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KARACHI MEGA CITIES PREPARATION PROJECT

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CURRENCY EQUIVALENTS

Currency Unit = Rupee (PKR)
For the purpose of this document, a rate of US$1.00 = 59.730 Rs. has been used, which was the approximate rate at the time of the preparation of the Draft Final Report.

GLOSSARY OF TERMS

ADB	Asian Development Bank
ADP	Annual Development Program
ADF	Asian Development Fund
ARV	Annual rental Value
BOO	Build Operate Own
BOT	Build Operate Transfer
CBP	Capacity Building Programme
CCB	Citizens Community Boards
CDGK	City District Government of Karachi
CDS	City Development Strategy
CSP	Country Strategy and Program
CSPU	Country Program and Strategy Update
CWS	Cities Without Slums
DBO	Design Build Operate
DCO	District Coordination Officer
DDO	Deputy District Officer
DFV	District Financing Vehicle
DO	District Officer
E&IP	Enterprise and Investment Promotion
EA	Executing Agency
EDO	Executive District Officer
FY	Financial Year
GDP	Gross Domestic Product
GIS	Geographic Information System
GKWSS	Greater Karachi Bulk Water Supply Scheme
GoS	Government of Sindh
GRP	Regional Product
GST	General Sales Tax
HDI	Human Development Index
HRD	Human Resource Development
HRM	Human Resource Management
IA	Implementing Agency
IFI	International Financing Institution
IPP	Independent Power Provider
IUCN	International Union for Conservation of Nature
JBIC	Japan Bank for International Cooperation
JETRO	Japan External Trade Organization
JICA	Japan Aid Organization

KCR	Karachi Circular Railway
KDA	Karachi Development Authority
KESC	Karachi Electricity Supply Corporation
KMC	Karachi Municipal Authority
KUDP	Karachi Urban Development Project
KWSB	Karachi Water Supply and Sewerage Board
KWSIP	Karachi Water Supply Improvement Project
LDA	Layari Development Authority
LITE	Layari Industrial Trading Estate
lpcpd	Liters per capita per day
MC	Metropolitan Corporation
MD	Municipal District
MDA	Malir Development Authority
Mgd	Million gallons per day
MICS	Income Survey
MMIS	Municipal Management Information System
MNA	Member of National Assembly
MOF	Ministry of Finance
MPA	Member of Provincial Assembly
MTDF	Medium-term Development Framework Plan
MW	Mega Watt
NEPRA	National Electric Power Regulatory Authority
NFC	National Finance Commission
NGO	Non-government Organization
Nox	Oxides of Nitrogen
NWFP	North West Frontier Province
OCR	Ordinary Capital Reserves
OPP	Orangi Pilot Project
OZT	Octroi & Zila Tax
PBME	Project Benefit Monitoring and Evaluation
PC1	Planning Commission Pro-forma 1
PD	Project Director
PDF	Pakistan Development Forum
PFC	Provincial Finance Commission
PPIFF	Private Infrastructure Finance Facility
PLGO2001	Pakistan Local Government Ordinance 2001
PMU	Project Management Unit
PPP	Private Public Partnership
PPS	Public Perception Survey
PRSP	Poverty Reduction Strategy Paper
PSC	Project steering Committee
RfPs	Requests for Proposals
Rs	Rupees
SITE	Sindh Industrial Trading Estate
SLG	Sindh Local Government
SLGO	Sindh Local Government Ordinance
SMEs	Small and Medium Enterprises
SOEs	State Owned Infrastructure Entities

Sox	Oxides of Sulphur
SPM	Suspended Particulate Matter
T&D	Transmission and Distribution
TMA	Tehsil Municipal Administration
TTF	Technical Task Force
UA	Urban Administration
UFW	Unaccounted for Water
Ug/m3	Microgrammes per cubic meter
UNCHS	United Nations Centre for Human Settlements
UNDP	United Nations Development Programme
URC	Urban Research Centre

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KARACHI MEGACITIES PREPARATION PROJECT

A. The Economy, Population and Urban Institutions

Pakistan is in the midst of an economic upturn. Wide-ranging structural reforms, prudent macroeconomic policies, fiscal discipline, and consistency and continuity in policies have transformed Pakistan into a stable and resurgent economy. Karachi, the capital of Sindh Province, is the commercial hub and the gateway of Pakistan. The city handles 95% of Pakistan's foreign trade, contributes 30% to Pakistan's manufacturing sector, and almost 90% of the head offices of the banks, financial institutions and multinational companies operate from Karachi. The country's largest stock exchange is Karachi-based, making it the financial and commercial center of the country. Karachi contributes 20% of GDP, adds 45% of the national value-added, retains 40% of the total national employment in large scale-manufacturing, holds 50% of bank deposits and contributes 25% of national revenues and 40% of provincial revenues. To sustain the momentum of economic growth is a major challenge, and is dependant on continued job creation and poverty alleviation, which is in turn dependant upon strengthening the management efficiency of Karachi, and supporting improvements in urban infrastructure and services.

According to the 1998 Census Report, Karachi had a population of 9.2 million in 1998 compared with 5.2 million in 1981, a growth rate of 4.5% per annum. On the basis of continued growth at this rate, the population in Karachi is currently 12.8 million, and will reach 20.7 million by year 2015 and 26.4 million by 2020. It is estimated that currently, about 50 percent of Karachi's population live in Karachi Adadis, and a comparison of their income levels[1] with the Government of Pakistan's standard per capita poverty-line income of Rs.748.6 reveals that 89 per cent of Karachi's Katchi Abadi population is living in poverty.

The institutional setting in Karachi has traditionally comprised a host of agencies at federal, provincial and local government levels with separate land areas, separate legal and administrative frameworks, and engaging in little institutional coordination. This results in a fragmented management system with each agency responsible for multiple services within its own jurisdiction and in many cases with its own set of regulatory laws and frameworks. This has far reaching and adverse consequences on city growth and development. The resulting poor governance and regulation in Karachi affects not only the quality of city planning, infrastructure development and public and municipal services, but also impacts adversely on the country's economic growth and development prospects.

The devolution reforms in Sindh ushered in under SLGO 2001 called for major restructuring of the sub-provincial government structure. This comprised the transfer of political and administrative power and authority to the three-tier elected local governments, through an elaborate legal, administrative and financial structure backed by detailed rules and regulation. However, implementation of the devolution process is still incomplete, and there is an urgent need for the process to be completed. This change holds immense promise for the city of

[1] Decentralized Governance of Sindh Katchi Abadis, SPDC, 1998, Table 3.3.

Karachi, especially in facilitating a central governing authority for the city in the form of a City District Government, which in principle is to be the central player in managing city affairs, and in providing a clear development framework for Karachi's future growth.

B. Urban Planning

Planning and development controls within Karachi city remain weak. This is as a result of (i) the fragmentation of authority over land between the various government agencies which have significant land holdings, and (ii) poor enforcement of the planning regulations as they do exist. The major planning and development control issues include: (i) absence of effective coordination of planning process between land-holding and controlling agencies; (ii) the distribution and development of public land which does take place is not guided by development policies and strategies (or spatial planning); (iii) control systems for land development by private developers are ineffective; (iv) building and construction provisions for leasing out of public land are not enforced; and (v) conditions in building permits are seldom followed. (There are cases where approval was granted with retrospective effect for buildings that did not meet the requirement under Building and Town Planning Regulations). Nearly 90 percent of city land is under public ownership, but the owners are reluctant or unable to make this land available for development and housing. Partly for political, and partly procedural reasons (public land can only be disposed through public auction), land is not now being released for development.

One result of the absence of land available for development and the demise of KDA is that there is now no government agency actively pursuing the opening up of land for serviced plots. Where government has failed, the informal private sector has stepped in. The "land mafia" of the informal sector illegally obtains access to public land, sub-divides it, and sells plots at relatively low prices to newcomers. Where "official" plots are available (more than 400,000 plots are said to be available around the City and at Hawkesbay for housing) these cannot be occupied due to a complete lack of services. Serviced plots which can be offered are outside the affordability range of most low-income dwellers.

Finally, and most importantly, there is currently: (i) no long-term vision of medium term development framework for Karachi (ii) no structure plan or masterplan in place to guide city growth; and (iii) no sector masterplan in place to guide investment prioritization and sequencing in the key infrastructure sectors.

C. Infrastructure and Service Provision

Service provision within the city is generally poor. While an estimated 82 percent of households have a KWSB water supply connection, water is frequently only available for a few hours every other day and in some cases not at all. Losses are unknown but are thought to be around 50% and the leaking network and variable pressure means that the water within the distribution network is heavily contaminated. Although an estimated 89 percent of households have a flush toilet connected either to the sewerage system or a septic tank, the sewerage network suffers from poor connectivity and a large number of undersized and broken sections. As a result most of the wastewater is discharged to the stormwater drainage network and only about 25% of sewage generated finds its way to one of the three functioning sewage treatment plants – which operate at just over 50 percent of their design capacity.

Of the estimated 7,250 tons of solid waste generated daily within the City District from domestic, institutional, industrial and commercial sources, only about 4,350 tons (60%) is lifted, increasingly by private contractors working for the TMAs. Of the remainder, an estimated 1,500 tons is removed by informal recycling operations and the rest disposed of to open spaces, roads and drains, or is burnt. Of that which is collected, only about 1,800 tons is disposed of to one of the two official open dump sites. The rest is sold for landfilling or use in kilns, or is dumped at one of a number of open unofficial dumpsites. The stormwater drainage system is characterized by a network which is both heavily encroached and extensively used for the disposal of solid waste. Although rainfall is not frequent in Karachi, it is intense, and the annual flooding causes both damage to homes and infrastructure, and constitutes a significant heath risk from floodwaters contaminated by the raw sewage which flows in the drainage network.

Responsibility for major roads, transport and traffic management is shared between three departments of CDGK. There is no mass transit system and the population of the City District relies almost entirely on the road network for urban transportation: Of the 13.5 million mechanized trips made each day within the CDGK area, 52 percent are made by public and 48 percent by private transport. There have been occasional attempts to revive the Karachi Circular Railway and a major light rail mass transit system for Karachi has been planned since 1973, but these have failed to attract either public or private investment. While there has been, and continues to, be a significant program of trunk and primary road building, there has been no complementary investment in the secondary distributor road network, compounding congestion problems. The secondary network in commercial areas is severely congested, due to parked vehicles reducing the road thoroughfares by more than fifty per cent.

The Karachi Electric Supply Corporation (KESC) is responsible for both the provision and distribution of electricity to the city of Karachi. Current peak demand is estimated to outstrip supply by some 518 MW or 24%. The impact of this on Karachi is frequent load-shedding during periods of peak demand, with the consequent negative economic impact. In addition to the shortfall in supply, there are serious problems with the distribution network: The combined transmission, distribution and administrative losses constitute over 37 percent of supply.

The environment in and around Karachi is poor. The city's coastline (including extensive mangrove stands) and the near-shore marine habitat receive some 200 Mgd of untreated domestic and industrial waste water and up to 1,000 tons of uncollected solid waste per day. Karachi's industries introduce a cocktail of chemicals and toxic substances to the environment through an estimated 92 Mgd of industrial effluent which is discharged to the stormwater drainage system. Within the city, a key contributory factor to the poor and deteriorating environmental conditions is the lack of any effective urban planning. No attention is paid to preventing unplanned development in environmentally sensitive areas or within reserves for critical infrastructure.

The rapid and uncontrolled growth of the city which has resulted in unregulated development and inappropriate land-use changes has also resulted in an estimated 50% of the population living in unplanned, poorly serviced and heavily polluted informal settlements – Katchi Abadis. The lack of an effective and efficient mass transit system means rapidly increasing numbers of vehicles on ever-more congested roads leading to overcrowding, increased air pollution, stress and increasing accidents.

The major current development activity is the Tameer-e-Karachi Program - an ambitious Rs29 billion development package geared specifically towards rebuilding Karachi (and to some extent, Sindh) by providing vital physical infrastructure and other civic amenities in key target locations, particularly in industrial areas. The Program is to be carried out within the next 4 years through the concerted efforts of the City District Government of Karachi (CDGK), the

Federal and Provincial governments of Pakistan and Sindh, and various stakeholders in the private sector.

D. Urban Finance

The City District Government of Karachi (CDGK) receives funding to cover both its recurrent and development expenditures from both Federal and Provincial government budget sources, as well as from taxes and fees generated at a District Government level. In addition, the 18 Towns and 178 Union Councils within Karachi receive funding for recurrent and development purposes from Provincial Government sources (as well as Federal programs), and revenues from taxes collected on their behalf by CDGK and from their own limited tax and fee base. This system: (i) causes very significant vertical imbalance; (ii) gives provinces no discretion over the amount of funds; (iii) does not permit fiscal capacity equalization to a national average standard; (iv) removes from the Federal government leverage to influence provincial priorities to achieve national objectives; (v) uses a formula for determining provincial level allocations that bears little relationship to provincial expenditure requirements; and (vi) leaves provinces exposed to changes in federal tax bases and collection performance. The provincial tax revenue base is narrow, primarily because of the highly centralized federal tax structure with an almost exclusive preserve over all the buoyant taxes, leaving only the residual taxes under the provincial and local government domain.

Following devolution, the first Provincial Finance Commission (PFC) in Sindh announced an Interim Award in June 2002, later extended till June 2004, under which, the Provincial Government was to retain 60% from the divisible pool. This comprises all revenues other than non-tax receipts from user charges and the Federal Share of 2.5% GST funds being given to provinces in lieu of the abolishment of Octroi. The balance 40% is to be distributed among District Governments on the basis of population (50%), backwardness (17.5%, to be determined on a composite index of 33 indicators), and tax collection (7.5%), with the remaining 25% earmarked for transitional transfer grants for bridging the gap between the expenditures of the District Governments and transfers on the basis of the three criteria. This revenue sharing arrangement is commendable in that it is reasonably transparent with the local governments enjoying full autonomy in the use of available transfers.

However, this arrangement has important limitations[2] including: (i) All Districts are treated alike; (ii) the awards ignore the different fiscal capacities of various districts/TMAs; (iii) the distribution of revenues is based solely on expenditure needs which can be inequitable; (iii) the awards do not fully match the transferred expenditure responsibilities of various local governments; (iv) the awards weaken local government accountability to resident taxpayers; (v) the horizontal nature of awards to TMAs mean they have no accountability to their District governments, creating planning and coordination conflicts; and (vi) the PFCs have failed to enhance the efficiency and equity of the federal system by providing the right incentives for responsive, responsible, and accountable governance. Dividing the pie rather than increasing its size appears to be the prime objective.

KWSBs financial performance has always been weak. Tariffs are low and service levels are poor. KWSB is unable to meet its projected cash operating expenses out of revenues, let alone proper O&M costs, while debt service on past loans is now met by the Sindh Provincial Government. Tariffs remain unchanged since 1998 while the general level of prices and KWSB expenses have increased by around 40%. While bulk customers are metered, only 28% of

[2] Refer Devolution in Pakistan, Annex 2, Technical Considerations, pages 24, ADB, DFID, WB, July 2004

meters are functional with the remainder paying based on past usage. These metered customers account for less than 1% of customer numbers and for 17% to 20% of water volume sold, but account for 65% of overall revenues.

E. Project Rationale

One of the key pillars of growth for Pakistan is a focus on the development of urban areas in order to unleash the full economic potential of cities. This is explicitly recognized in the Medium-term Development Plan 2005-2010 which recognizes the vital role played by large cities in national economic development and the importance of their development being undertaken in a holistic manner as part of a long-term economic strategy. The Government of Sindh is fully committed to the devolution process commenced in 2001 as a means of improving services at the local level. However, both the CDGK and TMAs (towns) have experienced significant challenges in the process of implementing decentralized service delivery, due to both capacity and financial constraints.

As is evident from the foregoing, the development needs of Karachi are great in terms of the requirement for improved urban governance, management and finance, and demands for more extensive infrastructure provision and better service delivery, both to support economic activity and provide a decent standard of living for the city's residents.

Currently, the development of Karachi is severely constrained by: (i) the lack of a future vision and coherent development plan, (ii) the lack of clarity of institutional roles and responsibilities between the different jurisdictions and tiers of government, (iii) poor enforcement of planning regulations, and (iv) unavailability of adequate funds to construct, rehabilitate and sustainably operate and maintain critical urban infrastructure and services. Karachi must compete regionally and globally for domestic and foreign investment in productive activities. Failure to urgently address these problems is likely to result in Karachi rapidly losing its competitive position, not only in the global marketplace, but also within Pakistan.

The investment required in infrastructure and services cannot be found from government funds alone. Government must create the conditions to attract private sector investment into the provision of infrastructure and services in Karachi. Furthermore, in order to attract such investment, and use it effectively, the City District must be in position to identify and prepare good projects, and have in place a regulatory environment and funding mechanisms which can facilitate timely project execution, and ensure the sustainability of assets so created.

F. ADB Urban Sector Strategy in Pakistan

The focus of ADB's Country Strategy and Program Update (2005-2006) for Pakistan is on reducing poverty by providing help in the key strategic areas of good governance, sustainable pro-poor economic growth, and inclusive social development. The strategy also recognizes that substantial infrastructure development is required for the Government to reach its objective of poverty reduction. Infrastructure and service provision fits within the framework of ADB's declared areas of specific intervention of: (i) supporting good governance, (ii) pro-poor economic growth (infrastructure, rural development, employment generation), and (iii) extensive social development (education, health, water supply and sanitation, and social protection).

The main focus of ADB assistance to the urban sector is in bringing about environmental improvement and addressing the needs of the poor. It broadly covers: (i) institutional restructuring and devolution of service delivery, (ii) private sector involvement in the delivery of selected services, (iii) budgeting and finance, encouraging increased cost recovery and municipal revenue raising, (iv) increased community participation, and (v) attainment of the Millennium Development Goals (MDGs). Infrastructure development, either rehabilitation of existing facilities or development of new facilities forms an integral part of the Bank's agenda for pro-poor economic growth.

G. City Development Framework

The development framework for the Karachi City District is cast within the context of the national and provincial development frameworks. The VISION 2030 of Federal Government envisages a "*Developed, industrialized, just and prosperous Pakistan through the rapid and sustainable development in a resource-constrained economy by employing knowledge* inputs." This vision is to be achieved through establishing a just and efficient economic system for alleviating poverty and achieving the millennium Development Goals (MDGs). While supporting the achievement of these longer term objectives, the Planning Commission's Medium Term Development Framework (MTDF) for the period 2005-2010 incorporates a paradigm shift towards enhancing competitiveness of the of the economy in the era of globalization through knowledge inputs. The framework focuses on the bringing together of the three key elements of: infrastructure development, human resource development and technology.

In the urban sector there is recognition that increasing urbanization is an inevitable part of the process of economic development, and that urban-based economic growth will continue to increase. The challenge is to ensure that this urban growth is sustainable, efficient and equitable. The development framework for Karachi calls for a rationalizing and strengthening of urban institutions, an increase in the efficiency of urban services through enhanced urban planning and integrated urban development, enhancement of urban management capacity, infrastructure development and the strengthening of public-private partnerships. The framework also pays particular attention to the improved management of Karachi megacity through improved land supply and services, transport and communication links, information systems and labor markets. Significantly, the framework accepts that continued rural-urban migration to Karachi is opportunity-seeking behavior by the poor rather than a problem to be addressed by distorting rural and/or regional development.

The importance of Karachi city to the national economy demands a comprehensive approach to its development which encompasses not only urban infrastructure and services requirements but also the vision to support the economic role of the city. Thus the city development framework for Karachi follows the lead set by the Federal Government in placing particular emphasis on megacity development. The framework: (i) supports the development of long-term strategies and sectoral policies, strategies and plans for Karachi's development, (ii) adopts an entrepreneurial approach to city development, including support for private-public sector partnerships, and (iii) supports capacity building of Karachi City District and town agencies to better equip them to perform against their mandate.

For the city to maintain its position as a regional and international industrial and commercial centre requires:

- The introduction of improved city governance and management to enhance responsiveness, predictability, accountability and transparency of government and provide a coherent and supportive framework for efficient urban management and planned development.

- Enhanced land use and development efficiency through: (i) facilitating the operation of an effective urban land market, and (ii) preparation, enactment and implementation of a city structure plan/masterplan and its use as a tool to resolve planning and jurisdictional conflicts and enhance urban efficiency.
- Preparation of critical infrastructure and service masterplans to support city plan – particularly in water supply, wastewater management, solid waste management and transportation.
- Upgrading and extension of city infrastructure and services to support economic development – particularly in the sectors of water supply, electricity, transport, wastewater disposal and solid waste management.
- Enhancing the resources available to support large-scale infrastructure development through attracting private sector resources in a variety of public-private sector partnership arrangements.
- Improved tenure arrangements and access to basic urban services for the urban poor – particularly those living in Katchi Abadis.
- Releasing the “dead capital” in land held by the urban poor, and attracting it towards productive use through the extension of the regularization process for Katchi Abadis.
- Increased sustainability of infrastructure and services through improved cost recovery for services leading to better-funded and improved management, operation and maintenance of services.
- Enhanced tax collection efficiency (especially property tax) at the city district level to provide resources for the use of CDGK and TMAs (towns) in infrastructure and service provision, rehabilitation and operation.
- Improving urban environmental conditions through improved waste water and solid waste management, better traffic management, the introduction of mass transit systems and retention and enhancement of green open spaces and the coastline.

H. The TA Loan Project

The Government has made a commitment to enhancing the competitiveness of the megacity of Karachi, and improving the quality of life of its residents. As a result of discussions between the ADB, GoP, GoS and the CDGK, the ADB has agreed to provide funding to support a Karachi Megacity Project which is intended to address pressing infrastructure and service needs in the megacity in the short- to medium-term. In support of this proposed intervention, a TA Loan is envisaged to enhance the Government’s ownership of investment projects and provide an effective response to the needs for upfront organizational development and capacity building in project management and implementation and other key areas such as city planning, management and municipal finance. In addition, the need for innovative and sustainable financing mechanisms for megacity development suggests that a specialized financial intermediary be created to address the large scale financing requirements of Karachi on a sustainable basis.

The proposed TA Loan intends to address the issues of: (i) strengthening the organizational structure and capabilities of the City District Government to plan, initiate and manage large scale, bankable infrastructure and service projects, (ii) assist in establishing clear regulatory frameworks for private investment in infrastructure and service provision, (iii) provide a facility to enable the CDGK to draw on funds for the preparation of feasibility studies for infrastructure and service improvement projects, and (iv) support establishment of a suitable financial intermediary as a conduit for development funding.

The objective of the TA loan would be to assist Karachi city in tackling a wide range of problems through: (i) enabling the preparation of high priority investment projects for urban infrastructure and service improvement; and (ii) assisting in the urban policy, institutional and regulatory reform, organizational development and capacity building necessary to support enhanced city governance, development and management. The TA loan would: (i) enhance the Government's ownership of the investment projects to be financed by ADB, (ii) facilitate the preparation of infrastructure sector projects that promote economic growth and poverty reduction, and are technically feasible, financially and economically viable, and environmentally and socially responsible; (iii) assist in developing PPP modalities; (iv) provide an effective response to the need for advance capacity building in city planning and management, project management and implementation, financial management and other key areas of support, and thus improve institutional capacities within city infrastructure agencies and institutions (v) facilitate the design and establishment of a financial intermediary to function as a conduit for Bank and other financing to the sector, and (vi) address the issue of initial implementation delays frequently encountered under ADB-supported urban infrastructure and development projects.

I. Policy dialogue

The Bank will engage with GoS and CDGK in a dialogue over policy issues which need to be addressed to: (i) ensure that the project objectives are met, and (ii) support the sustainable growth and development of Karachi megacity. These policy issues focus primarily on institutional development, human resource development, land, finance and the efficiency of services.

1. Institutional Development

There is an urgent need both for rationalization of the structure of decentralized government, and clarification of the responsibilities and duties of the various devolved institutions. Further reform is necessary to strengthen the CDGK and towns in performing their functions under the SLGO. Increased accountability of local government institutions and greater participation by civil society in development by involving stakeholders in the planning, design and implementation of policies and programs needs to be discussed and introduced. The roles and responsibilities of urban institutions need to be clarified in order to avoid the horizontal and vertical overlap which currently exists.

2. Human Resource Management Function

Administrative devolution has only been partial as staff transferred to the districts continue to be under the control of the provincial government who carry out appointments, transfers postings, promotions and appraisals of district staff. There is a need to provide mechanisms to develop human resources and improve human resource management. Equally, there is a need to examine how the accountability of departmental staff can be improved, the opportunities for reward and sanction, and a system of staff engagements which encourages team building and loyalty, and facilitates a productive and motivated workforce within CDGK and the TMAs.

3. Municipal Finance

A sound fiscal transfer system is a key element of a sound Local Government finance system. The Seventh National Finance Commission is charged with investigating ways to increase devolution of tax sources. These steps should be encouraged. There is need for continuous dialogue with the Sindh Provincial Finance Commission and review of procedures to ensure that they promote accountability, efficiency and improved performance in local government financing. In particular inclusion of Non-tax revenues in the divisible pool would increase the allocation to Districts and to Karachi where the bulk of these revenues are generated

Property tax computerization, reform and enhancement offers the best opportunity to raise revenues by CDGK for TMAs, while increases in user charges for water and wastewater services is justified once levels of services are improved. This would reduce the financial burden on both Federal and Provincial sources to meet not only operation and maintenance costs, but also the debt service and capital investment for theses services in Karachi. The freed up funds could be used for development purposes in areas where cost recovery is difficult. Dialogue is necessary to set in place a program to increase the level of services and then to raise user charges correspondingly so that these utility services can become financially independent in the medium to long term.

Finally there is a need to introduce comprehensive accounting and MIS systems in the CDGK and TMAs to provide better and more timely information for budgeting, management, monitoring and reporting purposes. This is necessary to provide CDGK and TMAs with the necessary information to properly plan, budget manage, monitor, and report on carrying out of their respective responsibilities.

4. Land and Planning

The land market in Karachi is failing, and this has a major impact on the efficiency of current development and on the future growth potential of the city. The basis for any market-led economic growth must be the free, easy and unrestricted availability and transferability of land and capital. There is a need to engage in dialogue around the reasons for failure of the urban land market and to develop mechanism to bring land which is attractive and suitable for development into use.

Related to this is the need to evolve a holistic city development vision through involvement of all major stakeholders in order for the city to move forward with confidence. Devolution provides the opportunity for the CDGK to play a central role in evolving a clear, focused future development vision.

5. Service Delivery

Service providers in Karachi – notably KWSB and KESC – have failed, and continue to fail, to provide a quality service. Well organised, well planned, effective, affordable and sustainable utilities are a vital component of an efficiently working Megacity. Policy discussion with the utility service providers needs to focus around the rationalisation of their tariffs, their legal framework, organisational structure, and interrelationships and interoperability with other utility service providers and the city district and town administrations and land development and control authorities.

J. Project Scope and Components

The following **Table ES.1** sets out the scope of the proposed TA Loan project. In addition, these components will be complimented by (i) development of the GIS and MMIS database and (ii) preparation of the masterplan being funded under the Tameer-e-Karachi program, (iii) development of a water supply and wastewater management masterplan supported by JICA, and (iv) preliminary work on a transportation masterplan for Karachi also being undertaken by JICA. **Table ES.2** shows a range of potential sub-projects which would be prepared under the proposed project with potential for funding under a proposed follow on megacity project for Karachi. These projects simply try to address the key deficiencies in existing infrastructure, rather than identify the investments necessary to meet growth in population and economic activity over the next 5-15 years. Identification of these investments would arise out of the CDS and Masterplanning exercise supported by the TA loan.

K. Project Costs

Base Costs in US$ are set out in **Table ES.3**. After applying inflation factors and assuming the Rs/US$ exchange rate declines in the future by the differential between foreign and local inflation, total project costs are estimated at $ 22.7 million equivalent, including interest during implementation. The foreign exchange cost is estimated at $14.8 million while local currency costs are estimated at $7.8 million. The total cost includes interest during implementation of $0.30 million[3]. The cost estimates are inclusive of taxes and duties to be financed by the Government. The amounts associated with taxes and duties are minor and only relate to the equipment purchases and expenses in undertaking the initial projects comprising mainly consultancy costs.

L. Financing Plan

An indicative financing plan is set out in **Table ES.4**. It is assumed that the Bank could provide a loan of $10.00 million from ADF or equivalent sources. Other foreign costs are assumed to be covered by grants. At the present time this includes grants for developing the City District Strategy and proposed Twinning Project with Madrid, Spain estimated at $3.15 million in total. This would leave a further $1.70 million of foreign costs to be financed by grant through bilateral donors. If further grants for parts of the capacity building program can be identified then the amount financed by the Bank under the TA loan could fall and /or the amount financed by the Government could be reduced. In particular Parts A and B could be attractive to bilateral agencies leaving the Bank and the Government to finance the feasibility studies and provide the initial start up capital for the Financial Intermediary (i.e. Parts C and D.). The Table shows the Government will finance the local costs of $7.8 million (about 35%), which will cover local currency counterpart financing. The Government may also need to pick up the balance of the foreign costs not met by the Bank and Bilateral donors. This amount is presently identified as $1.7 million.

[3] Assuming ADF loan with a service charge of 1.0% per annum over the implementation period and 1.5% thereafter. Repayment over 32 years, including a grace period of 8 years.

Table ES.1: Megacity Development Support Project Components

Part	Project	Implementing Institution
A	Project Management Support	
A1	Overall Project Management Assistance to Project Director	CDGK (E&IP)
A2	Specific Technical Assistance to EDO Masterplan on GIS and Masterplan Preparation	CDGK (Masterplan office)
A3	Preparation of City Development Strategy for Karachi	CDGK (E&IP)
A4	Willingness and Ability to Pay Surveys	CDGK (F&P)
A5	Assistance Facility to other EDOs as Required	CDGK (E&IP)
B	**Institutional and Policy Reforms**	
B1	Organizational Development Study	CDGK (E&IP)
B2	Immediate Capacity Building	CDGK
B3	CCBs Vitalization	CDGK (CD)
B4	Katchi Abadi Regularization and Pilots	CDGK
B5	Implementation of Accounting and MIS	CDGK
B6	Water, Wastewater, and Solid Waste Tariff Studies	CDGK
B7	Community Awareness Program	CDGK
B8	Twinning Program Arrangements	CDGK
B9	Downstream Capacity Building	CDGK/Town councils
C	**Feasibility Study for Priority Subprojects**	
C1	UFW and System Strengthening	CDGK (KWSB)
C2	Korangi Wastewater Management	CDGK (KWSB)
C3	Stormwater Drainage and Sewerage	CDGK (KWSB)
C4	Solid Waste Transfer Stations, Landfill Sites	CDGK (KWSB)
C5	Malir Bund Road	CDGK (KWSB)
C6	Mass Transport System	CDGK (W&S)
C7	Ongoing FS of Megacity Projects	CDGK (W&S)
D	**Development of Financial Intermediary**	
D1	Feasibility Study for Establishing a Financial Institutions	GoS
D2	Initial Working Capital for Financial Institutions	GoS/Private Banks

Table ES.2: Potential Megacity Priority Projects for Funding through Loans/IPP etc.

Code	Sector	Project	Funding Source	Preliminary Cost Rs B	Implementing Institution
KAO1	**Institutional & Policy Reform**	Regularization & Upgradation of Katchi Abadis through Community Involvement of Self-help Loan	Loan		KSWB
WSO1	**Water Supply**	Rehabilitation and Strengthening of existing WS Network	Loan	5.0	KWSB
WS02		NEK Water Treatment Plant Expansion	Loan/Private Sector	2.0	KWSB
WS03		Hub WTW Water Treatment Plant Expansion	Loan/Private Sector	0.5	KWSB
WS04		Metering of service connections	Loan	2.0	KWSB
WS05		Construction of two Seawater Desalination Plants	Private Sector	10.0	KWSB/Private
WW01	**Wastewater Management**	Korangi Wastewater Treatment Plant (WWTP)	Loan	5.0	KWSB
WW02		Rehabilitation and Strengthening of existing Sewer Network	Loan	5.0	KWSB
SD02		Rehabilitation of Existing Stormwater Drainage Network and	Loan	2.0	KWSB

Code	Sector	Project	Funding Source	Preliminary Cost Rs B	Implementing Institution
		Interconnections with Sewer Network to Take Dry-weather Flow (Sewage)			
SW01	**Solid Waste Management**	Waste-to-Energy Plant	Private Sector	20.0	W&S/E&IP
SW02		Solid Waste Landfill Site	Loan/Private Sector	2.0	W&S/E&IP
R01	**Roads and Transport**	Malir River Diversion Road	Loan/Private Sector	2.0	W&S
R02		Elevated Expressway over Sharia-e-Faisal	Loan/Private Sector	2.5	W&S
R03		Elevated Road Structure on I.I. Chundrigar & M.A. Jinnah	Loan/Private Sector	1.0	W&S
TM01		Development of High Capacity City Bus Routes and a Bus Rapid Transport System	Loan/Private Sector	5.0	Mass Transit Cell
ES01	**Electricity**	Electricity Generating Units	Loan/Private Sector	9.0	KESC
ES02		Transmission and Distribution Improvement	Loan	15.0	KESC
		Total	Rs Billion	88.0	
			$ Billion 1/	1.46	

Note 1: Assuming 60 Rs = $1.00

Table ES.3: Megacity Development Support Project - Project Costs

	Rs '000			$ '000		
I. Project Costs	**Foreign**	**Local**	**Total**	**Foreign**	**Local**	**Total**
A (1) Project Management Advisor	20,982	4,800	25,782	320	73	393
A (2) Assistance to EDO Master plan	27,878	10,980	38,858	427	168	595
A (3) CDS for Karachi	36,829	14,724	51,553	573	229	802
A (4) User and WTP for Services	6,514	6,150	12,664	103	97	199
A (5)Ongoing Support to CDGK	26,553	6,000	32,553	400	90	490
A. Project Management Support	118,756	42,654	161,410	1,822	658	2,480
B (1) Organizational Development Study	107,645	42,534	150,179	1,654	654	2,308
B (2) Immediate Capacity Building	17,842	7,110	24,952	277	110	387
B (3) CCBs Vitalization	8,103	7,650	15,753	128	120	248
B (4) Katchi Abadi Regularization	20,169	27,540	47,709	306	418	724
B (5) Implementation of MIS	117,222	45,000	162,222	1,750	672	2,422
B (6) Tariff Studies Water etc	25,497	9,810	35,307	382	147	528
B (7) Awareness Program	13,011	4,950	17,961	193	73	266
B (8) Twinning Arrangements	120,236	27,000	147,236	1,800	405	2,205
B (9) Downstream Cap. Bldg.	70,991	27,000	97,991	1,050	400	1,450
B. Institutional and Policy Reform	500,715	198,594	699,309	7,538	2,999	10,537
C (1) UFW and System Strengthening	8,230	3,330	11,560	130	52	182
C (2) Korangi Wastewater Management	9,342	3,780	13,122	147	59	206
C (3) Stormwater Drains & Sewerage	15,792	6,390	22,182	249	101	349

I. Project Costs	Rs '000 Foreign	Local	Total	$ '000 Foreign	Local	Total
C (4) Solid Waste Transfer Stations, Landfill Sites	13,790	6,390	20,180	217	88	305
C (5) Malir Bund Road	10,587	4,284	14,871	167	67	234
C (6) Mass Transport Systems	43,391	17,190	60,581	669	265	933
C (7) Ongoing FS of Megacity Projects	94,507	36,000	130,507	1,400	234	1,634
C. FS for Priority Projects	195,640	77,364	273,004	2,977	867	3,844
D (1) FS to Establish FI	21,842	8,838	30,680	344	139	483
D (2) Initial Funding FI	22,936	0	22,936	350	0	350
D. Financial Intermediary	44,778	8,838	53,616	694	139	833
Subtotal	**859,888**	**327,450**	**1,187,338**	**13,031**	**4,662**	**17,693**
Taxes and Duties	0	9,180	9,180	0	141	141
Total Base Cost	**859,888**	**336,630**	**1,196,519**	**13,031**	**4,803**	**17,834**
II. Contingencies						
Physical Contingency	72,060	29,098	101,159	1,060	443	1,503
Price Contingency	31,366	28,669	60,035	455	429	884
Contingencies	**103,426**	**57,767**	**161,194**	**1,515**	**872**	**2,388**
III. Financing Charges						
Interest During Construction	18,356	0	18,356	289	0	289
Foreign Exchange Loss	77,141		77,141			
VI. Total Costs	**1,058,812**	**394,398**	**1,453,209**	**14,835**	**5,675**	**20,510**
% of total costs	73%	27%	100%	72%	28%	100%

Table ES.4: Megacity Development Support Project - Indicative Financing Plan ($'000)

Financing Plan	Per cent FX	LC	Total	US$ '000 FX	LC	Total
ADB Loan	67%	0%	49%	10,000	0	10,000
GOP - debt/equity/grant	0%	100%	28%	0	5,675	5,675
External Grants 1/	33%	0%	24%	4,835	0	4,835
Total	**100%**	**100%**	**100%**	**14,835**	**5,675**	**20,510**
% of total costs				72%	28%	100%

Notes: 1/ Represents grant sources currently identified for components, CDS and twinning, and $1.7 million of other foreign bilateral support to be identified to cover the balance of foreign costs.

