removal of industrial refuse or effluent is usually charged specifically, according to volume and effluent strength. Where communal sanitation is provided, users might be expected to maintain it collectively.

(e) *Fire services.* Urban authorities occasionally charge their citizens (or their insurers) for putting out fires.

C. Cost estimation

7. The basis of charging is cost-recovery, but this can be varied by governmental policy to charge less than the full cost or to recover more than the full cost, involving, respectively, a contribution from or to general revenue. Issues of subsidization or surplus-generation will be discussed in later sections. However, the first necessity under any charging policy is to define and calculate the full costs of the service under consideration. This raises three issues.

8. The first issue is what expenditures to attribute as costs to a particular service. Where does one draw the boundary between the costs of a particular service and those of general public services in the locality or the general administrative overheads of the local authority concerned? For example, in calculating the costs of a sites-and-services plot, one could notionally include all expenditures on:

(a) Off-site infrastructure such as roads, drainage, street lighting;

(b) Extensions to trunk infrastructure necessitated by the estate (e.g., main roads, water treatment plants and pumping stations, main services);

(c) Social and community services (e.g., schools, clinics, community halls);

(d) Project administration (e.g., managers, architects, engineers);

(e) A proportion of central administrative overheads (e.g., planning, personnel and finance departments, the chief executive office).

An intermediate approach is to attribute only the marginal costs of administration, i.e., those increases in overheads caused specifically by the expansion of a service. The community services on an estate might be regarded as part of the general services provided by the local government to public and private tenants and owner-occupiers alike: if this is so, there would be no justification for including them in the housing costs. However, a different case would arise if services provided to a municipal estate were of an exceptional standard and character:

here, resort can be made to the principle of charging the marginal costs, i.e., those increases in public expenditure which arise specifically from the provision of the service.

9. The cost “boundaries” issue arises very sharply in respect of car parking. The full cost of a car park might be regarded as confined to the provision and management of a parking site. It can be argued, however, that the costs of parking include providing access to the general area, thereby including the road and traffic management system in the vicinity.

10. The second issue is whether the costs are calculated according to the actual expense of a particular unit of service or on a pooled average basis. The actual costs of an identical level of service might vary considerably. Amortization of capital costs will vary with the age of the capital assets, because of inflation and because of fluctuations in the interest rates attached to any loans involved. Location affects costs: water and electricity will be costly to supply to outlying areas, because of transmission costs - the length of mains, pumping, leakage etc. Low-density populations consume less than high-density, but the fixed costs of provision will not fluctuate proportionately: a half-empty bus serving a sparsely populated area will cost almost as much to run as a crowded one in the city centre (depreciation and labour costs might he almost constant, and fuel consumption will not be proportionately lower).

11. There are conflicting arguments. If chargeable services are seen as purely private goods, and charging as a market-pricing instrument, each unit of service should be charged according to its own marginal cost. A consumer is only provided with a service if he/she is prepared to pay the true cost of providing it to him/her. This encourages rational use of a service and an optimum location of settlement. If wealthy commuters choose to live on elevated 4-acre plots 20 miles from the city, they should bear the heavy costs of pumping water to them; the charges might encourage them to live somewhere more sensible in the eyes of town planners.

12. The opposite argument is that the conditions which vary the cost of service are not necessarily of the consumer's making; insofar as the service might meet a basic human need, the consumer should not be penalized, if costs are above average in his/her case. If the poor live on the outskirts of a town, for example, it might be because that is the only place they can afford land and shelter. Distance from work will increase their essential expenditure in any case, and their burden should not be increased by charging above-average unit costs for essential services.

13. This issue arises sharply in many cases and is difficult to resolve. It faces public-housing authorities when fixing rents of estates which vary greatly in their historical construction costs and interest charges pertaining to particular generations of houses. Two questions, however, affect the balance to be struck between the arguments for marginal cost and for equalized charging. The first is the extent to which the service (or some minimal provision of it) is meeting an essential human need: the second is the degree to which individual consumers choose the conditions - particularly the location - which affect the cost of the service they use. Both questions really involve the degree of consumer choice; the extent to which use of a service at above-average cost is self-imposed, like buying an expensive piece of clothing.

14. The third issue in cost estimation is whether capital costs are included and on what basis. There are many examples of services which are meant to be self-financing, but only the operating and maintenance costs are charged to the consumer. The capital costs have been met out of general public revenues or from loans which have been fully discharged. Many long-standing water-supply and sanitation systems fall into this category; so does the New York City subway.

15. Clearly, where debt charges are still current, these would be included in the chargeable costs of a service, unless it is being deliberately subsidized. Even so, these debt charges might fall below a market level if the loans are "soft", i.e., they have not been advanced on full commercial terms. There are arguments, however, for including capital costs in the estimation of charges, whether the authority administering the service is currently discharging them or not. Capital investment is regarded as having an opportunity cost; i.e., it could have been used on some other form of public expenditure or left in the taxpayer's pocket. Seen in this light, investing capital in a particular service can only be justified if it earns a rate of return comparable with alternative forms of public or private use. The public's willingness to buy a service at the resulting level of charging is comparable to its readiness to buy goods or services from a commercial operator using the same amount of capital; it is the essential market test of viability. It is even argued that this test of comparison can only be fully met if charges include the equivalent of the taxation which a private operator would have faced.

16. Similarly, it can be argued that it is improvident that users should not contribute to the capital costs of assets, just because the costs have already been fully met by another generation or public body. All physical assets will wear out in time and will require replacement at current costs. Not to pay towards capital costs is to live off the sacrifice of previous and future generations. Charging should, therefore, include the amortization of capital assets at their current rather than historical value, i.e., the cost of acquiring or constructing them now.

17. Marginal-cost pricing is a variation of this approach, aiming to charge all consumption at the unit cost of meeting any additional demand; if extra demand would necessitate new capital expenditure, its unit costs would be reflected in the price of the whole existing supply. For example, if a water supply is capable of supplying twice the present level of demand, the marginal cost of extra consumption would be zero, but, if its full capacity is already exhausted by current demand, the marginal cost of water is investment in a new supply (extra reservoirs, pumping stations, mains pipes, treatment plants etc.). Such pricing is advocated on the grounds that every consumer must be faced with the full cost implications of increasing demand. It is mainly used in relation to utilities such as water and electricity, where increases in consumption can flow from the decisions of existing as well as potential consumers.

