

DOMESTIC FINANCE STUDIES NO. 68URBAN GOVERNMENT FINANCES IN KARACHI

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The views presented in this paper are solely those of the author and do not necessarily reflect the official opinions of the World Bank or its affiliates.

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I. Introduction

Karachi, the largest city of Pakistan, has a population of approximately 5.4 million accounts for 6.8 percent of the total national population. It covers 136 square miles and has an overall population density of 3,970 per square mile but at the core of the city over 500,000 people live in a few square mile area. The population of Karachi is growing at a rate much greater than the nation and the rest of Sind province. The economic base of Karachi is dominated by manufacturing, trade and services. Although it has only 30 percent of the provincial population, it provides over three-quarters of manufacturing employment, over two-thirds of the reporting factories, and it accounts for over three-quarters of value added in manufacturing. Regionally Karachi may be separated from the rest of Sind. In many respects it is a national rather than a regional center being the country's only international port, major banking center with 50 percent of national deposits in 1972, and in the same year it accounted for 15 percent of gross domestic product and 25 percent of federal revenues.

The major local government responsible for the provision of public services in Karachi is the Karachi Municipal Corporation (KMC). The KMC is responsible for the bulk of the city's urban services; it employs over 32,000 people and administers the total budget of over Rs 400 million. However, the KMC is overlapped by the Karachi Development Authority (KDA) Cantonment Boards and various special purpose local authorities. Among these authorities, the most important is the KDA whose functions are divided into water supply, and land and housing

development divisions. The KDA employs 8,500 people and has an annual budget of over Rs 500 million.

Karachi, like many other big cities in the world has pressing expenditure needs and inadequate government resources, i.e., is subject to a problem of public sector poverty. In Karachi, housing and public utilities are particularly severe problems with the majority of the city population living in conditions with inadequate housing structures, overcrowding, few public service amenities and poor sanitation. According to the latest estimates, for example, average water availability is 22 gallons per capita per day; only 30 percent of households has water connections. Less than 30 percent of the city population is served with the central sewerage system. The remainder rely on night soil collection service, pit latrines or waste ground to dispose of their wastes.^{1/} Moreover, nearly one million people live in squatter slum communities where health and education needs are especially acute. There are also serious deficiencies in Karachi's mass transportation system.

On the other hand, Karachi's tax base and fiscal management have been unsatisfactory in meeting the growing demand of the city's services. For example, in 1977/78 total current revenue receipts of KMC amounted to Rs 315.9 million, of which only Rs 28.6 million was available for development expenditure. Current expenditures, particularly in education and health and the deficit of water and sewerage

1/ Department of Master Plan and Environmental Control, Planning and Development Problems of Karachi (Karachi, 1979).

account have increased as rapidly as revenues and resulted in an overall deficit of Rs 84.2 million or 20.6 percent of total expenditures of the KMC in 1977/78 (Table 2). The fiscal position of KDA is even worse than that of KMC. In 1977/78 KDA registered an overall financing gap of Rs 313.6, reflecting mainly operational deficits of its water supply schemes (Table 6). The present level of budgetary deficit cannot be reduced without raising the water charges to local bodies.

In view of recent developments of KMC and KDA, the financial problems of Karachi have undoubtedly reached critical proportions and call for an immediate fiscal reform to increase total revenues of both KMC and KDA. Four major areas where policy action is needed might be mentioned briefly here, though each is explored in detail in the forthcoming report. First, there is an urgent need to increase the productivity and elasticity of the property tax through new assessment of property values and structural reform. This is not only to meet current and new expenditure needs, but also to begin to clear up the backlog of infrastructure and service needs which plague particularly the city's low income population. Second, there are both horizontal and vertical inequities in the local tax which need reform. Third, the bulk of water supply scheme, of which KDA is responsible on behalf of local authorities is being operated with large deficits and require immediate adjustment on water rates. Fourth, action is needed to increase revenue of the city through additional taxation and/or more efficient tax collection and administration. Fifth, there is a poverty of systematic fiscal planning and budgeting.

The formulation of remedial policy to deal with these problems and the evaluation of other facets of the operation of the local finance system require detailed study of the overall functioning of the system. Such detailed study is the purpose of this exercise.

II. Government Structure and Administration

Local Government in Pakistan

In Pakistan local governments first emerged as autonomous, representative units which could deal with the local civic problems following the Basic Democracies Order of 1959 and the promulgation of the Municipal Administration Order of 1960. For a period of more than a decade, the local government system of Pakistan was organised around the concept of "Basic Democracies." During this period, the former four provinces of the West Wing remained integrated into a single West Pakistan Province and local bodies below that level were organized in an elaborate four-tier structure.

After the change of government in December 1971, the four provinces were re-established and the Basic Democracies system of local government was replaced by a new system of "People's Local Government." The new system has introduced significant reforms in the structure and function of local bodies. The major change introduced in financial arrangements is that the provincial and local property tax have been integrated. The Excise and Taxation Departments of the provinces are now responsible for collecting the total tax which is shared between the local bodies and the provinces after deducting the collection charges by the provinces. Under the new system the local government institutions were to be fully representative. Nominations of government officers of various departments in local bodies which existed under the previous system were to be discontinued. The head of every local body was to be chosen by election not by appointment.

Under this system the provincial governments themselves instead of district officers would exercise necessary supervision and control over local bodies.

Structurally, local governments in Pakistan are divided into two broad categories; urban and rural councils. In the province of Sind there are one municipal corporation, 19 municipal committees, 87 town committees and 11 rural district councils. Of the four types of local authorities in Sind only two--municipal corporation and municipal committees--are fully functioning local government units. Both town committees and rural district councils are set up for small towns and villages with limited functions and they are not ready for full functions of the government. The municipal government in Karachi is a corporation.

Federal-Province - Local Relations

The pattern of intergovernmental relations in Sind, as in all Pakistan provinces, is one of close Federal-Province and Province-Local ties. The Federal government exerts no direct regulatory controls over local government bodies and direct Federal-local government loan or grant programs are virtually non-existent. Province-local relations are more direct and important in terms of local government operations. The government of Sind exerts a set of direct regulatory controls over local governments, gives grants and loans to both KMC and KDA, shares its tax revenues, and makes substantial direct expenditures within the urban area. The most important of the direct controls over KMC and KDA by Sind government are approval of their budgets, approval for the tax rate increase and for borrowing beyond the prescribed statutory limits, and appointment of

the chief officer of both KMC (Administrator) and KDA (Director General).

Budget Structure and Organization

Formerly the principal governing body of the KMC is the Citizen's Committee, but it has little executive or administrative power or authority. The Committee is composed of 100 members who are nominated by the KMC Administrator and appointed by Sind government. The day-to-day administration of the KMC is the responsibility of the administrator. He is advised by the Citizen's Committee and assisted by the Financial Advisor who is also appointed by the provincial government.

The budget is prepared initially by the chief financial officer (Financial Advisor) and is presented first to the Citizen's Committee and to the Sind government for consultation. If there is no demand for revision, the draft budget automatically becomes effective. The governing body of KDA is made of 6 members: 2 ex-officio members, 2 full-time members and 2 part-time members. The Director General is the chief executive officer who is responsible for the day-to-day administration. The KDA's budget is prepared in a fashion same as that of KMC and it should be also approved by Sind government.

The budget of local governments (KMC and KDA) is comprised of a revenue budget and development budget. On the expenditure side, the revenue budget includes all ordinary expenditures, all debt service payments, and all expenditures of the city water and sewerage systems. On the income side the revenue budget includes all current revenues raised from own sources, grants, and tax sharing.

Most capital expenditures made by the KMC and all those financed from loans are shown in a separate development budget. The revenue items in this development budget are payments from reserve accounts, payments from the revenue budget, and proceeds from borrowing. However, KDA prepares two different sets of budgets, each for Water and Development Wing.

Because of the budget format and presentation it is difficult to analyze expenditures by object (e.g., wages and salaries, maintenance, etc.) and development expenditures are presented on a functional basis.

It should be also noted that there is an absence of any long term fiscal planning for the KMC. Beyond the annual budget, there are neither planned expenditure levels nor revenue projections, and there is no office within the KMC which has fiscal planning responsibility.