M. Implementation Arrangements Project Management and Coordination

The Executing agency for the TA Loan project will be the Finance Department of the Government of Sindh.

The implementing agency for parts A and B of the proposed TA loan and assistance project will be the City District Government of Karachi – through the Department of Enterprise and Investment Promotion (E&IP). A Project Management Unit (PMU) will be established within E&IP to provide dedicated project management and implementation support. Part C of the project will be implemented by the government agencies sponsoring the particular project, and will be the implementing agency (IA) for the project. The TORs will be finalised and consultants will be engaged in close collaboration with the PMU (in E&IP) and in accordance with Government and ADB guidelines.

Project oversight for routine matters will be provided by a technical steering committee chaired by the DCO and with each of the EDOs of potential beneficiary departments (IAs) as members. A full project steering committee will be established for policy guidance chaired by the Secretary of Finance of GoS.

N. Implementation Schedule and Period

The overall implementation schedule for the TA loan is 4 years, and it is expected to be implemented from January 2006 to December 2009. Careful scheduling of activities is required so that: (i) some capacity building is provided only when duties and responsibilities are clear (following OD study), and (ii) subprojects which need to be justified in terms of the city spatial development framework are only taken forward once this work is completed. The PMU will oversee all technical assistance matters throughout the implementation period, and for part C of the project will liaise closely with the individual IAs on matters relating to ToR preparation, tendering etc. On completion of the TA Loan project the PMU should have become a center of excellence on project feasibility and related matters, and can be absorbed back into CDGK.

O. Project Benefits, Impacts and Risks

Capacity building of CDGK and TMAs and increased funding of infrastructure projects will be ensured through improvements in the enabling environment for infrastructure investments, and additional projects can be developed and implemented in the future after removing investment constraints diagnosed and resolved under the TA Loan.

The TA loan project will ensure: (i) Capacity building of CDGK to ensure improved city planning, city management and provision of services, (ii) institutional capacities for infrastructure project identification, development, preparatory activities, implementation, and monitoring materializes in a timely manner while meeting international standards of best practice, and (iii) increased provision of infrastructure services through enhanced resources for subproject preparation and financing of follow-on projects.

The TA loan through the organization development sub-project, will improve the vertical and horizontal linkages of city government with other development institutions – and especially the towns, and will clarify roles and responsibilities of each level of local government.

The TA loan will support efficient development of infrastructure services and thereby contribute to Karachi's economic development and poverty reduction with the provision of funds through a financial intermediary. In this way, it will provide additional infrastructure facilities required to meet city development needs, and benefit urban infrastructure users by enabling them to undertake current and additional economic activities efficiently. In addition, the TA loan will strengthen the CDGK's project preparation capacity to international standards and improve governance and transparency in consultant selection and project procurement activities.

The key risk to the project remains the uncertain political economy of Karachi. The City has a deeply ingrained and volatile political, sectarian and religious landscape that has in the past resulted in social instability creating a difficult climate in which to plan end execute development programs. Failure of the state and city governments to effectively address these problems is likely to have a negative impact on any development project and to adversely affect FDI and other inward investment opportunities.

I. INTRODUCTION/PROPOSAL

1. The Government has made a commitment to enhancing the competitiveness of the megacity of Karachi and improving the quality of life of its citizens. In order to support this objective, during 2004, Government requested the Asian Development Bank's assistance in addressing the needs and challenges faced by Karachi. Given the immense size of the megacity, the magnitude of its investment requirements, and the scope and scale of the needs for urban policy and institutional reform, both the Government and ADB recognized that the needs of the megacity cannot be addressed with a one-off approach, but rather require a series of appropriately sequenced and integrated interventions.

2. Accordingly, the ADB and Government agreed that: (i) a TA Loan would be required to provide resources to the Government to facilitate the preparation of a number of priority projects, critically needed urban reforms, and comprehensive capacity building, and (ii) that a small-scale TA[4] (SSTA) would be provided by the Bank to assist Government with (i) the preparation of the Loan TA and (ii) scoping out the potential role for Bank intervention. It is envisaged that the TA Loan would enhance Government's ownership of the investment projects and provide an effective response to the needs for upfront capacity building in project management and implementation and other key areas, e.g., city planning and management and municipal finance. The TA Loan is expected to tackle the megacity's large scale and multidimensional needs by enabling the preparation of high priority investment projects for urban infrastructure and services and assistance for necessary urban policy and institutional reforms and capacity building.

3. The purpose of the SSTA is to design a TA Loan for ADB financing. The objective of the SSTA is to: (i) undertake a rapid assessment of the megacity issues and needs in terms of urban infrastructure and services, policy and institutional framework, and planning and management capacities of urban institutions, (ii) prepare a city development framework, (iii) identify a list of high priority projects whose preparation will be financed under the TA Loan, and (iv) determine the further reforms required to streamline the urban institutional and financial frameworks and to enhance capacities of city district government, town municipal administrations, and utility agencies, (v) develop project profiles, including scope, cost estimates, and terms of reference for each high priority project in urban infrastructure and services and advisory and capacity building programs and (vi) assess the feasibility of establishing a specialized financial intermediary to address the long-term financing needs of the megacity. The SSTA will also assess the institutional absorptive capacities for utilizing the TA Loan.

4. As a result, a team of consultants[5] was mobilized in Karachi from June 8th 2005 for a period of two months to carry out the SSTA work. The methodology of approach involved: (i) collection and review of extensive amounts of secondary data on Karachi (see **Annex 1)** (ii) meetings and discussions with a wide range of stakeholders of Karachi (see **Annex 2**); (iii) visits

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[4] TA 4578- PAK: Megacity Development approved on 11 April 2005 for $150,000.

[5] The Team comprised Jim Arthur, GHK, Urban Development Specialist and Team Leader; Ian Walker, Urban Finance Specialist; Derek Ireland, Creod, Financial Intermediary Specialist; Rana Sarwar, Low Income Area Upgrading Specialist; Syed Ashraf Wasti, Urban Governance and Institutional Development Specialist; and Haider Zaman, Urban Planning Specialist.

to administrative offices of Provincial and all tiers of local government; (iv) visits to existing city infrastructure facilities, Katchi Abadis, new development areas, and potential project sites; and (v) analysis and synthesis of this information as the basis for the recommendations made in this report. The team met with: (i) officials of the Federal Government, Government of Sindh, City District Government of Karachi, Town Municipal Administrations and Union Council Administrations; (ii) representatives of bilateral donors and international organizations; (iii) representatives of trade and commercial organizations; (iv) commercial banks and other financial institutions; (v) non-government, voluntary, and other civil society organizations; and (vi) prominent individual members of Karachi society.

5. The team would like to take this opportunity in particular to thank the Government of Sindh; City District Government of Karachi and its service agencies; and TMAs (particularly those of Gulshan-e-Iqbal and Gulberg) in their support and assistance to the study team.

II. BACKGROUND AND SITUATION ANALYSIS

A. Demography and Economy

1. Recent Overall Economic Performance

6. In the past financial year (FY, ended 30 June 2005) Pakistan achieved a number of milestones.

- real GDP growth estimated at 8.4 % in FY 2005, the highest in two decades; the fifth time in the country’s history that it exceeded 8 % growth mark; Pakistan positioned itself as the second fastest growing economy after China in FY 2005;
- per capita income exceeded $ 700;
- Pakistan achieved highest ever production of cotton *(14.6 million bales)* and wheat *(21.1 million tons)* in FY 2005;
- largest ever expansion of private sector credit in FY 2005;
- exit from the IMF Programme marks an important milestone;
- Pakistan became the fourth sovereign nation to issue an Islamic Bond (Sukuk), following Malaysia, Qatar and Bahrain;
- the country’s public and external debt burden declined to their lowest in decades;
- current account balance slipped into the red after posting surpluses for three consecutive years; and
- inflation at 9.3 % was the highest in 8 years.

2. GDP and Sector Growth

7. Real GDP grew by 8.4 % in FY 2005 as against 6.4 % the previous year and surpassed the target (6.6%) by a wide margin. This is the third year in a row when Pakistan exceeded its growth target by a wide margin. The growth in the past year was aided by a strong performance in large-scale manufacturing, recovery in agriculture and a strong growth in services sector. Thus growth was broad-based as each sub-sector recorded strong growth.

8. Large-scale manufacturing grew by 15.4 % against the target of 12.2 % and last year's achievement of 18.2 %. Growth in large-scale manufacturing is also broad-based as many sub-sectors registered a high double-digit growth. Agriculture posted a growth of 7.5 % against the target of 4.0 % and last year's achievement of 2.2 %. The services sector registered an equally strong growth of 7.9 %, aided by high growth in finance and banking sector (21.8%), wholesale and retail trade (12.0%); and a modest growth in transport and communication (5.6%). With 8.4 % growth, Pakistan has joined Singapore to emerge as the second fastest growing economy of Asia after China in FY 2005.

3. Outlook for FY 2006

9. Pakistan is in the midst of an economic upturn. Wide-ranging structural reforms, prudent macroeconomic policies, financial discipline, and consistency and continuity in policies have transformed Pakistan into a stable and resurgent economy. Going forward, sound macroeconomic policies, financial discipline, continuity of policies, political and regional stability will be the key to sustain growth momentum.

10. To sustain the momentum is indeed a major challenge for policy-makers. Linked with this are the challenges of job creation, poverty alleviation, improving social indicators and most importantly, strengthening the country's physical infrastructure to support 6% annual growth in the medium-term. Projected growth for FY 2006 is 7%. Against the backdrop of the improved economic outlook, the focus of policy efforts should be on medium-term measures that would underpin the sustainability of the recovery, while providing room to respond to possible future shocks.

4. Sindh Province and Karachi Economic Activity

11. Sindh is the second largest province of Pakistan in terms of population, it occupies 19% of land area with 23 % of the total population. Estimated population in 2005 is 35 million. It is the most urbanized province of Pakistan, with 49 % of its population living in urban areas. The Gross Regional Product (GRP) of Sindh was estimated to be Rs.1019 billion[6] in FY 2003 representing 28 % to the national GDP.

12. The economy of Sindh grew at a rate of 6.8%[7] over the period of 1998-2003. In FY 2001 National GDP growth was a low 1.8% compared with that for Sindh projected at 7%. Likewise National GDP growth in FY 2002 was 3.3% compared with Sindh of 5.8% and in FY 2003 National GDP growth was 4.8% compared with that of Sindh of 9.2%. It is likely that this trend has continued with Sindh growth in FY 2005 exceeding the national average of 8.4% as a result of strong agricultural production trends and increased commercial and manufacturing activity in Karachi.

13. Karachi, the capital of Sindh is the commercial hub and the gateway of Pakistan. The city handles 95% of Pakistan's foreign trade; contributes 30% to Pakistan's manufacturing sector; and almost 90% of the head offices of the banks, financial institutions and multinational companies operate in Karachi. The country's largest stock exchange is Karachi-based, making it the financial and commercial center of the country. It also comprises about 40% of the total

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[6] Kaiser Bengali, Ph.D. Dissertation "Regional Account of Pakistan", 2004. See Appendix 2 for detailed analysis.

[7] Kaiser Bengali, Ph.D. Dissertation "Regional Account of Pakistan", 2004. See Appendix 2 for detailed analysis, in particular Tables 3 to 6.

banking and insurance sector of the country. Karachi contributes 20% of GDP, adds 45% of the national value added, retains 40% of the total national employment in large scale manufacturing, holds 50% of bank deposits and contributes 25% of national revenues and 40% of provincial revenues.

5. Population

14. Pakistan's population has grown at an average rate of 3% per annum since 1951 and until the mid 1980's. Population growth slowed to an average rate of 2.6% per annum during FY1986 and until FY 2000. However, since FY2001 Pakistan's population is growing at an average rate of 1.9% % per annum. During the last 50 years, Pakistan's population has increased from 33 million to 152.53 million in FY 2005. Thus making Pakistan the seventh most populous country in the world.

6. Karachi 1998 Population Census

15. According to the 1998 Census Report, Karachi had a population of 9.2 million in 1998 compared with 5.2 million in 1981, a growth rate of 4.5% per annum. In 1998 the National population was 130.5 million, and that of the Sindh province 30.4 million. Growth rates since 1981 were 2.61% and 2.80% respectively, indicating rapid urbanization in Karachi, which was also much higher than the national average growth for urban areas of 3.45% and also for that of Sindh at 3.52%. Of the 9.2 million which 8.74 million were living in the Metropolitan Corporation (MC) area covering five Municipal Districts (MD), and 0.46 million in Cantonment areas. If the above population is projected at the inter-censal (1981-1998) growth rate of 4.5%, the projected population of Karachi 2005 to 2020 is summarized below. On this basis population in 2015 for Karachi would reach 20.7 million and 26.4 million in 2020. However, it is likely as experienced in other large cities world wide, that growth is likely to tail off, especially where living conditions and the environment continue to deteriorate.

Table 1: Karachi Population Growth Projections

Census Year	Population (million)	Average Annual growth rates (%)
1951	1.068	--
1961	1.912	7.9 %
1972	3.515	7.6 %
1981	5.208	5.4 %
1998	9.204	4.5%
2005	12.750	4.5%
2010	16.230	4.5%
2015	20.710	4.5%
2020	26.390	4.5%

Source: Karachi Census Report 1998, up to 1998, and consultants estimates

16. According to the Census, the number of lifetime in-migrants was 2.15 million or 23.34 % of the total population of Karachi city. The overall ratio of migrants decreased from 28.64 % in 1981. Of the total migrants from outside Karachi, 24.28 % were from NWFP, 35.48 % from Punjab, 14.23 % from Balochistan and another 26.01 % from Sindh province. A large number of Afghan nationals were in fact excluded from the census. In-migration continues to be a chief source of population growth, with populous towns of the CDGK believing that this is accounting for some 3% of the ongoing population increase.

B. Poverty and Katchi Abadis

1. Introduction

17. Poverty in Karachi and especially in Katchi Abadis is a multi-dimensional phenomenon. Some of many facets of poverty are; inadequate and unstable income leading to inadequate consumption and indebtedness; poor quality and overcrowded housing; poor and risky asset base – unplanned and illegal occupation with high risk of evacuation or demolition; inadequate access to public services and infrastructure (piped water, sanitation, electricity), schools, vocational training, health care, public transport, communication and law enforcement; no safety net to ensure basic consumption, housing and health care, protection of the civil and political rights of the poor. The poor are voiceless and powerless within the political system and with decision making institutions and lack the means and capability to ensure accountability from public agencies, corporatized utilities and NGOs and also the ability to participate in the definition and implementation of their poverty reduction programs.

2. Incidence of Poverty in Karachi

18. The poverty line adopted by the government of Pakistan is based on a caloric norm of 2350 calories per adult equivalent per day and minimum non-food requirements. This poverty line approximates Rs. 748.6 per month per equivalent adult in FY 2001. Based on the 2001 poverty line and the FY 2002 income levels for Karachi the head count poverty rate is calculated at 50.5% of the total 12.5 million people living in Karachi. The current average household monthly income in Karachi is in the range of Rs 5000-6000 and the per capita monthly income at Rs.785[8].

19. The pattern of household income shows that around 9.5 per cent of the households having monthly earnings less Rs. 3000 are living under extreme and chronic poverty; while another over 14% are transitory poor. The transitory vulnerable poor is major category under the poverty line. Overall 50.5 per cent of total population is below poverty. Another 8.5% in the monthly income range of Rs. 6000-7000 living above the poverty line and are vulnerable to shocks.

20. Another important feature of poverty in Karachi is a high concentration of the population within a small range around the poverty line. It is estimated that as much as 59 percent of the total population in fact fall between the poverty line and a level of consumption that is equivalent to 75 percent of the poverty line. Based on this argument, the whole population is divided into the consumption-expenditure based quartiles or 'poverty band' around the poverty line of Rs748.6 that helps in understanding the 'transitory vulnerable.

21. The incidence of poverty varies in the 18 towns and the cantonment areas within the metropolis. The incidence of poverty is lowest in the military areas. The proportion of population living below poverty in all cantonments is 40 per cent, [9] followed by 44 per cent in planned and business oriented areas such as Janshaid town, and Gulberg and Sadar. It is slightly higher than the former in North Nazimabad (46 per cent) which is mostly a middle class residential area. The highest incidence of poverty reported is in the working class and Katchi Abadi-dominated towns such as Orangi Town (57 per cent), Gadap and Landhi Towns (53 per cent each) and 52 per cent in Malir Town.

[8] See **Table 3.1, Appendix 3**.
[9] See **Table 3.3, Appendix 3**.

3. Incidence of Poverty in Katchi Abadis

22. Katchi Abadis account for over 40 per cent of total population of Karachi. The incidence of poverty is severe in these informal settlements. A comparison of income levels[10] of the people living in planned areas and Katchi Abadis with the per capita standard determined by the Government of Pakistan (Rs. 748.6) reveals that 89 per cent of the total population of Katchi Abadis living below poverty. Of the total population around 54 per cent falls in the category of chronic Poor, 35 per cent as transitory Poor, 11 as transitory vulnerable leaving non in the category of non-poor.

23. The above assessment is based on the monthly income levels. Majority of Katchi Abadis are either excluded from the social services and the safety net. Adding up the cost of these facilities at a minimum rate of 10 per cent the whole transitory vulnerable group will be further pushed back to the transitory poor. It is therefore, safely assumed that the entire population living in Katchi Abadis is living below poverty line.

24. Living in a Katchi Abadi is itself an important indicator of poverty; poor infrastructure services, and living under the stress and constant threat of eviction. Over 40,000 people have already been evicted during the last 10 years. The government on the one hand is unable to provide proper shelter to the poor and on the other occasionally resorts to evictions and demolition for expansion of necessary city infrastructure. The fear of evictions leads the poor to develop community/ethnic based settlements as well as protection networks/organizations. Over the years around 30 per cent of these settlements have been regularized and upgraded, provided with roads and water and sanitation services. There is still a large gap in regularization and up-gradation. The regularization and up-gradation of Katchi Abadis will lead to providing the majority of the poor secure shelter, relief from living under stress, and will enhance their asset base.

- **Social and human development Indicators of Poverty:** Improved access to social services and other safety nets reduces household expenditure and poverty levels. Better literacy, nutrition and health can drive a dynamic workforce and the development of these social indicators will lead to higher productivity and thus will contribute to stronger economic performance (i.e. improved per-capita incomes)
- **Education and Literacy Indicators:** Education is the most important factor distinguishing the poor from the non-poor. It is a vital prerequisite for combating poverty, empowering women, protecting children from hazardous and exploitative labor, protecting the environment and influencing population growth. Overall literacy rate in Katchi Abadis is 71 per cent with a significant gender gap with 76 per cent for males and 66 per cent for females. The adult literacy rate in Katchi Abadis is low at 45 per cent, and ranges from 30 to 48 per cent in different areas with a primary enrollment rate at 54 per cent.[11]
- **Infant and Maternal Mortality:** The presence of private sector health facilities helped improve health related incidences of poverty. The current infant mortality rate under 5 years [per 1000 live births] has improved to 59[12] and the maternal mortality to 180. These positive changes reflect increasing levels of awareness, education, availability of

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[10] Decentralized Governance of Sindh Katchi Abadis, SPDC, 1998, **Table 3.3**.

[11] SPDC. Ibid. **Table 3.3**.

[12] Sindh District –Based Multiple Indicators Cluster Survey (MISC) 2003-4, Planning & Development Department, Government of Sindh, Karachi, Nov. 2004.

preventive health facilities and adoption of family planning practices by an increasing number of young Karachiites.

- **Access and availability of Water Supply and Sewage Facilities:** The people of Katchi Abadis have limited access to public sector water supply and sewage disposal facilities and invest a significant part of their incomes to purchase potable water and construction of in-house septic tanks to dispose of waste water. While overall more than 70 per cent of the households in Katchi Abadis obtain water from the public sector piped water supply system, less than 30 percent are formally connected to the system. The remaining population depends on un-protected sources and on average spends 5-8 percent of their monthly income to purchase water. This is an added factor in poverty. Most of Katchi Abadis are connected to a lane sewer. The remaining households either dispose of wastewater either in open spaces or household septic tanks.

25. Key Sector Issues are: (i) land ownership in the hands of different public sector entities, making land policy and the release of land for housing difficult, (ii) failure of the government to provide proper shelter has lead people to encroach on public land giving rise to unplanned housing settlements called Katchi Abadis, (iii) the need for regularization or ownership rights of the land of the houses by the government in Katchi Abadis to provide security of tenure, (iv) the need for up-gradation or removal (by resettlement) of Katchi Abadis where there is encroachment on land required for roads, streets and open spaces for amenities and services, and (v) a reluctance of the services delivery institutions for provision of services to what are effectively illegal settlements.

26. For that third of the Katchi Abadis, which are regularized and upgraded, the residents with a secure tenure immediately improved their living environment and the settlements stood at par with the planned areas and were able to obtain formal access to basic infrastructure facilities. Therefore, there is a need to urgently initiate regularization process by the CDGK/GoS, in cooperation with NGO/Consultants and the local Citizen Community Boards (CCBs) to achieve the necessary up-gradation and to provide formal access to full urban services.

27. Under the SLDO 2001, CCBs are the local institutions organized to strengthen community participation, cost sharing and take over the O&M of development projects, ensuring decision making for the people, enhancing accountability, reducing corruption and delivering results that improve the lives of the local people. Twenty-five per cent of the annual development funds of every town are to be spent through the Citizen Community Boards (CCBs). Millions of rupees have accumulated in Karachi just because the CCBs are not activated. To avail CCB funds the CCB has to mobilize 20% of the project cost from the beneficiary community. Activating CCBs through this project would achieve public –private partnership for community level sub-projects and a higher level of accountability and monitoring for the donor funding. The ultimate objective is to devise a strategy where the local government, NGOs, private sector, corporate sector and Donors become partners in development. Whereas CCBs are active elsewhere in the country in other major cities (e.g. Lahore) they are not in Karachi.

C. Megacity Development Trends and Environment

28. Until the end of the 19^{th} century, Karachi was a small fishing village. Early in the 20^{th} century, Karachi emerged as a major trading centre as other Sindh towns (Alor, Mansurah, Bra Hamanavod Sehwan, Nasarpur, and Thatta), which relied on the Indus as a primary means of transportation for local produce (cotton cloth, carpets, leather goods, silk, wool, indigo, dairy products, fisheries and a few minerals), declined. Through the last century, Karachi has emerged as the key trading port in the region, initially for its hinterland to the north, and after partition for the whole of Pakistan. The importance of Karachi grew further when the pre-partition Government established their military base there, and export of raw materials such as cotton and wool started picking up due to demand for such materials in Great Britain and elsewhere in Europe, as a result of increased trade with the region.

29. Karachi had very little industry up to the mid-twentieth century, but after the creation of Pakistan in 1947, it became the national capital, and Navel base, and the only seaport in Pakistan physically well protected against storms. Its other locational advantage was its land route connection with Iran, Afghanistan, China and Central Asian countries, and sea route connection with India, Sri Lanka and nearby Arabian countries. As such, Karachi has a number of locational advantages to its credit due to which it has attracted significant industrial and commercial investments, leading to the large scale employment opportunities which exist today. As a result of this development, its population swelled dramatically, ushering in the modern age of Karachi as a port and dominant commercial and industrial center.

30. However, this increasing dominance of its industrial, commercial and port-related activities has meant that the economy of its hinterland has not really benefited from the city's prosperity, in some measure doubtless due to the lack of a regional planning approach towards Karachi's development. Furthermore, this imbalance is likely to continue under current circumstances as Karachi's dominant role cannot be expected to diminish in the foreseeable future. Karachi's overtly industrial character has inevitably meant a tenuous relationship with its agricultural hinterland, except to the extent that it has been serving both as a market and outlet for agricultural produce. As such, the current development trends are likely to further the polarization of urban and rural Karachi, and will inevitably widen the gap between the city and its hinterland.

31. The negative impacts of the absence of a regional planning approach, have been further exacerbated by the absence of effective city planning. As large numbers of people have migrated to Karachi since partition seeking work, so planning systems have failed under successive administrations either to ensure appropriate land use or provide infrastructure and services to keep pace with the burgeoning population. Thus congestion, lack of infrastructure facilities, poor service provision, the growth of large informal settlements, environmental degradation and increasingly unemployment and poor security have become the common problems of Karachi today.

32. Growth pressures on Karachi's housing and land markets have been, and continue to be, enormous. Presently, about half of Karachi's population lives in Katchi Abadis, which are dispersed throughout the city, and are largely devoid of adequate infrastructure or services. Many are located at long distances from centers of employment. These communities are well established and continue to occupy large tracts of government land. At the same time, some 90 percent of land around the core area of the city is publicly owned which could be brought under the control of City Government and used for low-income housing close to employment centers. However, a range of impediments prevent this from happening and meanwhile, the "land mafia"

illegally develops public land to make plots available for newcomers, thus further compounding the Katchi Abadi problem.

33. Continuing unplanned development is the result of weak planning and development controls, primarily as a result of the fragmentation of authority over land, and poor enforcement of existing planning and building control regulations. This not only has an impact on the security of land tenure and infrastructure and service provision. Unplanned development and poor services has led to serious environmental degradation. The lack of enforced planning controls results in development taking place in environmentally sensitive areas or within reserves for critical infrastructure. The lack of planned infrastructure and service provision, leads to absent or poor quality services, and to increased costs of their provision.

34. People who cannot obtain services legally will either obtain them illegally or end up paying more for the provision of an adequate level of service. Absence of adequate access or the maintenance of reserves for trunk infrastructure results in indiscriminate disposal of solid and liquid waste and failures in the stormwater drainage networks. People will not pay for poor services and so the vicious circle of ever decreasing levels of service and ever poorer cost recovery for those services is established. The impact of the environmental degradation that results is felt most keenly by the urban poor living in the Katchi Abadis and the near-shore marine environment which is heavily contaminated with solid waste, and wastewater from both domestic and industrial sources.

D. Spatial Planning and Development

35. Karachi does not currently have either a Structure Plan or Masterplan guiding city growth. The most recent plan, prepared in the year 1986 for the period to year 2000[13] by a UNCHS team for the KDA, was never formally adopted. The geographical location and economic potential of Karachi has been drawing both labour and capital towards it for many decades, but the city has never been in a position to deal effectively with these inputs in order to maximise their potential to benefit the city. Neither new investments nor new additions to the labour force have been optimally located in the city, leading to uncontrolled growth, haphazard development, poor or at best uneven infrastructure provision, a polluted urban environment and for many, poor quality of life. It can be concluded that Karachi's growth and efficiency cannot be optimized until and unless a competitive urban system is developed through the adoption of a regional planning approach which encourages spatial mobility of factors within a controlled planning framework.

36. Some of the key spatial planning issues confronting the city are:

- **Planning and building controls**. Planning and development controls within Karachi city are weak. This is as a result of (i) the fragmentation of authority over land between the various government agencies which have significant land holdings, and (ii) poor enforcement of the planning regulations as they do exist. The issue of fragmented authority over city land is recognized in the Karachi Building and Township Registration Regulations of 2002, although these do not provide a solution to the problem. The last attempt at addressing this problem was the constitution of a coordinating body notified in 1990 known as the Policy and Steering Committee (PSC), which could initiate legal measures to bring these fragmented authorities into joint action for development.

[13] Karachi Development Plan 2000; KDA, UNCHS, 1991

However this committee proved ineffective and was abolished under SLGO-2001, and its functions transferred to the City District Council.

The major planning and development control issues include: (i) absence of effective coordination of planning process between land holding and controlling agencies; (i) the distribution and development of public land is not guided by development policies and strategies (population projections service provision etc.); (iii) control systems for land development by private developers is ineffective; (iv) building and construction provisions for leasing out of public land are not enforced; and (v) conditions in building permits are seldom followed. (There are cases where approval was granted retrospectively for buildings that did not meet the requirement under Building and Town Planning Regulations).

There is an urgent need for: (i) designation of priority areas for development, and of control areas where development should be restricted; (ii) enforcement of regulations and procedures (iii) integration of spatial planning with economic development planning and budgeting. These require: (i) effective coordination - either through a new agency or by empowering the CDGK appropriately (ii) improved integration of economic and spatial planning through development and implementation of a strategic planning framework, (iii) capacity building, and (iv) enforcement.

- **Availability of land for development**. Nearly 90% of city land is under public ownership, where housing facilities cannot be extended without the consent of owning agency, of which there are 17 major institutions. While land is still available for a variety of different uses in relatively central locations, the lack of land made available for housing (and particularly low income housing) has meant that (i) employment centers are mostly located at significant distance form employee housing, and (ii) approximately half of the city's population is living in Katchi Abadis which currently occupy about 40% of city's residential land area.
- **Availability of serviced plots**. Where plots are available (more than 0.4 million plots are said to be available in City and Hawkesbay area for housing) these cannot be occupied due to lack of services. Serviced plots which can be offered are outside the affordability range of most low-income dwellers. One unfortunate impact of the collapse of KDA and KMC into the CDGK appears to be that there is now no government agency actively pursuing the opening up of land for serviced plots. Where government has failed, the informal private sector has stepped in. This "land mafia" illegally obtains access to public land, sub-dividing and selling plots to people at relatively low prices. This practice has created an estimated 1200 Katchi Abadis, and continues to do so.
- **Katchi Abadis.** While many of the more recent Katchi Abadis lack access to basic infrastructure facilities, the NGO sector (particularly OPP) and community groups, in combination with local governments have been successful in providing partial urban services to many of the older and better established Katchi Abadis. However, regularization is proceeding very slowly and there is need for a clear policy and strategy for (i) determining which Katchi Abadis should be relocated and which regularized; and (ii) an action plan and funding for this to take place.

E. Existing Infrastructure

1. Water Supply

37. The provision of water for domestic, commercial and industrial use is the primary responsibility of the City District Government of Karachi through the Karachi Water and

Sewerage Board (KWSB). KWSB draws most water for the city from two surface water sources – the Indus River, which lies over 100 km from the city, and the Hub dam which lies about 35 km away. Currently, about 540 million gallons per day (Mgd) is pumped to the city of which about 350 Mgd is partially or completely treated through clarification, filtration and chlorination. The remainder enters the distribution system untreated. The K-III project currently under implementation and due for completion in late 2006 will add a further 100 Mgd of raw water supply from the Indus river source. This additional 100 Mgd will be delivered untreated to the distribution system, leaving a shortfall in treatment capacity of about 300 Mgd.

38. On completion of: (i) the current JBIC-supported Karachi Water Supply Improvement Project (KWSIP) and (ii) Phase K-III of the Greater Karachi Bulk Water Supply Scheme (GKBWSS), and (iii) on the KWSB assumption of a service population of around 12.6 million, water availability (including demand for commercial and industrial uses and losses) in 2006 is likely to stand at around 51 gal/capita per day or 230 lpcpd. This is not far short of the assumed water demand for 2006, which based on KWSB's standard of 54 gal/cap/day (240 lpcpd), is 680 Mgd. However, there are currently no funded plans for further supply augmentation.

39. Unaccounted for water (UFW) and system losses are believed to be considerable. In the absence of both bulk metering on the distribution system and domestic metering, it is simply not possible to arrive at an accurate figure for system losses. However, it has been estimated[14] that between 35 and 50 per cent of the water which is pumped to the network is lost in distribution. With the projected delivery of 635 Mgd from 2006, this represents a loss of between 220 and 320 Mgd. Thus barely 250 Mgd or 20 gal/capita/day (90lpcpd) is available for use by domestic consumers. Due to the intermittent nature of supply in all areas, and absence of supply in some, this reduces to less than 10 gal/capita/day (45 lpcpd) in many areas – and particularly in the Katchi Abadis - with water only available in the network for a few hours every other day.