18. Including provision for future capital requirements, through depreciation charges, current-cost accounting, marginal-cost pricing or similar approaches, is obviously prudent in theory, but it does have its dangers. Adoption of such principles can give rise to considerable increases in charges which conflict with counter inflation policies. It can also generate substantial cash surpluses which discourage service managers from proper concern with efficiency and economy in expenditure.

Surplus funds held against future capital commitments can be too readily diverted to cover deficits in the financing of other services.

19. There are, therefore, a variety of practices in cost estimation. Chargeable costs may include:

(a) Operation and maintenance only;

(b) Amortization of capital costs on “soft” terms (i.e., interest-free or at submarket interest rates; perhaps with moratoria on repayment or prolonged repayment schedules);

(c) Amortization of capital costs at full market rates of interest;

(d) Depreciation of the value of capital assets over their estimated life;

(e) A commercial rate of return on the value of the investment in capital assets;

(f) The marginal cost of investment (i.e., the unit capital costs of providing more than the present supply);

(g) A notional element of tax liability.

Furthermore, in calculating the value of capital assets for assessing depreciation or rates of return, valuation may be based on:

(a) Historical costs;
(b) Current market or replacement costs.

A two-part tariff can be adopted, with a fixed charge for the capital-installation costs and a variable charge based on consumption.

Charging below cost

20. The grounds for imposing charges would normally suggest that they should be based upon the total costs of the services under provision (though subject to all the question marks over cost estimation just discussed). The extent of this self-financing varies, however. As we have seen, the theoretical justification for charging involves some compromises, and these might result in charges being fixed below full cost level and subsidized from general revenue. There are three cases when this might happen.

21. The first case arises when a service is basically a public good – provided because of its collective benefit - but a charge has to be imposed to discipline consumption. The charge would then have to be set at a level calculated to

deter waste but to permit the minimum essential level of consumption by all income groups. Medical-prescription charges or water-standpipe rates might fall into this category.

22. The second case occurs where a service is partly a private and partly a public good - where it primarily benefits the individual user, but its consumption needs to be encouraged for some public saving or benefit. The most conspicuous example is where rail or bus fares are subsidized to encourage people to use public rather than private transport, as a means of reducing traffic congestion and road maintenance.

23. The third case is where a private good might be subsidized, because it is regarded as a basic human need and low-income groups, at least, could not be expected to meet its full cost. It is difficult to give examples, simply because the conception of "basic needs" is highly subjective and relative to the general standard of living.

24. To the purist, subsidization is an aberration. Clearly, it can lead to inefficiencies – either because resources are squandered on provision which is not cost-effective or because the subsidy benefits all consumers whether they need it or not. Two solutions are advanced. First, reduced charging should only apply to certain categories of users - low-income groups, children, old people etc. - or, secondly, subsidization should apply only to a minimum level of consumption, above which market pricing should apply. The first 40 litres of water supplied to a person per day might be charged, for example, at a low rate below cost, but consumption above this level would be priced at the full marginal cost. This is known as the "lifeline" approach, and water tariffs in Tokyo, for example, are based on this principle.

Charging above cost

25. In some cases, charges can be based upon recovering more than the full cost of a service, i.e., upon making a profit. There are three cases, at least, where this might arise.

26. The first is where charges are imposed for a basically regulatory purpose, involving little direct cost. There is a wide variety of charges from which municipalities, in various countries, derive revenue - often substantial - of this type. Examples include:

(a) Plot-registration fees;
(b) Land transfer fees;
(c) Building licences;
(d) Trading licences;
(e) Parking charges;
(f) Liquor licences.

27. The second is where charges might be imposed at an above-cost level, to reinforce their disciplinary effect upon consumption. Telephone charges can be graduated according to the time of day, to discourage congestion at peak business hours. Parking fees or area-licensing fees can be imposed at punitive levels, as in Singapore, to keep private cars out of city centres.

28. The third is where a service might be in heavy demand and people willing to pay highly for it, because of its importance or popularity and short supply. This is the case where the same service is also provided by private-enterprise. Charging above cost could be justified, in such circumstances, if the surplus revenue is ploughed back into extending the service, so that many have access to it.

29. Charging above cost, however, more than users gain is analogous to taxation. Its incidence and equity have to be considered. Which sections of the community are paying over the costs for a service, and which sections are benefiting from the surplus revenues? Charging high parking fees might be equitable, insofar as car-owners are generally from high-income groups, but making profits out of bus users, through fares, bus station fees etc., might largely penalize the poor.

D. Appraisal

Adequacy and elasticity

30. The extent and practice of charging are subject to such variations that generalizations about the scale of its contribution to local-government revenues would be meaningless. Some comment is possible, however, on elasticity. Charging should be responsive to growth in population and incomes, since these are generally reflected (often more than proportionately) in the growing demand for and consumption of a service.

31. Charges tend to be unresponsive to inflation, however. They are almost invariably based upon fixed tariffs per unit of service, and a discretionary decision is usually needed to increase them when costs rise. Increasing house rents, water tariffs, and bus fares is unpopular, and these charges frequently fall far behind the rate of inflation.

Equity

32. Charging is traditionally regressive. There are three reasons. First, it falls upon consumption which might be dictated more by essential needs than income levels. Secondly, subsidization often benefits middle-income and high-income groups more than the poor, as already discussed, with public housing and tertiary education as prime examples in many developing countries. Thirdly, because the capital costs of installation have to be recovered, regardless of the level of consumption, and do not vary greatly according to that level, many tariffs are based upon a declining unit cost, i.e., the more water or electricity used, the cheaper it gets. This favours large industrialists, at the expense of small enterprises, and householders with two bathrooms, a lawn to sprinkle and a car to wash, at the expense of poor families with one tap. One other regressive practice has been that of initial connection charges for water and electricity; regressive in the sense that the requirement of a lump-sum payment for initial installation has frequently prevented poor households from getting a service at all.

33. Charging is not usually seen as an instrument of redistribution *per se*. It is an inefficient tool for this purpose, precisely because consumption is not related only to income but also to family size, for example. Nevertheless, there is a growing concern to curb its regressive tendencies and, even, to use it as a positively redistributive mechanism. There are two reasons. The first is the effect which regressive incidence may have upon the access of the poor to chargeable services regarded as basic needs. The second is the failure of the taxation system in many countries to shift resources from the rich to the poor; if charges are easier to exact than taxes as a general means of financing public expenditure, this may extend their utility in redistribution.