III. Expenditure Trends

The purpose of this section is to describe and, if possible, explain the pattern of increase in KMC and KDA expenditures. Three considerations are relevant: the general pattern and trend of expenditure increase, the sources of financing this increase and the functional components of this expenditure increase. Throughout this section, there is special emphasis on the extent to which any expenditure activities generate revenues which account for some part of costs (are partially or wholly self-financing) and therefore on the general revenue dependence of each expenditure category.

General Patterns

Public expenditure activities within Karachi metropolitan area can be assigned to the KMC, the KDA, the government of Sind and the Federal Government. The Federal government keeps no records on direct expenditures within the metropolitan area. Thus, it is not possible to qualify their relative expenditure importance and to compare this with expenditures of other governments. This is because expenditure records are kept by purpose of expenditure, by function, or by object but not by location of the expenditure. An estimate of the relative importance of the three levels of government in Karachi might be made by comparing their overall levels of per capita expenditures, i.e., by comparing per capita expenditures by the government of Pakistan (less transfers to lower levels of government), per capita expenditures by the Sind government, and per capita expenditures of both KMC and KDA.

Such a comparison is presented in Table 1 and shows that per capita KMC and KDA expenditures accounted for 22.8 percent of per capita expenditures of all three levels of governments combined in 1977/78. The importance of KMC expenditure, however, has declined somewhat between 1970/71 and 1977/78. Per capita expenditures of KMC and KDA combined grew at average annual rate of 20.5 percent, while per capita expenditure of the Federal and Sind government grew at average annual rates of 23.5 and 15.8 percent respectively.

The time series data in Table 2 shows that the growth of KMC expenditure has been sluggish. Data limitations are such that a systematic study of the determinants of this growth is not possible. However, the trend in per capita expenditures might be viewed as generally effected by increases in the price level and increases in population. Had per capita total expenditures remained constant in real terms at Rs 33.9 between 1970/71 and 1977/78 total money expenditures would have risen to Rs 551.3 million as compared with actual KMC expenditures of Rs 408.1 million. Thus, increases in total expenditures during this period have not caught up with rising population and price increases.

The decline in real per capita expenditures of KMC over the past decade is primarily due to continued stagnation of its development budget for water supply, schools, health, hospitals, roads and bridges. Per capita expenditures in the current accounts especially in the area of education, sewerage, health, hospitals and recreation have

Table 1: Relative Importance of Federal, Provincial and Local
Governments as Measured by Per Capita Expenditures
(in Rupees)

| | <u>Per Capita Amount</u> | | <u>Average Annual Percent Increase Expenditure</u> | <u>Average Annual Percent Increase Population</u> |
|----------------------------------|--------------------------|---------|--|---|
| | 1970/71 | 1977/78 | | |
| Federal Government ^{1/} | 94.1 | 412.9 | 23.5 | 2.9 |
| Sind Government | 53.3 | 149.1 | 15.8 | 3.0 |
| Local Governments ^{2/} | 44.9 | 165.8 | 20.5 | 6.0 |
| KMC | 33.9 | 80.1 | 13.1 | - |
| KDA | 11.0 | 85.7 | 34.5 | - |
| Total for Karachi Area | 207.8 | 727.8 | 19.6 | 6.0 |

1/ Excludes transfers to the lower level of government and represents overall national averages.

2/ Due to data limitations Government Boards are excluded from the total.

3/ Estimates by linear interpolation.

Table 2: Summary of KMC Finances, 1970/71 - 1978/79
(in million Rupees)

| | 1970/71 | 1971/72 | 1972/73 | 1973/74 | 1974/75 | 1975/76 | 1976/77 | 1977/78 (Revised Estimates) | 1978/79 (Budget) |
|---|---------|---------|---------|---------|---------|---------|---------|-----------------------------------|---------------------|
| | | | | Actual | | | | | |
| Total Municipal Revenue ^{1/} | 100.8 | 103.5 | 113.2 | 162.5 | 191.3 | 243.4 | 253.8 | 323.9 | 388.2 |
| Total Municipal Expenditures | 114.9 | 126.7 | 143.2 | 194.9 | 256.1 | 287.3 | 282.8 | 408.1 | 441.3 |
| Current | 78.2 | 88.2 | 98.6 | 134.7 | 167.7 | 197.5 | 207.2 | 287.4 | 320.5 |
| Development | 36.7 | 38.5 | 44.6 | 60.2 | 88.4 | 89.8 | 75.6 | 120.7 | 120.8 |
| Overall Surplus (+) or Deficit (-) ^{2/} | -14.1 | -23.2 | -30.0 | -32.4 | -64.8 | -43.9 | -29.0 | -84.2 | -53.1 |

1/ Includes revenues from sales of government properties and development charges but excludes loans and grants for primary schools.

2/ Financed by government loans, grants and use of cash balances.

Sources: KMC, Explanatory Memorandum for respective fiscal years and supplementary data provided by KMC Finance Department,

registered varying amounts of real growth (Table 3). Indications are that increases in these expenditures are more of a reflection of increasing wage rate than that of an upgrading of municipal services.

Table 4 presents the composition of KMC expenditures. In 1970-71 water supply, public health and roads and bridges were the most important components of KMC expenditures; together they accounted for 63.0 percent of total outlays. In 1977/78, however, the relative importance of these functions declined to 52.4 percent and especially the share of water supply expenditure declined from 21.9 percent to 14.0 percent of total spending. The share of KMC expenditure on roads and bridges also declined from 20.1 percent to 16.3 percent of the total during the same period. One explanation of this pattern is the inability of KMC to generate required revenues. As a result of the lack of financial resources and frequent pay revision enforced by the Federal Government, the functional distribution of expenditures has been accentuated toward more on the social service functions.^{1/} As may be seen from Table 5, social service expenditures have increased from 53.2 percent to 62.1 percent of total spending.

The Sources of Finance

A key to understanding and explaining the trends of local government expenditures is measurement to the extent of which the various sources of revenues -- taxes, specific fees and charges, grants and loans -- have contributed to the financing of expenditure

^{1/} The broad definition of social services used here include health, education, hospitals, fire, refuse collection and recreation.

Table 3: KMC EXPENDITURE PATTERN, 1970/71 - 1978/79
(in million Rupees)

| | Total Expenditures | Total Real Expenditure (1970 Prices) | Rates of Current to Total Expenditures | Per Capita Total Expenditure | Population | Prices ^{1/} |
|---|--------------------|---|--|------------------------------|------------|----------------------|
| 1970/71 | 114.9 | 114.9 | 68.0 | 33.9 | 3,386 | 100.0 |
| 1971/72 | 126.7 | 119.1 | 69.6 | 35.3 | 3,590 | 106.4 |
| 1972/73 | 143.2 | 116.8 | 68.8 | 37.6 | 3,805 | 122.6 |
| 1973/74 | 194.9 | 126.9 | 69.1 | 48.3 | 4,034 | 153.6 |
| 1974/75 | 256.1 | 136.2 | 65.5 | 59.9 | 4,276 | 188.0 |
| 1975/76 | 287.3 | 127.3 | 68.7 | 63.4 | 4,532 | 225.6 |
| 1976/77 | 282.8 | 104.5 | 73.3 | 58.9 | 4,804 | 270.7 |
| 1977/78 | 408.1 | 127.8 | 70.4 | 80.1 | 5,092 | 319.4 |
| 1978/79 ^{2/} | 441.3 | 120.1 | 72.6 | 81.7 | 5,398 | 367.3 |
| Average Annual ^{3/} Growth Rate | 18.4 | 0.6 | | 11.6 | 6.0 | 17.8 |

1/ GDP price index (1970/71 = 100).

2/ Budget estimates and other preliminary data

3/ Average annual growth rate refers to the compound rate of growth between the first and last year shown in the data.