40. The coverage within the urban area of mains water connections to households is reasonably high. The 1998 census results for the city of Karachi indicate 75.8 percent of households have a piped connection within the house and a further 7.2 per cent outside the house – over 8 out of 10 households. The Sindh MICS study[15] which drew information from a 3 percent survey of households throughout the city district recorded 85 percent of households with access to improved sources (77 percent piped and 8 percent other protected sources) and 15 percent unimproved sources (1 percent unprotected wells and 14 percent tanker trucks). With exception of one or two towns, many households (probably well over 10 percent of total households in Karachi) rely entirely on tankers to supply potable water. It is estimated that some 25,000 tanker loads per day (with around 25 Mgd) of water are supplied at prices ranging from Rs 275 up to Rs 1,000 per 1,000 gallons depending on the quality of water and the ability of the purchaser to pay. This activity is managed by the Pakistan Rangers, who obtain water from KWSB hydrants at no cost.

41. Water quality in Karachi is poor. Recent surveys have shown that over 75 percent of water samples taken from the system are below WHO standards[16]. Water quality in the network is compromised by (i) the lack of adequate treatment, (ii) poor functioning (or bypassing) of existing treatment works, and (iii) the intermittent flow and variable pressures in the system

[14] WLR&SS (1996) project, KWSB and consultants estimates.
[15] Sindh MICS 2003-2004, Draft Report Nov 2004.
[16] Sindh; State of Environment and Development, IUCN, 2004.

which allows the ingress into the supply system of faecal contaminated groundwater and surface water.

42. **Key Sector Issues** are (i) the need for long term system planning for a sustainable and safe supply system, (ii) a better understanding of where losses occur and a programme for their reduction (iii) addition of treatment capacity (iv) improved operation and maintenance and (vi) better cost recovery (and possibly metering).

2. Wastewater Management

43. The collection treatment and disposal of both domestic and industrial wastewater within the city district is primarily the responsibility of KWSB who operate an extensive sewer network and three sewage treatment plants (STPs). However, low treatment capacity and especially poor interconnectivity between elements of the sewerage system mean that much of the wastewater generated in the city is discharged untreated into the stormwater drainage system and thence to Karachi Harbour and the Arabian Sea untreated, while the STPs function at below their design capacity. Of the estimated 300 Mgd of sewage flow – which is likely to rise to 370 Mgd next year (2006) on completion of K-III, it is estimated that only 90 Mgd (26%) reaches the sewage treatment plants which currently have a treatment capacity of 151 Mgd. Of the three plants, two are performing poorly as a result of inadequate maintenance and frequent blockages caused by solid waste entering the plants.

44. Household sanitation within the city is reasonably good with a relatively high incidence of sanitary toilets within households and of connections to a sewer network. The 1998 population census found that 92.8 percent of households within the city had separate latrines, 4.1 percent shared latrines and only 2.1 percent had no toilet facility. The Sindh MICS study of FY 2004 found that 89 percent of respondents had a flush toilet connected either to the sewerage system or a septic tank. There is a good record of collaboration between the NGO sector and government in the provision of sewerage in Karachi. For instance, the OPP provided guidance to the KMC's ADB funded Karachi Urban Development Project (KUDP) in Orangi.

45. **Key Sector Issues** are: (i) the need for long term system planning for a sustainable and effective sewerage and sewage treatment network, (ii) rehabilitation of damaged, dilapidated and overloaded elements of the system, (iii) addition of treatment capacity (iv) improved operation and maintenance (vi) improved cost recovery; and (iv) investigation of the possibilities for wastewater reuse.

3. Solid Waste Management

46. Solid Waste Management within the City District is the combined responsibility of CDGK, the Town councils and Union Councils. In addition, the Cantonment Boards, Karachi Port Trust and Pakistan Steel Mills carry out their own waste collection and transfer. The key agencies responsible for collection are the town councils who either use their own equipment or contract private sector operators in managing and operating the primary collection system. The CDGK is responsible for the maintenance and operation of the two "official" open disposal sites at Jam Chakro and Gond Pass – each 35 km from the city centre. Based on the information available[17], it is estimated that approximately 7,250 tons of solid waste is generated daily within the City

[17] Key sources are: Department of Local Government, Government of Sindh, 2005; City District Government of Karachi, 2005; Consultants to CDGK (Icepack), 2005; IUCN, Sindh State of Environment and Development, 2004; Solid Waste Management, edited by Aquila Ismail, URC Karachi series, 2000; Arif Hassan, Understanding Karachi, 1999.

District from domestic, institutional, industrial and commercial sources. Of this, only about 4,350 tons (60%) is lifted and of this, not more than 1,800 Tons (25% of that generated) makes it to one of the two designated city “landfill” sites – actually open dumping sites. The remainder is either recovered for recycling (an estimated 1,500 tons per day) or is disposed of by burning or by illegal dumping into open drains or onto roadsides or open land (an estimated 1,400 tonnes). It is estimated that some 55,000 families depend on the informal solid waste recycling industry for their livelihood and with more than 1,000 operating units that the industry is worth some Rs 1.2 Billion per annum[18].

47. Hospital wastes are (i) incinerated onsite (four hospitals), (ii) collected by a private contractor for transfer and incineration at one of two incineration plants, or (iii) co-disposed with the regular solid waste stream. Despite the availability of incineration facilities most, hospital waste is co-disposed with general waste, representing a significant health risk.

48. **Key Sector Issues** are (i) the critical need for the development of a practical waste management plan for Karachi which is built upon the active involvement of all stakeholders in the system and particularly the formal and informal private sector. (ii) supporting privatisation of the collection service; (iii) developing mechanisms and sound feasibility studies to encourage private sector involvement in sanitary waste disposal – including development of sanitary landfill sites and garbage transfer stations, and (iv) capacity building for improved tracking and monitoring of the SWM system.

4. Stormwater Drainage

49. Responsibility for the collection, conveyance and disposal of stormwater, and for maintenance and channelisation of major stormwater infrastructure within the CDGK area has just recently been transferred from Works and Services of CDGK to KWSB in a decision of the Governor of Sindh on 17th July 2005. The drainage system comprises 40 main drains and Nullahs of about 167 Km in length which discharge to the two non-perennial rivers – the Malir and the Layari – which run through the city district. Minor drainage of up to 1,000 km. is the responsibility of the town councils. However, conflict results from the fact that much of the stormwater drainage network also functions as part of the wastewater disposal system – resulting in maintenance being neglected – although this provides the rational for KWSB being made responsible for the main system. In addition, most of these drainage lines are (i) heavily encroached, and (ii) used extensively for the disposal of solid waste.

50. **The Key Sector Issue** in the drainage sector is maintaining adequate stormwater drainage infrastructure by (i) avoiding encroachments and (ii) ensuring that drainage lines are kept clear and occasionally cleaned. Coupled to this is the need to progressively achieve separation between wastewater and stormwater systems so that responsibility for storm drain maintenance can be returned to where it more properly belongs. There is also urgent need to develop a stormwater drainage masterplan and to develop programs to establish and maintain drainage rights of way and introduce a system of routine drainage maintenance.

5. Roads

51. The Works and Services Department of CDGK is responsible for the maintenance and upkeep of all major roads within the city, and the associated roadside drainage and street lighting, totaling about 176 Km in length. Other roads are the responsibility of the town councils.

[18] Mansoor Ali, URC, Solid Waste Disposal in Karachi, 2000.

Maintenance budgets come from federal, provincial and district sources and new construction and maintenance works are contracted out - although contractors frequently hire back the plant owned by the Works and Services department in order to undertake the works. The Department operates four depots within the district which have their own asphalt batching plant and a range of road construction equipment (grader, rollers, loaders etc.). While the quality of major thoroughfares is generally good, the quality of the distributor and minor road network varies dramatically. Roadside drainage is frequently absent, and where present is frequently blocked and/or used as an open sewer – which leads to conflicts over maintenance responsibility. Street lighting is seldom adequate and there are many areas of the city which have poor access to surfaced roads. The secondary network in commercial areas is severely congested, due to parked vehicles reducing the road thoroughfares by more than fifty per cent.

52. **The Key Sector Issue** is the focus on primary road network at the expense of distributor and secondary road links. Both in existing unplanned residential areas and in areas at the edge of current development, the absence of a distributor road network is resulting in inefficient development and creating a major problem for the future in making access to and egress from residential and commercial development difficult and inefficient. There is the need for preparation of, and adherence to, a comprehensive Transportation Masterplan for the City District which can guide future development of both road infrastructure and public transport in the city. Related to this is the issue of coordination between the CDGK and the various other agencies who are responsible for their own elements of the road network within the city.

6. Traffic and Transport

53. Responsibility for traffic and transport management issues within the City District is shared between the Transport and Communication Department of CDGK and the Mass Transit Cell of CDGK which reports directly to the DCO. The population of Karachi City District relies almost entirely on the road network for urban transportation. There is currently no mass transit system *per se*, although many commute using the network of bus routes. There are nearly 13.5 million mechanized trips made each day within the CDGK area, of which 52 percent are made by public and 48 percent by private transport. There are 1.3 million registered vehicles in Karachi (almost 50 percent of the national total) and private vehicles – mainly motorcycles and cars – now constitute 83 percent of total registered vehicles while buses and min-buses constitute only 1.5 percent. With growth rates for private vehicles at over 9 percent, there are now over 280 new vehicles added to the streets of Karachi each day. While there has been, and continues to, be a significant programme of road building, there has been no complementary investment in public transport systems.

54. There have for some years been plans for the introduction of rail-based mass transit systems. A major light rail mass transit system for Karachi has been planned since 1973, and earlier there was a proposal to develop and expand the Karachi Circular Railway (KCR). However, despite attempts to attract private sector investment for these schemes they have yet to be realized.

55. **The Key Sector Issue** is that of coordination between the various agencies responsible for traffic transport and road infrastructure within the City District. This issue is particularly acute in the transportation sector where there appear to be overlapping responsibilities between the Transport and Communications Department and the Mass Transit Cell under the CDGK. There is a clear need for the development of a Transportation Masterplan for the City District. However, in the meantime there is a need to implement measures to (i) improve the quality of public transport in the city, (ii) provide a viable alternative for those using private vehicles to

commute, and (iii) secure the right of way of the KCR for the future benefit of the city and its population.

7. Electricity – Generation and Distribution

56. Provision and distribution of electricity to the city of Karachi is the responsibility of the Karachi Electric Supply Corporation (KESC). KESC has a generating capacity of 9 percent of the total national power generated (1,756MW), and in Karachi it both generates electricity and transmits and distributes it to domestic, institutional, and industrial users. Current peak demand outstrips supply by an estimated 518 MW or 24% of generation capacity[19]. The impact of this on Karachi is frequent load-shedding during periods of peak demand over the summer months, with the consequent negative economic impact. Recently, the persistent incidents of load-shedding in some areas of the city, has led to civil unrest.

57. In addition to the shortfall in supply, there are serious problems with the distribution network. Many of the feeders are overloaded which adds to transmission losses and outages, others are very long which again contributes to increased transmission losses. While there are 1.4 million paying domestic customers within the service area, and a further 400,000 commercial, institutional and industrial consumers, there are estimated to be a further 350,000 who are illegally connected to the system and thus do not pay for the power that they consume. The combined transmission, distribution and administrative losses are over 37 percent of supply.

58. **Key Sector Issues** are (i) the need for increased generation capacity – preferably through IPPs or other PPP modalities, and (ii) an acceleration of the loss reduction program Requiring greater investment in rehabilitating, reinforcing and expanding the distribution system.

8. Fire Services

59. Under the SLGO of 2001 the City District Government is responsible for the maintenance of a fire brigade for the prevention and extinction of fires. The Karachi Fire Brigade could not be said to possess adequate staff, fire station or equipment to provide fire prevention and extinction cover for a city of over 13 million people. There is a serious shortfall in fire service coverage for the city.

60. **Key Sector Issues** are the availability of trained fire-fighting staff and equipment to provide adequate fire cover and the availability of hydrants – of which there are only nine in the city.

F. Priority Projects to be Financed under Future Megacity Loans

61. The table below sets out priority infrastructure requirements that would require financing in the future by CDGK. Total costs are estimated at Rs 86 billion, or $1.43 billion. Details are set out in Appendix 9. It is envisaged that the TA loan would provide financing to meet the cost of feasibility studies to support these projects. During the course of the TA loan after infrastructure projects are likely to be financed. Also this list identifies existing deficiencies in infrastructure,

[19] For FY 2005 the peak demand was estimated at 2197 MW and available capacity at 1679 MW, resulting in a shortfall of 518 MW or 24%. For planning purposes, if a reserve margin of 200 MW is provided for maintenance of KESC capacity, then the shortfall in capacity is 718 MW or 33% of demand. See Annex 4 Appendix 7 for details.

but does not necessarily provide for expansion of facilities that would be required over the next 5 to 15 years as population growth and further urban and industrial development takes place.

Table 2: Potential Megacity Priority Projects for Funding through Loans/PPP etc.

Code	Sector	Project	Funding Source	Preliminary Cost Rs B	Implementing Institution
KAO1	**Institutional & Policy Reform**	Regularization & Upgradation of Katchi Abadis through Community Involvement of Self-help Loan	Loan		KSWB
WSO1	**Water Supply**	Rehabilitation and Strengthening of existing WS Network	Loan	5.0	KWSB
WS02		NEK Water Treatment Plant Expansion	Loan/Private Sector	2.0	KWSB
WS03		Hub WTW Water Treatment Plant Expansion	Loan/Private Sector	0.5	KWSB
WS04		Metering of service connections	Loan	2.0	KWSB
WS05		Construction of two Seawater Desalination Plants	Private Sector	10.0	KWSB/Private
WW01	**Wastewater Management**	Korangi Wastewater Treatment Plant (WWTP)	Loan	5.0	KWSB
WW02		Rehabilitation and Strengthening of existing Sewer Network	Loan	5.0	KWSB
SD02		Rehabilitation of Existing Stormwater Drainage Network and Interconnections with Sewer Network to Take Dry-weather Flow (Sewage)	Loan	2.0	KWSB
SW01	**Solid Waste Management**	Waste-to-Energy Plant	Private Sector	20.0	W&S/E&IP
SW02		Solid Waste Landfill Site	Loan/Private Sector	2.0	W&S/E&IP
R01	**Roads and Transport**	Malir River Diversion Road	Loan/Private Sector	2.0	W&S
R02		Elevated Expressway over Sharia-e-Faisal	Loan/Private Sector	2.5	W&S
R03		Elevated Road Structure on I.I. Chundrigar & M.A. Jinnah	Loan/Private Sector	1.0	W&S
TM01		Development of High Capacity City Bus Routes and a Bus Rapid Transport System	Loan/Private Sector	5.0	Mass Transit Cell
ES01	**Electricity**	Electricity Generating Units	Loan/Private Sector	9.0	KESC
ES02		Transmission and Distribution Improvement	Loan	15.0	KESC
		Total	Rs Billion	88.0	
			$ Billion 1/	1.46	

Note 1: Assuming 60 Rs = $1.00

G. The Urban Environment

62. IUCN's 2005 Report on the State of the Environment of Sindh[20] draws on a variety of source documents and highlights many of the environmental issues, both facing Karachi and caused by Karachi. Outside of the megacity itself, the major environmental resource which is adversely affected by activities in the city of Karachi is the coastline (including extensive mangrove stands) and the near-shore marine habitat. Some 200 Mgd of untreated domestic

[20] Report on the State of the Environment of Sindh, IUCN, 2005.

and industrial waste water and over 1,000 tons per day of uncollected solid waste finds its way directly or indirectly to the sea, providing a constant source of marine pollution. Karachi's industries generate a cocktail of chemicals and toxic substances to the environment through and estimated 92 Mgd of industrial effluent which is discharged from SITE and LITE/Korangi industrial estates into creeks, rivers or the sea.

63. Within the city itself, a key contributory factor to the poor and deteriorating environmental conditions is the lack of any effective urban planning. This works at two levels: firstly, there is no current masterplan, structure plan or development framework for the city; secondly, what planning controls do exist are frequently ignored in providing development approvals. As a result, no attention is paid to preventing development in environmentally sensitive areas or within reserves for critical infrastructure. This is particularly problematic where development is allowed to take place in stormwater drainage channels – causing major environmental problems during periods of heavy rainfall. The rapid and uncontrolled growth of the city which has resulted in unregulated development and inappropriate land-use changes has also resulted in an estimated 50% of the population living in poorly service and polluted informal settlements – Katchi Abadis.

64. Both surface water and groundwater sources are increasingly polluted due largely to the disposal of untreated domestic and industrial wastewaters to rivers, nullahs and irrigation systems. There is inadequate sewage treatment capacity, and where it does exist, it frequently operates ineffectively.

65. The inadequate solid waste collection system. The piles of uncollected waste are unsightly, cause nuisance and attract vermin (flies and rats) which can carry disease, and uncollected solid waste blocks sewers and drainage channels causing wastewater and stormwater to pond and stagnate, which in turn causes nuisance and mosquito breeding, in turn creating a nuisance and health risk.

66. The lack of an effective and efficient mass transit system means rapidly increasing numbers of vehicles on ever more congested roads leading to overcrowding, increased air pollution, stress and increasing accidents. The relative age of much of the vehicle fleet and preponderance of smoke belching diesel vehicles and two-stroke motorcycle rickshaws adds to the high concentrations of suspended particulate matter (SPM) SOx and NOx in the air. SPM concentrations of over 600 Ug/m3 have been measured and almost 23 percent of patients attending Karachi hospitals are suffering for respiratory problems.

H. Institutional, Governance and Legal Arrangements

1. Existing Situation

67. The institutional setting in Karachi has traditionally comprised a host of agencies at federal, provincial and local government levels with separate land areas; separate legal and administrative frameworks, and little institutional coordination, resulting in a fragmented management system with each agency being responsible for multiple services within its own land jurisdiction and in many cases having its own set of regulatory laws and frameworks, with far reaching consequences on city growth and development. The resulting poor governance and regulation in Karachi, the trade and business hub of the country, affects not only the quality of city planning, infrastructure development and quality of public and municipal services, but also impacts the country's economic growth and development. The weak and fragmented governing structures in the city consequently has serious and visible fallouts on private sector

development and the growth of business, which in normal circumstances would have spurred a massive economic growth given the natural dynamism and growth potential of this metropolis. Many of these activities overlap creating further confusion and poor management.

68. The SLGO 2001 devolution reforms in Pakistan have ushered in a need for major restructuring of the sub-provincial government structure through transfer of political and administrative power and authority to the three tier elected local governments, through an elaborate legal, administrative and financial structure backed by a detailed rules and regulation. However this process is in various phases of implementation. This theme holds immense promise for the city of Karachi, especially in facilitating a central governing authority in the shape of a City District Government, which in principle is to be the central player in managing the city affairs.

69. The representative nature of the local governments is seen to be the major institutional change in comparison to previous local government systems, where the bureaucracy is now accountable to the elected heads of district and town governments and through them to the district's constituents. The post devolution institutional set up of the CDGK comprises 16 group of offices and some special projects, and was primarily an outcome of joining together of the past Karachi Municipal Corporation (KMC), Karachi Development Authority (KDA), Malir Development Authority (MDA), Lyari Development Authority (LDA) and the provincial government employees into the new CDGK in either one or more than one group of offices rather than any major re-organization in terms of evolving an organization needed to undertake the management of a megacity on modern lines.

70. Devolution has further facilitated merger of several services that were previously the domain of urban or rural local councils spatially and functionally at the town administration level for providing integrated municipal functions. These include town planning and development of physical infrastructure and provision of services of water, sanitation, roads, street lights etc to urban and rural Karachi. The integration of the previous urban and rural administrative areas have implications on the flow of funds between urban and rural areas and in many instances leading to pooling of resources, as in many instances previous separate jurisdictions, now fall within the same town administration. In the context of Karachi, this aspect holds tremendous promise for a more integrated development of the rural and urban areas and it also provides opportunities for holistic and planned future growth of the city. This, in addition to various community organizations, monitoring committees are a hallmark of the new system providing opportunity for an institutional framework that is cohesive, administratively sound and is in collaboration with civil society.

71. In the post devolution scenario, while the critical first steps seem to have been taken, the stage is now ready to remove the critical institutional impediments for facilitating a professional, accountable and a modern organizational framework. Some of the major constraints in this set-up are the generally low quality of manpower inherited by the CDGK; an incomplete administrative devolution where CDGK is dependant on the provincial government for senior as well as many mid level staff positions in various cadres; its inability to recruit and fire the staff inherited from the provincial government to improve its organizational capacity; its over riding dependence on the fiscal transfers as well as vertical programs and special grants for funding its programs rather than on its own fiscal base which is dominated by federal transfers of taxes.

72. Establishment expenses (mainly salary costs) are the biggest portion of the CDGK budget as these account for about 60% of the budgetary outlays.[21] Poor past practices of human resource management have resulted in a pyramid like composition of the civil service, where an overwhelming 81.6% of the CDGK employees are in grade 1 to 11, (who are often functionally illiterate). Only 1.7% of the employees are in grade 17 and above showing a visible and acute gap at the apex levels where again many positions are with non technical persons, especially in the departments of Masterplan, Revenue, Finance and Budgeting, Works and Services etc. Further the persistent ban on the recruitment imposed by the Government of Sindh, even after 4 years of devolution, other than being contrary to devolution, restricts CDGK's capacity to seek appropriate technical manpower.

73. Lack of any institutional linkage between the elected Nazim and the district police has remained a major institutional issue in the post devolution period. This has also been cited as a critical constraint seen in the context of the CDGK as the absence of prescribed linkages of the CDGK with the police authorities in the context of multiple law and order issues ranging from crime, terror, traffic regulation, price control; encroachments and host of other public order enforcement issues, impacts the overall management of civic and municipal function.

74. The devolution of KDA[22] is still seen to be unsatisfactory in the sense that it has split the professional manpower and may impact the ability of the CDGK to evolve the Masterplan and to carry forward its implementation. It has certainly resulted in the drying up of the development of serviced land for housing purposes, as this role has not been taken over by any department in the CDGK. The restructuring of both the major service providing agencies namely KWSB and KBCA was also disconnected with the vision of a central decision making district government linked to town level delivery of unbundled services. Both these organizations require further appraisal for facilitating their restructuring in conformity with this vision. Other than smoothening the inter and intra agency linkages, overcoming HR management and development issues are important for evolving an administratively and financially lead organization for urban management. Institutional reform recommendations are outlined below.

2. Recommendations for Institutional Improvements

► *Clarification of Roles and Responsibilities*

75. The devolution of powers has provided an important opportunity to consolidate responsibilities for service provision, which for the urban sector have historically been dispersed over numerous entities. However, implementation of the Devolution Plan has led to continuing overlaps and fragmentation, particularly at the provincial level, which need to be analyzed and removed. Various agencies continue to be involved in the provision of services which are now the responsibility of local governments. Furthermore, no agency appears to have the mandate to analyze the economic potential of the City District, and to formulate appropriate policy frameworks, development strategies and programs to optimally tap its economic base. At the local level, the city has a limited role in policy formulation for local economic development. The federal and provincial policies and regulations on, for example, improving the investment climate or attracting SMEs, which are to be implemented at the local level, are formulated without involving or taking the views of local governments into account. For example, Karachi has

[21] Financial Analysis Report For CDGK, 2002
[22] Lahore, for example, did not devolve its development authority, but retained it as a separate functioning body so that it could continue to carry out its functions, particularly land development.

seventeen major land-owning agencies, many of which have their own development plans and regulations.

76. The challenge for GoS and CDGK is to introduce appropriate institutional structures and business practices to ensure accelerated economic growth and efficient functioning of the city. These will require: (i) evolution of new regulatory relationships between GoS, CDGK and the TMAs (towns); and (ii) clarity of functional responsibilities. At the local government level it is also crucial to ensure a clear delineation of roles and responsibilities of the elected and nominated officials. This would ensure that the role of the elected representatives remains limited to policy formulation and providing the vision for development, and that they do not interfere with investments and implementation.

77. The GoS, and to some extent the CDGK, need to assume a greater role for regulation and oversight, rather than service provision. To fulfill this role effectively, they need to develop and reorganize the planning and development institutions, and provide them with the required capacity. Institutional reforms need to be accompanied by capacity building within the provincial and local government agencies. If institutional mandates continue to be unclear, overlapping, and in some cases absent, then the full potential of any capacity building initiatives will not be realized.

78. At the CDGK and town level, while the Devolution Plan has devolved substantial authority and responsibility, the financial, technical, and management capacity available to shoulder these responsibilities is grossly inadequate. Some of the reforms necessary to strengthen the CDGK and towns will need to focus on: (i) increased accountability of local government institutions; (ii) increased participatory development by involving stakeholders in the planning, design and implementation of policies and programs; (iii) ensuring the induction of better quality staff; (iv) rationalizing the existing staff and commencing training programs; (v) strengthening local government information and management systems; and (vi) linking future financial assistance to past performance. Moreover, for economically viable services, options need to be considered to limit the role of public sector agencies to that of a facilitator and regulator, and provide an enabling environment for induction of the private sector with appropriate performance incentives and accountability mechanisms.

79. The effective management of Karachi requires professional expertise that is not available in the public sector, and hiring from the market remains an issue. The most technically well-endowed agency in Karachi was the Karachi Development Authority. However, with its original mandate lost and its collapse into the CDGK, the planning and management capabilities of its staff are rapidly being lost – and will be further if their expertise is not put to constructive use through rationalization of structures. However, even their skills mix does not cover the full spectrum of expertise required, such as developing strategic plans or capital budgets linked to them. These would need to be employed once institutional structures have been rationalized, and requisite mandates assigned to them.

► ***Developing a City Vision and Masterplan***

80. There is a need to evolve a holistic city development vision through involvement of all major stakeholders in order for the city to move forward with confidence. The devolution provides tremendous promise in making available a representative organization mandated to

undertake city planning and urban management and it is therefore natural to allow the CDGK to play a central role in evolving a clear, focused future development vision. The need for a masterplan for Karachi has been time and again articulated in all previous studies on the subject. The masterplans or now the strategic plans cannot move by themselves, as these need strong institutions which can evolve them, implement them in consonance and coordination with all stakeholders, and also evolve related investment forecasts in line with the plan proposals. Such a plan requires legal, institutional and financial cover for an orderly growth of a megacity. As such a very strong Planning & Development Authority is recommended to be established within the overall structure of CDGK and it needs to cover the entire Karachi irrespective of the areas under Federal (including Military), Provincial and Local control.

► ***Agency Coordination***

81. While KWSB has retained a centralized responsibility for the provision of water supply, including the management of distribution services, close cooperation with TMAs and further delegation of some of its maintenance responsibilities to TMAs is expected to yield improved service provision. Similarly, the building control function cannot be detached from the overall urban planning and management functions. Although the BCA operates within the CDGK framework, it needs to be linked with the city planning function to provide overall planning and building control. Furthermore, town operations need to be integrated with the TMA administration horizontally to provide town-level inspection and regulatory functions under the policy framework of the central BCDA office.

► ***Establishing Human Resource Management Function***

82. General perception of the organizational characteristic of the CDGK is that its performance in the context of urban services delivery is much lower than that required for a "minimum acceptable service". Another conspicuous characteristic of the new government is absence of work culture, which is common to public sector in Pakistan and is symptomatic of a deeper administrative malaise which, despite the more accountable framework, has not been overcome. A preliminary appraisal of this culture shows that a large majority of the executive officers are not suited for their management positions in the CDGK, which require more qualified and trained personnel to facilitate evolution of the appropriate work ethic in the CDGK. Furthermore, staff allegiances remain with the parent organisation – PMC or PDA – rather than towards the newly established CDGK, compromising service quality.

83. It is recommended that the CDGK establishes a HRM group of offices headed by a HRM specialist (EDO) for facilitating the professional management of CDGK staff covering future recruitment, transfer postings, reward and remuneration, performance evaluation and undertaking other HRD functions including training and HR motivation. HR management requires a modern public sector management approach different from the traditional treatment to the employee service issues to facilitate a productive and motivated workforce for the CDGK. This HR management framework needs to be evolved after a detailed organizational study based on appraisal of existing capacities and needs assessment for senior and mid-level management staff. The CDGK administration further needs to upgrade its administrative/financial systems to improve financial management – budgeting, accounting and strategic financial planning systems, to make it not only more efficient but also more accountable to the citizens.

► ***Resolving Conflicting Regulations and Institutional Responsibilities***

84. There is a need to remove/harmonize all the separate Regulatory and Land Use Laws and Frameworks of Federal and Provincial Agencies in existence in Karachi and replace then with a single set of rules and regulations. The issue of multiplicity continues to be a big barrier to city planning and development activities. It is recommended that a premier coordination body under either the Chief Minister or Governor Sindh be established through an act of the Provincial Assembly for ensuring a permanent and effective institutional coordination mechanism amongst federal, provincial, and local level agencies. It is believed any further postponement of this issue would prove to be a major stumbling block in the social and economic growth prospects of the city.

85. Other than evolution of a formal coordination mechanism there is also an urgent need to review all the existing land use, zoning and building control byelaws of all the land owning agencies for facilitating evolution of a standard regulatory framework for the entire city. The need for a standard regulatory framework cannot be understated as city planning and growth has suffered immensely on account of the diversity in these laws. The administration of this regulatory framework can be housed in the CDGK's Masterplan Group of Offices, by upgrading its status to a central Planning Agency for the city and ensuring adherence to the planning regulatory framework by all land owning agencies through an act of parliament.

► ***Completing Administrative Decentralization***

86. Administrative devolution has only been partial as the district staff transferred continue to be under the provincial government administration. The province essentially continues to exercise informal control over all the personnel matters ranging from appointments, transfers postings; promotions appraisals. So much so that in Sindh; the provincial government continues to disburse salaries to these employees through the provincial Account # 1, instead of transferring funding to the District Accounts. The overall result is that although physically located in the districts, most senior district staff do not consider themselves as district employees and as such are likely to accommodate provincial pressures to transfer subordinates.

87. This issue can only be resolved by establishing a local government cadre of civil servants. In the case of CDGK; this particular cadre needs to be evolved very carefully as the requirement of the CDGK for highly qualified and technical staff is much greater than that of an average district. Its requirement for well qualified technical staff including engineering, architecture; town planners; financial managers and accountants to manage and plan the development of a large city like Karachi is high, when compared with the civil servants required to run a typical provincial district in rural parts of Sindh. At the present time civil servants are likely to find themselves transferred from small rural districts to Karachi. This is no longer appropriate for the planning and management of Karachi, which needs to develop its own highly qualified cadre of professional permanent staff.

I. Urban Finance Sources

1. Introduction

88. The City District Government of Karachi (CDGK) receives funding to cover both its recurrent and development expenditures from both Federal and Provincial government budget sources, as well as from taxes and fees generated at a District Government level. In addition the 18 Towns and 178 Union Councils that make up CDGK, also receive funding for recurrent and

development purposes from the Provincial Government sources (as well as Federal programs), and revenues from taxes collected on their behalf by CDGK and from their own limited tax and fee base.

2. Federal NFC Allocations

89. The inter-governmental fiscal framework of the Federal Government of Pakistan, and provincial governments (Government of Sindh, GOS) is defined under the constitution. The revenue sharing takes place on the basis of the National Finance Commissions (NFC) awards announced every five years. Provincial governments rely largely on block transfers from the divisible pool (revenue sharing), "straight transfers" and "special lump sum transfers" for backwardness. "Other transfers and development grants" similar to conditional or special purpose grants, total only some 3% of federal recurrent transfers. The above does not include donor on-lent projects which continue to play a significant role in provincial finances. Thus there continues to be a wide range of vertical programs in addition to block transfers.

90. The provincial government also receives grants in lieu of abolishment of the Octroi and Zila Tax (OZT) since FY 20000. In turn the rate of GST was increased from 12.5% to 15% for generating additional revenue to compensate the Local governments for the loss of the OZT. Federal grants through the 2.5% GST revenue transfer also constitute a major part of overall provincial receipts.

91. **Table 3** below sets out Sindh receipts (Rs m.) from the Federal Government and their own revenue generating provincial sources. The table shows the dependence on Federal Direct transfers ranges from 83% in FY 2002 and 89% in FY 2005.

Table 3: Sindh - Federal and Provincial Revenue Receipts Rs million

	Divisible Tax Receipts	Straight Transfers	Federal GST/ OZT Grant	Total, Federal	Provincial Receipts	Total, Province
Year ended 30 June	Rs m	Rs m	Rs m	Rs m	Rs m	Rs m
2002	32,571	17,499	4,322	54,392	11,176	65,568
2003	38,501	19,444	7,053	64,997	11,282	76,280
2004	38,133	25,685	10,886	74,704	12,979	87,684
2005 (Estimate)	47,713	27,281	11,496	86,490	11,207	97,698
2006 (Budget)	52,004	29,518	12,150	93,671	19,280	112,951

3. Deficiencies in the Federal Transfer System

92. Despite its simplicity and effectiveness in getting funds into the hands of the provinces with a minimum of intrusion, revenue sharing has some drawbacks, if relied upon excessively, as in the case of Pakistan.[23]. The issues include : (i) very significant vertical imbalances, (ii) provinces have no discretion over the amount of funds, (iii) does not permit fiscal capacity equalization to a national average standard, (iv) removes from the Federal government leverage to influence provincial priorities to achieve national objectives, (v)the formula determining provincial level allocations bears little relationship to provincial expenditure requirements, and (vi) leaves provinces exposed to changes in federal tax bases and collection performance.

[23] Refer Devolution in Pakistan, Annex 2, Technical Considerations, pages 21 and 22, ADB, DFID, WB, July 2004

4. Sindh Government Own Sources of Revenues

93. The provincial tax revenue base is narrow, primarily because of the highly centralized federal tax structure with an almost exclusive preserve over all the buoyant taxes, leaving only the residual taxes under the provincial domain. Revenues can be broken down into tax receipts and non-tax receipts. GOS's own taxes consist mainly of Stamp Duties, Motor Vehicle Taxes, Infrastructure Development Cess, Agriculture Income Tax and land revenues, and Registration fees. Non – tax receipts include fines, cost recovery from charges in the case of health and education, and the sale of government land. In terms of Taxes the Property Tax and the Entertainment Tax were devolved to the District Governments for collection from FY 2005. **Table 4** sets out the amount collected from tax and non-tax sources with tax sources representing around 70% of Sindhs own revenue generation.