34. There are various methods by which charging can be made non-regressive or positively redistributive. The first is the widespread basing of charges upon property values; water and sanitation are often priced on this basis. However, such an approach remains ineffective in most developing countries owing to lack of up- to-date valuation. The second is the use of differential tariffs, with high rates for certain classes of user - usually commercial and industrial; this is, of course, a questionable instrument, if the incidence falls on the consumer rather than the shareholder. The third is a progressive tariff which imposes increasing unit prices as consumption rises. The fourth is means-testing, with reduced tariffs or exemptions for the old and the poor (rarely an easy process to administer). Water-supply schemes financed by the World Bank have been widely characterized by cross-subsidization, progressive tariffs on large domestic or commercial consumers and reduction or elimination of the charges for supply to public standpipes and to households consuming small volumes only. However, this practice is being questioned, at least with respect to the charges to large domestic consumers, on the grounds that high water consumption might reflect household size more than wealth and that large families or shared dwellings are characteristic of the poor.

35. Cross-subsidized housing schemes are an object of increasing experiment, with rents or tenant-purchase charges on large houses or commercial premises subsidizing the provision of serviced sites or small units. Remedies for the burden of initial infrastructure connection charges include spacing payments over a number of years and recovering them by installments combined with the regular consumption charges.

Administrative capacity

36. Charges are theoretically easy to assess and collect. They are easy to assess, because liability is based on measurable levels of consumption; easy to collect, because people only get what they pay for. If rents are unpaid, the tenant is in principle, evicted; water, electricity, or telephones are cut off if bills are unpaid; people can only enter the swimming pool or the theatre through the turnstile.

37. In practice, there are three sets of difficulties. The first is technical – the problems of controlling illegal water connections and meter-bypassing, for example, or of collecting fares from a crowded bus with passengers inside and outside. The second concerns the political will to implement sanctions: evictions rarely win votes and are pilloried by the media; politicians may intervene to stop disconnection of water or electricity supplies to their supporters. The third problem is integrity: tax liabilities are fixed, but those for charges vary with consumption; it is hard to check what collectors should have received.

38. Imposition of sanctions is essential to efficient administration of charges, and some other devices are common. The first is to estimate what income should be received and then impose target revenues upon collectors: even municipal bus crews in Jakarta are expected to turn in a target collection of fares per route per day. A second is to subcontract charging to commercial collectors who tender lump-sum revenues competitively; this is analogous to tax-farming. Either method stabilizes revenues but can exploit the consumer. Subcontractors become monopoly suppliers and can often make extortionate profits, standpipe water-selling being a notorious case in some countries. A third practice is to require small neighbourhood groups to collect charges and pay these jointly to the service authority. This has been adopted for plot and water charges in the upgraded squatter areas in Lusaka; prompt payment is rewarded by a discount in the form of some communal improvement.

Political acceptability

39. Most charging is accepted in principle. Insofar as they are directly related to a specific tangible service and insofar as consumption includes an element of choice, charges are understood and met with reasonable willingness. Nevertheless, the level of charging is most sensitive politically. Most charges have to be paid out of pocket, and many relate to what people regard as daily necessities - education, transport, water, housing and the like. Increases require specific political decisions and are unpopular so that representative bodies are often even less willing to raise bus fares, house rents or water rates than taxes. Moreover, the need to raise charges arises particularly in times of inflation, when governments are under pressure not to increase prices.

40. As a result of failure to increase charges, by reason of political inertia, services either deteriorate or require increasing subsidy. Bus services, for example, have become increasingly unreliable because of the inability to replace worn-out vehicles. However, increased charges to meet rising costs might result in decreased consumption. Since capital costs and overheads remain constant, this gives rise to increasing unit costs: a vicious circle of declining use and rising charges is created.

41. The direct connection between consumption and charging is not always a political advantage. The public might make invidious comparisons between the service they receive and the amount they pay for it. Such discontent can be helpful, if it spurs managers to seek efficiency; it can be unhelpful where it is based on misconceptions of the true cost of provision.

Charging by local government

42. Discussion, so far, has not focused specifically on charging by local governments, since little distinction can be drawn between the practices and experience of central, parastatal and local authorities in this respect. Many if not most directly charged services are provided, in fact, by local authorities. There are no special problems attached to the administration of charging by local government. The performance of a service is normally located clearly in a given region, and assignment does not create difficulty; local variation in tariffs can cause political dissatisfaction but no insuperable administrative problem; the relative closeness of local representative bodies to their electorate might, however, sharpen their reluctance to increase tariffs or enforce compliance.

E. Conclusion

43. Acceptability, ease of collection and the need to discipline popular demand are all powerful arguments for charging service costs directly to the consumer. Although not inherently or traditionally an instrument of redistribution, charging can be molded to this purpose where there is political will and no suitable fiscal alternative. Much charging is highly sensitive, however; revenue might fall below the levels needed to operate a service effectively, particularly in times of inflation, because of political reluctance to increase tariffs or enforce sanctions. The specific connection between consumption and cost, and the direct nature of payment enhance accountability, where representative institutions are involved, but the consequent sensitivity can undermine the viability of a chargeable service.

VI. CHARGING: SPECIFIC APPLICATIONS

Trainers' notes

This chapter looks at practical applications of user charging for three major urban services - water supplies, low-cost shelter, and urban land development. In the case of water supplies the chapter assumes user charges as the norm and sets out the normal measurements of the viability of a water enterprise. In the cases of low-cost shelter and land development, it describes a variety of methods by which cost recovery is attempted in different countries and cities.

A less didactic approach is needed for discussion of this chapter. It is designed as a prelude to group discussion in which participants describe the methods of cost recovery in their own countries/cities, analyse their effectiveness and debate the possibility of improvements and alternatives. As with the treatment of taxation, the chapter aims to open course members' minds to the variety of instruments which may be open to them.

A. *Urban water supplies*

1. Urban water supplies are generally expected to be self-financing. There is a long tradition in both developed and developing countries of constructing and managing such supplies through separate enterprises - often municipally owned. Although such enterprises usually need to borrow money extensively to finance capital costs, they are generally expected to repay the capital and interest and meet the operating expenses through charges levied on the consumer. Some consumers do get a subsidized supply (or even a free supply through public standpipes), but the costs will be met by excess charging of other consumers, often industrial or commercial.