Table 4: INCREASE IN KMC PER CAPITA EXPENDITURES BY FUNCTION: 1970/71 - 1977/78

(in Rupees)

| Function | 1970/71 | 1977/78 (Revised Estimate) | Annual Percent Increase | Function | 1970/71 | 1977/78 (Revised Estimate) | Annual Percent Increase |
|----------------------------------|---------|----------------------------------|-------------------------------|-----------------------------------|---------|----------------------------------|-------------------------------|
| Water (Total) | 7.39 | 11.19 | 6.1 | Recreation (Total) | 1.02 | 3.47 | 19.1 |
| Current | 5.48 | 7.91 | 5.4 | Current | .70 | 2.14 | 17.3 |
| Capital | 1.91 | 3.28 | 8.0 | Capital | .32 | 1.33 | 22.5 |
| Education (Total) | 2.32 | 8.28 | 19.9 | Road and Street Lights (Total) | 6.81 | 13.07 | 9.8 |
| Current | 1.17 | 7.79 | 31.0 | Current | 3.42 | 5.75 | 7.7 |
| Capital | 1.15 | .49 | -12.9 | Capital | 3.39 | 7.32 | 11.6 |
| Health (Total) | 7.09 | 17.73 | 14.0 | Fire (Total) | .34 | 1.42 | 22.5 |
| Current | 5.30 | 15.73 | 16.8 | Current | .29 | .80 | 15.6 |
| Capital | 1.79 | 2.00 | 2.3 | Capital | .05 | .62 | 43.5 |
| Sewerage and Drainage (Total) | 1.61 | 6.06 | 20.7 | Others (Total) | 4.75 | 12.17 | 14.4 |
| Current | .70 | 2.37 | 19.0 | Current | 4.48 | 8.70 | 10.0 |
| Capital | .91 | 3.69 | 22.3 | Capital | .27 | 3.47 | 44.2 |
| Hospitals (Total) | 2.53 | 6.62 | 14.7 | Total | 33.88 | 80.17 | 13.1 |
| Current | 1.50 | 5.18 | 19.4 | Current | 23.06 | 56.46 | 13.6 |
| Capital | 1.03 | 1.44 | 4.9 | Capital | 10.82 | 23.17 | 11.9 |

Table 5: PERCENTAGE DISTRIBUTION OF KMC EXPENDITURES BY FUNCTION

| Function | 1970/71 | | 1977/78 (Revised Estimate) | |
|---------------------|---------|-------|-------------------------------|-------|
| | Current | Total | Current | Total |
| Water | 23.9 | 21.9 | 14.0 | 14.0 |
| Education | 5.1 | 6.9 | 13.8 | 9.9 |
| Health | 23.1 | 21.0 | 27.9 | 22.1 |
| Sewerage & Drainage | 3.1 | 4.8 | 4.2 | 7.6 |
| Hospitals | 6.5 | 7.2 | 9.2 | 8.3 |
| Recreation | 3.1 | 3.0 | 3.8 | 4.3 |
| Roads & Streets | 14.9 | 20.1 | 10.2 | 16.3 |
| Fire | 1.3 | 1.0 | 1.4 | 1.8 |
| Others | 19.1 | 14.1 | 15.4 | 15.7 |
| Total | 100.0 | 100.0 | 100.00 | 100.0 |

increase. The revenue structure of the KMC is characterized by heavy reliance on general tax revenues, while that of KDA mainly depends on specific charges from the water and land development schemes and grants and loans. When the financing of 1970/71 - 1977/78 changes in local government expenditure is examined, it may be seen that the pattern is generally reinforced, i.e., more than 60 percent of KMC expenditure increase was financed through general taxation; nearly same percentage of KDA expenditure increase was financed through grants and loans and the remainder through specific charges.

IV. The Functional Sources of Expenditure Increase

Alternative approach to explain the local government expenditure trend is to focus on expenditure increases on a functional basis and to identify any part of expenditures which are covered from resources other than general purpose revenues raised from own sources. Accordingly, specific attention is accorded those functions which recapture a portion of expenditures through specific charges or benefit levies, and expenditure functions are viewed according to their financing arrangements, i.e; general revenue finances, or "self-financed" in cases where the function is supported either wholly or in part by a user charge or earmarked tax. While most of the KMC functions are financed by general revenues, KDA clearly belongs to the latter category. Although the water supply, sewerage and drainage function in KMC are in practice, general revenue financed, they do have "designated" revenue sources. For purposes explained below, the water supply, sewerage and drainage functions are treated initially as though they were "self-financed."

Water Supply

Both KMC and KDA are jointly responsible for water supply in Karachi. KDA is responsible for development and maintenance of water resources and operation of treatment plants. KDA also maintains the trunk mains and a small part of the distribution system. It sells the water in bulk to a number of government and private groups each at different rates; Rs 0.94 per 1,000 gallons to government bodies and Rs 3.00 to agricultural and private consumers. The responsibility

for the distribution of the city water supply and collection of water charges rests with local authorities, mainly with KMC.

Water is (officially) provided to about 45 percent of total households in the city area, with in-house water connections for only 30 percent. According to recent estimates average availability of water per city resident is 22 gallons per day in 1977/78. Water is supplied from the Indus River (about 90 percent) and tubewell sources, and total system leakage is estimated at about 15 percent of water production.

The growth in water supply expenditure was mainly due to heavy capital spending and the ensuing debt servicing obligations of KDA which have resulted from expansion of the city water supply. The financing of water supply expenditures is from water rates and general tax revenues in case of KMC (Table 6), while that of KDA is mainly from borrowing (Table 7). There is no tariff differentials between domestic, commercial, and agricultural purposes. Sales to distribution agencies are based on meter readings, but a large number of existing meters are believed to be inoperative. These deficient meters appear to be reasons for frequent disagreement between KMC and KDA with regard to the amount of water supplied and water charges due. In 1977/78, for example, KDA records show that it supplied the city with approximately an average of 158 million gallons per day (MGD) of bulk water of which an average of about 120 MGD was allocated to the KMC distribution system. KDA, however, received a total water revenue of only Rs 55.2 million of which Rs 32.9 million was collected from KMC. The actual water receipts from KMC is equivalent to the amount sufficient to cover an average of only 96 MGD at the present rate of Rs 0.94 per 1,000 gallons.

Table 6: FINANCING MUNICIPAL WATER SUPPLY

(in thousand Rupees)

| | 1970/71 | 1971/72 | 1972/73 | 1973/74 | 1974/75 | 1975/76 | 1976/77 | 1977/78 (Revised Estimate) | 1978/79 (Budget) |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|----------------------------------|---------------------|
| Water Rate Received | 12,809 | 11,100 | 11,865 | 12,950 | 10,081 | 16,274 | 17,228 | 21,479 | 31,000 |
| Current Expenditures | 19,274 | 20,848 | 24,122 | 22,903 | 23,684 | 38,708 | 39,639 | 40,349 | 46,294 |
| Current Surplus or Deficit | -6,467 | -9,748 | -12,257 | -9,953 | -13,603 | -22,434 | -22,411 | -18,870 | -15,294 |
| Capital Expenditure | 4,282 | 5,438 | 5,197 | 11,202 | 10,263 | 8,241 | 10,271 | 16,730 | 20,076 |
| Overall Surplus or Deficit | -10,749 | -15,186 | -17,454 | -21,155 | -23,866 | -30,675 | -32,682 | -35,600 | -35,370 |

Table 7: Summary of KDA Finances, 1973/74 - 1978/79
 (in million Rupees)