Table 4: Sindh Government Tax and Other Revenue Receipts (Rs m)

FY Year 30 June	2001	2002	2003	2004	2005	2006
					Estimate	Budget
	Rs m.	Rs m.	Rs m.	Rs m.	Rs m.	Rs m.
Tax Receipts	7,531	8,111	8,487	10,689	11,422	12,710
Non- Tax Receipts	3,167	3,703	3,287	2,904	4,953	6,569
Total	10,697	11,814	11,774	13,592	16,375	19,279
	%	%	%	%	%	%
Tax Receipts	70.4%	68.7%	72.1%	78.6%	69.8%	65.9%
Non- Tax Receipts	29.6%	31.3%	27.9%	21.4%	30.2%	34.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

5. Sindh - Recent Tax Reforms

Tax reforms undertaken by the GOS in recent years include:

i) A reduction in the number of taxes from 23 to 10, a pruning of exemptions and the broadening of the tax base;

ii) Simplification of the structure of Property tax through the merger of four related taxes and adoption of a uniform rate, coupled with the widening of the property tax base by launching a massive survey of properties after a gap of 32 years which added 100,000 new properties to the tax base as the number of areas rated for property tax purposes increased from 26 to 42. Most importantly the mode of assessment was transparent and the discretion of tax assessing officials greatly reduced;

iii) The rationalization and consolidation of the number of Stamp duties (from close to 70 serials to about half that number) and the replacement of the presently less elastic and administratively cumbersome to monitor structure with one based on ad-valorem rates so as to give much needed buoyancy to the system;

iv) Institutional Strengthening of the Agricultural Income Tax. Preparation computerized data based and collection procedures.

6. Provincial Transfers to Local Government

6.1 Recurrent Expenditures Budget

94. Following devolution, the first Provincial Finance Commission (PFC) in Sindh was constituted in February 2002, which announced an Interim Award in June 2002, which was later extended till June 2004. Under the Interim-2002 Award, the Provincial Government was to retain 60% from the divisible pool, (consisting of all revenues other than non-tax receipts from user charges and the Federal Share of 2.5% GST funds being given to provinces in lieu of the abolishment of OZT) with 40% to be distributed among the District Governments on the basis of population (50%), backwardness (17.5%, to be determined on a composite index of 33 indicators), and tax collection (7.5%), with the remainder 25% earmarked for transitional transfer grants for bridging the gap between the expenditures of the District Governments and transfers on the basis of the three criteria. Allocation of funds between the Province and Districts are summarized below.

Table 5: Estimate of Provincial Current Expenditure (Rs million)

Year ended 30 June	2003	2004	2005	2006
			Estimate	Budget
	Rs m	Rs m	Rs m	Rs m
Total Current Expenditure.	86,715	93,083	105,703	118,931
Provincial (including common costs) 1/	61,715	62,905	71,223	81,770
Total District	26,000	30,178	34,480	37,161
Local Govt OZT Transfers	6,912	10,878	10,448	11,660

Note 1: These include debt servicing, pension payments etc.

6.2 Annual Development Plan

95. The District Governments ADP share of 55% of the total ADP in FY 2003 fell to 38% FY 2005 and is projected at 28% in FY 2006. This decrease in share has resulted as District Government funding has been provided through special development packages for Hyderabad and Karachi, the MPAs priority program and Megacity development projects.

96. Under special projects the provincial government has allocated Rs. 3 billion, with Rs. 1 billion each for Karachi, Hyderabad and Rural Sindh.

Table 6: Sindh Provincial and District Government ADP Share

Year ended 30 June	2003	2004	2005	2006
			Estimate	Budget
	Rs m	Rs m	Rs m	Rs m
District Government	3,874	4,526	6,885	6,790
Provincial Schemes	3,126	6,474	11,052	17,210
Total	7,000	11,000	17,937	24,000
District Government	55%	41%	38%	28%
Provincial Schemes	45%	59%	62%	72%

7. District Government Revenues and Expenditure

97. In FY 2005 the criteria for horizontal distribution to District Governments was agreed to be (population (50%), backwardness (17.5%), tax collection (7.5%) and transition transfer (25%)). Fiscal transfers to the District Governments in the FY 2005 were in accordance with Award 2004. For FY 2005, the overall share of the District Governments as per PFC was Rs. 23.142 billion. As against this an amount of Rs. 23.587 billion was transferred to the DGs combined, which included Rs. 17.132 billion for salaries, Rs. 2.0 billion for non-salary and Rs. 5.0 billion for ADPs.

98. In addition, Rs. 1.89 billion was allocated to the District Governments under DSSP (Devolved Social Services Program). The DSSP funds will be utilized on the basis of the Memorandum of Understanding to be so signed with each District Government and TMA. The funds were to be distributed amongst the DGs and TMAs on the basis of the formula suggested by the Provincial Steering Committee of DSSP. To date Karachi has not accessed DSSP funding. Although it is entitled to access the DSSP funding, it has not been able to prepare the necessary three year development plans, to allow funding to be provided.

8. OZT Transfers to TMAs

99. For the distribution of the federal share of 2.5% GST, it was agreed that the historical shares of all the stakeholders in the OZT revenue in the base year would be protected, and the additional revenue from this head would be used to provide funds for the Union Administrations (UAs); base funds for new TMAs; funds for pension of SLG employees and the residual funds to be distributed amongst the TMAs on the basis of a formula: (i) Annual fixed grant amounting to Rs. 1.2 million each will be given to 1095 UAs. (ii) Annual fixed grant amounting to Rs. 1.2 million each to six newly created TMAs.(iii) An amount of Rs. 140 million will be provided to SLGB for payment of pension to the SULG employees. (iv) residual amount will be distributed amongst TMAs on the basis of the following formula: Population, 50%; HDI, 40%; Tax collection, 10%. The table below summarizes District transfers and OZT grants received by Karachi District/TMAs from the Sindh Government allocations.

Table 7: Sindh PFC allocations to Karachi and TMAs (Rs m)

Year Ended 30 June	Karachi 2003 Rs m.	All Districts Rs m.	Karachi 2004 Rs m.	All Districts Rs m.
Recurrent				
Salary	4,890.3	20,852.9	5,897.6	24,744.2
Non-Salary	1,086.9	5,047.7	837.9	5,337.6
Total	5,977.2	25,900.6	6,735.5	30,081.8
ADP	933.8	2,918.8	1,183.8	5,294.3
Total	6,911.0	28,819.4	7,919.35	35,376.1
OZT Releases	4,654.7	6,600.0	4,631.7	6,579.7

9. Deficiencies in the Provincial Transfer System

100. The revenue sharing adopted by the provinces is commendable for several reasons. It is reasonably transparent with the local governments enjoying full autonomy in the use of available transfers. Nevertheless the new revenue sharing system has important limitations[24] These issues include : (i) all Districts are treated alike, (ii) the awards ignore the different fiscal capacities of various districts/TMAs, (iii) the distribution of revenues is based solely on expenditure needs can be inequitable, (iii) the awards do not fully match the transferred expenditure responsibilities of various local governments, (iv) the awards weaken local government accountability to resident taxpayers (v) the horizontal nature of awards to TMAs mean they have no accountability to their District governments creating planning problems, (vi) the PFCs have failed to enhance the efficiency and equity of the federal system by providing the right incentives for responsive, responsible, and accountable governance. The finance commissions are focused primarily on dividing the pie rather than expanding the pie.

10. Karachi City District Government (CDGK) Revenues

101. The CDGK revenues are summarized in the **Table 8** below and include both recurrent and capital (ADP) sources. PFC transfers have declined from 59% of receipts in FY 2005 to 36% in FY 2006. This decline results from a reduction in the ADP with funds provided by the Sindh Government through Special Projects. Taxation sources in the form of property taxes, land revenue, entertainment tax make up the bulk of revenues from tax sources. Sale of land and associated fees are the main source of revenues for the CDGK.

Table 8: CDGK Revenue Sources (Rs m)

	FY 30 June	2003	2004	2005	2006
				Estimate	Budget
		Rs m	Rs m	Rs m	Rs m
	Total	8,562.5	8,275.2	7,447.3	27,614.2
	Budgeted	14,454.9	16,653.5	17,279.1	
	Actual / Budget (%)	59%	50%	43%	
(i)	**Sindh PFC Transfers**	5,055.0	4,546.9	2,363.3	9,837.6
	(Sind PFC/Total) %	59%	55%	32%	36%
(ii)	**Taxation sources**	2,213.3	2,451.5	2,906.8	6,768.1
(iii)	**User Charges/cost recovery**	1,294.2	1,276.8	2,177.2	11,008.5
	Total	3,507.5	3,728.3	5,084.0	17,776.6
	Taxation sources	26%	30%	39%	25%
	User Charges/cost recovery	15%	15%	29%	40%
	Total	41%	45%	68%	64%

102. A notable feature of past budgets (as shown in Table 8) has been their low realization, ie actual versus budget. In FY 2003 this was 65% of the budget, with the most notable shortfalls being in Taxation receipts (30%), Works and Services (91%), and Lyari and Malir Development Project land sales (93%). In FY 2004 this was 56% of the budget, with the most notable shortfalls being again Taxation receipts (50%), Works and Services (88%), and Lyari and Malir

[24] Refer Devolution in Pakistan, Annex 2, Technical Considerations, pages 24, ADB, DFID, WB, July 2004.

Development land sales (90%). However Sindh PFC transfers were also only 66% of budgeted. This pattern is expected to repeat in FY 2005, with realization only 65%, with Provincial transfers at May 2005 only 52% of the budgeted level.

103. The risk of this pattern repeating itself in FY 2006 is also very high, in particular in the Head relating to Taxation receipts. There has been no institutional changes made that would result in higher collections for the year. For the Finance and Planning and the Revenue Departments combined, budgeted revenues in FY2006 are Rs 6,768 million compared with an estimated Rs 2,907 million actually received in FY 2005. Thus there is an expectation that actual revenues for FY 2006 will be 2.5 times FY 2005.

10.1 Summary CDGK Recurrent and Development Expenditure

104. CDGK recurrent expenditures are dominated by establishment or salary costs. Just as CDGK revenue were less than budgeted, actual expenditure fell well short of budgeted expenditure in all years. Given the need to meet salary costs, it is clear that most of the reduction in expenditure (due to lack of resources) is absorbed by the development budget. Maintenance of existing infrastructure represents a very minor percentage of the recurrent expenditures, not exceeding 3% over FY 2003 to FY 2005 and budgeted at 4% in FY 2006.

Table 9: Summary CDG Recurrent and Development Expenditure

	FY Ended 30 June	2003	2004	2005	2006
				Estimate	Budget
	Expenditure Head	Rs m	Rs m	Rs m	Rs m
	Recurrent				
i	Establishment Salaries etc	1,307.5	2,090.0	2,487.6	3,301.7
ii	Administration	381.3	384.8	444.2	1,245.8
	Pensions	110.0	120.0	85.1	120.0
iii	Repairs and Maintenance	36.4	57.2	91.2	194.0
	Total	**1,835.2**	**2,651.9**	**3,108.1**	**4,861.4**
iv	**Development**				
a	Funds for Union Council Members		377.7	944.8	1254.7
b	CDGK Funded	256.7	846.0	965.5	
c	Projects (Past KDA)		279.7	385.8	
d	PSDP (Sindh Government allocation)	1,021.1	1,030.7	981.0	1,395.0
e	Malir Development Project		168.3	610.3	5376.2
f	Lyrai Development Project		59.5	88.9	1330.8
g	Tameer-e-Karachi			350.0	6000.0
v	Transfers to TMAs and Union Councils	2,561.3	1,283.4	1,726.5	2,577.0
	Total	**3,839.2**	**4,045.3**	**6,052.7**	**17,933.7**
	Total Expenditure	**5,674.3**	**9,349.2**	**12,269.0**	**27,656.5**
	Budgeted Expenditure	**8,749.1**	**16,659.0**	**18,813.5**	
	Actual / Budget (%)	64.9%	56.1%	65.2%	

105. As noted above, recurrent expenditures are dominated by establishment or salary costs, especially those of the Health and Education sector devolved to the District level. Education takes over 75% of the budget, with nearly 99% of these salaries. Health is the second highest level of expenditure at 12% in FY 2005, with again salary component comprising 80% of expenditure. This is followed by Works and Services (4%) and Board of Revenue (3%). In the case of Works and Services salaries only represent 25% of the expenditure in FY 2005, however the non-salary expenditure is only Rs 210 million in FY 2005. This is also made up of utility expenses meaning the amount spent on maintenance of roads, bridges and buildings is very small for a city the size of Karachi. In FY 2005 non-salary expenditure was Rs m 656 million (9%) out of a budget of Rs 7166, demonstrating the high proportion (91%) of expenditure devoted to salaries.

10.2 CDGK ADP Expenditure

106. A major source of development project expenditure for CDGK is the Sindh ADP. In FY 2005 Education accounted for 51%, with Heath 12%. Physical Planning and Housing at 29% is the second highest development head in any year behind Education. The breakdown of Physical Planning shows that in each year Infrastructure (roads and bridges) takes the largest share (52% in FY 2005) followed by Urban Water (36% in FY 2005). Nevertheless the amounts involved are not great (Rs 402 million in FY 2006) in terms of Karachi's development requirements. In the discussion of the Sindh ADP the fact was noted that the District share of ADP was declining but that other sources of development expenditure were available. For Karachi this includes the SDSSP (for water, health and education), special projects (Sindh and Federal, totaling Rs 2 billion) and Tameer e Karachi (budgeted at Rs 6.0 billion in FY 2006 in **Table 10**).

11. Town and Union Councils Funding and Expenditure Revenue Sources

107. The TMAs receive a share of the 2.5% grant from Federal Government in lieu of OZT taxes. Also the TMAs receive property taxes, entertainment and advertising taxes collected by CDGK on their behalf. In addition a conservancy tax collected with water supply is allocated to the TMAs for solid waste management. **Table 10** shows that OZT grant represents 57% in FY 2005 and property tax receipts 19%, representing 76% of total receipts. Development grants and capital receipts make up a further 10% meaning that revenues from local sources account for only 14%. This demonstrates the dependence of the TMAs on revenues from OZT Federal source and CDGK property taxes. The TMAs also receive the conservancy charge collected at the same time as the water bill. Because it is a separate bill, households are less inclined to pay this so that collection efficiency is lower than the water bill. Rs 200 million was budgeted in FY 2005 with about Rs 50 million received.

Table 10: TMA Budgeted Revenue Sources (Rs million)

Year Ended 30 June	2004		2005	
Description	Rs m		Rs m	
Share from divisible Pool (OZT)	2,752.5	61.4%	4,100.5	57.1%
Property tax as specified in Section 117 of SLGO.	1,014.0	22.6%	1,337.6	18.6%
Total	4,482.3	100.0%	7,176.9	100.0%

12. TMA Expenditure Heads

108. The TMAs budgeted expenditure is split between development (54% in FY 2005) and administration and salaries (18.3% and infrastructure maintenance (22.7%). TMAs are responsible for local road and drainage maintenance, but KWSB is responsible for water and sewerage services in most TMAs while KESC provides electricity. However, some TMAs also spend funds on water and wastewater assets, in the absence of funding available from KWSB.

Table 11: TMA Budgeted Expenditures (Rs million)

Year Ended 30 June	2004		2005	
Description	Rs m		Rs m	
General Administration/Salaries	1084.7	24.0%	1281.2	18.3%
Infrastructure & Services	1264.1	28.0%	1585.8	22.7%
Charged Expenditure	7.5	0.2%	13.0	0.2%
Development 1/	2041.1	45.2%	3743.4	53.6%
Total	4512.6	100.0%	6986.9	100.0%

Note: 1. TMAs advise that much of the expenditure reported as development is actually spent on rehabilitation, so is better referred to as deferred maintenance of existing assets, rather than construction of new assets.

13. Union Council Revenues and Expenditures

109. Union Councils are provided with a fixed annual allowance by the CDGK. They however have no responsibility for the provision of urban services to households within their jurisdiction. In FY 2005 the PFC provided for an annual fixed grant amounting to Rs. 1.2 million each to all 1095 UAs in Sindh, including the 178 UAs in Karachi District. In addition the UAs in Karachi receive Rs 6.45 million allocation annually for development projects. These expenditures are approved by the TMAs and the costs of work undertaken reimbursed by the CDGK against invoices for work completed.

J. Karachi Water Supply and Sewerage Board (KWSB)

110. KWSBs financial performance has always been weak. Tariffs are low and service levels are poor. Towns and Katchi Abadis are provided water on a rotating basis with households receiving up to 2 to 6 hours per day at best, but often only 2 to 3 times per week. Some customers claim that they have never received water through their piped connection and rely on tanker deliveries. There is no other source of potable water available in the city. While tube well and groundwater sources exist these are saline or brackish at best. While there is no estimate of water sales and losses due to lack of bulk metering and lack of household metering, current estimates of water losses in the distribution system of 35% are thought to be understated, with losses more in the order of 50-60% of water production.

111. The majority of KWSB’s customers are not metered and are charged on the basis of the size of the plot/covered area of the flat. Tariffs remain unchanged since 1998 while general level of prices and KWSB expenses have increased around 40% over that time. Bulk customers are metered but only 28% of meters are functional with the remainder based on past usage. While “bulk” or metered customers account for less than 1% of customer numbers they account for 65% of overall revenues, and account for 17% - 20% of water volume sold. The metered customers are charged Rs 44 per 1,000 gallons, and non-domestic are charged Rs 73 per 1,000 gallons. Around 60% of domestic households pay Rs 34 per month or less.

112. While no figures on actual water sales volumes are available, adopting assumptions on production and losses provides some measure of water sales. In 2005 revenue per 1000 gallons is estimated at Rs 14.5, while cash operating costs are estimated at Rs 23.9, indicating that without subsidy support KWSB cannot meet its operating costs. An increase of 65% of average revenues would be required to breakeven on operating costs. To cover interest and depreciation would require average revenues of Rs 38.7 per 1000 gallons. Present levels of maintenance expenditure are inadequate, resulting in a deterioration of assets and increase in water losses. Repairs and maintenance expenditure of Rs 2 .0 billion per annum would appear reasonable for a system the size of Karachi. This would require average revenues of Rs 51.3 per 1,000 gallons. This is probably equivalent to the average of the metered domestic rate of RS 44 and non-domestic rate of Rs 73 per 1,000 gallon. This maybe compared with tanker charges for an equivalent amount of water, i.e 1,000 gallons of Rs 275 to Rs 1,000 representing a high willingness to pay.

Table 12: KWSB Financial Performance (Rs / 1000 gallons)

Y/E 30 June	2004	2005	2006	2007
Rs per 1000 gallon				
Average revenue	12.8	14.5	16.9	16.9
Average cash operating costs	21.3	23.9	25.9	25.2
Add Interest and Depreciation	31.2	38.7	43.7	43.7
Add R&M equivalent to Rs 2bn 2/	45.0	51.3	57.3	55.0

Source: Consultants estimates.

Note:
1/ Present water availability is estimated at 542 MGD less Pakistan Steel 25 MGD leaving 517 MGD and losses of 35%, with in FY 2007 another 100 MGD from K-III. In practice actual losses are probably nearer 50% resulting in higher costs/1000 gallons.
2/ Ideally maintenance material expenditures should be of the order of 2% of replacement capital costs. The problem with KWSB fixed asset values, is that it is not evident that they are all included, following transfers after devolution, so that defining an asset base on a replacement cost basis for calculating levels of proper O&M is difficult, given the present fixed asset records. For this reason a figure of Rs 2 bn was adopted.

113. Where metering is introduced the poor could be protected by providing them with a lifeline block equivalent to say 50 lpcpd or 10 cum per month (equivalent to around two tankers of 1,000 gallons each.). The tariff should cover direct operating costs of electricity and chemicals, about Rs 25 per 1,000 gallons. Thereafter tariffs should be set to meet average level of consumption say up to 25 cum per month 12,500 gallons per month. Thereafter all water should be charged at the non-domestic rate and in line with economic cost of supply. Such a tariff structure would provide KWSB with revenues to meet cash operating costs, including proper O&M, debt service, depreciation and/or a share of future capital expenditure.

114. There is an urgent need for the transmission and distribution system to be rehabilitated and for the customer base to be metered. This would allow tariffs to be increased and revenues raised to maintain the KWSB systems, but at the same time providing for lifeline rates within a progressive tariff to protect the poor and provide affordable water to meet basic needs. Without these changes the water losses will continue and the additional production of K-III, 100 MGD will be negated with 50% disappearing in water losses.

115. In conjunction with the JICA Masterplan there needs to be a detailed tariff study to determine tariff levels and tariff structures. A financial plan is necessary to complement the physical Masterplan to ensure that the financial implications of rehabilitating the T&D network,

providing treated water and adequate wastewater collection and treatment facilities is known, funding sources identified and affordable tariff structures necessary to ensure that the physical works can be financed and proper O&M of facilities provided.

1. KWSB Financial Management and Accounting Systems

116. KSWB have a computerized billing system with non-metered customers generally charged on an annual basis and the bulk metered customers billed on a monthly basis based on meter readings (or in most cases estimated consumption). KWSBs accounting functions are computerized and year end financial accounts are prepared based on a trial balance. KWSB generally follows international accounting policies and also accrual accounting principles[25]. However, annual accounts are prepared by an accounting firm due to lack of qualified accountants within KWSB. The accounts are subsequently audited. At the present time the accounts are being prepared for FY 2004, with the accounts for FY 2003 yet to be audited.

117. Annual budgets are prepared by KWSB but these follow typical local government procedures and in their presentations do not distinguish between capital and operating items. This tends to mask the true poor operating situation of KWSB. There is limited use of financial information throughout the organization, with departments not networked and provided with real time information. This also reflects more, the serious state of the KWSB finances and the lack of funds to carry out only very limited activities from revenue generation, with bulk of works carried out through project financing, including works carried out under Tameer - e -Karachi.

118. Capacity building is required in these areas and will be addressed under the proposed JICA Master Planning Study as will the need to upgrade and improve the underlying accounting and MIS systems.

K. Improvement in Local Government Revenue Receipts

119. Strong local infrastructure services are essential for sustaining growth and employment creation in urban economies. This requires adequate financial resources at the local government level. The CDGK and TMA's would echo similar comments as the Sindh government that limited local tax revenue options remain for them to generate receipts as Federal taxes make up the bulk of tax sources. The Towns have benefited from the fact that Property tax, Entertainment tax, and Advertising tax[26] have been devolved from the Provincial Government.

120. Comprehensive financial information for the towns is not available, however it is clear that (i) there is variability across towns (ii) the overall level of budgeted infrastructure

[25] Accrual accounting principles mean that a sale is recognized at the time water is billed rather than when cash is received. The result is a gross overstatement of revenues, as households refuse to pay their bills, because in a contractual sense a no service has been rendered and income earnt from provision of a service. Hence in KWSB's balance sheet there are large levels of accounts receivable that will never be collectible, but have been recorded as revenues. The allowance for doubtful/bad debts of 15% does not represent a realistic level and overstates likely receipts. A better approach is to take billings by customer category and apply a collection efficiency based on past levels of collections and then use this for estimating income rather than accruing water bills and allowing an unrealistic adjustment for bad debts.

[26] We were advised that in FY 2005 the Nazim instructed that the advertising tax be retained by the CDGK rather than passed through to the towns as the amount collected, relative to the effort did not justify transferring the revenues.

maintenance expenditure and investment is low at around Rs.130 and Rs 310 per capita[27] for maintenance and investment respectively in FY 2005. In total, this amounts to Rs 440 per head, or $7.3 per head per annum to cover O&M and capital investment. The available funds do not appear sufficient to offer the level of infrastructure services needed to support a growing urban economy and improve the quality of life in Karachi and its towns. As in the case of KWSB, insufficient information is available on the infrastructure facilities of Karachi and their value to make any estimate of the level of actual maintenance expenditures to maintain all secondary road networks in Karachi, streetlighting, drainage and TMA and UC administrative buildings to assess what level of funding is necessary on a per capita basis to support the proper maintenance of TMA infrastructure. The future development strategy should be to expand the resource base available to local governments to improve infrastructure services, combined with better management to ensure, among others, adequate maintenance of existing facilities.

121. Under devolution there is the opportunity to improve resource allocation and revenue generation at a number of levels. A sound fiscal transfer system is a key element of a sound local government finance system. The deficiencies in the NFC Award system were discussed above. There is the opportunity under the Seventh NFC to improve the allocation system and improve accountability as discussed below.

1. Federal Divisible Pool, Provincial Allocations, Accountability and Efficiency

122. The Seventh NFC headed by the Prime Minister has just been promulgated as the Sixth set up in July 2000 has now expired. The TOR for commission are to review : (i) the distribution between the federation and provinces, (ii) the making of grants-in-aid by the federal government to the provincial government, (iii) the exercise by the federal governments of the borrowing powers conferred by the constitution, (iv) examine the question of rationalization of payment of royalties on crude oil and of surcharges on natural gas collected by the federal governments to the provincial governments, (vi) to develop and enforce a mechanism for setting parameters to achieve fiscal discipline at the federal and provincial levels.

123. The Finance Ministers of the Provincial Governments are members of the NFC and therefore, it is important that they use this opportunity to push for a greater share of the divisible pool in line with responsibilities under devolution, and where possible the devolution of tax collection authority to improve accountability and efficiency of tax collection at provincial and also district level.

2. Provincial Divisible Pool, District Shares and Local Government Revenue Generation

124. Since devolution local governments have been starved of resources from their own sources resulting in a high dependence on resource transfers from the provincial divisible pool. There are two reasons for this. First the LGO 2001 assigned to them only limited revenue generating sources (apart from property tax). Second, the efforts of local governments to raise revenues were frustrated by the provinces, due to ambiguities in the laws. Districts, apart from

[27] Assuming population 12.1 million in 2005, excluding Cantonments, based on a growth rate of 4.5% per annum from 1998. In addition data requested by the TMAs in a questionnaire at the beginning of the SSTA was not provided by enough TMAs, in a consistent format, to draw any further conclusions as to the level of O&M expenditure and development expenditure. However, indications were that development expenditure was more in the form of rehabilitation, so could be regarded as deferred maintenance rather than expenditure on new infrastructure assets.

Karachi faired poorly with own revenues ranging from 15 to 14% with Karachi 49%, but in the case of Karachi this is due mainly to revenues from land sales. TMAs own revenues fair better because of the assignment of property tax with revenues ranging from 36% to 56% of resources.

125. Also the provinces violated sub-section 1(a) of section 120 (D) on vertical distribution of resources between the provincial government and local governments. The Formula laid down by PFC Awards for the distribution of resources from the "Provincial Consolidated Fund" comprising tax and non-tax revenues and capital receipts and federal transfers out of the federal divisible pool as well as straight transfers were not faithfully adhered to. The Sindh government excluded non-tax revenues from the divisible pool. Sections 120-A to 120-M of the amended Ordinance 2005 remove this anomaly. Nevertheless, Sindh have excluded non-tax revenue sources from the divisible pool for FY 2006. This amount to an estimated Rs 4.9 billion in FY 2005. If 55% of this was allocated to Districts and 22% to Karachi then all other things being equal, Karachi would have received a further Rs 592 million from PFC Award.

126. On the development side, the continuation of vertical programs both from Federal and Provincial sources deprive the local governments of the resources (which would be provided by allocation) to fully fund community - conceived projects. In Sindh in FY 2005 only 46% of the ADP was allocated to districts to spend, with the bulk on provincial funded projects. However, this is much higher than other provinces.

127. The GoS is working in several areas to enhance the system, including measures to provide incentives for local government performance in its grant system, and to ensure discipline in intergovernmental payments. These matters are part of the ongoing review and reform of the Sindh PFC.

3. Provincial Government Revenue Generation

128. The Punjab Government intends to overhaul local government taxes under the five-year Punjab Resources Management Program (PRMP) financed by the Asian Development Bank. The US$500 million program aims to improve public finances and reform financial and fiscal management in the province. This includes enhancement of tax and non-tax resources to reduce reliance on federal funds under the NFC Award. The taxes to be revamped include agriculture land tax, general sales tax (GST), property tax, professional tax, stamp duty and motor vehicle tax (MVT).

129. The Sindh Government has already made progress on some of these matters. Agricultural land tax is being computerized with an inventory of land established, stamp duty has been simplified and placed on an ad-valorem basis, making it simpler and more buoyant. In the case of MVT Sindh government would like to simplify this and also introduce a tax on the sale of petrol, to be retained by the province. If the Sindh Government follow the spirit of the LGO, 2001 and 2005 Amendments then resulting improvements in tax takes will benefit the Districts and TMAs in the allocation process, while enhancements to the Sindh tax base will result in a larger divisible pool and allocation to Districts, including Karachi.

4. CDGK and TMA Revenue Generation

130. Expanding revenues for infrastructure development and maintenance in Karachi and its towns will involve improving their own revenue base as well as the provision of provincial resources, as is the case for most local governments around the world. There are several areas

for improvement of own revenues. The two most significant include the property tax and user charges, especially for water and sewerage and the associated collection of conservancy tax for solid waste management and fire fighting levy. It is proposed that enhancing revenue generation and review of Schedule Two of SLGO 2001 forms part of the initial OS project for CDGK, with consulting input provided for this purpose.

(i) Property Tax

131. Measures to improve the yield of the property tax include (i) computerization of records and inclusion all properties with the assistance of GIS, (ii) shifting the base from Annual Rental Value (ARV) to transaction value as determined by the registrar for payment of stamp duty, (iii) limitations on exemptions, with inclusion of Cantonments, Federal and Provincial properties, as a buoyant property tax is an essential element of local finance in rapidly urbanizing economy like Karachi. These matters will form part of the capacity building assistance under the OS to increase revenue generation.

132. In FY 2005 estimated returns from Property Tax were Rs 1,159 million compared with estimated Rs 1,518 million representing a collection efficiency of 76%. The Town Nazims advise that approximately 35% of households and commercial properties are unrecorded, resulting in a loss of revenues of Rs 531 million. Existing exemptions[28] of households is estimated at a further 20% or Rs 300 million. Increasing rates in line with increasing property values[29], which have more than doubled, since the last nominal adjustment in rates in 2001 would have the potential to increase revenues by at least a further 50%. Finally including the Cantonment Boards and all Federal and Provincial Properties[30] in the Property Tax net would yield a further increase in revenues. Given that these tend to be high value housing areas (Cantonments) and Commercial and Industrial properties, the estimate of overall increase is 25%, is probably conservative. This would result in property tax yielding some Rs 4 billion (and possibly as high as Rs 6 billion) in revenues compared with the current yield of Rs 1.2 billion. Property Tax is also a buoyant and growing source of revenues for the future. A detailed review of Property Tax is proposed under the OS study, while computerization of property records and tying in with the GIS is provided within the ongoing capacity building program.

Table 13: Estimate of Revenue Generation Potential from Property Tax

	Rs m	Rs m 1/
Collections FY 2005		1,159
Estimated Tax from Billings	1,518	
Collection Efficiency	76%	
Revenue from collection efficiency improvement	95%	283
Unrecorded Properties	35%	505
Household Exemptions	20%	288
Total		2,235
Revise rates for property increases since 2001 adjustment in ratable value	50%	1,118
Add Containment Boards, Province and Federal exempt properties	25%	838
Potential Property tax		4,191

28 TMAs have now been provided with the discretionary powers to amend the rules and tax all households including those exempted since 2001.

29 The tax is charged at 20% of the annual value of land and buildings.

30 Currently Exempted under Section 4 of the Sindh Urban Immovable Property Tax Act, 1958

Increases over FY 2006	3,032

Source: Consultants estimates
Notes: 1/ Assuming 95% collection efficiency

(ii) Advertising Tax

133. Advertising tax or Billboard tax is another source of revenues not fully exploited by the CDGK. Estimates are that the tax revenues represent only 5-10% of billboard costs. The existing tax yield is Rs 250,000 with the potential considered to be Rs 500,000 rather than that budgeted of Rs 1 million. The potential could be realized by putting up for tender/auction the prime billboard sites in the ten main roads in Karachi.

5. User Charges for Water and Sewerage

(iii) KWSB Water and Sewerage

134. In the medium term user charges for water and sewerage offer the potential to achieve full cost recovery, provided services are improved, and thus reduce the need for operating and development subsidies to KWSB. Service levels have always been the major issue for Karachi, and while water shortages are being rectified over the years and with the provision of an additional 100 MGD under KIII expected in August 2006, service levels will not improve until the transmission and distribution system is rehabilitated. Secondly the level of losses, assumed to exceed 50%, means that much of the water provided is lost.

135. At present tariff levels the estimated revenues in FY 2005 was Rs 2, 528 million compared with collections of Rs 2,210 million. However, recovery of past arrears from bulk customers results in an overstating of collection efficiency. If collections are adjusted for estimated collection of arrears then the average collection efficiency is nearer 74%, however collections of retail water and sewerage charges are 62% and 59% respectively, while bulk sewerage collections are only 59%.

136. The table below shows the additional revenues available if collection efficiency averaged 95%[31] are RS 780 million. If this money had been collected in FY 2005 KWSB would still not be able to meet its existing cash operating costs with a deficit of Rs 230 million. Where a realistic level of maintenance was assumed of Rs 2 billion per annum the shortfall would be Rs 1.8 billion. The conclusion that can be drawn from this analysis that while improving collection efficiency from existing tariffs would result in an additional Rs 783 million in FY 2005 this is inadequate to meet existing levels of O&M and falls far short of the revenues required to meet proper levels of assumed maintenance expenditure. This means tariffs need to be increased, but this would first require an increase in the level of service, but there would be scope for increasing tariffs to existing bulk customers as the cost of tanker water at Rs 600 plus for commercial customers compared with Rs 73 per 1,000 gallons.

Table 14: KWSB Receipts with Improved Collection Efficiency

	2005	2005 Adjusted	Collection Efficiency	Additional Receipts /1
KWSB Receipts	**Rs m.**	**Rs m.**	%	**Rs m.**

[31] For KWSB to achieve 95% from present 74% average will take a concerted effort to ensure all houses and apartments pay their bills. KESC advise a collection efficiency of 97%, however the level of accounts receivable does not support this statement.