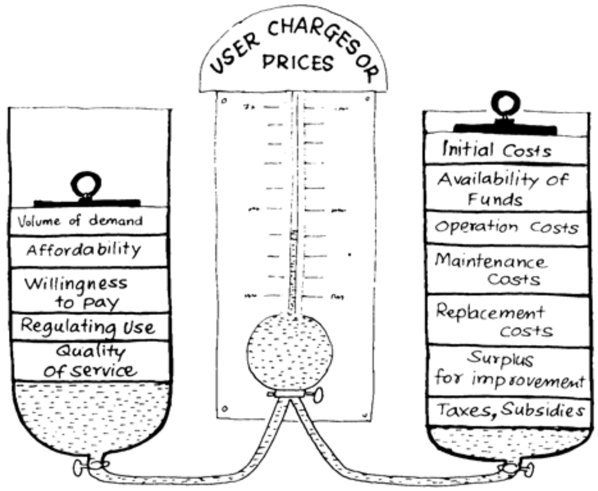
2. This principle of full cost-recovery is not always observed. Some water undertakings get subsidies from governmental or municipal budgets. These may be direct subsidies or provision of loan finance on concessional terms. In other cases, water supplies might form part of ministry or municipal budgets, and no direct effort is made to reconcile the specific revenues from water charges with the specific outlays on the supply (which might not, in any case, be clearly defined in the budget). However, these are generally regarded as unsatisfactory or transitional arrangements, with full cost recovery as the ultimate aim.

3. Just why full cost charging is expected is a matter of debate. Potable water supplies are a basic human need, and they are not purely a private good, since they are important for hygiene and the control of communicable diseases. This is the rationale for at least a degree of cross-subsidy within the service, to help poor households. However, a self-financing basis for a water supply as a whole can be justified on at least three grounds:
   (a) Potable water supplies are not universally provided. In most developing countries, treated and piped supplies are not widely provided in rural areas nor adequately throughout all towns. A “free” supply would involve, some subsidy of consumers by taxpayers who do not have access to the supply;

   (b) Much water is used as a raw material by industrial and commercial consumers for profit-making operations;

   (c) Water is usually a scarce resource, and consumers need to be subject to some discipline (an effective argument only when charging is based on metered consumption).

4. A feature of most urban water supplies is their heavy ratio of capital to operational costs. The construction of reservoirs, treatment plants, trunk pipeline and reticulation systems is normally costly, particularly where adequate supplies can only be found at considerable distance. Operating costs vary, according particularly to the degree of pumping required for reticulation, but, compared with most local public services, the labour requirements are small. A further characteristic of water supplies in most developing countries is rapid expansion in demand. This is due to high rates of urban population growth, industrialization and general economic growth, with associated improvements in living standards and expectations. A final factor is that many of the capital assets used in water supply particularly the pipes and machinery - have a limited life, and they eventually need extensive repair or replacement. Because such costs are heavy in proportion to normal operating costs, they can cause exceptional levels of expenditure in a particular year, difficult to meet purely from that year's budgeted revenue. All these factors put pressure on water enterprises to raise sufficient revenue to meet their operating costs, provide for future replacement of plant and machinery, and finance heavy capital investment in expansion.



Demand Pulls and Cost Pushes & Price levels

Financial indicators

5. A series of financial indicators are normally used to assess how far water enterprises are meeting the objectives of cost recovery and capital provision. They are examined not just at a single point of time: comparisons of these indices at normal intervals show the trend in financial performance. These indicators are described below:

(a) The first financial priority for an enterprise is to remain solvent. This means being able to pay the costs of staff, electricity, chemicals etc., and avoid debts to employees or suppliers. An indicator for measuring this capacity is the QUICK CURRENT RATIO. This is,

$$\frac{\text{The value of current assets (excluding inventories)}}{\text{Current liabilities}}$$

The current assets are cash (including bank balances) and sums owed to the enterprise (mainly in unpaid consumer charges): the current liabilities are sums owed to others - outstanding payments to employees, suppliers etc., deposits and interest owed to depositors. The value of inventories (stores etc.) is excluded because it cannot be readily turned into cash to meet liabilities. Clearly, if the ratio is less than 1, the enterprise is in debt on its current operations, but, if the ratio is high, it could mean that tariffs are too high (unless money is being accumulated to pay for pending capital works).

(b) Viability and equity are heavily dependent upon collecting water charges efficiently. This depends both upon the s~ at which people are billed and required to pay, and the efficiency with which defaulters are identified and action taken against them. Two indicators are relevant. The first is the COLLECTION EFFICIENCY, which is,

$$\frac{\text{Revenue collected}}{\text{Total billings}}$$

It is important, in this respect, to look not just at one year's figures but at trends over time, to see whether efficiency is improving or decreasing.

(c) A supplementary measurement of collection is the AVERAGE AGE OF CUSTOMER RECEIVABLES, i.e., the average number of months that all outstanding billings have been due for payment. Again, comparisons over time will show whether default is increasing or lessening.

(d) It is frequently necessary to borrow money to finance capital expenditure. There is, of course, nothing wrong, in principle with such a practice, since the loans should be repaid from the revenue earned by the increased supply. It is necessary to ensure, however, that revenue is adequate to cover debt service. An indicator for this is the DEBT SERVICE COVERAGE which is,

Net annual income*
Annual debt service

(*Net annual income = Gross annual revenues - Operating costs)

(e) It is important that consumer charges meet operating costs, debt service and provision for renewals. As explained above, operating costs should not normally represent a large percentage of these obligations. The tariffs should be designed to yield a substantial surplus of revenue over operating costs. This is represented by the WORKING RATIO, which is,

Operating costs (excluding depreciation)
-- per cent
Total revenue

(f) Finally, it is frequently (though controversially) held that the overall financial liability of a water enterprise should be measured by the same test as a commercial enterprise, namely, net income as a percentage of capital invested. This is based upon the assumption that investment in the enterprise can only be justified if it raises the same financial return as an alternative use of the capital. Even if this rationale is not fully accepted (because of the social benefits of water supply), rates of return do provide a yardstick for comparing the performance of different water enterprises. They also provide a useful means for looking at the financial performance of a particular enterprise overall and seeing its trend over time. RATES OF RETURN are:

Net annual income*
------------------------- per cent
Value of fixed assets

*Net annual income = Revenue - (Operating costs + Depreciations)

Ideally the value given to fixed assets should be current value, i.e., what it would cost to construct or purchase the assets now (as opposed to their historical costs). This is rarely done in practice, however.