| | 1973/74 | 1974/75 | 1975/76 | 1976/77 | 1977/78 | 1978/79 |
|------------------------------------|---------------|-------------|--------------|--------------|------------------------|--------------|
| | <u>Actual</u> | | | | (Revised Estimates) | (Budget) |
| <u>Current Receipts</u> | <u>103.8</u> | <u>94.1</u> | <u>132.4</u> | <u>117.6</u> | <u>122.8</u> | <u>255.6</u> |
| Sale of Water | 33.8 | 34.8 | 37.9 | 49.6 | 55.2 | 124.0 |
| Sale of Plots | 60.4 | 46.5 | 84.8 | 51.2 | 49.6 | 97.8 |
| Renewal and Replacement | 2.5 | 2.4 | 2.9 | 3.9 | 5.2 | 20.1 |
| Service Charges | 2.1 | 3.7 | 4.2 | 3.6 | 4.6 | 5.3 |
| Miscellaneous receipts | 5.1 | 6.6 | 2.6 | 9.3 | 8.2 | 8.5 |
| <u>Non-Development Payments</u> | <u>59.6</u> | <u>78.1</u> | <u>97.6</u> | <u>119.0</u> | <u>111.0</u> | <u>242.7</u> |
| Water Supply | 33.2 | 47.0 | 56.6 | 65.6 | 76.6 | 92.8 |
| Renewal and Replacements | 2.5 | 2.4 | 2.9 | 3.9 | 5.2 | 20.1 |
| Debt Servicing (Water) | 22.6 | 25.8 | 33.8 | 46.6 | 24.6 | 124.5 |
| Self-Contained Departments | 1.3 | 2.8 | 4.2 | 2.8 | 4.6 | 5.3 |
| <u>Development Payments</u> | <u>47.3</u> | <u>80.0</u> | <u>118.3</u> | <u>153.8</u> | <u>325.5</u> | <u>270.8</u> |
| Land Development Schemes | 42.5 | 64.5 | 62.4 | 48.4 | 75.6 | 100.5 |
| Captial Works (Water) | 4.9 | 15.5 | 55.9 | 105.4 | 249.9 | 170.3 |
| Financing Gap | 3.1 | 64.0 | 83.5 | 167.8 | 313.6 | 257.9 |
| <u>Capital Receipts</u> | <u>4.5</u> | <u>56.1</u> | <u>64.2</u> | <u>180.5</u> | <u>285.6</u> | <u>175.4</u> |
| Government Loans | 4.5 | 56.1 | 9.2 | 0.5 | 2.8 | 1.9 |
| Bank Loans | - | - | 55.0 | 180.0 | 253.1 | 167.8 |
| Other Receipts | - | - | - | - | 29.7 | 5.7 |
| Overall Surplus (+) or Deficit (-) | +1.3 | -7.9 | -19.2 | +25.2 | -28.0 | -82.4 |

Sources: KDA, Budget Estimates and Annual Accounts of Water Wing for respective fiscal years.

In contrast to a total revenue receipt of Rs 55.2 million, KDA's current water expenditures amounted to Rs 101.2 million, resulting in an operating deficit of Rs 46.0 million or 45 percent of current water expenditures in 1977/78. If the capital outlays are included in this total, KDA's water deficit would amount to Rs 296 million or 83 percent of its total water expenditure. According to KDA's own estimates, the rate required to cover total operating costs of water supply in 1978/79 amount to Rs 2.97 per 1,000 gallons representing 216 percent more than the present rate. Furthermore, if KDA is to cover both its current and capital expenditures, the present rate of Rs 0.94 has to be increased by 483 percent, an equivalent of Rs 5.48 per 1,000 gallons. The present water rates in Karachi rank among the cheapest in the world for a major city and they are not only major sources of local financial difficulties but also lead to the waste of water resources in the city.

At present KMC is responsible for about 75 percent of the city water distribution and about 60 percent of total water revenues collected by KDA. There is a 6.0 or 6.5 percent property tax rate for water supply; however this designation of revenues is more a justification for imposing additional tax on properties than an intended means of self-financing.^{1/} That is, total expenditures are not limited to this amount and the user charges is not based on consumption. In fact, the designated water tax has represented a declining share of

1/ Households with individual water connections are charged 6.5 percent of net annual rental value and those without individual connections are charged 6.0 percent.

total water expenditures. As a result, KMC is forced to increase its dependence on general tax revenues than the designated water rates, while KDA increases its dependence on borrowing. Since the water tax rate in KMC remained constant for a number of years, the slow growth in water revenues is due to stagnation of rental (or property) value assessment. Because of further extension of the water system (especially the 4th phase of Karachi Bulk Water Supply Scheme) is planned for the next few years, the shortfall between water tax receipts and expenditures for water supply will increase, and therefore increasingly more general tax revenues for KMC and more borrowing for KDA will be required.

If the increasing drain on KMC revenues for water supply financing is a result of a low property tax rate for water, then an upward rate adjustment might be proposed. In this respect, it is possible to estimate that water property tax rate at which all current water supply expenditures are covered. It is important to note that an increase in the designated property tax rate for water financing in no sense improves efficiency, since there is no relationship between the water charge and consumption.

The water-rate price equivalent may be estimated if only assessed property value and the average cost of providing water are known. The latter can be approximated with data from the consolidated accounts of operating and capital costs of water supply in KMC (Table 8). Because of the difficulty in deriving the cost function we use only a point estimate of average costs, i.e., cost per gallon in the most recent year for which data is available.

In terms of revenue adequacy, total property tax revenue designated for water supply financing would have to be sufficient to cover total operating costs. Such an amount may be determined by using the consolidated accounts of water supply expenditures. To raise revenues equal to total expenditures, the average property tax rate designated for water supply financing should have to be tripled from its present level, if net annual rental values were to remain constant. For example, in 1977/78 estimated total operating cost for water supply was Rs 83.3 million resulting in a shortfall of Rs 61.8 million or 74 percent of total spending. A property tax rate of 17-18 percent instead of the current 6.0 - 6.5 percent would eliminate this shortfall of water expenditures. With appropriate overall property tax reform especially new assessment of rental (or property) values the required rate increase may be substantially less (for detail see the Property Tax Section below).

Drainage and Sewerage

The sewerage system in KMC being complementary to refuse collection and disposal system includes a network of drains and sewers used to collect and dispose the liquid wastes of the city. The growth of sewerage expenditures is also due primarily to heavy capital spending (Table 9). Sewerage and drainage expenditures are not financed by a user charge, but there is a surtax on property levied at a rate of 5 percent of net annual rental value. These revenue receipts fall short of total cost and because of the low growth in property valuation there is reason to expect a further growth in the financing gap.

TABLE 8: CONSOLIDATED ACCOUNTS OF KMC WATER SUPPLY

| | (in thousand Rupees) | | | | | |
|------------------------------------|----------------------|---------|----------|----------|----------------------------------|---------------------|
| | 1973/74 | 1974/75 | 1975/76 | 1976/77 | 1977/78 (Revised Estimate) | 1978/79 (Budget) |
| | Actual | | | | | |
| Current Revenue (total) | 19,224 | 19,405 | 28,008 | 34,300 | 32,900 | 38,300 |
| Water Tax | 12,950 | 10,081 | 16,274 | 17,228 | 21,479 | 31,000 |
| General Revenues | 6,274 | 9,324 | 11,734 | 17,072 | 11,421 | 7,300 |
| Current Expenditure (total) | 45,529 | 58,879 | 78,500 | 89,489 | 83,349 | 170,969 |
| KDA ^{1/} | 41,850 | 54,600 | 67,800 | 84,150 | 75,900 | 162,975 |
| KMC | 3,679 | 4,279 | 10,700 | 5,339 | 7,449 | 7,994 |
| Current Surplus (+) or Deficit (-) | -26,305 | -39,447 | -50,492 | -55,189 | -50,449 | -132,669 |
| Capital Expenditure (total) | 14,877 | 21,888 | 50,166 | 89,321 | 204,155 | 147,801 |
| KDA ^{1/} | 3,675 | 11,625 | 41,925 | 79,050 | 187,425 | 127,725 |
| KMC | 11,202 | 10,263 | 8,241 | 10,271 | 16,730 | 20,076 |
| Overall Surplus (+) or Deficit (-) | -41,181 | -61,335 | -100,658 | -144,510 | -254,604 | -280,470 |

^{1/} KDA expenditures on behalf of KMC are estimated by using the KMC's consumption share in the total KDA water supply, roughly 75 percent of KDA expenditures.

Sources: KDA Budget Estimates and KMC Budget Explanatory Memorandum.

Table 9: FINANCING MUNICIPAL DRAINAGE AND SEWERAGE WORK

(in thousand Rupees)

| | 1970/71 | 1971/72 | 1972/73 | 1973/74 | 1974/75 | 1975/76 | 1976/77 | 1977/78 (Revised Estimate) | 1978/79 (Budget) |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|----------------------------------|---------------------|
| Current Revenues | 6,767 | 8,729 | 9,735 | 11,348 | 8,598 | 15,517 | 12,649 | 16,158 | 20,000 |
| Current Expenditures | 2,363 | 3,970 | 4,066 | 6,058 | 7,280 | 8,574 | 5,339 | 12,099 | 12,541 |
| Current Surplus or Deficit | 4,404 | 4,759 | 5,669 | 5,290 | 1,318 | 6,943 | 7,310 | 4,059 | 7,459 |
| Capital Expenditure | 3,107 | 4,257 | 6,874 | 7,132 | 20,681 | 17,062 | 12,409 | 18,777 | 24,612 |
| Overall Surplus or Deficit | 1,297 | 502 | -1,205 | -1,842 | -19,363 | -10,119 | -5,099 | -14,718 | -17,153 |

To meet this shortfall, the designated property tax rate might be increased. If, for example, in 1977/78 the property tax were to cover full costs, the present tax rate has to be raised by nearly 100 percent or a rate of 9.6 percent of net annual rental value.