Water Bulk	1,396.6	1,047.5 2/	88%	89
Water Retail	575.8	575.8	62%	302
Total	1,972.4	1,623.3	77%	
Sewerage Bulk	87.2	87.2	57%	155
Sewerage Retail	150.6	150.6	59%	237
Total	237.8	237.8	58%	
Total	2,210.2	1,861.1	74%	783

Source: Consultants estimates

Notes: 1/ Additional Receipts assuming 95% collection efficiency.

2/ Assuming 25% of receipts were payments of arrears.

(iv) Payment for Water Tanker Supplies

137. To supplement piped water sales, tanker sales are made from KWSB hydrants with water provided free of charge. This activity is managed by the Pakistan Rangers. The Pakistan Rangers charge tanker operators charge Rs 44 for domestic supplies and Rs 73 for non-domestic supplies per 1,000 gallons, whereas the tanker operators charge the end user from Rs 275 to Rs 100 per 1,000 gallons. KWSB advise that there are some 25,000 tanker movements each day from KWSBs nine hydrants. Estimated daily water consumption is 25 MGD. There would appear to be ample scope for KWSB to be paid for this water and thus reduce the excessive profits been made by the tanker operators (and Pakistan Rangers), as adequate margins would remain to compensate all groups. Assuming KWSB receive the average of the above rates, then KWSB would receive Rs 534 million. Thus with improved collection efficiency and payment of “bulk” water KWSB would meet its existing cash O&M costs, but would still fall far short of meeting proper levels of O&M, by Rs1.3 billion, again demonstrating the requirements for tariff adjustments.

(v) Water Conservancy and Fire Levy

138. In conjunction with the KWSB water and sewerage bill, a invoice is rendered by KWSB on behalf of CDGK to cover a conservancy charge (25% of water bill) to meet part of the cost of solid waste services and to provide a levy (10% of water bill) for meeting the cost of fire fighting department. In FY 2005 the CDGK received Conservancy taxes of Rs 134 million and Fire Levy of Rs 45 million. Because the bill is separate from the water and sewerage bill of KWSB, less households are inclined to pay, so collection efficiencies are less than water and sewerage bills at around 45%. Assuming a collection efficiency of 95% would result in revenues of Rs 380 million or an increase over present levels of Rs 200 million. To achieve this, the amounts should form part of the water and sewerage bill, coupled with more aggressive collection procedures.

(vi) Summary

139. As outline above there are number of steps the CDGK can take to increase taxes and user charges, while these are also to be reviewed under the OS study. The JICA Water and Sewerage Master plan Study will identify physical infrastructure requirements and undertake a review of KWSBs organization and financial and management information systems. However, a separate tariff study has been included in the Megacities Project to establish water and wastewater and solid waste charges. As noted above, existing water and sewerage tariffs are not adequate to cover the levels of O&M undertaken, let alone proper levels that would result in levels of expenditures to maintain assets in proper working order. As noted elsewhere in this report, water treatment plants are not functioning properly and only one out of three wastewater treatment plants are operating, while water losses are likely to exceed 50%.

140. The above improvements in collection efficiency and charges for tanker water would result in an increase in revenues for KWSB of Rs 2.2 billion, CDGK water conservancy and fire levy, Rs 200 million, Advertising Tax Rs 250 million and Property Tax Rs 3 billion, a total of Rs 5.7 billion. This would represent over a doubling of CDGKs present revenues from taxes and user charges for FY 2005.

L. Financial Management Reforms

141. A brief description of the CDGKs present accounting systems are set out in Appendix 7, Section J. The complexities of the financial management system especially the centralized accounting, and audit institutions need further reorganization to develop a more responsive accounting and financial reporting system for the new CDGK. Existing F&P Department financial accounting and reporting systems however are inadequate for meeting the requirements of the changed scenarios. The CDGK does not get any proper accounts from the AG Sindh as there are no prescribed reporting mechanisms in place. Also the CDGK expenditures from its own resources, mainly the funds that it gets on account of abolishment of Octroi and its other revenues are accounted for separately. Another anomaly is that CDGK has been receiving only the non salary funds from its respective share of PFC grant, whereas monies for the salaries of its devolved staff (especially Health and Education) and ADP expenditures are released directly from Provincial Account #1.

142. There is a need to establish in F&P and CDGK an integrated accounting and reporting system[32]. The present system where a part of the functions are performed by the AG Sindh office and part by provincial treasury needs to give way to independent accounting functions within the CDGK to cater for the CDGK accounting, and reporting functions. The two funding streams (local and provincial) which are continuing despite the legal amendments, need to be merged. and a strong financial accounting and reporting system evolved to furnish regular accounting and other financial information required by the CDGK for planning, controlling and decision-making. There is also a requirement integrate TMA accounting within the entire system.

143. Legislative oversight, the key to accountability cycle, is not functioning adequately as firstly the formation of the District Accounts Committees was delayed and now subsequent to their establishment, they have not yet effectively begun operations of over seeing the accounts and audit reports of the local governments. This needs to be addressed since effective oversight is a vital link in the accountability chain and, weak oversight tends to reinforce weak institutional practices.

144. The OS study[33] includes a detailed review of the accounting and information needs of the CDGK and the need to bring together all the MIS requirements of the District Government, including TMAs.[34] Based on the review of individual departmental requirements, the necessary

[32] Governement and local government accounting policies follow cash accounting principles. There is no recognistion of depreciation of assets and revenues are accounted for on a cash basis rather than an accrual basis. That is for CDGK the bulk of its recurrent expenditures and development expenditures are met from the Provincial Sindh divisible pool and in turn for Sindh from the Federal divisible pool. Thus CDGK only receives those funds in the year that are passed through as cash. There is no recognition of the fact that the annual estimate provided by Federal to Sindh and Sindh to CDGK will be received, and that at end of year any amount not received will be provided in following months. That is on an accrual basis. This makes planning very difficult for each level of government with the resulting shortfall generally meaning a reduction in maintenance expenditures and a delay in development expenditures as available funds are used to meet salaries and wages.

[33] Details are provided in the OS TOR Section 5.

[34] As noted in footnote 31, local government financing is on a cash basis, with no recognition of depreciation and accrual of revenues/receipts. This is likely to continue as long as all Federal and Provincial Government accounting follow cash based accounting. This does not mean that in some of the CDGK revenue generating activities including property tax and payment of fees, that it will not estimate revenues for internal management proposes based on actual invoices rendered for the year, but from

hardware and software will be specified to provide online real time information to all departments, plus provide reports to allow for effective review and monitoring at each level and to provide necessary external reporting. Following the review of the CDGKs financial and MIS needs, a Request for Proposal (RFP) will be prepared and tenders invited from a short list of firms to provide the necessary software and hardware, its installation and operation and staff training. These tenders will be evaluated and a contract negotiated to cover provision of hardware and software, installation implementation and training. These activities will be undertaken as part of the ongoing capacity building within CDGK. Thus while the TA loan provides/budgets for an accounting and MIS project for CDGK and TMAs of $2.5 million, it is necessary first under the OS to carry out a review of accounting and MIS needs to arrive at the specific software and hardware requirements for this project. Provision is provided under the TA loan within the OS study for about $660,000 for these studies.

practical point of view, for year end accounting purposes its activities are likely to be reported on a cash basis.

M. Local Financing of Urban Infrastructure

145. One important problem for local financing of urban infrastructure is what a World Bank (2002 Report[35]) refers to as fiscal imbalance, whereby the expenditure responsibilities assigned to local governments do not correspond with the fiscal resources that are available to them. The result is that fiscal obligations are much greater than the fiscal own-source revenues of local governments in Pakistan. This problem is being addressed in part through revenue sharing arrangements, but economic efficiency and political accountability factors would argue for local governments to have access to and control over larger tax bases for their own-source revenues. There is as well overlapping fiscal powers between provincial and local governments. The result as of the 2002 World Bank study was that 65% of the spending of the Karachi City District Government and the towns on average was allocated to recurrent expenditures, leaving limited local government funds for maintaining and extending urban infrastructure facilities and systems.

146. The more recent PPID Report of the ADB[36] raised similar concerns. While stressing the large need for infrastructure investments and the key role that should be played by sub-sovereign (local government) entities in managing infrastructure services, the PPID Report stresses that, after devolution, the sub-sovereigns have limited financial strength and management capacity and that developing these financial and management capacities will take an extended period.

147. The PPID authors concluded on pages 2-3 that: “there are immediate opportunities for developing PPID projects. One point of entry for sub-sovereigns is to identify and structure within their jurisdiction revenue earning entities that can be developed as self-standing for private sector participation.” However, for the reasons discussed in **Appendix 13**, the time period needed to turn a government agency into a true company with the ability to operate on commercial principles and to repay commercial loans and attract private investment can also be quite lengthy.

148. The other major issue is that restricting the specialized FI and the ADB Megacity Loan to financing only stand alone projects managed by companies/legal entities means that public goods such as drainage and local road and bridges that do not generate tolls, fees and revenues would not receive commercial lending. This places added weight on the imperative to greatly enhance the revenue raising and loan repayment capacities of the CDGK and TMAs. As discussed in **Appendix 13**, good urban road and bridge projects can generate strong, identifiable and measurable economic benefits. Some of these economic benefits can be captured in the form of higher local government revenues that can be used to repay the loans – as long as the Karachi City and town governments have revenue-raising systems that are sufficiently robust and responsive to generate additional revenues from these economic advances.

[35] The World Bank, “Financial Analysis Study of the Karachi City District Government”, November 10, 2002, pages 9-10.

[36] Asian Development Bank “Private Participation in Infrastructure Development: Aide Memoire and Updated Concept Note” July 5, 2005, pages 2-4.

III. PROJECT RATIONALE

A. Introduction

149. One of the key pillars of growth for Pakistan is a focus on the development of urban areas in order to unleash the full economic potential of cities. This is explicitly recognized in the Medium-term Development Plan 2005-2010 plan which recognizes the vital role played by large cities in national economic development and the importance of their development being undertaken in a holistic manner as part of a long-term economic strategy. In particular, Government has indicated its intention to stimulate economic development of megacities by the establishment of a "Co-ordination committee on Development and management of Large Cities" under the chairmanship of Deputy Chairman Planning Commission. This committee focuses specifically on the cities of Karachi, Lahore, Peshawar and Quetta, and in its first meeting on 8th July reiterated the importance of cities developing a medium-term strategic framework for development to assist cities in tapping their economic potential and spurring growth.

150. Supporting these objectives requires the formulation of a policy framework for the management and governance of urban areas, as well the strengthening of institutions. Service delivery by local government agencies needs to be improved in a sustainable manner to the citizens if economic development is to be supported with a framework of pro-poor growth. A key feature of the institutional environment for urban service delivery is the Government's devolution process that started in 2001. The Government of Sindh is fully committed to the devolution process as a means of improving services at the local level. However, both the Province and Local Governments at district and TMA (town) levels have experienced significant challenges in the process of implementing decentralized service delivery, including capacity and financial constraints at the local level.

151. In addition to improved infrastructure and service provision, policy and institutional reforms that enhance the capacity of local governments are essential to ensure that major investment programs succeed in improving service delivery in a sustainable manner. These need to be focused at governance and institutional responsibilities for service delivery, municipal finance, urban land management, and transport.

152. As the premier city in Pakistan and its key entreport, Karachi has a dominant role in the national economy. In order to continue to thrive, Karachi must compete regionally and globally for domestic and foreign investment in productive activities. The provision of adequate infrastructure and services within the city district to: (i) adequately serve existing commerce and industry, (ii) attract further inward investment, and (iii) serve the needs of the population, is vital if Karachi is to compete effectively in this global market. The investment required in infrastructure and services cannot be found from government funds alone. Government must create the conditions to attract private sector investment into the provision of infrastructure and services in Karachi. Furthermore, in order to attract such investment, and use it effectively, the City District must be in position to identify and prepare good projects, and have in place a regulatory environment and funding mechanism to ensure timely project execution.

B. External Assistance to the Sector

153. As of December 2004, Pakistan had received approximately $14.3 billion of financial assistance in terms of loans to the infrastructure sectors from the major providers of infrastructure lending. ADB had provided $5.4 billion, or about 38 percent, of the total amount. In addition ADB has provided eight loans to the urban sector, totaling about $450 million, since the beginning of assistance to Pakistan's urban sector in 1976 (this includes loans for the water supply, sanitation, and urban development sectors). ADB has provided a further $12.3 million in non-lending technical assistance (TA) for infrastructure financing and a further $6.75 million for TA in the water supply, sanitation, and urban development sectors.

154. In terms of sector distribution, most of the infrastructure lending has been to the power sector which has obtained $7.6 billion (53%) of the financial assistance total. This is followed by the transport sector with $3.5 billion (24%), and the water resources sector $3.3 billion (23%). The distribution of the ADB's non-lending contribution per sector was $8.3 million (67%), $1.7 million (14%), and $2.3 million (19%) respectively. Karachi has previously benefited from ADB loans in the power and urban sectors.

155. The principal bilateral source of investment in both the infrastructure and urban development sectors has been the Government of Japan. In the urban sector Japan has provided the largest external support to the sector, and the World Bank, the second largest. In terms of sector dominance for infrastructure sectors, the World Bank has the largest lending program to the power sector.

156. ADB is the second largest lender, while ADB and Japan Bank for International Cooperation (JBIC) are the largest financiers of the transport sector. In the water resources sector the World Bank and ADB are about equal in their respective lending programs. External assistance to Pakistan suffered as a result of the nuclear testing activities in the latter part of the 1990s, but recently bilateral programs have reengaged in Pakistan's infrastructure sectors.

157. The actual infrastructure financing for the 2001-2004 lending period shows that ADB provided $837 million compared to a preliminary programmed infrastructure lending level for the 2005-2008 period of $2.7 billion. In addition to the figures presented, ADB's private sector operations are expected to further assist the development of infrastructure facilities in Pakistan through possible loan and equity instruments. The current ADB program to Pakistan includes innovative modalities for infrastructure development and financing such as the proposed Public Private Facility for Infrastructure Finance and a pilot intervention promoting PPP for National Highway Department, addressing policy issues to attract private participation in infrastructure.

158. Other bilateral assistance to the infrastructure sectors is provided by the governments of Germany, Kuwait, Netherlands, Switzerland, and United Kingdom. The United Kingdom in particular has supported the urban sector in Punjab is terms of capacity building for service provision. The United Nations Development Programme, along with the United Nations International Children's Fund and the World Health Organization, have also provided assistance to the sector, mostly in community water supply and low-cost sanitation projects. A summary table of external assistance to the infrastructure sectors is provided in **Appendix 8**.

159. Both JICA and JBIC are particularly active in supporting both studies and physical infrastructure in Karachi, particularly in the water supply and sewerage, and transportation sectors. KWSB is completing a Rs 675 million rehabilitation of the Hub and Pipri treatment works which was supported by JBIC. JBIC has also supported a study in the Vitalization of

Karachi and remains interested in taking this work forward. JICA is planning to support the preparation of a water supply and sewerage masterplan for Karachi at a cost of US$ 5 million dollars and has agreed to fund a passenger origin-destination study in Karachi with a view to further support of the preparation of a transportation masterplan for the city. In addition JETRO is active in planning future development of industry in Karachi – particularly in the textiles sector.

C. Lessons Learned

160. Previous externally-supported projects in both the infrastructure and urban sectors in Pakistan have been characterized by the common problems of: (i) pre-implementation delays; (ii) implementation delays; (iii) financial inadequacies; and (iv) inadequate institutional arrangements to ensure timely project completion and project sustainability. These problems have been caused by (i) long delays in engaging project management and design consultants; (ii) late declaration of loan effectiveness due to unfulfilled loan conditions; (iii) land acquisition problems; (iv) unexpected changes to project scope; (iv) late budgetary provision of counterpart funds; (v) changes in key project personnel and (vi) weak executing and implementing agencies and project execution and management arrangements. In terms of project sustainability, the key lessons are: (i) the need to involve a broad range of stakeholders and beneficiaries in project conceptualization and design; (ii) the need to address the issues of poor governance and weak institutions as part of the project; (iii) the need to avoid remote, centralized and unconnected project management structures which inhibit project ownership by beneficiaries and stakeholders; and (iv) to focus on issues of operation and maintenance and cost recovery for services.

161. A specific lesson derived form the previous Karachi Urban Development Project is that urban upgrading is complex and demands a holistic rather than a piecemeal approach. Upgrading interventions require intensive involvement of beneficiaries in the preparation and design process and must be able to deal with the broad range of problems faced by slum (Katchi Abadi) dwellers including that of regularization and security of tenure.

162. Until recently, the ADB's portfolio was experiencing diminishing capacities for effective project development and implementation. This led to the development in 2003 of the Project Implementation Action Plan. This plan focused on both immediate and longer-term actions and included (i) contract awards, (ii) disbursement and imprest accounts turnover ratios (iii) reducing "at risk" projects (iv) closing of project accounts when due (v) retaining project monitoring unit staff (vi) establishing revolving funds and (vii) operationalisation of core project management units. Portfolio reviews now assess the performance of executing agencies against criteria and overall performance has been improving in recent years. The proposed TA Loan project will need to adopt these performance criteria in developing institutional capacity building components.

163. The objective of the TA Loan is to provide a facility which will ensure that projects prepared for funding under the proposed megacity project incorporate the lessons set out above in developing high quality proposals. In addition the capacity building component will enhance the abilities of client government departments to recognize quality projects and to ensure that all pre-conditions are met for project sustainability.

D. Government Infrastructure and Urban Sector Strategy

164. The overall urban development strategy of the Government can be inferred from the Medium Term Development Programmes of the Government of Pakistan, Government of the

Sindh and City District Government of Karachi. Following from the 2004 Pakistan Development Forum (PDF), the Government's Medium Term Development Framework 2005-2010 (MTDF) provides the strategic basis for infrastructure and urban development in Pakistan for the next 5 years. This sets out a strategy which focuses on ensuring that the inevitable growth in urban areas is sustainable, efficient and equitable. The strategy calls for an increase in the provision of infrastructure and the efficiency of urban services through integrated urban development for enhanced urban planning, enhancement of urban management capacity, infrastructure development and the strengthening of public-private partnerships. The strategy also pays particular attention to the improved management of metropolitan areas and megacities to improve land supply and services, transport and communication links, information systems and labor markets.

165. ADB has already commenced an active dialogue with the Government following the release of the draft MTDF in March 2005. The MTDF is based on (i) the 2004 PDF, which focused on sustainable infrastructure development, and (ii) a number of sector presentations made by the ministries and agencies involved in infrastructure activities to the Planning Commission (PC) during the second and third quarters of 2004. The Poverty Reduction Strategy Paper (PRSP) [37] for Pakistan contains a strong emphasis on economic growth through increased and improved delivery of infrastructure facilities and services as they would also, in addition to economic growth, provide improved integration of Pakistan's cities, districts, provinces and regions, thereby providing increased opportunities for the more even distribution of the benefits of economic growth.

166. The PC is working from an infrastructure framework that incorporates an elaborate and integrated approach to infrastructure development. In order to obtain optimal economic growth through infrastructure development it is not enough to provide a singular infrastructure sector solution but rather ensure that several infrastructure facilities are provided within a clear and coherent development framework. The Government has expressed the view that without considerable investments in the major infrastructure sectors it would not be possible to attain the established annual economic growth and poverty reduction targets. The PRSP, which sets out the Government's vision for economic growth and poverty reduction, clearly establishes the linkage between economic growth and poverty reduction. The PRSP includes support for the creation of opportunities for the poor to participate in the economy, which can only materialize through improved local governance, development of increased infrastructure facilities and the provision of better services. Increased basic infrastructure facilities are required to realize poverty reduction in both the rural and urban areas. In urban areas priority infrastructure includes: (i) power generation to provide increased electricity supply sufficient to cover industrial and commercial production facilities and markets; (ii) building an integrated transportation network to connect production centers to domestic and international markets; and (iii) development and more efficient used of water resources. These strategy should also assist in developing a sound framework and capacity for water supply development and management to ensure sustainability of the resource for domestic, municipal and industrial supply and irrigation.

167. In the urban sector specifically, actions required include (i) the provision of adequate urban infrastructure to support urban-based economic growth, (ii) addressing urban poverty, (iii) improving the urban environment, and (iv) strengthening urban management. Government strategy calls for: (i) the development of strategic spatial development plans set within a long term perspective; (ii) improved land-use efficiency and improvements to the functioning of land

[37] Accelerating Economic Growth and Reducing Poverty: The Road Ahead. Poverty Reduction Strategy Paper, Government of Pakistan, Islamabad, 31 December 2003.

markets; (iii) conservation of nonrenewable resources and greater reliance of market-based approaches to reduce urban pollution; (iv) the regularization of Katchi Abadis and streamlining of land use and development regulations for low-income housing; (v) the development of cost-effective and efficient private-public partnerships which can attract private capital for urban infrastructure provision; and (vi) a greater role for the community in the development process – particularly through the active involvement of the Citizens Community Boards (CCBs).

168. To date, Government has been faced with, and continues to be faced with, inefficient state owned infrastructure entities (SOEs), which require support directly or indirectly through the federal and provincial budgets. This extends to city level service providers such as KWSB. The nature of the operational support is both technical and non-technical. The non-technical matters are directly linked to the Government's efforts to institute sector reforms and institutional restructuring, hence improving the infrastructure environment through increased transparency at all levels. Of particular interest is the efforts related to price setting mechanisms and governance of infrastructure sub sectors. There are also substantial legal and regulatory issues being addressed by the Government, and recently several independent regulatory bodies have been established such as the National Electric Power Regulatory Authority (NEPRA). These regulators through their acts have established transparent processes for licensing and tariff setting matters, and early experiences are that the real cost of infrastructure services has emerged as a key issue. This needs to be extended from the national to the local level for locally-delivered services such as water supply, sanitation and solid waste management.

169. The Government's overall infrastructure strategic framework is focused on facing these challenges, and it has commenced restructuring of SOEs in order to improve efficiencies and increase the transparency of both decision making and results. Managerial accountability and financial viability and sustainability have become part of the more results-oriented focus of the Government, and this needs to be extended to government service providers at the city level. The Government has embarked on an ambitious privatization program, and success in this regard has been attained in the finance sector, while infrastructure entities have proven to be more complicated to privatize than expected. Private sector participation is crucial in terms of increasing the investment level and introducing enhanced operating efficiencies and effective service management. Another element of the strategic framework of the Government is to create competition where possible, through introduction of private sector entities into the infrastructure sectors, new investments and improved service quality. Again, there is a need for these approaches to be translated to the local level.

170. With regard to the financing of current and future infrastructure facilities the Government is faced with substantial sector requirements. There is a clear need to undertake serious prioritization within each sector with regard to both investing in institutional reform and capacity building in sector agencies and in physical infrastructure projects. The MTDF also considers the financial implications of acceleration of infrastructure projects, but it can safely be stated that due to fiscal constraints, Government would not be in a position to fund more than about $1.5 billion of the estimated annual infrastructure requirements of $2.5 to $3.0 billion. The balance of funds will need to be found from a combination of resources from the domestic and international private sector, and from multilateral and bilateral donor agencies. In order for private sector funding to be attracted in the quantum required will need a major effort by government to establish the appropriate enabling legislative and regulatory framework, set up the appropriate institutional structures and ensure that there are quality projects prepared to the appropriate standard to interest private sector financiers.

171. In order for Pakistan to be able to attract the envisioned infrastructure investments, the investment environment needs to be made more conducive through investor confidence building. Particular focus on investor protection, sector and investor legal and regulatory fairness and consistency, property rights, transparency of sector policy frameworks, strategic direction, and sector development, monetary stability and exchange regulations, and efficient contract enforcement. Several attempts have been made to undertake private sector assessments with particular focus on creating an enabling environment for private sector investments. These efforts have defined the above issues, which need to be further addressed by interventions on an item by item basis. In terms of infrastructure investments, the Government is pursuing market liberalization policies, which would improve the entry of nonpublic sector developers and financiers. Through various strategic interventions presented in the MTDF the Government is set to make serious efforts to improve the investor environment in order to attract additional capital resources to increase infrastructure services.

172. At the City District level there is no specific coherent strategy for the provision of infrastructure in the medium to long-term within the Karachi City District. CDGK has developed its MDG and one of the goals is "Delivery of WSS services to 532 Katachi Abadis in Karachi". The Mid-term Development Framework 2005-2010 for Urban Development by the City District Government of Karachi proposes a development programme for this period with an emphasis on (i) roads, bridges, flyovers and underpasses, (ii) low cost housing schemes, (iii) transport and communications, (iv) water supply and sewerage, (v) agricultural development, and (vi) irrigation. The summary of program elements is shown in **Appendix 8**. This programme proposes a total expenditure of Rs 65.3 Billion over the next 5 years (Rs 13 billion per year). This overlaps somewhat (about 30 percent) with the Tameer-e-Karachi program (see below) which proposes investments of Rs 29 billion over the next 4 years (Rs 7 billion per year). While these are significant expenditures, they come nowhere near the estimated total requirement for Karachi infrastructure and service investment requirements. It has been estimated that the total infrastructure requirement for Karachi is currently between US$ 0.5 and US$ 1.0 billion per annum[38]. Furthermore, commitments to the Tameer-e-Karachi program are unlikely to be fully met, and there is no evidence that CDGK will have anything like adequate resources to carry out its medium-term development program.

E. Tameer-e-Karachi Program

173. The Tameer-e-Karachi Program (TKP) is an ambitious Rs 29 billion mega development package geared specifically towards rebuilding Karachi (and to some extent, Sindh) by providing vital physical infrastructure and other civic amenities in key target locations, particularly in the industrial areas. The Program is envisaged to be carried out within the next 4 years through the concerted efforts of the CDGK, the Federal and Provincial governments of Pakistan and Sindh as well as various stakeholders in the private sector. Types of projects earmarked for funding are:

- Construction and rehabilitation of roads, bridges and flyovers
- Rehabilitation of rivers and nullahs
- Removal of transport bottlenecks
- Expansion and improvement of water supply, drainage and sewerage services
- Integrated solid waste management

[38] Calculations by the Study Team, see Appendix 9.

- Procurement of necessary equipment and machinery
- Crisis management and emergency response centers
- Inter-city terminal and local terminal facilities
- Projects supported by Cantonment Boards and Defense Housing Authority (DHA)

174. The share of the Government of Sindh and the CDGK is Rs 6 billion each while the Federal Government's contribution is Rs 5 billion (**Appendix 6**). The remaining amount of Rs 12 billion will be financed by the various stakeholders that include:

- Export Processing Zone Authority
- Pakistan Steel
- Defense Housing Authority
- Karachi Port Trust
- Pakistan Railways
- Pakistan International Airlines
- Port Qasim Authority
- Export Promotion Bureau
- Civil Aviation Authority
- Various petroleum and multinational companies

175. To date, only Rs 9.2 billion has been finalized out of Rs 29 billion committed. CDGK has released a total of Rs 3.3 billion with actual disbursement of Rs 773 million. Of the aggregate total of 73 projects pertaining to roads, 22 are in progress (Rs 1.9 billion) while a total of 13 flyovers/bridges are currently being processed with cost estimated at Rs 4.3 billion. There are 166 schemes of water supply, sewerage and drainage and of these, 14 have been completed and 51 are in progress for a total estimated cost of Rs 2.1 billion (**Appendix 8**).

F. Private Financing of Infrastructure – Lack of a Supportive Legal, Regulatory and Policy Framework for PPP

176. The ADB has supported the preparation of a national study on the establishment of a public private infrastructure financing facility (PPIFF)[39] which provides a detailed analysis of the gaps in the current framework and the improvements needed in laws and regulations in order to promote public-private partnerships in infrastructure financing, management and operation. The same legal and regulatory gaps would hinder and often prevent commercial financing from say a specialized FI to urban infrastructure projects, as well as other urban lenders in Karachi. This highlights the issues and gaps deemed most important to the establishment and successful operation of the specialized FI.

177. The PPIFF study concluded that most public-private partnerships (PPP) in infrastructure were at the national level mainly in the power sector, other energy and telecommunications. Consultations with existing financial institutions provided similar findings, with the implication that commercial financing and PPPs for urban infrastructure development are rare if not non-

[39] ADB TA No. 4154-PAK: TA for Infrastructure Development.

existent in Pakistan. Accordingly, the PPIFF study concludes that there has been very little progress in attracting private sector investment into the key urban and municipal infrastructure sectors of water, wastewater, solid waste management, urban transportation and roads. The PPIF study also identified a number of impediments to successful PPPs in urban and other infrastructure in Pakistan. These include: (i) lack of clear policies and laws at national, provincial and local government levels to promote PPPs and to allow provincial and local governments to contract out the development and operation of urban and local services to private sector companies that are qualified; (ii) lack of institutional capacity within provincial and local governments to develop, analyze and prepare bankable projects and to structure, tender, evaluate, contract, negotiate and regulate PPP transactions; (iii) lack of training and human capacity by officials to oversee and manage the processes of PPP project preparation, development and oversight; (iv) lack of standardized analytical toolkits for selecting, analyzing, structuring, tendering, evaluating and negotiating PPPs in Pakistan (in short, for preparing PPP infrastructure projects to bankable and private sector standards); (iv) limited or no funds to pay for effective PPP analysis to bankable standards, for project preparation, and for transaction advisory services; (v) lack of long-term, fixed rate, rupee-based financing for infrastructure investments in Pakistan; (vi) lack of the institutional and legal capacity to regulate the post-transaction performance of the PPP and to fairly adjust tariffs as costs and other conditions change.

178. One consequence of these impediments – particularly the lack of policy direction, legal clarity, and capacities within governments -- to commercial, including PPP, infrastructure projects, is that infrastructure projects are subject to serious delays. These delays discourage commercial bank, development finance institution and private sector participation through placing the commercial viability of these projects at considerable risk. FIs interviewed have voiced concerns about government delays in approvals and decision-making that add to their costs and reduce their margins.

179. These same factors also impede the establishment of commercially operated urban infrastructure entities and the provision of commercial financing to those same entities in Karachi. This conclusion is not surprising, given that public-private partnerships are essentially a subset of commercially financed and operated infrastructure projects and entities that could include: (i) privately owned and operated companies without a government partner (e.g. a private bus company that would be licensed by government but that is all), and (ii) a government owned utility that is being operated based on commercial principles – sometimes but not always in anticipation of public-private partnerships or full privatization at a later date.

180. The specialized FI proposed would be designed to address many of these impediments, with emphasis on capacity building in commercial financing of infrastructure, technical advice and assistance in preparing bankable projects, appropriate financing in terms of interest rates and tenors, and post project monitoring of financed projects. Other impediments with respect to policies, laws, and regulations including the economic regulation of tariff adjustments and quality of service, would be removed through policy changes and other interventions by the GOP, the Government of Sindh (GOS) and/or the CDGK.

G. ADB Urban Sector Strategy

181. The overarching goal of the ADB is the reduction of poverty. The ABD defines poverty as "a deprivation of essential assets and opportunities to which every human is entitled. Everyone should have access to basic education and primary health services. Poor households have the right to sustain themselves by their labor and be reasonably rewarded, as well as having some

protection from external shocks. Beyond income and basic services, individuals and societies are also poor - and tend to remain so – if they are not empowered to participate in making the decisions that shape their lives." It is within this context that the potential role for the ADB in assisting in contributing to the development of the City District of Karachi has been defined.

182. The ADB's Regional Urban Sector Strategy, prepared in year 2000 to guide its activities in the urban sector, recognizes that the growth process in most DMCs, even if not as equitable as desired, has at least led to significant improvements in the living conditions of the urban poor. However, it notes that if severe and absolute poverty is to be eradicated in the next few decades, it will not be adequate to rely on the benefits of "trickle down" economic growth to alleviate the problem. Instead, explicit objectives need to be identified and consciously incorporated into development strategies to achieve a reduction in the level of urban poverty. These include a focus on the development of partnerships of local governments, central government, communities and the private sector to harness the energies and commitment of both the poor themselves and the private sector.

183. The focus of ADB's Country Strategy and Program Update (2005-2006) for Pakistan is on reducing poverty by providing help in the key strategic areas of good governance, sustainable pro-poor economic growth, and inclusive social development. The strategy recognizes that a substantial number of infrastructure developments are required for the Government to reach its objective of poverty reduction, and infrastructure and service provision fits within the framework of ADB's declared areas of specific intervention of: (i) supporting good governance, (ii) pro-poor economic growth (infrastructure, rural development, employment generation), and (iii) extensive social development (education, health, water supply and sanitation, and social protection).

184. The ADB strategy continues to be relevant, and in line with Government priorities. ADB lending to devolved sectors will aim to strengthen devolution by ensuring that future ADB projects are consistent with the new governance structure under the PLGO 2001. Where appropriate, efforts will be made to realign recently approved ADB projects for devolved sectors. ADB's emphasis will remain on improving delivery of social services that supports both increased public sector allocations and improved governance through devolution, improved sector administration, and improved financial management. The Water for All: the Water Policy of the Asian Development Bank, 2001 also supports ADB's strategy for poverty reduction by addressing each of the three framework elements of poverty reduction: pro-poor sustainable growth, social development, and good governance. The main focus of ADB assistance to the urban sector will be on environmental aspects and needs of the poor, and will broadly cover : (i) institutional restructuring and devolution of service delivery, (ii) private sector involvement in the delivery of selected services, (iii) budgeting and finance, and increased cost recovery and municipal revenue, (iv) increased community participation, and (v) attainment of the Millennium Development Goals (MDGs).

185. Infrastructure development, either rehabilitation of existing facilities or development of new facilities, forms an integral part of the pro-poor economic growth focus. In terms of ADB's strategy, as expressed through the CSPU, individual infrastructure sector road maps translate into sustainable pro-poor growth. These infrastructure road maps seek to reduce poverty through selection of infrastructure projects for financial support that would have the largest poverty reduction impact. The approach allows ADB to draw upon its strong experience and institutional knowledge within these infrastructure sectors. In terms of actual funding facilities, different modalities are envisioned to be utilized, including Asian Development Fund (ADF) and

Ordinary Capital Resources (OCR) lending operations, guarantee facilities, technical assistance, and private sector operations.