B. Shelter for low-income groups

Introduction

6. The principle of charging beneficiaries is increasingly being applied to shelter programmes in developing countries. Any substantial subsidization merely reduces the size of the programme and, therefore, the number of needy people who can be assisted. It is seen as unfair to provide some with publicly subsidized accommodation but not others who are equally deserving. Cost recovery can be a means of generating additional capital to increase the scale of provision.

7. This section looks briefly at the implications of the principle of full cost recovery and the extent to which it is followed in practice. It is concerned with low-income shelter schemes which are mainly of four types:
(a) House construction for rental;
(b) House construction for sale (immediately or by tenant-purchase);
(c) The sale of serviced sites (again, immediately or by tenant-purchase);
(d) Slum improvement, which may include legalization of tenure in squatter settlements.

The categories are not always distinct. Sites-and-services schemes can include building some superstructure, such as latrines, bathrooms, kitchens and, even, a "core" room. Slum-improvement schemes often include some serviced-site provision for those who have to vacate land needed for public services.

Methods of cost-recovery

8. A wide variety of methods is used for cost-recovery. They may be classified as follows:
(a) Sale. Land on serviced sites and any superstructure (which may range from a latrine to **a** complete building) can be sold. There are various combinations, e.g.:

(i) Sale can be at a fixed price or by auction (the latter often chosen for plots for commercial or high-income residential development);

(ii) Installment purchase can be by loan/mortgage or by tenant purchase, either one with varying degrees of initial down payment;

(b) Rental. Land and/or buildings can be rented in two ways:
(i) Rents can be paid by tenants of public-sector houses, flats or commercial premises;

(ii) Rents can be paid for the lease of public land (at a price which might include recovery of the cost of on-site or off-site services), the leaseholders constructing and owning the buildings;

(c) Taxation. Initial costs of infrastructure and amenities can be recovered through a special tax (e.g., valorization taxes) or by reassessment of annual property taxes, to amortize capital (loan) and maintenance costs;

(d) Charging. The capital costs of service provision (on-site or off-site) can be the subject of a specific charge. This may be recovered in a single payment, by way of a connection charge, a frontage assessment or a premium associated with the grant of title; in such cases, it may also be covered by a loan. Alternatively, it may be recovered in installments, collected, in the case of utilities such as water, with recurrent operating charges.

Cost definition

9. The extent to which costs are recovered depends partly on the way in which they are defined. Public-sector costs of any improvements on a plot - utilities, superstructure, landscaping etc. - are almost invariably incorporated in cost-recovery practices. There is substantial variation, however, in the extent to which these also include the cost of off-plot or off-site infrastructure, community services and administrative overheads. A midway approach is often taken: estate roads, local reticulation, drainage, sewerage etc. are included in the costs recovered, but not extensions to trunk infrastructure; land reserved for community services is included, but not the cost of constructing schools, clinics and social centres on it. The costs of specific project or estate management staff = charged, but not those of a central housing, planning or engineering department.

Affordability and subsidization

10. Cost-recovery policies are increasingly influenced by a concern that the burden of charges not exclude people totally because of poverty. Attempts are made to ensure that recovery costs are "affordable" by target groups, particularly low-income groups. Affordability is often determined by taking into consideration the incidence of rents, charges, loan repayments etc. and beneficiaries' willingness to pay.

11. There are several approaches to holding down costs to meet "affordability" targets:
(a) Minimization of standards for service provision, building etc.;

(b) Specific external subsidization from general revenues, "soft-term" borrowing etc.;

(c) Concealed subsidization, by excluding costs, such as land acquisition, administrative overheads, trunk or off-site infrastructure, from recovery;

(d) Internal cross-subsidization, by charging above cost for commercial or low-density/high-income residential plots (often by auction or tender).

Subsidization is always a questionable approach to financing a private good and can only be justified if strictly confined to the benefit of the most needy. It is even more questionable in the case of shelter and land as these can be sold eventually to higher-income groups.

Enforcement

12. Experience suggests three elements in determining the success of enforcement. These elements are:
(a) Mechanical efficiency of the process;
(b) Willing compliance by beneficiaries;
(c) Sanctions.

These are dealt with separately below.

13. The first element is the mechanical efficiency of the process. Initial procedures often involve surveying and mapping, preparation of tides and other tenancy, sale or loan documents, and conclusion of legal contracts, often associated with collection of a down payment. This can be an extremely protracted process, outstripped by the physical development and occupation of the scheme. Long delays between people getting the benefits and paying the costs not only create immediate cash-flow problems but jeopardize long-term enforcement prospects.

14. These initial steps have to be followed by a regular process of billing recurrent charges, such as rents, service charges or loan repayments, recording payments and reacting to defaults. It is obviously important that procedures identify a default promptly and that records be produced (if not necessarily kept) on a sufficiently localized basis for the managers of specific estates or projects to take responsibility for chasing arrears. Prompt and accurate recording is technically possible by manual processes, but computerized systems have the best record.

15. The second critical element is willing compliance by the beneficiaries. This is an intangible field, but several factors appear relevant:

(a) The nature of the initial contractual process. People occupying serviced sites or tenant-purchase housing are more likely to see themselves as entering voluntarily into commitments than slum dwellers who benefit from site improvement. The latter are easier to charge if legalization of tenure is involved, since a title is a more tangible "purchase" than services;

(b) The timing of the initial contractual process. People are likely to honour their obligations, if contractual agreements are made before they get the benefits, e.g., before occupation of a plot or before provision of services. Conversely, they are least likely to do so, if lengthy administrative delays result in their getting the land or the services initially "for nothing";

(c) The quality of maintenance. Occupants become increasingly reluctant to pay loan installments, rents, charges etc., if services are not well maintained, if roads deteriorate, water supplies are intermittent, rubbish is not collected, and so on. Poor maintenance will jeopardize cost-recovery, even where this is not strictly related to the services in question; people might default on repayment of a building materials loan, for example, because the water supplies fail,

16. Finally, the nature and enforcement of sanctions are clearly important. Charging interest on late payment or granting rebates on prompt payment helps to some extent, depending on the rates involved. Promptness in warning defaulters is important, but the critical factor is what happens when all the interim warning and penalty procedures have been exhausted. Foreclosure and eviction are usually the ultimate sanctions, and their use, even in very few cases, is a powerful encouragement to payment. Failure to use sanctions at all can lead to a rapid deterioration in levels of collection.