General Revenue Financed Services

The growth in total expenditure for the municipal water supply and sewerage system was 13.8 and 27.3 percent per year between 1970/71 and 1978/79 respectively, while the growth rate in total KMC expenditure for all other (general revenue financed) services was 18.6 percent per year over the same period (Table 10). The composition of the growth is presented in Table 11 below.

To the extent that the municipal water and sewerage system operates in deficit, and use the general revenue of KMC to offset this deficit, they leave less revenue to be spent on the services financed from general revenue (revenues other than property tax). The deficit of the water supply account in 1977/78 was Rs 35.6 million and the deficit in the sewerage account was Rs 14.7 million. These deficits which are financed from general revenues might be viewed as a result of an intentional government subsidy. However, the merit of these subsidies actually depends on the extent to which expenditures on water supply and sewerage weigh more heavily on the incomes of the poor than do the mainstays of the general account (mainly Octroi payments).

Table 10: KMC EXPENDITURE TRENDS, 1970/71 - 1978/79
(in thousand Rupees)

| | General Revenue Financed | Water Supply | Drainage and Sewerage |
|------------------------------------|--------------------------|--------------|-----------------------|
| 1970/71 | 85,929 | 23,556 | 5,470 |
| 1971/72 | 92,161 | 26,286 | 8,227 |
| 1972/73 | 102,950 | 29,319 | 10,940 |
| 1973/74 | 147,691 | 34,105 | 13,190 |
| 1974/75 | 194,121 | 33,947 | 27,961 |
| 1975/76 | 214,763 | 46,949 | 25,636 |
| 1976/77 | 215,153 | 49,910 | 17,748 |
| 1977/78 | 320,119 | 57,079 | 30,876 |
| 1978/79 | 337,829 | 66,370 | 37,153 |
| Average Annual Percent Increase | 18.6 | 13.8 | 27.3 |

Table 11: Per Capita KMC Expenditures by Functions, 1970/71 - 1978/79
(in Rupees)

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| | 1970/71 | 1971/72 | 1972/73 | 1973/74 | 1974/75 | 1975/76 | 1976/77 | 1977/78 (Revised Estimates) | 1978/79 (Budget) |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|-----------------------------------|---------------------|
| Actual | | | | | | | | | |
| Water Supply | 6.75 | 7.18 | 7.60 | 8.18 | 8.06 | 10.35 | 10.39 | 11.19 | 12.29 |
| Current | 5.48 | 5.68 | 6.24 | 6.10 | 5.53 | 8.54 | 8.25 | 7.91 | 8.57 |
| Capital | 1.27 | 1.50 | 1.36 | 2.08 | 2.47 | 1.81 | 2.14 | 3.28 | 3.72 |
| Education | 2.32 | 3.11 | 3.35 | 5.35 | 3.77 | 5.36 | 4.87 | 8.28 | 8.26 |
| Current | 1.17 | 1.50 | 2.02 | 2.95 | 3.45 | 4.81 | 4.52 | 7.79 | 7.85 |
| Capital | 1.15 | 1.61 | 1.33 | 2.40 | .32 | .55 | .35 | .49 | .31 |
| Public Health | 7.09 | 6.73 | 6.81 | 7.93 | 12.05 | 12.75 | 13.22 | 17.73 | 19.86 |
| Current | 5.30 | 5.37 | 5.61 | 7.04 | 10.86 | 11.78 | 11.87 | 15.73 | 15.72 |
| Capital | 1.79 | 1.36 | 1.20 | .89 | 1.19 | .97 | 1.35 | 2.00 | 4.14 |
| Sewerage & Drainage | 1.61 | 2.30 | 2.01 | 4.72 | 6.53 | 5.66 | 3.68 | 6.06 | 6.86 |
| Current | .70 | 1.11 | 1.07 | 1.48 | 1.70 | 1.89 | 1.10 | 2.37 | 2.31 |
| Capital | .91 | 1.19 | .94 | 3.24 | 4.83 | 3.77 | 2.58 | 3.69 | 4.55 |
| Hospitals | 2.53 | 2.08 | 3.16 | 3.52 | 4.29 | 5.29 | 5.89 | 6.62 | 6.66 |
| Current | 1.50 | 1.75 | 1.83 | 2.48 | 3.66 | 3.64 | 3.95 | 5.18 | 5.59 |
| Capital | 1.03 | .47 | 1.33 | 1.04 | .63 | 1.65 | 1.94 | 1.44 | 1.07 |
| Recreation | 1.02 | 1.39 | 1.46 | 2.49 | 4.31 | 2.26 | 3.06 | 3.47 | 3.49 |
| Current | .70 | .89 | .89 | 1.38 | 1.56 | 1.67 | 1.81 | 2.14 | 2.22 |
| Capital | .32 | .50 | .57 | 1.11 | 2.75 | .59 | 1.25 | 1.33 | 1.27 |
| Roads & Street Lights | 6.81 | 7.21 | 7.60 | 8.73 | 10.11 | 10.16 | 9.07 | 13.07 | 10.70 |
| Current | 3.42 | 3.59 | 3.96 | 4.96 | 4.34 | 4.12 | 4.22 | 5.75 | 6.48 |
| Capital | 3.39 | 3.62 | 3.64 | 3.77 | 5.77 | 6.04 | 4.85 | 7.32 | 4.22 |
| Fire | .34 | .41 | .43 | .46 | .54 | 1.30 | 1.22 | 1.42 | 1.40 |
| Current | .29 | .33 | .36 | .44 | .53 | .55 | .52 | .80 | 1.00 |
| Capital | .05 | .08 | .07 | .02 | .01 | .75 | .70 | .62 | .40 |
| Other | 6.38 | 4.70 | 5.11 | 6.90 | 10.18 | 10.26 | 7.44 | 12.17 | 12.28 |
| Current | 4.48 | 4.31 | 3.85 | 6.52 | 7.50 | 6.57 | 6.88 | 8.70 | 9.59 |
| Capital | .91 | .39 | 1.26 | .38 | 2.68 | 3.69 | .56 | 3.47 | 2.69 |
| Total | 33.88 | 35.28 | 37.57 | 48.35 | 59.83 | 63.41 | 58.91 | 80.17 | 81.72 |
| Current | 23.06 | 24.56 | 25.87 | 33.42 | 39.18 | 43.59 | 43.16 | 56.46 | 59.35 |
| Capital | 10.82 | 10.72 | 11.70 | 14.93 | 20.65 | 19.82 | 15.75 | 23.71 | 22.37 |

V. Revenue Structure and Trend

The structure of KMC revenues shows a heavy dependence on two major taxes -- Octroi and property tax. KMC rely very little on external assistance. The two taxes together account in 1978/79 budget for over 98 percent of total tax or about 78 percent of total revenue. Revenues from other taxes (mainly cinema and advertising tax) account for only 1.3 percent of total revenue. The balance is from non-tax revenue sources. Non-tax revenues which are mainly receipts from rents on government properties, fees and charges increased in importance from 11.1 percent of total revenue in 1970/71 to 20.7 percent in 1977/78. Over the same period tax revenues have ranged between 78 and 90 percent of KMC resources (Table 12).

On a per capita basis, tax revenues have grown at a rate of 9.4 percent per year, while the price level increased at a rate of 17.8 percent. As a result real per capita tax revenue declined at a rate of 4.6 percent. The decline in per capita taxation reflects in the ratios estimated of tax revenues to income which fell from 1.4 percent in 1970/71 to 0.7 percent in 1977/78. As shown in Table 14, there has been a steady and continuous decline in this ratio and it implies that the tax effort in KMC has been deteriorating greatly over this period. The negative buoyancy in tax receipts has come about particularly because of the sluggish growth in property tax revenues whose share in the total tax shrank from 41.7 percent in 1970/71 to 28.0 percent in 1977/78.