H. City Development Framework

186. The development framework for the Karachi City District is cast within the context of the national and provincial development frameworks. The VISION 2030 of Federal Government envisages a "Developed, industrialized, just and prosperous Pakistan through the rapid and sustainable development in a resource-constrained economy by employing knowledge inputs". This vision is to be achieved through establishing a just and efficient economic system for alleviating poverty and achieving the MDGs. While supporting the achievement of these longer term objectives, the Planning Commission's Medium Term Development Framework (MTDF) for the period 2005-2010 incorporates a paradigm shift towards enhancing competitiveness of the economy in the era of globalization through knowledge inputs. The framework focuses on the bringing together of the three key elements of: infrastructure development, human resource development and technology. The MTDF provides a framework for translating VISION 2030 into action through strengthening the enabling role of government through policy direction and the development of a more appropriate regulatory environment. This should enhance efficiencies and private sector investment in productive activities, infrastructure and services to support accelerated growth, thus releasing scarce public resources for provision of basic services – health, education, and security - to support poverty reduction and balanced rural development.

187. In the urban sector there is a recognition that increasing urbanization is an inevitable part of the process of economic development, and that urban-based economic growth will continue to increase. The challenge is to ensure that this urban growth is sustainable, efficient and equitable. The strategy calls for an increase in the efficiency of urban services through integrated urban development for enhanced urban planning, enhancement of urban management capacity, infrastructure development and the strengthening of public-private partnerships. The strategy also pays particular attention to the improved management of metropolitan areas and megacities to improve land supply and services, transport and communication links, information systems and labor markets. Significantly, the plan sees urban-rural migration as opportunity-seeking behavior by the poor, rather than a problem to be addressed by distorting rural and/or regional development priorities.

188. As noted above, in support of its strategic emphasis on megacity development, Government has constituted a steering committee under the chairmanship of the Deputy Chair, Planning Commission to facilitate the holistic and coordinated development and management of megacities (starting with Karachi) as a central plank of Government's long-term economic development strategy. The committee has been specifically tasked with (i) facilitating the promotion of long-term strategies and sectoral policies for megacity development, (ii) encouraging an entrepreneurial approach to city development, including support for private-public sector partnerships, and (iii) supporting capacity building of city agencies to better equip them to perform against their mandate. In this context, Government wishes to pay priority attention to Karachi as the nation's gateway, and its status as the country's primary commercial and industrial centre. The importance of Karachi city to the national economy demands a comprehensive approach to its development which encompasses not only urban infrastructure and services requirements but also the vision to support the economic role of the city.

189. The strategic development framework for Karachi is built on a combination of: (i) the assessment of existing conditions in the city and key constraints to its future growth, (ii) an

assessment of the key city constraints and opportunities – at policy, strategic and operational levels – based on the evidence-based situational analysis carried out under the SSTA, (iii) the proposals contained in the JBIC-supported Karachi vitalization scenario (presented in detailed in **Appendix 9**) and (iv) the programs and projects proposed by CDGK and other key stakeholders in the city through (a) the Tameer-e-Karachi program and (b) the city's mid-term investment plan (see **Appendix 8**).

190. This analysis has highlighted some of the key challenges facing the city, and which need to be systematically tackled if Karachi is to fulfill its development potential and become an **attractive place to live, work and invest in** – as is proposed through the Karachi vitalization scenario. The city is characterized by: (i) a political economy based on a feudal history and post-partition upheavals which have left the political landscape deeply divisive; (ii) a resulting policy environment which is ineffective and uncertain; (iii) a complex and fragmented institutional and development framework which fails to provide a sound and well-coordinated basis for city planning and development; (iv) inadequate staff capacity and inappropriate staff skill-sets within public sector institutions to effectively manage the city, its development and provision of its services and infrastructure, and (iv) inadequate funding provision to keep pace with the increasing demands for infrastructure and service investment, operation and maintenance.

191. This has resulted in a city which is characterized by: (i) poor planning, resulting in inefficient and poorly located development and the growth of unplanned and un-serviced housing; (ii) inadequate delivery of serviced land at affordable prices, resulting in unplanned development on government-owned land (the Katchi Abadis) and the growth of the "land mafia" as the only mechanism for serviced land delivery, (iii) inadequate and poorly-planned delivery of new infrastructure and services resulting in service deprivation, quality of life poverty and a poor urban environment; and (iv) poor service management and inadequate resources spent on operation and maintenance, resulting in the wastage of valuable resources, further stress on the urban poor and adding to environmental degradation.

192. A set of development objectives for Karachi can be set out which closely match the medium- to long-term strategic development priorities of the Federal, Provincial and City Governments and other key stakeholders in the city, and complement and support the actions already being undertaken.

- Through policy dialogue and reform, improved governance and management of the city to improve responsiveness, predictability, accountability and transparency of government and provide a coherent and supportive framework for efficient urban management and planned development.

- Enhanced efficiency of urban land use and development through the evolution of a clear city vision, and preparation, enactment and implementation of a city structure plan/masterplan and its use as a tool to resolve planning and jurisdictional conflicts and enhance planning efficiency.

- Upgrading and extension of city infrastructure and services to support economic development – particularly in the sectors of water supply, electricity, transport, wastewater disposal and solid waste management.

- Enhancing the resources available to support large-scale infrastructure development through attracting private sector resources in a variety of public-private sector partnership arrangements.

- Improved access to basic urban services for the urban poor – particularly those living in Katchi Abadis.

- Releasing the "dead capital" held by the urban poor, and attracting it towards productive use through the regularisation of Katchi Adabis.

- Increased sustainability of infrastructure and services through improved cost recovery for services leading to better-funded and improved management, operation and maintenance of services.

- Improving urban environmental conditions through improved waste management, better traffic management, the introduction of mass transit systems and retention and enhancement of green open spaces and the coastline.

193. Based on methodology which relates growth in per capita income to the need for enhanced and extended urban infrastructure and service provision (see **Appendix 9**), it is estimated that an investment of between US$0.5 and US$1.0 billion (Rs 25 to 60 billion) per year is required to maintain an adequate stock of infrastructure in Karachi. The current requirement is likely to be higher than this estimate in view of the poor state of much of Karachi's existing infrastructure stock.

I. Project Rationale

194. The Bank's Country Strategy and Programme (CSP) update 2005-2006 for Pakistan, sets out the Bank's assistance priorities in support of the Government of Pakistan's development emphasis on higher and sustained pro-poor growth. These points to the need for assistance with policy reform, institutional development and capacity building of decentralized government, and the development of economic infrastructure to support both accelerated economic growth and poverty reduction. Support in the construction, rehabilitation and management of well-targeted economic infrastructure, including the rehabilitation and extension of urban infrastructure, can have a major positive impact on both economic growth and poverty reduction. In the urban sector, the Bank aims to direct its OCR resources towards priority infrastructure projects, its ADF resources towards capacity building, and further OCR towards the facilitation of public-private partnerships in infrastructure provision, and the provision of instruments to assist with risk-mitigating guarantees.

195. The Government's MTDF establishes the integrated strategic framework for further development of Pakistan, and it has a clear focus on the urban and infrastructure sectors. It places particular emphasis on the development of megacities, and on the vital role which the provision of efficient and effective urban infrastructure and services plays in facilitating these development objectives. It also recognizes that the infrastructure demands of the country and its cities cannot be met by public funding alone, and that the attraction of private capital to investment in infrastructure provision through a variety of public-private partnership modalities is the key to attaining this goal. Government also recognizes that the key to attracting private investment is: (i) a favorable institutional and regulatory environment, (ii) good quality projects and project proposals, and (iii) a suitable financial intermediary.

196. The TA Loan intends to address the issues of: (i) strengthening the capabilities of the City District Government to plan, initiate and manage large scale, bankable infrastructure and service projects, (ii) assist in establishing clear regulatory frameworks for private investment in infrastructure and service provision, (iii) provide a facility to enable the CDGK to draw on funds for the preparation of feasibility studies for infrastructure and service improvement projects, and (iv) establishment of a suitable financial intermediary as a conduit for development funding.

197. In addition, project quality and sustainability will be achieved through structural and operational institutional capacity building of the City District and towns, and the intensified and more rigorous project preparatory work for new infrastructure projects. In this process, it is intended to increase the local government's ownership in developing infrastructure projects through increasing institutional capacities of implementing agencies, and, where relevant, through Government borrowing for the purpose of developing and promoting infrastructure projects, thus bringing increased responsibility and accountability to the implementing agencies. Increased Government ownership also challenges ADB to bring new ideas in terms of innovative ways of addressing infrastructure development through public-private partnerships and to obtain adequate financing to fund future projects. In addition, the TA resources of ADB need to be supplemented in order to meet the Government's areas of focus as well as ADB's increasing program of activities. In this respect, there are a number of bilateral donors already active in Karachi and in the urban governance, management and service provision sectors – notably the Japanese, Spanish and UK Governments. There is the opportunity for the Bank to leverage additional resources from donors whose development strategies are well aligned with the proposed TA loan facility and its outcomes.

198. In view of ADB adopting a multi-product approach to development of infrastructure facilities, introducing mixed loans from its ADF and OCR resources, utilizing guarantee instruments, and promoting private sector participation, urban infrastructure sector institutions need to be equipped with the necessary capacities to efficiently and effectively carry out project development and pre-construction activities. Successful project implementation requires timely, high-quality preparatory works to comply with ADB requirements for project processing and avoiding delays. The proposed TA loan, as a readily accessible financing facility, would allow the City District Government to efficiently conduct project preparatory and pre-construction activities as well as support capacity development activities. The CDGK's ability to manage the increased infrastructure focus and scale of development will be supplemented by a project management unit, which would strengthen the ability to assist implementing agencies with timely project identification, approval, and implementation.

199. ADB's assistance will build on lessons learned and policy dialogue with the Government on the overall infrastructure policy for the country, and input received through donor coordination. The TA Loan is an opportunity to continue the long-term infrastructure partnership with the Government, combining financial support with the joint development of an appropriate strategic and implementation framework for overall infrastructure development.

J. Project Rationale for the Financial Intermediary[40]

200. The lack of commercial and public-private financing in urban infrastructure in Karachi and Pakistan more generally is not the result of financial market failure. The quality and diversity of financial services for project and in particular infrastructure financing, the global

[40] Sub-section 2.3 of **Appendix 13** provides a more lengthy discussion of the rationale for the specialized FI which as well has implications for the rationale for the overall Megacity project.

competitiveness of Pakistan's financial sector and capital market, and the financial sector's understanding of the special needs of local governments and urban infrastructure service providers, are all in need of further improvement. However, the fundamental problem lies elsewhere.

201. Furthermore, the lack of commercial and public-private financing in urban infrastructure in Karachi is not the consequence of a lack of demand for expanded and higher quality urban infrastructure services in Karachi. As discussed in more detail in **Appendix 4**, the demand for high quality urban infrastructure service delivery greatly exceeds its current supply across all urban infrastructure sectors; and, few major investments have been made in Karachi's urban infrastructure for a number of years. There is as well a growing recognition that the increasing gap between urban infrastructure demand and current supply cannot be met through traditional government sources, including local government revenues and subsidies and transfers from the GOP. Alternative non-government sources of financing are clearly needed.

202. Rather, the lack of commercial and public-private financing in urban infrastructure in Karachi and Pakistan is the consequence of: (i) the limited number of local governments and local government owned enterprises that have the mandate and are prepared to borrow on commercial terms, (ii) the lack of high quality, well-managed utilities and other borrowers that are operated on a commercial self-sustaining basis and can service and repay commercial loans, (iii) the continuing dependence of infrastructure service providers on government subsidies to meet payrolls, cover their other O&M costs, and to expand their capital facilities, (iv) the attitudes of many households, businesses and governments that water and other urban services should be provided at low or no cost as a matter of right, (v) the lack of high quality urban infrastructure projects that are designed to operate on commercial principles and thus would be able to repay ADB, commercial and other loans from their revenues and net operating income (cash flow), and (vi) the lack of a legal and regulatory framework to promote commercial infrastructure facilities and public-private partnerships in urban infrastructure financing, management, operation and service delivery[41].

203. Developing a market for borrowings from a specialized FI will require major, concerted and sustained changes in attitudes, utility and government operations, and the policy, legal and regulatory framework. Simply providing a specialized FI that will supply commercial loans to urban infrastructure at commercial (and competitive) rates and tenors will not create a demand for those loans from borrowers and projects. The demand will need to be created through a combination of: (i) changes in government policy, (ii) improved legal and regulatory environments, (iii) greater awareness by all stakeholders that many urban infrastructure facilities can and should be placed on a commercial footing, and (iv) recognition that scarce government financial resources are better allocated to health, education, social services, public housing for the poor, regularization of the Katchi Abadis and other public activities that typically can not be provided by commercial operations and the private sector.

204. The rationale for the specialized FI goes beyond the rationale for the Karachi Megacity Project and the two ADB loans to the extent that the specialized FI could and should become an important catalyst and promoter in accelerating capacity building, economic reforms, financial discipline, commercialization and over time the private financing, management and operation of urban infrastructure services in Karachi and the Province of Sindh.

[41] See for example: SAGF "Public-Private Infrastructure Facility", Final (Draft) Report, Asian Development Bank, TA 4154-PAK, June 8 2004.

IV. THE TA LOAN PROJECT

A. Objectives

205. The Government has made a commitment to enhancing the competitiveness of the megacity of Karachi, and improving the quality of life of its residents. As a result of discussions between the ADB, GoP, GoS and the CDGK, the ADB has agreed to provide funding to support a Karachi Megacity Project which would be intended to address pressing infrastructure and service needs in the Megacity in the short- to medium-term.

206. In support of this proposed intervention, a TA Loan is envisaged to enhance the Government's ownership of investment projects and provide an effective response to the needs for upfront capacity building in project management and implementation and other key areas such as city planning and management and municipal finance. The need for innovative and sustainable financing mechanisms for Megacity development has been highlighted by the Advisor to the Prime Minister on Finance and the Advisor to the Planning Commission. In these discussions it has also been suggested that the feasibility of creating a specialized financial intermediary (FI) be explored to address the large scale financing requirements of Karachi megacity on a sustainable basis. Such an intermediary would provide loans and grants primarily to urban local bodies but also other institutions, including possibly the private sector, investing in urban infrastructure and services. The financial intermediary would also serve as a conduit for ADB's future assistance for mega city development including the proposed Megacity loans for Karachi scheduled for years 2006 and 2008.

207. The objective of the TA loan would be to assist Karachi city in tackling a wide range of problems through: (i) enabling the preparation of high priority investment projects for urban infrastructure and service improvement; (ii) assisting in the urban policy, institutional and regulatory reform and capacity building necessary to support enhanced city governance, development and management. The TA loan would (i) enhance the Government's ownership of the investment projects to be financed by ADB, (ii) provide an effective response to the need for advance capacity building in city planning and management, project management and implementation, financial management and other key areas of support, (iii) facilitate the design and establishment of a financial intermediary to function as a conduit for Bank and other financing to the sector, and (iv) address the issue of initial implementation delays frequently encountered under ADB supported urban infrastructure and development projects. It is anticipated that considerable time will be saved in the processing and implementation of follow-on loans by avoiding delays in recruitment of engineering consultants, advancing preparatory activities and enabling prompt loan signing.

208. TA Loan should also; (i) facilitate the preparation of infrastructure sector projects that promote economic growth and poverty reduction, and are technically feasible, financially and

economically viable, and environmentally and socially responsible; (ii) assist in developing PPP modalities; and (iii) improve institutional capacities within infrastructure agencies and institutions. The institutional capacity building should enhance the functions of city district agencies following sector reforms. These efforts will focus on policy development and formulation, strategic planning, efficient project preparation, and operational and financial sustainability. The TA Loan will also assist the Government in enhancing the enabling environment for urban infrastructure investments by the private sector as well as bilateral and multilateral agencies through identification of investor bottlenecks, development of strategies to address these bottlenecks, defining actions required to address the major obstacles, and execute subprojects to resolve these investment constraints, resulting in an improved enabling environment for urban service investment.

B. Policy Dialogue

209. The Bank will engage with GoS and CDGK in a dialogue over policy issues which need to be addressed to: (i) ensure that the project objectives are met, and (ii) support the sustainable growth and development of Karachi megacity. These policy issues focus primarily on institutional development, human resource development, land, finance and the efficiency of services.

1. Institutional Development

210. Despite the enactment and adoption of the SLGO-2001 and recent amendments to the code there remain many issues around its full and effective implementation. The CDGK, which is formed from a combination of the KMC and KDA does not function as a unified body, nor does it have a clear notion of its full mandate. There is an urgent need both for rationalization of the structure of decentralized government, and clarification of the responsibilities and duties of the various devolved institutions. Further reform is necessary to strengthen the CDGK and towns in performing their functions under the SLGO. Increased accountability of local government institutions and greater participation by civil society in development by involving stakeholders in the planning, design and implementation of policies and programs needs to be discussed and introduced. The roles and responsibilities of urban institutions need to be clarified in order to avoid the horizontal and vertical overlap which currently exists.

211. Information is a critical element of reform. Mandates need to be clarified and local government information and management systems need to be established as a means of determining performance against these mandates. Effective institutions required strong technical and management capabilities. The most technically well-endowed agency in Karachi was the Karachi Development Authority. However, with its original mandate lost and its collapse into the CDGK, the planning and management capabilities of its staff are rapidly being lost – and will be further if their expertise is not put to constructive use through rationalization of structures. The effective management of Karachi requires professional expertise that may well not available in the public sector, and hiring from the market remains an issue.

2. Human Resource Management Function

212. The general perception of the organizational characteristics of the CDGK is that its performance in the context of urban services delivery falls far short of that required for a "minimum acceptable service". This is in part due to a lack of clarity of responsibilities, but is also a function of the absence of work culture; a common feature of the public sector in Pakistan and elsewhere, and symptomatic of a deeper administrative malaise which the more

accountable decentralised institutional framework has not been able to overcome. In some cases executive officers may not suited for the management positions they hold, but equally they cannot expect loyalty from their senior-most staff when these staff are assigned to them by the provincial government. There is a need to look at mechanisms to develop human resources and improve human resource management. Equally, there is a need to look at how the accountability of departmental staff can be improved; the opportunities for reward and sanction, and a system of staff engagements which encourages team building, loyalty and facilitates a productive and motivated workforce within CDGK and the TMAs.

213. Fundamentally, administrative devolution has only been partial as staff transferred to the districts continue to be under the control of the provincial government who carry out appointments, transfers postings; promotions and appraisals of district staff. So much so that the provincial government continues to disburse salaries to these employees through the Provincial Account rather than transferring funding to the District Account. There is a need for the powers of local governments to be extended both to enable them to create fiscal space by dismissing surplus staff, and to select and engage their own officers. Ultimately this can only be resolved by establishing a local government cadre of civil servants for each district – as is provided for under SLGO-2001.

3. Municipal Finance

214. A sound fiscal transfer system is a key element of a sound Local Government finance system. There is need for continuous dialogue with the Sindh Provincial Finance Commission and review of procedures to ensure that they promote accountability, efficiency and improved performance in local government financing. The GoS is working in several areas to enhance the system, including measures to provide incentives for Local Government performance in the award of grants, and to ensure discipline in intergovernmental payments. These aspects require review under the SLGO in the context of the balance between the three tiers of local government (district, town and union) for grant of funds from the province and for revenue raising capacity. Also the inclusion of Non-tax revenues in the divisible pool would increase the allocation to Districts and to Karachi where the bulk of these revenues are generated.

215. Property tax computerization, reform and enhancement offers the best opportunity to raise revenues by CDGK for TMAs, while increases in user charges for water and wastewater services is justified once levels of services are improved. This would reduce the financial burden on both Federal and Provincial sources to meet not only operation and maintenance costs, but also the debt service and capital investment for theses services in Karachi. The freed up funds could be used for development purposes in areas where cost recovery is difficult. Dialogue is necessary to set in place a program to increase the level of services and then to raise user charges correspondingly so that these utility services can become financially independent in the medium to long term.

216. Finally there is a need to introduce comprehensive accounting and MIS systems in the CDGK and TMAs to provide better and more timely information for budgeting, management, monitoring and reporting purposes. This is necessary to provide CDGK and TMAs with the necessary information to properly plan and manage the carrying out of their respective responsibilities.

4. Land Planning

217. The land market in Karachi is failing, and this has a major impact on the efficiency of current development and on the future growth potential of the city. While most of the land remains in government ownership, the current mechanisms available for bringing this land into active use in stimulating an effective urban land market are both complex and inadequate. The basis for any market-led economic growth must be the free, easy and unrestricted availability and transferability of land and capital. There is a need to engage in dialogue around the reasons for failure of the urban land market and to develop mechanism to bring land which is attractive and suitable for development into use.

218. Related to this is the current policy of granting land rights/leases and tenure to the "illegal" occupants of Katchi Abadis. It has been suggested that one reason why Karachi is suffering from a lack of supply of capital and marketable security in the shape of real property, is the restrictions created in allowing Katchi Abadi occupants land rights, so that this land can come into circulation and free up marketable capital which should in turn rejuvenate the economic vitality of the city. Countervailing arguments can also be made that:

- this land is frequently given protection by illegal elements and the unregulated sector who facilitate and encourage the illegal occupation of neglected government or other land. Its regularization implies the legalization of an illegal situation and a consent to the continuation of an inefficient and badly planned activity. Furthermore, this creates the opportunity for the "land mafias" to obtain rights to land that are actually in the ownership of the government, and hence legalize the transfer from government to the "illegal mafia" of land that should have been used for public use and for organized, planned and efficient land development.
- the suggestion that this land title will ensure that the land is transferable and thus developers will come and correct the situation is flawed since even in the case of land that is regular and transferable, land developers have successfully violated building regulation, building high rise residential apartments and malls that compound the problems associated with poor urban planning and inadequate service provision. In a Katchi Abadi there is likely to be even less incentive to correct a situation and perhaps a greater incentive to not correct the situation.

219. However, there are strong social arguments as to why these Katchi Abadis should be regularized – although in doing so attention must be paid to the above points. However, to ensure the proper functioning of an urban land market in Karachi will require the removal of all the separate Regulatory and Land Use Laws and Frameworks of Federal and Provincial Agencies currently in existence in Karachi and their replacement with a single set of rules and regulations. In addition, there is an urgent need to review all the existing land use, zoning and building control bye laws of all the land owning agencies to facilitate evolution of a common regulatory framework for the entire city.

220. Related to this is the need to evolve a holistic city development vision through involvement of all major stakeholders in order for the city to move forward with confidence. Devolution provides the opportunity for the CDGK to play a central role in evolving a clear, focused future development vision. The need for such a vision and a structure plan for Karachi to support it has been time and again been articulated. However, even when developed, such plans need legal, institutional and financial cover, and strong institutions which can evolve them, implement them in consonance and coordination with all stakeholders, and prepare quality projects in line with these plans.

221. The Sindh Rented Premises Ordinance 1979 also contributes to the continued and effective stagnation of land as capital and the regression of the market and security available in the economy. The law does not allow the ejection of a tenant except in the case of (i) violation of the tenancy agreement, (ii) default in payment, or (iii) if the landlord for his/her own personal bona fide reason needs the premises (his/her owning any other property debars him/her from raising this plea). Cases are many – and often take decades to come to a judicial decision, often with no satisfactory remedy at the end.

5. Service Delivery

222. Service providers in Karachi – notably KWSB and KESC – have failed, and continue to fail, to provide a quality service. Well organised, well planned, effective, affordable and sustainable utilities are a vital component of an efficiently working Megacity. Policy discussion with the utility service providers needs to focus around the rationalisation of their tariffs, their legal framework, organisational structure, and interrelationships and interoperability with other utility service providers and the city district and town administrations and land development and control authorities. Moreover, to facilitate the development and provision of economically viable services, options need to be considered to limit the role of public sector agencies to that of a facilitator and regulator, and provide an enabling environment for introduction of the private sector, with appropriate performance incentives and accountability mechanisms.

6. Policy Dialogue on Financial Intermediary

223. The establishment and successful operation of a specialized FI for urban infrastructure in Karachi will as well face a large number of negative factors, conditions and constraints that will need to be addressed in policy dialogue between the ADB and Pakistan governments particularly the GOP as part of the Karachi Megacity Development Project, other ADB infrastructure loans, and in particular the establishment and operation of the private sector financing facilities under the Private Participation in Infrastructure Development (PPID) Sector Development Program (SDP) at the national level. These are discussed in some detail in section 2.2 of **Appendix 13**. The following section summarizes some of the key issues.

224. **Effects of Devolution**. Commercial and private financing of urban infrastructure requires the appropriate and transparent allocation of functional roles, responsibilities and mandates between levels of government. In this regard, the key issues for commercial lenders and private investors with respect to local governments and their infrastructure utilities and companies are: who can borrow, who has the collateral to provide security for the loan, and who has the mandate to capture the revenues and surplus in order to repay the loan to the FI. Devolution can and will provide important benefits to Karachi but has left considerable uncertainty regarding the allocation of roles, responsibilities and functions. Until these allocations are clearer, it will be difficult for a commercially operated specialized FI to lend to local governments and entities with full confidence of repayment of principal and interest; moreover, as the PPIFF study stresses, it will be difficult as well to attract private investment and public-private partnerships into Karachi's urban infrastructure sector (this is further discussed in the next sub-section).

225. **Lack of a Supportive Legal, Regulatory and Policy Framework**. The PPIFF study cited and used extensively in **Appendix 13** provides a detailed analysis of the gaps in the current framework and the improvements needed in policies, laws and regulations in order to

promote public-private partnerships in infrastructure financing, management and operation. The same legal and regulatory gaps hinder and often prevent commercial financing from e.g. a specialized FI to urban infrastructure projects and other urban sector borrowers in Karachi. This sub-section will simply highlight the issues and gaps deemed most important to the establishment and successful operation of the specialized FI and of the ADB Karachi Megacity Loans more generally.

226. The PPIFF study concluded that most public-private partnerships (PPP) in infrastructure were at the national level -- mainly in the power sector, other energy and telecommunications[42]. Discussions with existing financial institutions provided similar findings, with the implication that commercial financing and PPPs for urban infrastructure development are rare if not non-existent in Pakistan. Accordingly, the PPIFF study concluded that there has been very little progress in attracting private sector investment into the key urban and municipal infrastructure sectors of water, wastewater, solid waste management, urban transportation and roads.

227. More generally, there is limited knowledge of international best practices in the financing, management, operation and service delivery of urban infrastructure facilities on a fully commercial basis. Box 1 in **Appendix 13** provides a listing of some of these international best practices based on examples from other Asian countries. One consequence of these impediments – particularly the lack of policy direction, legal clarity, and capacities within governments -- to commercial, including PPP, infrastructure projects is that infrastructure projects are often subject to serious delays. These delays discourage commercial bank, development finance institution and private sector participation through placing the commercial viability of these projects at considerable risk.

228. The specialized FI proposed in **Appendix 13** would be designed to address some but not all of these impediments, with emphasis on capacity building in commercial financing of infrastructure, technical advice and assistance in preparing bankable projects, appropriate financing in terms of interest rates and tenors, and post project monitoring of financed projects. Other impediments with respect to policies, laws, and regulations including the economic regulation of tariff adjustments and quality of service, would need to be removed through policy changes and other interventions by the GOP or the Government of Sindh (GOS).

229. It is proposed therefore that the policy dialogue to take place between the ADB and the Karachi City District, Sindh and national governments should explore the existing policy, legal and regulatory framework from the perspective of the key impediments for commercial lending to and private investment in urban infrastructure projects. The dialogue would stress in particular those aspects of the existing framework that: (i) result in undue delays in government approvals of projects and of new tariff schedules needed for project viability; (ii) place pressure on commercial lenders to approve infrastructure projects of questionable viability; (iii) result in uncertainty in the allocation of property rights and in the roles and responsibilities across different levels of government and between government and the corporate/private sector; (iv) place at risk the project cash flows of infrastructure projects that are to be used for loan repayment; (v) impede the efforts of local governments to establish private concessions, BOTs and other forms of public-private partnerships (PPPs) as set out in the PPIFF study; and (vi) impede the efforts of government owned utilities and companies in urban infrastructure sectors

[42] Previous studies as well as the consultations indicated that many of the national infrastructure projects that received commercial lending and private financing were “one-off” transactions where the policies and regulations had to be established for each transaction. This of course adds to uncertainty, delays, transactions costs, and the opportunities for rent seeking, which in turn lowers the returns of commercial lenders and private investors.

to become more commercially oriented in their financing, operations, service delivery and customer relations.

230. **Lack of Experience with Commercial Financing and Public Private Partnerships in Urban Infrastructure**. Similar to other countries, there has been a lot of discussion about commercial and private sector financing of urban infrastructure in Pakistan – and some non-government financing has taken place with varying degrees of success in other countries. However, Pakistan, Sindh Province and Karachi have very little experience with non-government financing of urban infrastructure. The Karachi Water and Sewerage Board (KWSB) and the Karachi Electricity Supply Company (KESC) have used commercial loans as well as IFI loans but for the most part these apparently have been repaid by the Government of Pakistan and not by local governments and project beneficiaries.

231. Because government has dominated urban infrastructure financing for a long time, there is little experience in Pakistan and Karachi in particular with non-recourse financing where the feasibility and bankability of the project is dependent mostly on future cash flows and a strong and reliable revenue stream, rather than collateral and the quality and size of the government contribution and sovereign guarantee. As well, provincial and local governments are prohibited from borrowing that is from issuing bonds and other debt instruments, without first receiving the approval of the GOP. Therefore, local governments have no experience with issuing debt to finance urban infrastructure projects.

232. **Limited Market Demand and Few Appropriate Borrowers for Commercial and Private Financing**. For all of the reasons described in **Appendix 13** and other parts of this document, the ADB and Pakistan government, based on current information will face a major challenge with identifying appropriate projects prepared to bankable standards, and appropriate borrowers: (i) who want to borrow for urban infrastructure, (ii) who operate their facilities based on commercial principles, (iii) would be prepared to repay, (iv) would be capable of repaying the principal and interest, and (v) who have experience with functioning the financial discipline fundamental to commercialization, and with commercial bank and private financing partners of urban infrastructure facilities.

233. Within Karachi City, only KESC and KWSB have the legal mandate to borrow from banks and other commercial borrowers. However, these two entities have many weaknesses, as an appropriate borrower from a specialized commercially operated FI, related to inadequate tariff levels and revenues and likely inefficiencies in their operations and management (as catalogued elsewhere in this report).

234. Turning to other sectors, there is no public bus or mass transit company that could borrow – one or more of these could emerge in the future as a consequence of future mass transit projects. Responsibilities for public transport are divided between different agencies (the Mass Transit Authority and the Transport and Communications Department in the Karachi City District Government). There is in fact no public bus system (the public bus company was privatized a number of years ago) and, at the present time, there is no government owned public transport entity that could be a borrower under the ADB Loan or from the FI[43]. Urban roads are the responsibility of local, mainly town, governments – which as noted earlier under law are not allowed to borrow without GOP permission. Solid waste management is a shared responsibility of the City District Government and the 18 towns. The town governments are in

[43] The Urban Transport Board is a regulatory agency that handles licenses to private buses and essentially is no longer functioning.

the process of privatizing solid waste collection but have little experience with preparing, negotiating, managing and monitoring concession contracts.

235. In short, as stressed in **Appendix 13**, market demand and appropriate commercially operated borrowers for commercial loans from the specialized FI for the most part will need to be created in part through the ADB loan and related capacity building efforts.

7. Design of the Financial Intermediary

236. A final policy and technical issue is that the design and feasibility study for the specialized Karachi FI will need to be coordinated with two financing instruments now being designed and established at the national level under the Private Participation in Infrastructure Development (PPID) Sector Development Program (SDP) of the ADB. The first is the Infrastructure Project Development Facility (IPDF) in charge of developing projects for PPID. The second is the Infrastructure Project Financing Facility (IPFF) that will be in charge of managing an Infrastructure Fund (IF) and for structuring and arranging financing for PPID in order to leverage resources of the private sector.

237. Preliminary analysis of the material on these two instruments and the PPID SDP would suggest that these facilities and the specialized FI hold the potential to be complementary instruments for promoting greater commercial operation and commercial lending and private investment in Karachi's urban infrastructure sector. The complementary aspects, which should be further analyzed by the consultants responsible for the full feasibility and design study under the ADB TA Loan, are more fully described in **Appendix 13**.

238. Perhaps most importantly, the proposed advisory services for policy, legal and regulatory reform at the national level under PPID will complement and reinforce the policy dialogue under the TA Loan and any future Bank loans to Karachi, a policy dialogue that is essential to making the Karachi Megacity Development project a success. A national level facility would be well positioned to take the lead role in national level reform initiatives, with the Karachi ADB Loan providing technical advice and support and follow-up in Karachi and the Province of Sindh. Similarly, the capacity building efforts under the Karachi ADB Loans and the national PPID program can and should be similarly coordinated and mutually reinforcing. PPID initiatives designed to improve the financial strength and management capacity of sub-sovereigns (provincial and local governments) in urban and other infrastructure sectors, to improve service quality and standards, and to improve the capacity of Pakistan banks to structure infrastructure transactions involving private sector participation and PPPs (including greater use of non-recourse and limited recourse financing based largely on project cash flow), would be particularly helpful to successful implementation of the ADB loans and the specialized FI in Karachi.

239. Finally, PPID policies and strategies to (i) develop a PPID law (e.g. on concessions), contracts and regulatory functions and (ii) set out the process for developing market based long-term domestic resources for financial intermediaries (FIs) and infrastructure projects, including development of the bond market and supporting services such as credit rating services, would be very helpful to and supportive of the phased development proposed for the Karachi specialized FI.

240. Despite these potential complementary aspects between the PPID and the specialized FI in Karachi, the consultants designing the specialized FI will need to coordinate and interact on a regular basis with the consultants, ADB officials and government officials designing the PPID facilities over the next year through to mid 2006 when the PPID loan is expected to become effective.

C. Project Components and Outputs

241. The TA Loan project will comprise a total of four components. Component A will focus on project management support and the provision of technical support to the CDGK for specific identified technical support activities. Component B will (i) support organizational study and development of the CDGK through an associated capacity building program and (ii) provide a series of studies which will support development of a strategic development framework for the city, urban reform and service sustainability, and capacity ensuring security of land tenure by CDGK/GoS and up-gradation of Katchi Abadis through CCBs. Component B will include a twinning program which will be financed by the Government of Spain (or other bilateral donors). Component C will provide funds to undertake feasibility studies for identified priority development projects and provide funds for future feasibility studies within the project life. Component D will support the establishment of the financial intermediary and its initial start up costs.