17. Ultimately, effective collection is a matter of political will on the part of both residents and government. Effectiveness requires a positive view by the community of the benefits secured by a shelter programme (including its ongoing maintenance) and of the commitments into which it entered at the inception of the scheme; it requires also a positive determination by government to recover its costs.

C. Urban land development

Introduction

18. The development of land for urban use - whether residential, commercial or industrial - is expensive. On health grounds alone dense human settlement creates conditions demanding water supply, drainage, sanitation, refuse collection etc. An expanding urban area puts pressure on arterial and city-centre roads as well as new suburban networks. Rising incomes and the traditional urban style lead the occupants of new or redeveloped areas to expect utilities, such as electricity and telephones, social services, such as schools and clinics, and amenities, such as parks and sports grounds.

19. The installation or improvement of urban infrastructure and amenities imposes heavy capital and operating costs on government, but it also yields substantial gains, actual or potential, to the owners of the affected land. Land usually gains enormously in value, when it is converted from rural to urban use or when its services and amenities

are significantly improved. Housing development rarely keeps up with population growth in developing countries, and high rates of return can be earned on housing construction, particularly in middle-income areas.

20. There is a strong case for attempts to meet the public costs of urban development from the gains in land values to which it gives rise. There are at least three reasons for doing so. The first is the fairness of charging the costs of investment to those who benefit from it. The second is the efficiency of facing land developers with the full cost implications of servicing particular types of land use in particular locations. The third is the relative acceptability of charges linked directly and immediately to a tangible service.

21. Various methods have been adopted by urban governments for the recovery of land-development costs. These are categorized under three headings:
(a) The taxation of increased land values;
(b) The charging of beneficiaries;
(c) The public acquisition and development of land.

Taxing increased land values

22. The most conventional instrument for taxing land values is the annual property tax. Being an annual tax, it is unlikely to yield sufficient revenue to meet capital costs of new infrastructure and amenities directly and fully, but it might provide sufficient additional revenue to service and repay a loan for capital development. Mm question is how far the revenue from particular pieces of taxed property increases specifically in response to increments in value arising from public investment. This depends first on the basis of assessment a site-value tax will, in theory, respond more immediately dm one based on annual rental values or the capital value of land and improvements, since it should yield increases in the tax base ahead of the development or redevelopment of a plot by its owner. It depends equally on whether revaluation for tax purposes follows directly upon the public investment. Normally, any physical development on a plot is subject to specific m-assessment, except in the case of site-value taxes. However, improvements in roads and other trunk infrastructure are not normally reflected in the property-tax base until a general periodic revaluation of the whole city is undertaken - often at intervals of five years or more. Nevertheless, a specific revaluation of an area subject to general improvement has, on occasion, been undertaken.

23. A second taxing instrument is a specific levy - usually once only - on increases in landvalue; this is generally known as a betterment tax. This may be levied on accrued or realized increments in land value. On the former basis, it will be payable by landowners as soon as the increase in land value has taken place, even though the land has not been sold. This creates difficulty for government, in assessing what the notional increment in value has been, and for landowners, in paying the tax when the increase has not been turned into cash. Few governments surmount both these administrative and political hurdles. It is most common to tax realized increments in value, i.e., to impose a betterment levy only when land is sold. While easy to administer, such a tax - in effect, a capital-gains tax - can encourage landowners to hold on to land and inflate market prices.

Charging the beneficiary

24. Charging owners for the capital costs of services provided directly to their plots or immediate neighbourhoods, such as road access, drainage or sewerage, is a widespread practice. Capital costs are simply divided between owners, usually in proportion to plot size or frontage. Various terms are used for these charges such as special assessments, frontage charges or initial service premia (the latter being attached to the issue of new leasehold title in an urban area).

Box 6

In Mexico, landowners contribute to the capital cost of infrastructure serving their property, but mainly on an informally-negotiated rather than statutory basis. The form of contribution varies as does the percentage of cost covered; a rough attempt is made to vary the degree of contribution according to capacity to pay. A large-scale industrial or housing developer would be expected to install all the infrastructure or meet all its costs; a middle-class suburb might be expected to contribute 50 per cent of the costs of road paving or a sewer, low-income residents might offer locally available materials such as sand and stone, and some manual labour. The pub1ic-sector contribution may come from a variety of national, state and municipal funds.

25. These charges do not, however, recover the costs of area-wide investments in infrastructure or amenities, such as a trunk road, a main outfall drain or a new park. A wide scope of recovery is attempted by the valorization taxes levied most notably in Colombia. Through these lump-sum levies, the cost of a specific urban-development project is shared among all landowners in its “zone of influence”. The target yield is based upon the capital costs of the

project, with a margin for administrative overheads; distribution among landowners is based upon a formula, of which plot size or property value is normally the basic component but with weightings for factors such as proximity to the project. Valorization taxes have been particularly useful to Colombia in financing neighbourhood road schemes, but great difficulty was experienced in trying to use this tax to finance cross-city infrastructure which was not clearly reflected in changes in local land values.

Public acquisition and development

26. In a third approach, urban government seeks to recover costs by acting as a land developer itself. This takes a number of forms.

27. A public authority might acquire a large tract of land, usually on the periphery of a city, install urban services and then sell or lease the land to private developers (apart from the plots reserved for public purposes). This has been die model for the development of entire new urban communities by the British New Town Corporations. Very large suburban developments have been financed in this manner by the Delhi and Karachi Development Authorities and the Malaysian Urban Development Authority. The operation is intended to be self-financing and is normally carried out by special public corporations rather than municipalities, capitalized by central-government loans. The feasibility of the approach depends heavily on the terms on which land is acquired. The developers' "profit" on the conversion of land to urban use can only be fully secured for the public sector if the original acquisition of land is at previous use value. In New Delhi and Karachi this has been possible because peri-urban land was already in public ownership, and compensation for eviction could be restricted to current use. Compulsory-purchase legislation might also enable acquisition values to be pegged to current use. Ibis may involve however a considerable political risk. Even so, there are dangers that large-scale land banking will lead to land-price inflation well beyond the built-up zone. There are also risks of collusion between urban developers and development authorities, so that the former rather than the latter benefit from the value gain.