Table 12: KMC REVENUE STRUCTURE AND TRENDS
 (in million Rupees)

| | 1970/71 | 1971/72 | 1972/73 | 1973/74 | 1974/75 | 1975/76 | 1976/77 | 1977/78 | 1978/79 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Tax Revenues | | | | | | | | | |
| Property Taxes ^{1/} | 37.1 | 41.1 | 43.7 | 55.2 | 51.7 | 60.9 | 61.9 | 70.1 | 87.0 |
| Octroi | 50.3 | 49.9 | 56.2 | 88.6 | 116.9 | 128.5 | 154.2 | 177.5 | 200.0 |
| Cinema Tax | 0.6 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 |
| Advertising Tax | 0.7 | 0.7 | 0.8 | 2.3 | 1.8 | 2.5 | 1.9 | 2.5 | 4.0 |
| Other Taxes | 0.3 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 |
| Total Tax Revenues | 89.0 | 92.8 | 101.5 | 146.8 | 170.9 | 192.5 | 218.6 | 250.6 | 291.7 |
| Non-Tax Revenues ^{2/} | 11.1 | 10.0 | 9.7 | 12.3 | 18.0 | 44.3 | 35.1 | 65.3 | 77.6 |
| Total Current Revenues | 100.1 | 102.8 | 111.2 | 159.1 | 188.9 | 236.8 | 253.7 | 315.9 | 369.3 |
| Current Revenues at Constant Prices | 100.1 | 96.6 | 90.7 | 103.6 | 100.5 | 105.0 | 93.7 | 98.9 | 100.5 |

1/ Includes general property tax, water tax, conservancy tax and fire tax.

2/ Includes rents, fees and grants from primary schools.

Table 13: PERCENTAGE DISTRIBUTION OF KMC TAX REVENUES

| | 1970/71 | 1971/72 | 1972/73 | 1973/74 | 1974/75 | 1975/76 | 1976/77 | 1977/78 | 1978/79 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Per Capita Total Tax Revenues (in Rupees) | 26.25 | 25.85 | 26.64 | 36.43 | 39.93 | 42.49 | 45.54 | 49.23 | 54.02 |
| <u>Percentage Distribution:</u> | | | | | | | | | |
| General Property Tax | 17.1 | 19.4 | 17.5 | 17.2 | 15.3 | 15.3 | 12.5 | 10.9 | 10.3 |
| Fire Property Tax | 2.6 | 3.6 | 4.2 | 3.9 | 4.0 | 3.1 | 2.2 | 2.0 | 2.0 |
| Water Property Tax | 14.4 | 12.0 | 11.7 | 8.9 | 5.9 | 8.5 | 7.9 | 8.6 | 10.6 |
| Conservancy Property Tax | 7.6 | 9.4 | 9.6 | 7.7 | 5.0 | 4.8 | 5.8 | 6.5 | 6.9 |
| Octroi | 56.5 | 53.8 | 55.4 | 60.4 | 68.4 | 66.8 | 70.5 | 70.8 | 68.6 |
| Cinema Tax | 0.7 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Advertising Tax | 0.8 | 0.7 | 0.8 | 1.6 | 1.1 | 1.3 | 0.9 | 1.0 | 1.4 |
| Other Taxes | 0.3 | 0.6 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |

Table 14: PER CAPITA TAX REVENUES, PRICES

PER CAPITA REAL INCOME AND TAX REVENUES

| | Per Capita Tax Revenues (1) | Prices (2) | Per Capita Real Tax Revenue (3) = (1) ÷ (2) | Per Capita Real Income (4) | Tax Revenue As % of Income (5) = (3) ÷ (4) |
|------------------------------------|-----------------------------------|---------------|---|----------------------------------|--|
| 1970/71 | 26.25 | 100.0 | 26.25 | 186.90 | 1.4 |
| 1971/72 | 25.85 | 106.4 | 22.83 | 183.48 | 1.2 |
| 1972/73 | 26.64 | 122.6 | 21.73 | 191.72 | 1.1 |
| 1973/74 | 36.43 | 153.6 | 23.72 | 194.63 | 1.2 |
| 1974/75 | 39.93 | 188.0 | 21.23 | 193.66 | 1.1 |
| 1975/76 | 42.49 | 225.6 | 18.83 | 202.00 | 0.9 |
| 1976/77 | 45.54 | 270.7 | 16.82 | 207.78 | 0.8 |
| 1977/78 | 49.23 | 319.4 | 15.41 | 210.90 | 0.7 |
| 1978/79 | 54.02 | 367.3 | 14.71 | 214.13 | 0.7 |
| Average Annual Percent Increase | 9.4 | 17.8 | -4.6 | 2.0 | |

Sources: Price and income data are from Department of Master Plan and Environmental Control Department, Economic Prospects of Pakistan and Karachi from 1969/70 - 1989/90 (National Pilot Project No. 3), Karachi, October 1975.

Property Tax

Legal Structure. The property tax for Karachi was established by the West Pakistan Urban Immoveable Property Tax Act of 1958. The tax was administered by KMC until 1972 when the government of Sind took over the administrative responsibility for the tax. Under the Sind Finance Act of 1972, KMC has been debarred from levying general property tax but the City is entitled to receive 40 percent of the net property tax revenues collected by the Province of Sind (net revenue being gross revenue minus a 2 percent collection charge retained by the Province). Subsequently, KMC's share in the tax was increased to 50 percent and 85 percent in 1978/79 and 1979/80, respectively.

The base of the property tax is net annual rental value. The liability for payment is on the property owner and the tax is paid twice a year (January and July). The tax has four components: a general tax which ranges from 20 to 25 percent of assessed annual rental value, a water tax of 6.0 or 6.5 percent, a conservancy tax of 5 percent, and a fire tax of 1.5 percent (Table 15). The normal water and property tax rate does not include industrial properties such as factories and mills. For industrial consumption of water, charges are based on meter readings.

In Karachi most of old properties are subject to a rent control (The Karachi Rent Restriction Ordinance) but assessment by the Government is still made on the basis of annual rental value. The rent-control law, prescribing the conditions under which rents can be raised, has the effect of freezing assessments on old properties while the assessments on new but similar properties are increased. Over time this has resulted in wide and clearly inequitable discrepancies in the assessed value of similar properties which have been rented at different times.

Table 15: PROPERTY TAX RATE STRUCTURE

| Annual Rental Value | General Rate | Water Tax | Conservancy Tax | Fire Tax | Total Rate |
|---------------------------|----------------------|--------------|--------------------|-------------|------------|
| Rs 1 --- 250 | Exempt (general) | 6.0(6.5) | 5.0 | 1.5 | 12.5(13.0) |
| 251 --- 540 | Exempt (Residential) | 6.0(6.5) | 5.0 | 1.5 | 12.5(13.0) |
| 541 --- 12,000 | 20.0 | 6.0(6.5) | 5.0 | 1.5 | 32.5(33.0) |
| 12,001 --- 20,000 | 22.5 | 6.0(6.5) | 5.0 | 1.5 | 35.0(35.5) |
| Above Rs 20,000 | 25.0 | 6.0(6.5) | 5.0 | 1.5 | 37.5(38.0) |

Note: Owner-occupied residences receive a 25 percent rebate on the first Rs 12,000 of annual rental value.

The implications of the rent control issue are serious since virtually all rented properties in Karachi are under the rent control.

Assessment Procedures. The process of assessing the taxable value of properties in Karachi may be broadly divided into two different categories; residential and non-residential properties. The assessment of residential property values begins with the determination of the annual (or monthly) rental value attributed to all residential properties located in each district. To arrive at tax base (net annual rental value), however, an automatic deduction of a 10 percent of gross annual rental value is allowed for the cost of repairs and maintenance of such property. Then, at the discretion of the assessor (ETO or his inspector), the property is classified as very good, good, fair or poor, and the rental value is adjusted accordingly. This is the value at which the property tax is assessed. Although the size of the residential plot is not formerly taken into consideration during the valuation process, it is usually a fact in the discretionary good-fair-poor adjustment. For owner-occupied residences, this amounts to a determination of a "fair rental value" of the property.

With respect to renter occupied properties, on the other hand, assessment is based on rents actually realized by the landlord, if such rents approximate a fair market rent. If the assessor feels that the stated rent is not a fair one, the estimated market rent for the neighborhood is used. Thus, in both of these cases the judgement of the assessor plays a predominant role in determining tax base.