- **Part A** will focus on project management support and the provision of technical support to the CDGK for specific technical support activities. This will also include a City Development Strategy and Survey of CDGK users to ascertain services desired and their willingness to pay for improved services. These will provide necessary input into Part B.
- **Part B** consists of an organizational study to determine the appropriate structure for CDGK and the necessary capacity building required for the CDGK to function effectively. It includes some immediate capacity building initiatives plus a range of support studies and allows for a future program of capacity building. A key component of which is to introduce modern accounting practices into CDGK and provide an MIS system to provide necessary information flows to all parts of CDGK so that it can carryout its functions efficiently and effectively.
- **Part C** will provide funds to undertake feasibility studies for identified priority development projects.
- Finally, **Part D** provides funding for feasibility studies to review financial intermediary options, to set up the FI, and to provide funding for initial operations.

1. Part A: Project Management Support

242. Part A is divided into essentially three areas. These are:

Part A	**Project Management Support**
1	Project Manager/Advisor
2	Assistance to EDO Masterplan
3	City Development Strategy (CDS)
4	Urban Services and WTP Survey
5	Other Short Term Advisors

243. The Masterplan and development of GIS are not described here as these projects are already underway and would not therefore be funded under this proposed Megacity TA Loan Project. They are however, described in **Appendix 11**.

1.1 Project Management Support to E&IP Department (A1)

244. The implementing agency for the TA Loan will be the Enterprise and Investment Promotion Department (E&IP) of the City District Government of Karachi. This department will need assistance in the overall management of TA Loan activities – such as detailing of Terms of Reference, preparation of RfPs, evaluation of proposals and management of TA contracts. In addition, there is need for specific small technical assistance activities to support the CDGK in carrying out planning and development tasks already funded through ADP or Tameer-e-Karachi activities, or proposed for funding under committed CDGK, Provincial or Federal Government funding. The requirement would be for a technical advisor to work alongside EDO E&IP and provide assistance in managing the Loan TA and for resources to support a number of specific small technical assistance requirements.

245. The objective of the overall project management support programme would be to: Work with the Government Project Director (PD) in providing overall management for the TA loan; Ensure overall co-ordination between the different studies and technical analysis being carried out under the programme, and with the implementing agencies (IAs) for the infrastructure sub-projects; With the PD determine prioritisation of project feasibility and other studies to be carried out and assist in the finalisation of TORs, preparation of RFPs evaluation of proposals etc; Provide specific assistance to the Director of Mass Transit in assessing the feasibility, operational approach and optimal route pattern for a network of routes for a high capacity city bus network.

246. The scope of work envisaged under this component is set out in the detailed TORs in Appendix 14, and the financial allocation to this component is $0.4 million.

1.2 Assistance to EDO Masterplan (A2)

247. The implementing agency for the TA Loan will be the Enterprise and Investment Promotion Department (E&IP) of the City District Government of Karachi. This department will need assistance in the overall management of TA Loan activities – such as detailing of Terms of Reference, preparation of RFPs, evaluation of proposals and management of TA contracts. In addition, there is need for specific small technical assistance activities to support the CDGK in carrying out planning and development tasks already funded through ADP or Tameer-e-Karachi activities, or proposed for funding under committed CDGK, Provincial or Federal Government funding.

248. Provide specific assistance to the EDO Master Plan in monitoring, review and quality assurance for the two pieces of work being undertaken by the Department for the city – (i) the preparation of a GIS and MMIS, and (ii) the preparation of the Karachi City Master Plan. The requirement would be for a technical advisor to work alongside EDO E&IP and provide assistance in managing the Loan TA, preparing detailed TOR, evaluating bids and awarding contracts, and for resources to support a number of specific small technical assistance requirements.

249. The scope of work envisaged under this component is set out in the detailed TORs in Appendix 14, and the financial allocation to this component is $0.61 million.

1.3 Development of a City Development Strategy for Karachi (A3)

250. A CDS will be carried out for Karachi which will provide an action plan for equitable growth in the city to improve the quality of life for all citizens. This will be developed and sustained through public participation. The goals include a collective city vision and action plan to improve governance and management, increasing investments to expand employment and services and systematic and sustained programs to reduce poverty. The city will be expected to drive the process and local ownership is essential. The CDS will focus on the process of change, highlighting economic dynamics and opportunities and adopting a flexible strategy to respond to economic realities within the existing competitive environment. The CDS will help to build stakeholder capacity to manage the Megacity more efficiently and to encourage and attract businesses in national and global markets. It will do this by encouraging stakeholder participation and empowerment. The CDS will focus on the city as the unit of analysis, and will help the city to make the most of its strengths and opportunities, determine its future in relation to its vision, and improve its competitive position.

251. The primary objective of the Study will be to assist the City District of Karachi in strengthening its development strategies and plans, with specific emphasis on strengthening the linkage between economic development policy and physical and infrastructure planning, the financial viability of investment plans, and facilitating a participatory process. The Study has also an objective of capacity building in strategic planning through a learning-by-doing process and broader dissemination of know-how to participating stakeholders. The CDS is a process devised and owned by local stakeholders to formulate a holistic vision for their city. It involves analysis of the city’s prospects for economic and social development and redress of poverty, identification of priorities for investment and development assistance and implementation of this vision through partnership based actions. It is therefore both a process and a product to enhance the competitiveness, livability, management, and bankability of the city.

252. The scope of work envisaged under this component is set out in the detailed TORs in **Appendix 14**, and the financial allocation to this component is $0.82 million.

1.4 Survey of Users of Urban Services Incorporating Ability and Willingness to Pay (A4)

253. CDGK has not yet developed a formal approach to citizen communication and feedback. It has been reactive, rather than proactive. There is a need to initiate a wider dialogue with the citizens as a mutual trust-building process, and to improve understanding of the citizen and municipal government role in improving the civic services and the city. At the same time this would provide an opportunity to elicit users ability to pay for various urban services such as water supply, sewerage and solid waste provide by CDGK and TMAs.

254. As part of CDGK organisational review and development it is necessary for the local government to obtain input from the public as part of this process. Devolution of services to CDGK and to TMAs was undertaken as part of the SLGO in 2001. As part of the review CDGK is now seeking the views of users of urban services.

255. Conduct a socioeconomic survey of a representative sample of population in each selected town to identify issues such as needs and preferences, behavioral patterns, income

levels. expenditure patterns, environmental health conditions, affordability , and willingness to pay. These surveys should be complemented with data from key informant interviews, and a review of existing reports and studies.

256. The scope of work envisaged under this component is set out in the detailed TORs in Appendix 14, and the financial allocation to this component is $0.21 million.

1.5 Other Short Term Advisors (A5)

257. As CDGK has limited technical ability to supervise and manage ongoing and planned development assistance, provision is made within the TA loan to provide short term advisory services to CDGK EDOs as required over the period of the project, where requirements for such assistance arise to prepare feasibility study TOR etc for further megacity projects

258. The objective is to provide a pool of resources for other specific small short-term advisory assistance which can be utilised by the CDGK for specific technical assistance to CDDG departments. The services would be in the form of a short term advisors to the CDGK EDOs who would assist by providing technical input into evaluating future requirements and preparing TOR, evaluating bids and negotiating contracts for possible future megacity projects.

259. The financial allocation to this component is $0.50 million. The type of technical expertise and the amount will be drawn up by E&IP following requests from CDGK Departments for advisory technical assistance.

2. Part B: Institutional and Policy Reform

260. Part B is divided into the areas outlined below. These represent the Organisational study (OS) of Karachi and a number of support studies. In additional capacity building programmes will be identified by the OS and these will be funded by funds provided under Part B9 with $1.50 million earmarked for this purpose. In addition a key ingredient in the institutional strengthening of CDGK and the TMAs is the provision of an MIS system and upgrading accounting systems. An amount, $2.5 million is provided for this. The exact amount required will be determined in the OS and based on Requests for Proposals and subsequent tenders by suppliers. Part B2 provides funding for immediate capacity building initiatives for CDGK. This is set out in more detail in Annex 1 of **Appendix 12,** with an amount of $0.39 million provided for this purpose.

Part B	**Institutional and Policy Reform**
1	Organizational Development Study (OS)
2	Immediate Capacity Building
3	CCBs Vitalization
4	Katchi Abadi Regularization and Pilot Projects
5	Implementation of Accounting and MIS
6	Water, Wastewater, Solid Waste Tariff Studies
7	Community Awareness
8	Twinning Program Spain
9	Downstream Capacity Building Initiatives to come out of OS

2.1 Organizational Development Strategy for the City District Government of Karachi (B1)

261. The need for a wider capacity building in CDGK is identified as a central reform, which is believed critical for institutional strengthening of the CDGK and the towns for ensuring that municipal services can be delivered and that the financial base is available to achieve this. The objective of the programme is to improve the governance practices and service delivery mechanism of the CDGK ultimately leading to sustainable and equitable provision of urban services in the city, especially to the poor. To assist CDGK interventions are proposed under the following broad heads: SLGO Devolution, Governance, and Organisational Development; Human Resource Development and Training; Resource Mobilisation and Improved Financial Management.

262. The initial step of the capacity building program is to carry out an Organizational Study (OS) by undertaking in-depth review of the present institution and identify: institutional bottlenecks; recommendations for inter agency coordination; strengthening of CDGK's organizational structure and enhancing its internal efficiency in human resource management with the overall objective of facilitating evolution of CDGK into an efficient, effective, citizen responsive, financially sustainable and transparent organisation, delivering quality service to its citizens. In order to achieve this vision, CDGK will need to undertake a number of institutional reforms including fiscal and financial management, service delivery etc. This assignment is planned to begin with an organizational review (OS) focussing on structural and functional issues in order to identify the appropriate organisation and structure of CDGK to carry out its functions and then to design a capacity building program so that it can better perform these functions.

263. The objective of the organisational development and capacity building programme is to:

- Review CDGK and Town responsibilities for strategic planning, development and service provision under the SLGO 2001, determine the effectiveness of current arrangements and recommend amendments as appropriate.
- Undertake an organisational review of CDGK and TMA structures and processes focussing on issues of decentralisation, accountability, transparency and responsiveness in operations in light of their responsibilities under SLGO.
- Assess the current human resource needs and capacity of CDGK and TMAs and suggest improvements in effectiveness, deployment and training of its personnel, Provide frameworks for human resource development in CDGK and greater public participation and pro-poor orientation at the organisational level
- Assess opportunities for grater revenue generation from taxes and user charges as per the Schedule Two SLGO 2001.
- Provide CDGK and TMAs with the necessary accounting and management information systems to efficiently manage its activities.

264. The scope of work envisaged under this component is set out in the detailed TORs in **Appendix 14**, and the financial allocation to this component is $2.36 million.

2.2 Immediate capacity Building Assistance (B2)

265. The CDGK lacks skills in a number of key areas. A number of areas where immediate capacity building could commence in order to strengthen the functioning of CDGK and the towns has been identified. This would also demonstrate that tangible assistance in development is being provided at the outset rather than be delayed while further studies are carried out.

266. This component is designed to provide immediate capacity building assistance. The areas are set out in Annex 1 Appendix 14 below and focus on (1) Developing concept of customer focus in CDGK service delivery, (2) Understanding business sector service requirements (3) Understanding need for commercialization of services such as water supply, sanitation, and solid waste and charging of services (4) Developed understanding of participatory planning of infrastructure requirements at town and UC levels (5) Development of annual investment and operational plans (6) Works procurement procedures (7) Developed understanding of need for proper maintenance procedures, and (8) Develop an understanding of need for greater community participation.

267. The scope of work envisaged under this component is set out in Annex 1 of **Appendix 11**, and the financial allocation to this component is $0.40 million.

2.3 Program for Strengthening Role of CCBs in the Development Process (B3)

268. It is now widely acknowledged that development without community participation is not effective. Community participation ensures decision making geared to meet local needs, it gives local people ownership in local development and ensures accountability; reduces corruption and delivers results that improve the lives of local people. The SLGO-2001 stipulates that 25 per cent of local development funds be reserved for Citizen Community Boards (CCBs). If this money is not utilized within a financial year it is passed to the next year. This demonstrates the importance of CCBs within the local government system, and is also the cause of millions of Rupees of unspent development funds accumulated in the CDGK budget.

269. Under the SLGO-2001, in every local area, groups of non-elected citizens may, through voluntary, proactive and self-help initiatives, set up a CCB. The objective of this component is to facilitate the process of setting up of CCBs to energize the community for ; up-gradation of Katchi Abadi as with planned areas; development and improvement in service delivery; development and improvement in, or in the management of, new or existing public facilities; identification of development and municipal needs; mobilization of stakeholders for community involvement in the improvement and maintenance of facilities; and reinforcing the capacity of the special monitoring committees at the behest of concerned local councils.

270. The scope of work envisaged under this component is set out in the detailed TORs in Appendix 14, and the financial allocation to this component is $0.25 million.

2.4 Support to Acceleration of Regulations of Katchi Abadis (B4)

271. Of the total 1000 plus Katchi Abadis only 539 were listed in 1986. Over the last 20 years, only 284 out of 539 listed Katchi Abadis were notified (2.5% per year) for regularization and around 45 per cent of dwelling units in the notified Katchi Abadis granted lease rights. The rate of increase in size and number of Katchi Abadis, on the other hand, is 10 per cent per year. To develop the metropolis as a city without slums (CWS) the slow pace of development in notification, regularization and up-gradation warrant implementation of an accelerated program in this respect.

272. The Provincial Government and City Government need to take immediate action to review their current policy and take the following steps to move towards developing Karachi into a CWS. The first step in this direction is, under the leadership of City Nazim (Mayor) to

constitute a Technical Task Force (TTF) to lead the preparation and implementation of CWS program.

273. The scope of work envisaged under this component is set out in the detailed TORs in Appendix 14, and the financial allocation to this component is $0.72 million.

2.5 Implementation of Accounting and MIS (B5)

274. It is proposed under the Organizational Study, OS, that user requirements will be identified, Request for Proposals, RFP, advertised and tenders submitted, evaluated and contract signed with the successful tendered for the provision of accounting and MIS software and hardware, installation, testing, handover, training and ongoing support.

275. The objective is to provide CDGK and TMAs with a world class accounting and MIS system that will meet their needs for financial and other information required in the proper planning and day to day functioning and interface with the city district service users.

276. The scope of work envisaged under this component will be determined as part of the OS described above. An amount of $2.50 million is provided to cover the implementation.

2.6 Water, Wastewater, and Solid Waste Tariff Studies (B6)

277. KWSBs financial performance has always been weak. Tariffs are low and service levels are poor. Towns and Katchi Abadis are provided water on a rotating basis with households receiving up to 2 to 6 hours per day at best, but often only 2 to 3 times per week. Some customers claim that they have never received water through their piped connection and rely on tanker deliveries. The majority of KWSB's customers are not metered and are charged on the basis of the size of the plot/covered area of the flat.

278. Tariffs remain unchanged since 1998 while general level of prices and KWSB expenses have increased around 40% over that time. Bulk customers are metered but only 28% of meters are functional with the remainder based on past usage. While "bulk" or metered customers account for less than 1% of customer numbers they account for 65% of overall revenues, and account for 17% - 20% of water volume sold. The metered customers are charged Rs 44 per 1,000 gallons, and non-domestic are charged Rs 73 per 1,000 gallons. Around 60% of domestic households pay Rs 34 per month or less.

279. The tariff studies will be carried out in conjunction with the JICA Physical Master planning study. In assessing future tariffs the Consultants will take into account future investment requirements and their possible funding sources.

280. The objective is to develop tariff policies and objectives for tariffs for urban environmental services for Karachi, and structures that ensure access to the poor of urban services to meet their basic needs, but at the same time meet agreed financial objectives and lead to adequate funds being made available for ongoing O&M, debt service, and contributing to future capital expenditure.

281. The scope of work envisaged under this component is set out in the detailed TORs in Appendix 14, and the financial allocation to this component is $0.53 million.

2.7 Community Education and Awareness Program (B7)

282. There is limited understanding of the need for users to finance urban services where households are provided with a service. The purpose of the public awareness campaign is to raise awareness of the need for users to pay fees for services they receive to ensure long term sustainability. The awareness camping would also address a number of other issues associated with water supply and sanitation in order to educate the community.

283. Consultants will assist CDGK, TMAs and KWSB in preparing and implementing a program that will raise public awareness of : general water wastewater and solid waste systems scope; urban water supply and sewerage systems maintenance requirements; need for user charges to support sustainable services; water conservation, solid waste management practices; problems arising from disposal of rubbish/solid waste into Nullahs; hygiene education, health and environmental effects of pollution; and consumer responsibilities in water, wastewater and solid waste management.

284. The scope of work envisaged under this component is set out in the detailed TORs in **Appendix 14** with the financial allocation to this component is $0.27 million.

2.8 Twinning Arrangement with Madrid (B8)

285. A twinning arrangement provides an opportunity for cross fertilization of ideas and on the job capacity building through exchanges, formal and informal training etc. The city of Madrid has been involved in some preliminary activities in formulation of the megacity project and has an extensive track record of collaboration with other cities, particularly those in South America, in twinning arrangements.

286. The objective of the twinning arrangement would be to build capacity of the city and town administrations through the exposure of both the elected body and the executive to examples of good practice which have application in Karachi. In particular the City of Madrid has expressed an interest in engaging with Karachi City in the areas of: (i) sustainable economic development and management, and (ii) tourism development.

287. The actual twinning arrangement and scope of assistance provided would be determined in conjunction with the sister city. It is assumed that the value of such an arrangement may be $2.25 million over four years.

2.9 Downstream Capacity Building (B9)

288. To allow the proper functioning of the CDGK and TMAs it is envisaged that further training and support will be required.

289. The OS study’s objective is to develop a proper functioning institution to meet the City Of Karcahi’s needs. Out of the OS study will arise a number of training and institutional development requirements necessary to meet this target.

290. An amount of $1.50 million has been provided in the project to provide for capacity building. The details and scope of support envisaged will be determined by the OS.

3. Part C: Feasibility Studies for Priority Projects

291. The poor standard of project planning, identification and preparation is responsible for (i) disjointed, inequitable and inefficient infrastructure and service provision, (ii) failure of projects to

achieve their anticipated benefits, (iii) poor project sustainability, and (iv) a lack of interest by the private sector in investing in public infrastructure and service provision. The identification and preparation of quality projects supported by sound feasibility studies is a *sine qua non* of attracting private sector finance to the urban infrastructure sector in Karachi. The project will provide funds for the preparation of feasibility studies for projects which are identified as bankable and considered to justify investment under the Megacity project – either by government or the private sector.

292. The Priority feasibility studies to be undertaken under Part C are summarised below. In addition a sum of money ($2.00 million) is provided to carry out further feasibility studies during the course of the TA Loan as requirements are identified.

293. Also a Water and Wastewater Physical Masterplan undertaken by JICA at an estimated cost of $5.0 million is not described here as this project is planned to commence in late 2005 and would not therefore be funded under this proposed Megacity TA Loan Project. However, the JICA project is described in Appendix 11.

Part C	**Feasibility Studies for Projects**
1	Water Loss Reduction
2	Korangi Wastewater Project
3	Storm Water Drainage and Sewerage Study and Masterplanning
4	Solid Waste Transfer Stations and Landfill Sites
5	Malir Bund Road Expressway Study
6	Mass Transit/Public Transport Advisory Assistance
7	Future/Further Feasibility Studies (to be Identified)

3.1 Water Loss Reduction and System Strengthening (C1)

294. The provision of water supply is a major service responsibility of the City District Government of Karachi. Unaccounted-for-water (UFW) through leakages, wastage and illegal connections is creating a major strain on the provision of potable water to paying customers in the city. Many areas receive insufficient water supply and some receive none at all. It is estimated that between 35 and 50% of water delivered to the water supply network is lost through leakage, wastage and pilferage.

295. In 1999 a study was prepared which set out: (i) a strategy and action plan for the reduction of water losses in the system; and (ii) plans and programmes for strengthening of the system. Since this study, there have been changes in the water supply situation and network, and there are now under implementation investments which will increase by 100 Mgd the water being supplied to the network. This will have further implications on the nature, extent and magnitude of losses. The city now wishes to update the study to reduce UfW and improve overall water supplies, and to review update and finalize the system strengthening package in light of events since the 1999 study and the impact of the current K-III project under implementation.

296. The objective of the current study[44] is to verify and update the basic information used in the previous study and the water loss reduction strategy, water loss reduction programme, system strengthening works, costs and technical social and environmental feasibility of the project. The purpose of the project is to reduce UFW in the existing system.

297. The scope of work envisaged under this component is set out in the detailed TORs in **Appendix 14** with the financial allocation to this component is $0.18 million.

3.2 Korangi Wastewater Management and Sewage Treatment Plant (C2)

298. In 1997, the ADB together with the GoP and KWSB agreed on a project for the provision of a sewerage network and sewage treatment plant for the mixed domestic and industrial areas of Korangi and Landhi. The objectives of this project included: (i) improving the urban environment and public health in Korangi and Landhi; (ii) upgrading the quality of the aquatic and marine environment in Malir River and Girzi Creek; (iii) replace the irrigation of crops using raw wastewater with irrigation from treated wastewater and (iv) facilitate private sector participation on KWSPs sewerage operations.

299. The project did not come to fruition for reasons of: (i) objections by the NGO sector to the concept – caused by poor public consultation; and (ii) the poor financial performance of KWSB and reluctance of GoS to take on the loan.

300. The objective of the study would be to review the feasibility study and design of the wastewater collection and sewage treatment project for Korangi and Landhi – the Korangi Wastewater Management Project - Pak 26464. This project was the highest priority investment based on the 1990-2000 sewerage masterplan. The study would review the prioritization assumptions made in this Masterplan, and the proposals subsequently made under the Korangi with a view to verifying the assumptions made and conclusions reached. The study would provide a revalidated feasibility study for the project in the light of changes made since 1997, and provide updated analysis, plans, costs and project packaging information.

301. The scope of work envisaged under this component is set out in the detailed TORs in Appendix 14 with the financial allocation to this component is $0.21 million.

3.3 Sewerage and Drainage Network Rationalization and System Strengthening (C3)

302. The collection and disposal of both wastewater and stormwater is a major service responsibility of the City District Government of Karachi. From July 17th 2005, responsibility for both wastewater and stormwater collection, and for the treatment and disposal of wastewater from the city is the responsibility of KWSB. System problems are considerable. Due to poor interconnectivity between elements of the sewerage system, much of the wastewater generated in the city is discharged to the stormwater drainage system (drains and nullahs), which serves as a network of open sewers, while the STPs function at below their design capacity. Large quantities of heavily contaminated wastewater from both domestic and a variety of industrial sources are thus discharged directly to the rivers, harbour, mangroves or sea untreated.

303. While the new sewerage masterplan is under preparation (late 2005 to late 2007) there remains a need to optimise the utility of the existing sewerage network – and to provide

[44] Mott MacDonald Ltd

strategic missing links to the system – in order to ensure that full treatment capacities of existing STPs achieved. As such, there is an urgent need for KWSB to make a rapid appraisal of the approaches in wastewater and stormwater disposal and to explore innovative ways to enable more of the wastewater currently being discharged to the stormwater system to find its way to the underutilised STPs.

304. In addition, there is a need to prepare a drainage masterplan for the city and determine drain size requirements for the key elements of the system.

305. The objective of the study are to carry out a rapid assessment of the existing condition of the sewerage and stormwater drainage systems in Karachi, prepare an immediate action plan, prepare a programme of high priority system strengthening; prepare preliminary designs and full feasibility assessments and costings for immediate program; develop operation and maintenance procedures; in collaboration with those carrying out the city masterplan, prepare a drainage master plan for Karachi;

306. The scope of work envisaged under this component is set out in the detailed TORs in **Appendix 14** with the financial allocation to this component is $0.36 million.

3.4 Solid Waste Transfer Stations and Landfill Sites for Karachi (C4)

307. Solid Waste Management within the City District is the combined responsibility of CDGK, the Town councils (18) and Union Councils (178). In addition, the Cantonment Boards (6), Karachi Port Trust and Pakistan Steel Mills carry out their own waste collection and transfer. Currently the Town Councils are responsible for the collection of waste from roadside dumps and its transfer to the site of disposal. This is carried out by a combination of municipal-owned vehicle fleets and privatised collection services. The CDGK is responsible for the maintenance and operation of the two "official" open disposal sites at Jam Chakro (500 acres) and Gond Pass (500 Acres) – each 35 km from the city centre. The Provincial Government – through the Department of Local Government and the Environmental Protection Department, is responsible for monitoring and oversight of the Solid Waste Management System.

308. The negative impact on quality of life, urban environment and public health of the failure of the city to adequately address the problem of solid waste management are severe. Quite apart from the unsightliness and nuisance of piles of rotting garbage throughout the city, the uncollected waste is responsible for blocking drainage and sewerage systems, causing ponding of stagnant and focally contaminated wastewater and presenting a danger from water-borne (through ingress to water supply lines) and other water related (insect-borne and water-washed) diseases. During rain, (i) flooding occurs as a result of blocked drainage channels and (ii) thousands of tons of waste are washed into coastal waters causing severe pollution of the marine environment. Finally, solid waste disposed of into the sewerage system is responsible for blockage and damage to screens, pump stations and wastewater treatment facilities causing millions of Rupees worth of damage.

309. The City District Government, together with the town councils and the Government of Sindh, has taken action to begin to address these issues. The objective of the feasibility studies is to address the issue of solid waste collection, transfer and disposal for CDGK and TMAs.

310. The scope of work envisaged under this component is set out in the detailed TORs in **Appendix 14** with the financial allocation to this component is $0.34 million.

3.5 Expressway along Right Bank of Malir River (C5)

311. The road network of Karachi is becoming increasingly overloaded as the growth in traffic and limited availability of public transport forces the introduction of more and more private vehicles onto the road network. While the strategic emphasis is placed on the development of appropriate mass transit systems, in most cases these will take time (5 to 10 years) to become operational. In the meantime there is a continuing need to make well justified investments in the road network.

312. The proposed road would commence at the end of the existing expressway to the south east near Quaidabad, and terminate at Balouch Colony. The proposed expressway would; Provide additional capacity close to and parallel with the overloaded Shara-e-Faisal; Reduce travel distances between the city and areas of the city to the south east; Provide an alternative route out of the port and industrial area bypassing the busy Shara-e-Faisal road; Provide reduced travel distances and time for traffic from Shah Faisal, Clifton and Defense Colony to the National Highway to Pakistan Steel Port Qazim and The Export Processing Zone.

313. The objective of the study would be to prepare a feasibility study (FS) for the proposed expressway. This would provide a justification for the project in terms of its technical financial, environmental and social sustainability. The FS would be prepared in accordance with GoP and ADB standard procedures and guidelines and would specifically include an analysis of the potential for private sector involvement in the expressway on a BOT or BOOT basis.

314. The scope of work envisaged under this component is set out in the detailed TORs in **Appendix 14** with the financial allocation to this component is $0.24 million.

3.6 Advisory Services to the Mass Transit Cell on Optimal System of Mass Public Transport (C6)

315. The condition of public transport systems in Karachi is deplorable and is continuing to deteriorate as new investment in public transport fails to keep pace with increasing demand. Currently in Karachi 40 persons compete for each bus seat compared to 12 in Mumbai and 8 in Hong Kong. Recent public-private initiatives to increase the bus fleet added 300 buses in 2004 and 2005, but this is way below the requirement.

316. As part of the future public transport strategy, the Federal Government has committed to support the introduction of clean and environmentally friendly public transport buses for large cities and as a start has allocated an amount of Rs. 500 million in the Federal PSDP for 2005-06 to contribute towards the defraying of interest payments for the purchase of CNG buses in Karachi. It is envisaged that 8,000 CNG buses would be introduced in Karachi over the next five years, gradually replacing the existing dilapidated private bus fleet. The private sector would be invited to procure buses through loans by commercial banks and would pay back the principal over 3 to 4 year period, with the Federal Government paying the interest. A total amount of 5 billion is earmarked for this scheme.

317. This programme would provide an urban public transport system which is fast, frequent, reliable, comfortable, safe, and affordable to the general public. It should afford the operators the opportunity to make money and a reasonable return on their investment while reducing the environmental problems currently caused by the ageing bus fleet.

318. The objective are (i) a critical review of the 1991 Mass Transit Network proposal and development of a strategy and action plan to fund and implement the priority elements of this network, (ii) a feasibility study to determine the optimum arrangements for operation of a rapid bus transport system, and (iii) development of a strategy for implementation of both the mass transit network and rapid bus transport network under a private public partnership modality. The consultants would be responsible for delivery of a strategy and action plan for both elements of the proposed network and would work under the overall guidance of the Karachi Mass Transit cell of CDGK and in close collaboration with the GoS on regulatory matters.

319. The scope of work envisaged under this component is set out in the detailed TORs in Appendix 14 with the financial allocation to this component is $0.96 million.

4. Part D: Development of Financial Intermediary

320. Under Part D a feasibility study is to be undertaken to identify the most appropriate structure for a Financial Intermediary (FI) and then to provide setup capital for the initial operation of the FI.

Part D	**Financial Intermediary**
1	Feasibility study for establishment of FI
2	Operationalisation Funding of FI

4.1 Feasibility Study to Develop Specialized Financial Institution (D1)

321. It is proposed that a full feasibility and design study be conducted of the financial feasibility, market acceptance, preferred option, and proposed design of a specialized financial intermediary for infrastructure and other urban financing to cover Karachi and perhaps other cities and towns in Sindh province (depending on the FI design and its geographic scope).

322. The objectives are to develop alternative options for the FI and select the FI option that best meets the needs of Karachi and the overall Project, and describe in detail the design features and strengths that resulted in that decision, and how the weaknesses identified for that option are to be addressed and remedied.

323. Prepare and finalize the business case (rationale, concept, approach, major benefits and beneficiaries), business plan and long-term strategy for the specialized FI for urban infrastructure. The business case and plan would outline the vision, mission, purpose and overall rationale for the specialized FI, its ownership, legal and taxation status, and managerial structure.

324. Prepare the human resource development and capacity building strategy for the specialized FI, including the professional, technical and support skills needed by the FI, its recruitment policies and strategies, in-house and institutional training and other HRD measures.

325. Prepare a detailed Operations Manual for FI management and staff – as well as for its shareholders, directors etc. – designed to guide the practices and procedures of the specialized FI during its initial period of one or two years.

326. The scope of work envisaged under this component is set out in the detailed TORs in Transfer Stations and Landfill Sites, with the financial allocation to this component is $0.49 million.

4.2 Provision of Initial Financing for Specialized FI (D2)

327. This component provides initial financing of $350,000 for working capital purposes to set up the proposed FI.

Table 15: Project Summary

Part	Sector		Project	Funding Mechanism	Implementing Institution
A	**Project Management Support**	A1	Overall project management assistance to Project Director	TA Loan/Bilateral Grant	CDGK (E&IP)
	Support on Masterplan	A2	Specific technical assistance to EDO Masterplan on GIS and Masterplan preparation	TA Loan/Bilateral Grant	CDGK (Masterplan office)
		A3	Preparation of City Development Strategy for Karachi	CA/TA Loan/Bilateral Grant	CDGK (E&IP)
	Willingness to pay	A4	Willingness and ability to pay surveys	TA Loan/Bilateral Grant	CDGK (F&P)
	Other management support	A5	Assistance facility to other EDOs as required	TA Loan/Bilateral Grant	CDGK (E&IP)
B	**Institutional and Policy Reform**	B1	Institutional Review and Change Management Plan for CDGK and other city development institutions	TA Loan/Bilateral Grant	CDGK (E&IP)
	Capacity Building	B2	Capacity Building Programme for legislature, executive, officials and staff of: • CDGK • Development Authorities • Town Local Governments • Union Local Governments	TA Loan/Bilateral Grant	CDGK Government of Sindh Training Institutions Advisors
	CCB Vitalization	B3	Vitalization of the Citizens Community Boards in Karachi and development of CCB Programs	TA Loan/Bilateral Grant	CDGK (CD)
	Support on Masterplan	B4	Ramping up the Katchi Abadi Regularization and Upgrading program	TA Loan/Bilateral Grant	CDGK (F&P)
		B5	Implementation of Accounting & MIS	TA Loan/Bilateral Grant	CDGK
	Tariff Studies	B6	Water, Wastewater and Solid Waste tariff studies	TA Loan/Bilateral Grant	CDGK (F&P)
		B7	Community Awareness Program	TA Loan/Bilateral Grant	CDGK
	Twinning Arrangement	B8	Twinning arrangement with Madrid or other major industrial city (port city preferred)	Bilateral Grant	CDGK
		B9	Downstream Capacity Building	TA Loan/Bilateral Grant	CDGK

Part	Sector		Project	Funding Mechanism	Implementing Institution
C	**Feasibility Studies**	C0	Feasibility Studies for projects with potential for funding through PPP and under the Karachi Megacity Project	TA Loan	CDGK/Town councils
		C1	Unaccounted for water and system strengthening	TA Loan	CDGK (KWSB)
		C2	Korangi Wastewater Management	TA Loan	CDGK (KWSB)
		C3	Stormwater Drainage and Sewerage	TA Loan	CDGK (KWSB)
		C4	GTS and Landfill Sites	TA Loan	CDGK (W&S)
		C5	Malir Bund Road	TA Loan	CDGK (W&S)
		C6	Mass Transport System	TA Loan	CDGK (KWSB)
		C7	Ongoing FS of Megacity Projects	TA Loan	CDGK (W&S)
D	**Financial Intermediary**	D1	Feasibility study on the establishment of a Financial Intermediary	TA Loan	GoS
		D2	Operationalisation of the Financial Intermediary	TA Loan	GoS/Private Banks

D. Cost Estimates

328. **Table 16** sets out assumptions adopted for the detailed costs estimates. The assumptions for International and Domestic Inflation were provided by the Bank and provide the basis for calculating price contingencies. Physical contingencies are assumed at 10% of base costs, with the price contingency averaging 4.1% overall. Taxes and duties are assumed at an average of 5% of local costs, where GST is levied at 15% on local purchases and local consultancy are taxed at 3%. The average level of taxes to total Base Costs is 0.6%.