28. A variation on this process is land readjustment or "reblocking", as practiced in Japan and the Republic of Korea. Owners of land due for urban settlement are required to surrender it in full to the responsible governmental agency. The latter installs urban services, retains a portion for public purposes, sells off a further portion commercially and returns the balance to the original owners in proportion to their previous holding. The owners are compensated for the reduction of their holding by the high value of the balance in its serviced condition; government recovers its costs by sale of the portion it neither retains nor returns. This process has been politically attractive and avoids the use of public capital in land acquisition. It does, however, give government a vested interest in maintaining high serviced-land prices and is not beneficial to low-income groups.

29. "Excess condemnation" is a further variation. When land is acquired for a specific purpose typically a new road - adjoining land in excess of requirements is also compulsorily purchased. This is then sold off at a high value, in view of the adjacent public investment.

30. Finally, government - usually in the shape of a municipality or an urban development authority - may join in partnership with private enterprise in developing particular tracts of land. This has been most widely practised in redeveloping city centres in western countries. The public sector contribution to the equity is often the access to the land, the value of the infrastructure and the goodwill involved in the provision of planning and other consents; the liquid capital for superstructure is mainly supplied by private enterprise.

31. Clearly, the choice made in individual countries and cities between different methods of recouping urban-development costs depends on a variety of historical, legal and local factors. Three significant variables are worth mentioning:

(a) *Development or redevelopment.* Devices, such as public acquisition and development, readjustment or betterment taxation, are used in situations where large tracts of land on the urban periphery are being brought into urban use for the first time and where it is not feasible to require developers to undertake all the capital works themselves. In such situations the installation of services tends to be a comprehensive and simultaneous operation, with clearly identifiable "once-off" capital costs. This coincides with a change in land values which is also both dramatic and relatively easy to attribute to the public investment. Progressive development or redevelopment of existing urban settlement is not susceptible to these methods of cost recovery. The nature and scale of the public investment are heterogeneous, and it is not easy to distinguish the impact of public investment on gains in property value from the impact of other factors. Property-tax revaluations or frontage charges might help recover costs of specific services in the immediate neighbourhood but do not cover those of non-localized improvements.

(b) *Land tenure.* There are two important tenurial variables - whether freehold title is in public or private hands, and whether land is occupied legally or illegally. Examples have already been given of the political advantages of public ownership in limiting the compensation paid to agricultural users on conversion to urban use. In the case of neighbourhood improvement schemes, legalization of tenure may be the main instrument for securing cost-recovery from squatter occupiers.

(c) *Administrative capacity.* Administrative skills and political support are tested by virtually all the methods described. Valuation is involved, for example, in betterment taxes, property tax re-assessment or public land acquisition. Clearly, much depends upon the availability of these capacities to urban government.

Performance

32. As might be expected, the success of different approaches varies greatly, according to place and time. Land re-adjustment, for example, has made contributions to the development of cities such as Nagoya, Japan, and Seoul, Republic of Korea; the phenomenal expansion of Delhi has been greatly facilitated in the past by the land development and sale operations of the Delhi Development Authority. However, two weaknesses are widespread. The first is the relatively restricted range of urban-development costs which are actually recovered from beneficiaries. It is rare for development charges, by whatever method, to recover costs of expansions in trunk infrastructure, such as bulk water transmission and treatment, or social-service provisions attributable to specific area developments. The second is that emphasis on cost-recovery often leads to concentration of effort on types of urban development yielding high (or secure) rates of return. This tends to be the middle-income or high-income housing estate or the large shopping complex. Low-income groups, petty traders etc. might be neglected or positively harmed by such approaches. They might be squeezed out of occupying an area benefited by public investment, if taxed or charged on notional gains in land value which they are unable to turn into cash, except by selling and moving out. Various types of exemption or cross-subsidization are possible, to avoid such dangers, but might not be adopted, if the political balance is unfavourable or the emphasis on maximizing financial returns too great. Nevertheless, charging beneficiaries does favour equity, insofar as it removes the burden of financing specific costs of urban development from the taxpayer at large.

VII. LOCAL REVENUE ADMINISTRATION

Trainers' notes

This chapter covers the administration of revenue, whether taxes or charges. This includes the process of identifying those liable, assessing liabilities and enforcing payment.

The chapter analyses the risks of evasion, avoidance and corruption, and the characteristics of a revenue which maximises or minimises these risks. It should be used as the basis for an exchange of experience between participants. This will tend to dwell on practices which "work" or "don't work". The trainer's task is to use the chapter's framework to analyse why they work or fail.

A. Introduction

1. Revenue administration is concerned with the implementation of fiscal policy - with the process of identification/registration of taxpayers and consumers, of assessment and collection of charges and of enforcement of procedures. It is concerned with the administrative feasibility of using a local tax source or charge - one of the five general criteria by which levies should be evaluated. Two particular measurements can be used:

(a) Realization - the proportion of actual yield to the potential of the revenue source (the potential being the yield if everyone who should pay does pay and pays his or her full liability);

(b) Cost -the resources (money and labour) used in collecting revenues as a proportion of the yield.

2. Fiscal policy and revenue administration are interlinked. If a revenue source cannot be administered effectively (i.e., if yields fall far short of potential) or efficiently (i.e., if costs represent an unreasonable percentage of yields), it is necessary to evaluate substitutes.

B. Realization

3. In relation to realization, the objectives of revenue administration are to ensure that
   - (a) Everyone who should pay a tax or charge, does so;
   - (b) Everyone pays the right amount;
   - (c) All revenue is properly brought to account by those who collect it.

4. This means:
   - (a) Identifying all those liable to pay;
   - (b) Assessing them correctly;
   - (c) Collecting the payments as assessed;
   - (d) Checking who has not paid and enforcing sanctions;
   - (e) Controlling actual receipts by collectors to make certain they are brought to account.

5. Realization is threatened by two factors:

   - (a) Evasion -the desire of taxpayers to avoid paying a tax or charge, or to pay less than they should;
   - (b) Fraud and collusion - the temptation to assessors and collectors to:
     - (i) Allow payers to avoid or reduce payment in return for bribes;
     - (ii) To conceal and retain revenue they have collected.

6. These lead to the following risks:
   - (a) Identification:
     - (i) The taxpayer evades identification;
     - (ii) The collector identifies but fails to impose the tax/charge.
   - (b) Assessment:
     - (i) The payer conceals his full liability;
     - (ii) The collector is bribed to under assess.
   - (c) Collection:
     - (i) The taxpayer fails to pay;
     - (ii) The collector fails to enforce;
     - (iii) The taxpayer pays, but the collector retains the money.