Commercial and industrial properties are assessed on a different basis. Among the important considerations in determining assessed value are types of construction and usage of properties. Of commercial properties, cinemas, and hotels pose special assessment difficulties and they are treated as special cases. Assessors are provided with an appraisal manual that is out of date and of little practical use. The manual contains only three broad categories of construction types and it does not spell out how each of the various types of commercial and industrial properties should be appraised. Because of the complexity of commercial and industrial property valuation, the present rules and procedures of assessing these categories of properties are even more inequitable than those applying to residential properties.

The last comprehensive property valuation for Karachi was made in 1968. Initially the 1968 valuation list was to be effective for only five years but in effect it has been extended by one year each year since 1972 through special legislation. The most recent such legislation is The Sind Urban Immoveable Property Tax Ordinance, 1979. Thus, the valuation lists of properties other than the industrial properties has not been changed since 1968.^{1/} The only changes which have been made in the 1968 valuation list have been additions of new buildings to the list. Even for adding new properties to the list, the present procedures are unsystematic in nature. In addition, the

1/ The valuation of industrial properties is made on the basis of 4 percent of land cost and 5 percent of building cost.

current method of property assessment in Karachi are neither periodic nor uniform. The success of property taxation among other things depends greatly on practical details regarding the appraisal of property values.^{1/} The present practice of assessing property value (or rental value) is grossly inadequate in Karachi especially where property values rise very rapidly.

Revenue Performance. Property tax revenues in Karachi over the past eight years have grown at an average annual rate of 9.5 percent in comparison with a 18 percent increase for the price and a 6 percent increase for city population. The principapl reason for the slow growth is that the property tax base has not experienced rapid growth. Growth in rental value, in theory, should result from one of two factors; a natural growth in rent levels and/or property values, and new construction. The latter usually is added to the assessment rolls, while the former requires revaluation. Since 1968 there has been very little reassessment of properties in Karachi and the growth of property tax during this period is mainly due to additions of newly constructed units to the rolls.

In an effort to highlight the growth in property tax revenues the income elasticity of the tax has been estimated on the basis of data during the 1970/71 - 1977/78. Because of the wide variation in the annual changes in city income, the arc instead of average elasticity is

1/ Other factors necessary for the success of the property tax system include availability of tax administrative facilities, the existence of a fiscal cadastre and the availability of real estate market information. Due to the lack of information these aspects of taxation are not discussed here.

used and estimated elasticity coefficient is 0.41. The reasons for this low elasticity include too many exclusions from the tax base, lack of reassessment, and a poor collection rate. The record shows that 156,000 units of properties from a total of 295,568 units or 52 percent were exempt from tax in 1977/78. Since the elasticity of property tax is also less than both the elasticity of total KMC expenditure (0.78) and that of non-property tax revenue (0.76), it may be concluded that revenues from the property tax are a shrinking proportion of total tax revenues and of total expenditures. More specifically, a 10 percent increase in city income tends to raise total expenditures and non-property tax revenues by approximately 8 percent each, but property tax revenues by only 4 percent.

In a recent study conducted by the World Bank, a comparison of the property tax effort was made for 14 selected cities in LDCs, the level of tax effort being measured here as a ratio of tax revenue to income.^{1/} As shown in Table 16 the tax effort ratio for Karachi is only 0.3 percent. For a city with Karachi's level of per capita income, the ratio is extremely low. A normal ratio would lie between 1 and 2 percent. The median for a sample of 15 cities is 1.9 percent.

The property tax effort ratio may be decomposed into two parts; the ratio of tax to tax base (assessment) and the ratio of base (assessment) to income. If the former is low relative to other countries,

^{1/} Roy W. Bahl, Urban Property Taxation in Developing Countries (World Bank, Urban and Regional Report No. 77-5), April 1976.

Table 16: COMPARATIVE LEVELS OF PROPERTY TAX EFFORT IN SELECTED CITIES

| | Per Capita Total Property Taxes | Per Capita Assessed Value | Assessed Value as a Percent of Income | Taxes as a Percent of Assessed Value | Property Taxes as a Percent of Income |
|------------------------------------|--|---------------------------------|---|---|---|
| (Cities with Capital Value System) | | | | | |
| Bogota (1971) | US\$ 3.49 | US\$ 653 | 1.260 | 0.5 | 0.6 |
| Cartagena (1972) | 2.76 | 518 | 2.040 | 0.5 | 1.0 |
| Jakarta (1972) | 0.35 | 3 | 0.020 | 0.1 | ... |
| Kingston (1971) | 4.75 | 90 | 0.109 | 5.7 | 0.6 |
| Lusaka (1972) | 9.60 | 845 | 5.709 | 1.1 | 6.4 |
| Manila (1972) | 14.20 | 1,276 | 2.463 | 1.1 | 2.7 |
| Nairobi (1971) | 12.04 | 317 | 0.635 | 3.8 | 2.4 |
| Seoul (1971) | 2.20 | 840 | 1.935 | 0.3 | 0.5 |
| Tunis (1971) | 10.00 | 143 | 0.644 | 6.9 | 4.5 |
| (Cities with Annual Value System) | | | | | |
| Ahmedabad (1972) | 3.75 | 15 | 0.142 | 24.9 | 3.5 |
| Bombay (1971) | 4.80 | 18 | 0.068 | 27.4 | 1.9 |
| Calcutta (1971) | 5.73 | 14 | 0.080 | 40.9 | 3.3 |
| Hong Kong (1973) | 15.20 | 131 | 0.111 | 11.6 | 1.3 |
| Singapore (1968) | 14.30 | 32 | 0.046 | 44.4 | 2.1 |
| Karachi (1977/78) | 1.78 | 5 | 0.008 | 35.0 | 0.3 |
| MEDIAN | 4.80 | | | | 1.9 |

Source: All cities except Karachi from: Roy W. Bahl, Urban Property Taxation in Developing Countries (World Bank, Urban and Regional Report No. 77-5), April 1976, p. 34.

the underlying problem would seem to be the level and/or structure of tax rate. If the latter is relatively low, the assessment level may be the problem. Although the tax effort measure is comparable among all cities in the sample, both of the decomposed ratios were comparable only among cities using the same tax base (capital or annual value). Among the cities with the rental value systems, Hong Kong and Karachi would seem to make the lowest tax effort -- Karachi because of a low ratio of assessed value to income and Hong Kong because of both ratios are low. Among the capital value cities, however, Kingston, Bogota, Jakarta and Seoul seem to have lower level of property tax effort. Although the explanation for the poor revenue performance differs among these cities, Kingston seems to suffer from a problem of low assessment as is the case in Karachi.

The property values are assessed at a rate considerably below true market value in virtually every city included in the above study. The reasons for the underassessment vary widely. In some cases it is due to a conscious underassessment of property, whereas in others it is due to infrequent and outdated assessments. The latter seems to be more of the reason for underassessment in Karachi and it calls for the overall reassessment of property as a top priority of tax reform.

Octroi

The most important local tax source in KMC is the Octroi, a form of sales tax collected on imported goods for consumption, use or sale within the city limits. It is levied on an ad valorem basis for goods imported through sea and a specific duty on the weight of commodities imported through road and rail routes. In both cases the rates are not high. On the octroi schedule for goods imported by sea, 72 of the 99 items listed are taxed at a rate of 0.5 percent to 1.5 percent. Sea dues are levied as ad valorem tax on the CIF value of imported goods, which is determined by customs authorities. Ad valorem tax is also levied at the airport on commodities entering Karachi for local consumption. The average octroi tax on goods imported through road and rail routes is estimated at less than 1 percent of the value of commodities.

The tax is collected at 31 octroi stations -- 11 road, 17 rail, 1 air and 1 sea dues post. In 1977/78 gross receipts from the tax was Rs 181.0 million of which nearly 80 percent was collected from goods imported through sea routes (Table 17). Transit goods are supplied with transit passes and taxed with octroi at the city of destination.