Box 7

One Brazilian municipality draws a substantial part of its revenue from a service sales tax on the local hotel trade. It has given some tax rebates to the local laundry in exchange for regular information on the numbers of pairs of sheets laundered for each hotel -a thorough check on the daily occupancy rates reported by the hotel owners!

7. The art of revenue administration is to devise procedures which minimize all these risks. An important element of fiscal policy is also to choose revenue resources to which risk minimization procedures readily apply. The following factors relate to the evaluation and design of procedures:

(a) *Identification of payers.* Procedures should make it difficult for payers to conceal their liability and easy for government to check that they have been identified by the revenue staff. It helps if:
- (i) Identification is automatic, e.g., everyone who gets an electricity supply pays a bill which also includes a local tax on services and utilities;
- (ii) There is an inducement to people to identify themselves, e.g., people have to buy a ticket which includes entertainment tax, in order to enter a cinema;
- (iii) Identification can be linked to other sources of information, e.g., registrations of land transfers can be used for identifying property-tax payers;
- (iv) Liability is very obvious, e.g., the number of permanent stalls in a market which should be paying market fees is known exactly and by everybody.

Conversely, it is difficult to identify payers when liability is easily concealed, e.g., the ownership of a radio. It is also difficult to check on fraud and collusion when the headquarters of the revenue department has no easy information on how many people should have paid, e.g., how many lorries passed through a distant road post or how many casual hawkers used a market.

(b) *Assessment.* Procedures should make it difficult for payers to conceal their full liability or for assessors to under-collect. It helps if:
- (i) Assessment is automatic, e.g., a fixed percentage on the hotel bill or a cinema ticket;
- (ii) The assessor has little or no discretion, e.g., a fixed fee on a market stall per size, location and type of business;
- (iii) The assessment can be checked against other information, e.g., fees for extraction of building materials can be checked against quantities supplied by a governmental contractor.

Conversely, it is difficult to ensure full assessment where full liability can easily be concealed or assessors exercise considerable discretion, e.g., where the business-licence fees are established by a visit to individual premises to verify size and type of business etc.

(c) *Collection.* Procedures should ensure that payment of liabilities is enforced and that actual payments are brought fully to account. It helps if:
- (i) Payment is automatic, e.g., coin-operated public telephones; "pay as you earn"/withholding of tax from salaries, contract payments etc.;
- (ii) Payment can be induced, e.g., when payers need tux-clearance certificates to get contracts, licenses etc. (tax-clearance procedures need to be used with care; they can be very unfair to payers, if there is no accurate and prompt procedure for issuing assessments, recording payments and providing receipts);
- (iii) Default if obvious, e.g., a motor vehicle has no current license disc or number plates;
- (iv) Penalties are really deterrent. e.g., a high rate of interest on all late payments, and are enforced (penalties also need to increase strongly the longer payment is overdue);
- (v) Actual receipts are clear to the controllers in the central tax office. e.g., if fixed-fee tickets are issued, rather than receipts with carbon copies which can be altered;
- (vi) Payment is easy, e.g., it can be made at local cash offices, banks, post offices etc., without long delays or travel.

Conversely, it is difficult if there is no real pressure on people to pay and no clear evidence how much has been collected. It is also difficult if taxpayers are put to great inconvenience in paying, having to travel distances and wait in queues.

C. Cost

8. Cost is measured by the proportion of a revenue resource devoted to its assessment and collection. Collection costs, as a percentage of yields, can be kept low where:

(a) Assessment and collection are linked to some other administrative process (e.g., a surcharge on electricity bills or petroleum duty; pay-as-you-earn or withholding);

(b) A number of revenue sources can be collected in a single transaction;

(c) Individual tax or fee payments are large (i.e., there is a substantial revenue return on the cost of collecting each liability), e.g., with a motor-vehicle tax;

(d) Transactions (assessments and collections) are physically concentrated;

(e) Assessment and payment can be made automatic (as with vehicles passing through a road toll).

9. Conversely, costs can be very high where:
(a) A fee or tax is very small;
(b) Assessors and collectors are dealing with only one fee or tax;
(c) Collection is geographically dispersed;
(d) Visits have to be made by collectors to tax payers' houses, business premises, etc.

D. Conclusion

10. There is no standard set of roles or practices which can make revenue administration watertight, but certain lessons can be drawn from the previous analysis and experience. Revenue sources which rely upon house-to-house, business-to-business assessment and collection by officials are difficult to make really effective and efficient. Clearly, every effort has to be made to improve their administration by measures such as:
(a) Minimizing the discretion of assessors who have face-to-face contact with taxpayers (e.g., by using formula assessments of property);

(b) Rotating personnel;

(c) Using independent evidence to cross-check assessments;

(d) Applying self-assessment procedures, if strongly supported by sample checks and sanctions for under-declaration;

(e) Keeping comparative data on performance of assessors and collectors to identify those apparently needing close supervision.

Equally, effort is needed to identify and exploit revenue sources, which do not offer scope for evasion, collusion etc. These include:

(a) Taxes or charges which are paid by automatic processes, e.g., taxes on fuel, electricity consumption or entertainment;

(b) Taxes or charges where the payer "comes to the municipality" rather than vice versa, e.g., octroi, where the taxable goods have to pass through one inspection and collection point;

(c) Taxes or charges with a ready and punitive sanction for default, e.g., disconnection of a water or electricity supply.

11. Good, comprehensive, up-to-date information is vital at all stages of identification, assessment and collection. Co-ordination and exchange of information is important. For example, information on the use of a building for commercial purposes is needed for trading licences, planning control and property-tax assessment, and should be exchanged regularly between the departments responsible.

12. Finally, the ease or difficulty of revenue administration is heavily influenced by the attitude of the taxpayer. No one enjoys paying taxes or charges but there are differences in the degree of acceptance or resentment which affect the extent to which people actively seek to avoid their obligations. Compliance can be encouraged: simply explaining the purpose and calculation of a tax or charge helps, and so do collection arrangements which do not subject the payer to great inconvenience -for example, having to wait in a long queue or travel a long distance to pay a water charge or license a shop. Most important of all is a visible connection between a tax or charge and the quality of the service for which it is paid. A property tax is acceptable if the streets are repaired and the refuse removed: an increase in water charges might not be resisted, if supplies become regular.