The growth in octroi collections over the past decade has exceeded that of all other locally raised taxes in KMC. Its annual rate of growth of 19.8 percent exceeds the annual rate of price increase and a real growth of about 2 percent per year. The arc income elasticity of octroi tax is estimated at 0.78. The low elasticity is partly due to specific duty levied per kg or ton of weight and to administrative inefficiency in collection (smuggling, underassessment, corruption, etc.). While sea dues being levied as ad valorem increase at the same rate as

Table 17: OCTROI REVENUE RECEIPTS BY COLLECTION POSTS,
1973/74 - 1978/79
(in thousand Rupees)

| | Road Posts | Rail Posts | Air Posts | Sea Dues Posts | Total |
|-------------------|------------|------------|-----------|----------------|---------|
| 1973/74 | 20,269 | 5,227 | 1,561 | 61,834 | 88,892 |
| 1974/75 | 21,532 | 5,025 | 2,834 | 91,062 | 120,454 |
| 1975/76 | 22,052 | 3,910 | 4,279 | 97,910 | 128,150 |
| 1976/77 | 25,915 | 3,250 | 5,867 | 118,768 | 153,802 |
| 1977/78 | 26,627 | 3,696 | 7,393 | 143,259 | 180,975 |
| 1978/79(Estimate) | 30,500 | 5,050 | 9,100 | 175,000 | 219,650 |

Source: Data provided by KMC Octroi Taxation Department

prices during inflation, the landside octroi remain constant per quantity of goods. Thus, it does not keep pace with inflationary trends and greater loopholes are afforded to the collecting agencies by accepting less weight of goods, especially at octroi posts where adequate weighing facilities are not available. No equity exists for commodities taxed with sea duty and the same commodities domestically produced and taxed with landslide octroi. This means discrimination of imported commodities and revenue loss. To restore equity and to generate larger revenues, it would be necessary to levy ad valorem tax on the landside. However, considering the difficulties involved in establishing value of the goods entering octroi limits from the landside, periodic change of the existing specific duty rates should be considered as a more feasible alternative in the short-run.

Notwithstanding its importance in local government revenue source the octroi tax ~~constitutes~~ a hindrance to trade within the country. For this reason it has been often suggested that the tax should be abolished or replaced by other taxes (e.g., municipal sales tax). At present, however, KMC is so heavily dependent on the octroi tax that it should not be withdrawn without fully developing compensating sources of revenue.

VI. Summary and Conclusions

The preceding analysis of local government structure and finance in Karachi reveals a number of problems. Two major causes of these problems are inadequate amounts of public sector resources available to local governments and the fragmentation of local government within metropolitan area of Karachi. The resource bottleneck appears to have resulted from the mismatch between expenditure responsibility of local government and the share of total revenue sources allocated to them. The result has been a large gap between the demand for "local" services and the ability of local governments to finance these services from self-raised revenues.

To provide the necessary services, this gap has been filled by large amounts of loans especially in the case of KDA. Whereas rising population and income have rapidly increased the demand for those services for which local governments are responsible, the growth of local revenues has not been stimulated in the same way and has continued to lag far behind. Where the demand for services provided by local governments is more income elastic than the revenue sources utilized by local governments, the result is increased reliance on external financing, direct involvement of the provincial government in the provision of these services, and/or simple deterioration of essential urban public services. This appears to be what has happened in Karachi since the early 1970's.

The persistent inability of local governments to finance public services continues to raise the question as to the proper level

of involvement of the provincial government in many activities (schools, water supply, hospitals, streets, etc.) which have long been viewed as a local government responsibility. Before one can make recommendations concerning the system of local finance in a country, it is essential to understand the objectives which can realistically be achieved by using local governments as the instrument. To the foregoing problem, the following policy recommendations are suggested:

1. Local governments should be given the authority to plan and carry out decisions with respect to those services for which local governments are held responsible. Such services should include local road and street lights construction and maintenance, local inspection and business service activities, parks and recreational facilities, water and sewerage systems, land adjustment systems, housing, fire protection and refuse collection.

2. Revenue sources should be sufficient to ensure that those services assigned to local governments can be provided by local governments themselves. In addition to those revenue sources already allocated to local governments, the list should include property tax and motor vehicle tax as sources of local government revenue.

3. The provincial government should continue to specify the revenue sources available to local governments. However, it would be appropriate to allow a modicum of freedom in the setting of local tax rates and fees and charges, and also greater freedom in borrowing.

4. There should also exist a set of responsibilities which are recognized as jointly held by the local government and the provincial government. With respect to these responsibilities, it would be appro-

priate for the provincial government to continue a program of specific purpose grants, as now exists for education. These responsibilities should include primary education, water supply and hospital services.

The second problem, the fragmentation of local government in metropolitan Karachi has resulted in fragmented approach to fiscal planning and management. At present there is no consolidated local government budget which shows the overall fiscal position of KMC, KDA, Contonment Boards, and other local authorities. In addition there is no evidence of long-term fiscal planning by local governments in Karachi. Revenues are not estimated for a period longer than one year, and there exists no machinery or procedures for revenues forecasting. There is no capital budget, and it appears that capital expenditures are made on a year-to-year basis. The absence of a capital budget means that the activities and expansion of the local governments in Karachi has little continuity, tax reforms are ad hoc and not planned for, and in general there is no translation of long term allocation and distribution goals into a fiscal planning document.

The fragmentation of local government structure also resulted in a totally inadequate long-term urban planning and lack of coordination among local authorities and substantial intro-urban public service level disparities. There are far too many government and/or civic authorities having their own jurisdictions and controls within the metropolitan area. Important plans are often not implemented according to sound planning principles. Although some of the local authorities consult the KDA's Master Plan Department (a regional planning agency) and are guided by

the planning principles, others especially those under the Federal government do not consider it binding on themselves to consult the Department.

Some of the cases where the local authorities have disregarded planning principles are the establishment of the Pakistan Defense Service Cooperative Housing Society whose plans are not subject to approval by KDA, layouts of new Housing Societies, and construction activities of the Contonment Boards. The existing relationship between KDA and KMC with regard to urban water supply and its cost recovery system is another example of the same dimension. As a result, the urban area has grown in an ad hoc manner, guided mainly by market forces and influenced somewhat by inter-jurisdictional competition for the tax base. Efficient organization of urban activities by such a process could only be by accident. An additional element of the government fragmentation problem is that it appears to give rise to wide disparities among local communities in the level of public services.

In order to plan meaningfully and meet their responsibilities, it is suggested that local governments must establish a body (Metropolitan Coordinating Council) to coordinate and screen all joint projects which require local participation. Under this plan, however, a coordination council may have little or no direct expenditure or revenue powers. Thus in order to create a strong area-wide financing unit, it might be desirable to form a metropolitan area-wide government. This form of centralized local government appears to hold greatest possibilities for reducing problems arising from the fragmentation of local government in metropolitan Karachi.

In recent years, there have been some changes in local government structure and finance. The recent decrees issued by the Chief Martial Law Administrator on real property tax, betterment tax and entertainment tax will affect the future revenues of local governments in Karachi. The new distribution formula of property tax revenue went into effect in 1978/79 and another one is scheduled for 1979/80. The changes in betterment and entertainment tax went into effect in 1977/78. In addition, the recent merger of Landhi Korangi Municipal Committee (LKMC) with KMC has improved the structure and finance of local government. Changes in the local tax codes especially with the property tax will strengthen the overall financial resources of KMC and Contonment Boards. Despite these changes tax revenues of local governments are expected to lag behind expenditures in growth rate and there is some indication of important tax burden inequities. The reform is needed to raise more revenues, improve the elasticity of the tax system, and to effect a more equitable distribution of tax burdens. The following recommendations center on how property tax reform can contribute to these goals.

1. The general property tax, water tax, conservancy tax, and fire tax should be consolidated as a means of simplifying the property tax system and its administration. With an overall reassessment of property (or rental) values and continued improvement in property tax administration, the revenues from property-related taxes will greatly increase in the future. Certainly improved use of existing property-related taxes should accompany any other changes in the local revenue system. KMC continues to

derive a bulk of its revenues from Octroi tax that cannot be commended either on equity or efficiency grounds. However, without fully developing its alternative revenue sources, Octroi should not be abolished.

2. The rate structure of the property tax should be re-examined in light of slow growth of local government revenues and outcome of new assessment of property (or rental) value suggested. If an adequate overall reassessment is carried out under the current rate of property value increase, it is possible to achieve a large revenue gain from the property-related taxes together with a substantial reduction in the level of existing statutory rates.

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