Table 16: Inflation Rate and Contingency Assumptions

ASSUMPTIONS Year Ended 30 June	2006	2007	2008	2009	2010	2011
Foreign Inflation Rate	2.8%	1.8%	1.8%	1.8%	1.8%	1.8%
Local Inflation Rate	6.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Exchange Rate	63.55	65.53	67.59	69.71	71.90	74.16
Physical Contingencies:	Foreign	10.0%				
	Local	10.0%				
Taxes and duties (% Total Base Costs)		1.0%				

329. Base Costs in US$ are set out in **Table 17**. After applying the above inflation factors and assuming the Rs/US$ exchange rate declines in the future by the differential between foreign and local inflation, total project costs are $ 20.5 million equivalent, including interest during implementation. The foreign exchange cost is estimated at $14.8 million while local currency costs are estimated at $5.7 million. The total cost includes interest during implementation of $0.30 million[45]. The cost estimates are inclusive of taxes and duties to be financed by the Government. The amounts associated with taxes and duties are minor and only relate to the equipment purchases and expenses in undertaking the initial projects comprising mainly consultancy costs.

E. Financing Plan

330. An indicative financing plan is set out in **Table 18**. It is assumed that the Bank could provide a loan of $10.0 million from ADF or equivalent sources. Other foreign costs are assumed to be covered by grants. At the present time this includes grants for developing the City District Strategy and proposed Twinning Project with Madrid, Spain estimated at $3,150 in total. This would leave a further $1.7 million of foreign costs to be financed by grant through bilateral donors. If further grants for parts of the capacity building program can be identified then the amount financed by the Bank under the TA loan could fall and /or the amount financed by the Government could be reduced. In particular Parts A and B could be attractive to bilateral agencies leaving the Bank and the Government to finance the feasibility studies and provide the initial start up capital for the Financial Intermediary (i.e. Parts C and D.). The **Table 18** shows the Government will finance the local costs of $5.7 million (about 28%), which will cover local currency counterpart financing. The Government may also need to pick up the balance of the foreign costs not met by the Bank and Bilateral donors. This amount is presently identified as $1.7 million.

[45] Assuming ADF loan with a service charge of 1.0% per annum over the implementation period and 1.5% thereafter. Repayment over 32 years, including a grace period of 8 years.

Table 17: Megacity Development Support Project - Project Costs

	Rs '000			$ '000		
I. Project Costs	Foreign	Local	Total	Foreign	Local	Total
A (1) Project Management Advisor	20,982	4,800	25,782	320	73	393
A (2) Assistance to EDO Master plan	27,878	10,980	38,858	427	168	595
A (3) CDS for Karachi	36,829	14,724	51,553	573	229	802
A (4) User and WTP for Services	6,514	6,150	12,664	103	97	199
A (5)Ongoing Support to CDGK	26,553	6,000	32,553	400	90	490
A. Project Management Support	118,756	42,654	161,410	1,822	658	2,480
B (1) Organizational Development Study	107,645	42,534	150,179	1,654	654	2,308
B (2) Immediate Capacity Building	17,842	7,110	24,952	277	110	387
B (3) CCBs Vitalization	8,103	7,650	15,753	128	120	248
B (4) Katchi Abadi Regularization	20,169	27,540	47,709	306	418	724
B (5) Implementation of MIS	117,222	45,000	162,222	1,750	672	2,422
B (6) Tariff Studies Water etc	25,497	9,810	35,307	382	147	528
B (7) Awareness Program	13,011	4,950	17,961	193	73	266
B (8) Twinning Arrangements	120,236	27,000	147,236	1,800	405	2,205
B (9) Downstream Cap. Bldg.	70,991	27,000	97,991	1,050	400	1,450
B. Institutional and Policy Reform	500,715	198,594	699,309	7,538	2,999	10,537
C (1) UFW and System Strengthening	8,230	3,330	11,560	130	52	182
C (2) Korangi Wastewater Management	9,342	3,780	13,122	147	59	206
C (3) Stormwater Drains & Sewerage	15,792	6,390	22,182	249	101	349
C (4) Solid Waste Transfer Stations, Landfill Sites	13,790	6,390	20,180	217	88	305
C (5) Malir Bund Road	10,587	4,284	14,871	167	67	234
C (6) Mass Transport Systems	43,391	17,190	60,581	669	265	933
C (7) Ongoing FS of Megacity Projects	94,507	36,000	130,507	1,400	234	1,634
C. FS for Priority Projects	195,640	77,364	273,004	2,977	867	3,844
D (1) FS to Establish FI	21,842	8,838	30,680	344	139	483
D (2) Initial Funding FI	22,936	0	22,936	350	0	350
D. Financial Intermediary	44,778	8,838	53,616	694	139	833
Subtotal	**859,888**	**327,450**	**1,187,338**	**13,031**	**4,662**	**17,693**
Taxes and Duties	0	9,180	9,180	0	141	141
Total Base Cost	**859,888**	**336,630**	**1,196,519**	**13,031**	**4,803**	**17,834**
II. Contingencies						
Physical Contingency	72,060	29,098	101,159	1,060	443	1,503
Price Contingency	31,366	28,669	60,035	455	429	884
Contingencies	**103,426**	**57,767**	**161,194**	**1,515**	**872**	**2,388**
III. Financing Charges						
Interest During Construction	18,356	0	18,356	289	0	289
Commitment Charges	0	0	0	0	0	0
Front End Fee	0	0	0	0	0	0
Total Financing Charges	**18,356**	**0**	**18,356**	**289**	**0**	**289**

I. Project Costs	Rs '000 Foreign	Local	Total	$ '000 Foreign	Local	Total
Foreign Exchange Loss	77,141		77,141			
VI. Total Costs	**1,058,812**	**394,398**	**1,453,209**	**14,835**	**5,675**	**20,510**
% of total costs	73%	27%	100%	72%	28%	100%

Table 18: Megacity Development Support Project - Indicative Financing Plan ($'000)

FINANCING PLAN	Per cent			US$ '000		
	FX	LC	Total	FX	LC	Total
ADB Loan	67%	0%	49%	10,000	0	10,000
GOP - debt/equity/grant	0%	100%	28%	0	5,675	5,675
External Grants 1/	33%	0%	24%	4,835	0	4,835
Total	**100%**	**100%**	**100%**	**14,835**	**5,675**	**20,510**
% of total costs				72%	28%	100%

Notes: 1/ Represents grant sources currently identified for components, CDS and twinning, and $1.7 million of other foreign bilateral support to be identified to cover the balance of foreign costs.

F. Implementation Arrangements Project Management and Coordination

1. Component Specific Implementation Arrangements

331. The Executing agency for the TA Loan project will be the Finance Department of the Government of Sindh. The department is a powerful champion of this intervention and is led by a cadre of professional staff who can effectively provide overall strategic and policy guidance to the program while ensuring timely execution of project component.

332. The implementing agency for parts A, B, and D of the proposed TA loan and assistance project will be the City District Government of Karachi – through the Department of Enterprise and Investment Promotion (E&IP). A Project Management Unit (PMU) will be established within E&IP to provide dedicated project management and implementation support. Part C of the project will be implemented by the government agencies sponsoring the particular project, who will be the implementing agency (IA) for the project. The TORs will be finalised and consultants will be engaged in close collaboration with the PMU, with the active assistance of the consultants engaged to provide project management support, and in accordance with Government and ADB guidelines.

333. Consideration has been given to alternatives as the nodal implementing agency. However, while the E&IP department is relatively small and is less well establish than other departments of CDGK, it has the human resources and capacity to host the PMU. Other departments, such as finance and planning which could take on this role are already overstretched in complying with their existing mandates. The E&IP will be provided with significant support by the PMU and many of the TA loan components will be implemented by other departments of CDGK. The existing organizational chart for E&IP department is shown at **Figure 1**.

Project oversight for routine matters will be provided by a project working group chaired by the DCO and with each of the EDOs of potential beneficiary departments (IAs) as members. A full project steering committee will be established for policy guidance chaired by the Secretary of Finance of GoS. **Figure 2** provides an organizational chart for the project.

Figure 1. Enterprise & Investment Promotion Department

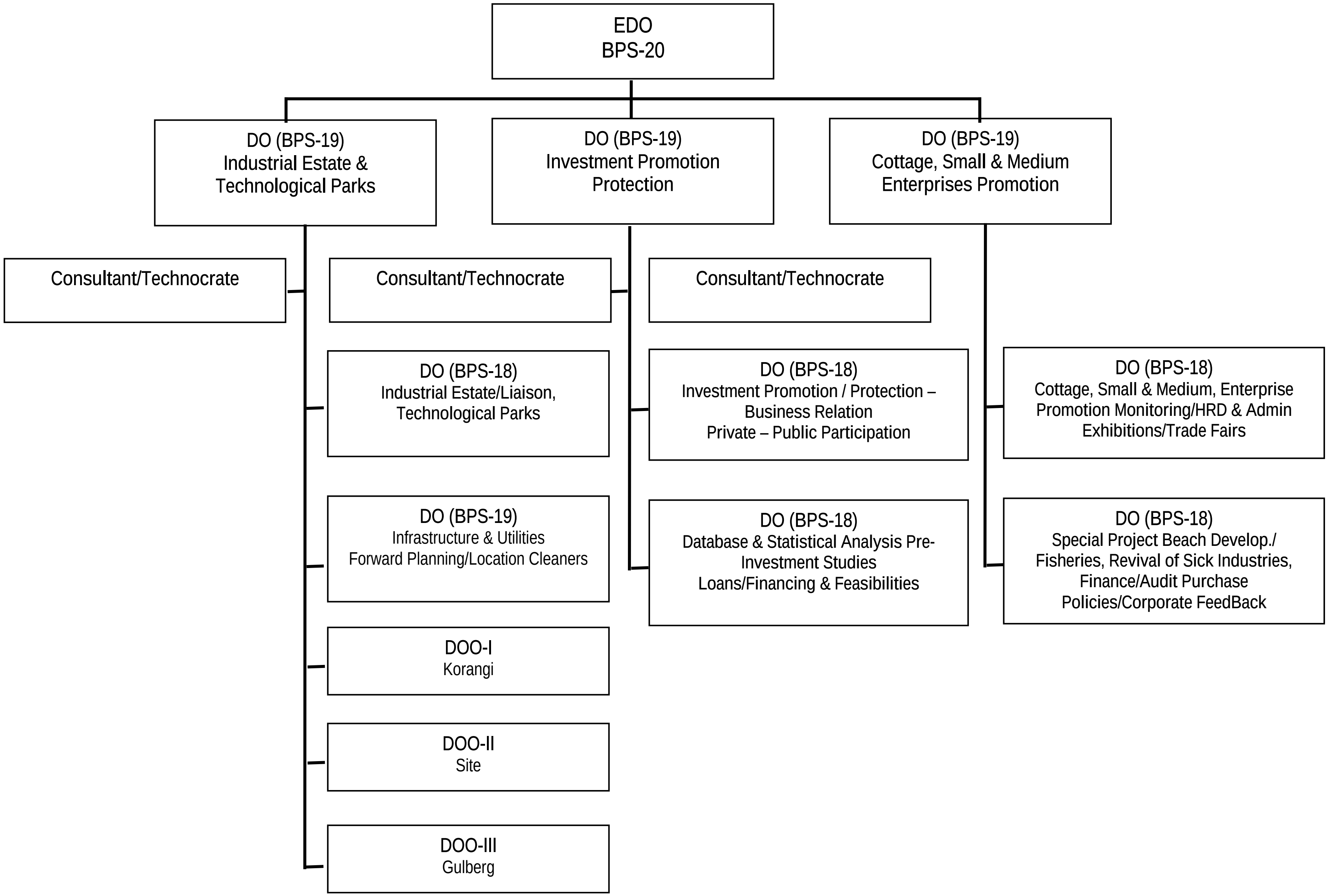
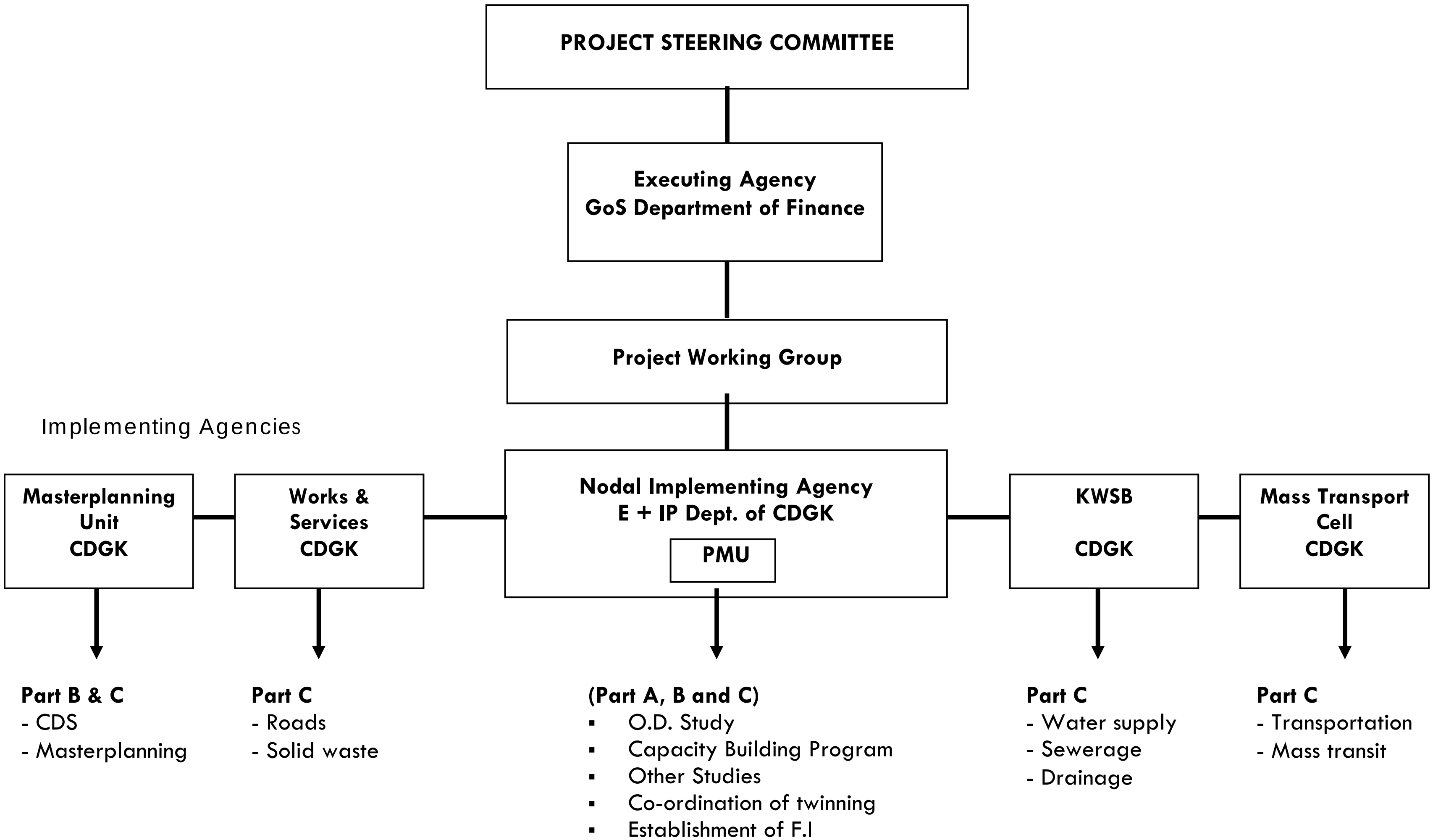


Figure 2. Project Organizational Chart



2. Subproject Selection Criteria

334. An objective of utilizing the TA loan modality is to ensure increase government ownership of its institutional capacity building and project preparatory program and activities. It is expected that through the implementation of the subprojects under the TA Project, government will develop increased capacity to address substantial project preparatory and sector development issues. In selecting subprojects, the overall implementing agency, and the PMU, will need to engage the relevant government authorities in the identification and evaluation of candidate subprojects. Following the PC's integrated approach to infrastructure development, and in line with the strategic development framework developed for the project, subproject selection by the City District Government, as appropriate within each sector, should be in accordance with this approach.

335. In the absence of a specific masterplan, structure plan or strategic development plan for the megacity, the specific criteria utilized in the selection of subprojects are (i) the subproject must have been identified and prepared – at least to project concept stage – by a city district department, (ii) it must be based on a current or recent sector strategy, master-plan or roadmap, (iii) it must be in line with ADB's objectives as stated in the current CSP/CSPU, (iii) it must be organizationally and/or technically feasible, (iv) financial and economically viable and sustainable, (v) environmentally responsible, e.g., all impacts should be mitigated, and if necessary an environmental impact assessment will be prepared in accordance with ADB's *Environment Policy (2002)*; (vi) socially responsible, e.g., a resettlement plan in accordance with ADB's *Policy on Involuntary Resettlement* will be prepared under each subproject, and an assessment will be made in accordance with ADB's *Policy on Indigenous People* (if necessary), and (vi) be implementable during the Project period. The standard subproject proposal form to be used by the implementing agencies when presenting the respective subproject proposal to the Project Management Unit is given in **Appendix 15**.

336. It should be noted that a number of the already identified subprojects have been prepared previously for funding by a multilateral agency and as such PC1s are already prepared and approved. It is expected that these subprojects will form the backbone of ADB's assistance to Karachi megacity in the first instance. The TA loan modality then becomes an important approach to ensure the establishment of a healthy lending and non-lending program for Karachi city and the ADB. All follow-on projects, arising from successfully implemented subprojects, selected for further financing by ADB (as part of ADB's lending operations) must have their feasibility studies reviewed by the PMU/IA and ADB, and it is understood that these follow-on projects would meet basic requirements qualifying such projects for full-scale project processing. The requirements are, among others: (i) technically feasible; (ii) economically and financially viable and sustainable (iii) environmentally responsible, and (iv) socially responsible.

3. Implementation Schedule and Period

337. The overall implementation schedule for the TA loan is 4 years, and it is expected to be implemented from January 2006 to December 2009. The implementation schedule is shown in **Appendix 14**. Each subproject will have its own implementation schedule independent of, but within the period of the TA loan. Careful scheduling of activities is required so that: (i) some capacity building is provided only when duties and responsibilities are clear (following OD study), and (ii) subprojects which need to be justified in terms of the city spatial development framework are only taken forward once this work is completed. The PMU will oversee all technical assistance matters throughout the implementation period, and for part E of the project

will liaise closely with the individual IAs on matters relating to ToR preparation, tendering etc. On completion of the TA Loan project the PMU should have become a center of excellence on project feasibility and related matters, and can be absorbed back into CDGK.

4. Consulting Services

338. The IAs, in coordination with the PMU, will be responsible for selecting and engaging consultants to undertake feasibility studies, institutional development, capacity building or other technical assistance work. These could be either international or domestic firms or individuals, or training institutions, who will provide the required services in accordance with the TORs for each subproject. Such subprojects include: (i) advisory services and technical assistance to CDGK on specific sector issues; (ii) institutional capacity building programmes; (iii) development of a city development strategy and other city planning and financial management studies; (iv) feasibility studies for the establishment of the FI and its piloting; (v) preparation of subproject feasibility studies; (vi) preparation of subproject detailed designs and bidding documents and evaluation (for a few priority projects only – normally detailed design costs would be included under the main loan); (v) development of public-private modality for the financing, construction, operating and maintaining of infrastructure facilities (vi) preparation and vetting of documents relating to such projects involving private-public participation; and (vii) preparation of environmental, poverty, and social assessments, resettlement plan, and indigenous people's development plan (as required).

339. The process to be followed will be consistent with that normally adopted under ADB funded projects in accordance with the *ADB's Guidelines on the Use of Consultants*, and other arrangements satisfactory to ADB for the engagement of consultants. ADB will review and approve the processing of consultant recruitment. Supervision of consultant's work will be carried out by each respective IA, which will be responsible for monitoring the consultants for each subproject, in consultation with the overall IA and PMU. Each IA will provide logistical support to the consultants and review their outputs. A consultant, whether an individual or firm, may be contracted for several subprojects within a sector or in several sectors as long as it is the first ranked consultant. Each consultant contract is viewed as an independent event and it is subject to evaluation by the IA, review and approval by the EA/PMU, and agreement by ADB. In cases where it emerges that the IA and/or PMU evaluate the consultants' performance as unsatisfactory, the IA or PMU reserves the right to terminate the contract and recruit new consultants for further subproject work, subject to ADB's agreement. For the first year of implementation, approximately 50 and 200 person-months of international and domestic consulting services, respectively, are required for the combined institutional development, planning and feasibility and engineering studies for the priority subprojects. Tentative estimates for the whole TA loan are approximately 2000 and 2000 person-months of international and domestic consulting services, respectively.

340. Consultant firms will be engaged using ADB's quality and cost based selection(QCBS) procedures or quality based selection (QBS) procedures whichever may be best suited for the particular subproject. In some cases direct selection may be necessary. QBS is required in cases where the technical expertise is the overriding requirement.

341. A set of the outline TORs for all the major institutional development and planning subprojects and for priority engineering subprojects are provided at **Appendix 14**. These TORs will be further reviewed and enhanced by the respective IAs and additional refinements are expected prior to issuance of RFP documents, which will include the detail TORs.

5. Disbursement Arrangements

342. TA loan disbursement will be in accordance with ADB's *Loan Disbursement Handbook* (2001), as amended from time to time, and detailed arrangements between the Government and ADB. The loan proceeds will be disbursed directly to the consultants based on approved contracts under the direct payment procedure. A signed withdrawal application must be submitted by the EA to ADB together with the consultant's claim or invoice. The Statement of Expenditure (SOE) procedure will be used to reimburse eligible expenditures for any individual payment transaction of up to $50,000 equivalent.

6. Project Performance Monitoring and Evaluation Report

343. Each IA will monitor and evaluate project performance in accordance with the TORs and the project framework, and will report progress to the PMU. Primary monitoring targets will be agreed between the EA, PMU and IAs for each subproject, and these targets will be used by the IAs and reported to the PMU, EA and ADB in accordance with the established reporting schedule.

7. Reports

344. The PMU will monitor project and subproject executions to provide a basis for reporting to government and the Bank and for identifying potential subsequent areas for infrastructure development. Bi-monthly progress reports on project implementation submitted by IAs will be consolidated by the PMU. The reports should indicate, *inter alia*, (i) progress made against established targets, (ii) problems and issues encountered and remedial actions taken or proposed to resolve the issue, and (iii) proposed project activities to be undertaken as well as progress expected during the subsequent implementation period, which should include details regarding contract awards and disbursement projections.

345. The progress reports are expected to contain sufficient information in summary form for the purpose of enabling the Government, EA, PMU, IAs, and ADB to monitor progress, identify issues, and ensure compliance with the objectives of the subprojects. Consultants are expected to prepare more detailed reports for the IAs and the PMU as necessary in accordance with the ToRs and for ADB review missions. The progress reports will contain an executive summary of the detailed reports, with format and content allowing ADB staff to readily capture key information for use in project performance reports. This will serve as the main tool for monitoring project implementation performance within ADB.

346. Each IA will prepare a subproject completion report (SPCR) for each subproject within three months of complete disbursement on the relevant subproject. The SPCR should contain detailed information concerning the implementation and outcome of the relevant subproject. The SPCR will evaluate how effectively the subproject has assisted the infrastructure developments of the respective sector and its contribution to the national development objectives. The TA Loan project completion report will be provided by the PMU within 3 months of completed disbursement.

8. Evaluation of Feasibility Reports and Final Consultant Reports

347. The PMU and ADB will review and provide comments to the consultant on the draft final feasibility reports. With respect to organizational and institutional development and capacity building subprojects, ADB will be actively engaged throughout the progress of the projects,

especially those that have policy and sector reform implication. ADB will review and provide comments on the various consultants' reports for the organizational development and institutional capacity building subprojects.

9. Project Review and Accounts and Audit

348. Regular project reviews will be conducted by ADB of the TA loan, utilization of facilities, IAs, and subprojects to respond to significant fund under-utilization, approval of additional IAs, and need for fund reallocation, if any. A midterm project review is expected to be undertaken half way through the TA loan implementation, to assess the overall implementation and progress as well as achievements made to date.

349. The IAs will maintain separate records and accounts adequate to identify financing resources received and expenditures made on the TA loan, including the equipment and services financed out of the loan proceeds and local funds. These TA loan accounts and related financial statements as well as the SOE procedure will be audited annually in accordance with sound auditing standards by auditors acceptable to ADB. The Government will submit annual audited reports and related financial statements to ADB within 6 months after the end of each fiscal year.

Table 19: Project Implementation Schedule

Part	Sector		Activity	2006				2007				2008				2009			
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A	**Project Management Support**	A1	Overall project management assistance to Project Director																
	Support on Masterplan	A2	Specific technical assistance to EDO Masterplan on GIS and Masterplan preparation																
		A3	Preparation of City Development Strategy for Karachi																
		A4	CDGK User Services Study and Willingness to Pay																
	Other Management Support	A5	Assistance facility to other EDOs as required																
B	**Institutional and Policy Reform**	B1	Institutional Review (Organizational Study, OS) and Change Management Plan for CDGK and other city institutions																
	Capacity Building	B2	Capacity Building Programme for legislature, executive, officials and staff of: CDGK, Development Authorities, Town Local Governments , Union Local Governments																
	CCB Vitalization	B3	Vitalization of the Citizens Community Boards in Karachi and development of CCB Programs																
	Katchi Abadis Survey	B4	Katchi Abadi Regularization and Pilot Studies																
	Capacity Building	B5	Implementation of Accounting and MIS systems																
	Tariff Studies	B6	Water, Wastewater and Solid Waste tariff studies																
	Community Awareness	B7	Raise awareness of costs of environmental services and need for user charges																
	Twinning Arrangement	B8	Twinning arrangement with Madrid or other major industrial city (port city preferred)																
	Downstream CB	B9	Follow-on Training and other initiatives identified by OD study																

Part	Sector		Activity	2006				2007				2008				2009			
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
C	**Feasibility Studies**		Feasibility Studies for projects with potential for funding through PPP and under the Karachi Megacity Project																
		C1	Unaccounted for water and system strengthening																
		C2	Korangi Wastewater Management																
		C3	Stormwater Drainage and Sewerage																
		C4	GTS and Landfill Sites																
		C5	Malir Bund Road																
		C6	Mass Transport System																
	Follow-on	C7	FS studies identified during project																
D	**Financial Intermediary**	D1	Feasibility study on the establishment of a Financial Intermediary																
		D2	Operationalisation of the Financial Intermediary, initial funding																

V. PROJECT BENEFITS, IMPACTS AND RISKS

350. Capacity building of CDGK and TMAs and increased funding of infrastructure projects will be ensured through improvements in the enabling environment for infrastructure investments, and additional projects can be developed and implemented in the future after removing investment constraints diagnosed and resolved under the TA Loan.

351. The TA loan project will ensure (i) Capacity building of CDGK to ensure better town planning, city management and provision of services, (ii) institutional capacities for infrastructure project identification, development, preparatory activities, implementation, and monitoring materializes in a timely manner while meeting international standards of best practice, and (iii) increased provision of infrastructure services through enhanced resources for subproject preparation and financing of follow-on projects.

352. The TA loan through the organization development sub-project, will improve the vertical and horizontal linkages of city government with other development institutions – and especially the towns, and will clarify roles and responsibilities. A number of capacity building interventions will improve CDGK and TMAs planning functions, institutional restructuring and improve managerial capacity, improve governance, improve financial planning, budgeting, monitoring and reporting, and improve service delivery and therefore contribute to the efficient operation of Karachi and thereby economic growth in the megacity of Karachi.

353. Secondly, the TA loan will support efficient development of infrastructure services and thereby contribute to Karachi's economic development and poverty reduction with the provision of funds through a financial intermediary. In this way, it will provide additional infrastructure facilities required to meet city development needs, and benefit urban infrastructure users by enabling them to undertake current and additional economic activities efficiently. In addition, the TA loan will strengthen the CDGK's project preparation capacity to international standards and improve governance and transparency in consultant selection and procurement.

354. The risk of implementation delay will be mitigated by close ADB supervision of implementation. ADB will be involved with the EA and its PMU, which will have authority to decide on the TA loan utilization. ADB will also guide the EA and IAs in preparing proposals for assistance through the TA loan. To avoid delays in engaging consultants for immediate use of the TA loan, the Government has agreed to (i) identify the EA and primary IA (IA for all capacity building activities and studies), establish its PMU, and nominate the project director, (ii) nominate IA coordinators, and (iii) prepare several subprojects for immediate financing. Consultant engagement and procurement will also follow ADB guidelines to ensure transparent and competitive processes.

355. The TA loan is expected to ensure development of environmentally and socially viable lending and non-lending projects. Projects, categorized as "follow-on" loans, will be prepared in compliance with the Government's environmental laws and regulations and ADB's Environment Policy (2002). The TA loan is not expected to have any adverse environmental or social impact consequences due to the nature of institutional development studies, planning studies and project preparation.

There is an additional risk to the project due to the uncertain political economy of Karachi. The City has a deeply ingrained and volatile political, sectarian and religious landscape that has in the past resulted in social instability creating a difficult climate in which to plan end execute development programs. The ADB will need to engage actively with the state and city governments to effectively address issues related to the volatile political economy through policy dialogue and through the organizational development and capacity building programs. This should mitigate the potential negative impacts of instability which could risk timely implementation of project components and .compromises the achievement of the intended project outcomes. Such instability also has a negative impact on complementary development programs by other donors and adversely affects FDI and other inward investment opportunities.

VI. ASSURANCES

A. Specific Assurances

356. In addition to the standard assurances, the Government has given the following specific assurances, which will be incorporated in the legal documents:

(a) The Government will ensure that the TA loan and all its subprojects will be prepared in accordance with (i) the Government's applicable environmental laws, regulations, and (b) ADB's Environment Policy (2002).

(b) The Government will ensure that for subprojects entailing land acquisition and resettlement, resettlement plans in accordance with (a) the Government's applicable laws and policies, and (b) ADB's *Involuntary Resettlement Policy* (1995) are prepared. Adequate measures to avoid or minimize land acquisition and resettlement will be incorporated into subproject designs. The Government will ensure that necessary mitigation measures will be prepared in accordance with (a) the Government's applicable laws and regulations related to indigenous peoples, and (b) ADB's *Policy on Indigenous Peoples* (1999) are incorporated in subproject designs.

(c) The Government will provide adequate resources and facilities to implement the TA loan and all its subprojects effectively through the EA and IAs.

(d) Each IA will appoint a competent subproject director, acceptable to ADB, for the duration of the subproject, who will have capacities to oversee social, resettlement, environmental, and sector aspects of the relevant subproject.

(e) The Government will ensure that the EA and each IA will enter into a Subproject Agreement for execution of the relevant subproject.

(f) The Government will ensure that all draft final feasibility study reports related to the TA Loan, will be submitted to ADB for review.

B. Conditions for Loan Effectiveness and Disbursement

357. The Government will meet the following condition before the loan becomes effective. The PMU will be established by the Government, and its Director appointed.

358. No disbursement shall be made under each subproject unless its Subproject Agreement has been duly executed, to the satisfaction of ADB.

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ANNEX 2. LIST OF PERSONS MET

Karachi – City District Government (CD: City Nazim and EDOs)		**14 June 2005**
City Nazim	Niamatullah Khan	923 2400
MD/EDO KWSB	Brigadier Iftikhar Haider	923 881 0333 2371080
EDO (MPGO)	Atique Baig	9231159
EDO (E&IP)	M. Raeesuddin Paracha	923 2095 0300 2269078
DG Karachi Mass Transit	Malik Zameer-Ul-Islam	923 0665
EDO Finance & Planning	Shakeel Naqvi	921 5119
DO (MPGO)	Hafiz Mohamed Javed	923 0657
DO Marketing	Rustam Ali Khan	923 0676
Additional DO (IT) T&CD	M. Tariq Zafar	923 0655
DO Coordination/Mali River Bridge Project/ Roads, W&S	Abdul Shakoor Pathan	0300 2209525
EDO Transport and Communication		**21 June 2005**
EDO	Dr. Tahir Soomro	491 2873 0300 824 3210
EDO Works and Services		**18 June 2005**
DO Environment and Deputy Project Manger Tameer-e-Karachi	Syed M Shakaib	0333 2158506
Solid Waste	Khalid Jawaid	0300 8294332 9215654
DO I (TKP)	Muhammad Fazal Memon	9230574 0333 2155437
DO II	Abdul Shakoor Pathan	0300 2209525
EDO Finance and Planning		**16 June 2005**
EDO	Shakeel Naqvi	921 5119
DO (Planning)	Irfan Ahmed Ali	0333 2113759
Revenue		
Expenditure		
DO Store & Procurement	Tauseef Zafar	9215058

		0300 9264316
Enterprise and Investment Promotion, E&IP		**18 June 2005**
EDO E&IP	M. Raeesuddin Paracha	923 2095 0300 2269078
ADO	Malik Zadim Khan	0300 269 7874
EDO Master Group of Offices (MPGO)		**16 June 2005**
DO (Masterplan)	Hafiz Mohamed Javed	923 0657
City District, Information Technology Group		**20 June 2005**
EDO	Syed Mushtaq Hussain	9231307 0300 9279627
DO, Operations and Networks	Khalid Prelin Khan,	0300 2240115
DO, Database Analysis	M. Abdul Naseer,	0300 3598670
DO (Property Tax)	Shabeer Shaikh	
CD - Karachi Mass Transit Cell		**15 June 2005**
Director General	Malik Zaheer-ul-Islam	923 0665
Deputy Director	Mirza Anwar Baig	0300 2649973
Deputy Director	Javaid Sultan	9230665
Karachi Chamber of Commerce and Industry		**21 June 2005**
President	Khalid Firoz, (also chairman of KESC)	2416091
Vice President	Mian Abrar Ahmad	2416091
	Shamoon Bakir Ali (Iron & Steel Merchants association)	0300 8242030
Secy. KCCI	M. Nazir Ali	2416091
JETRO/Pakistan Industrial Development Corporation		**22 June 2005**
Senior Industrial Advisor, JETRO	Ms Noriko Sato	920 2340
General manger Projects, PIDC	Sarosh Yousufi	92022340
JICA, Karachi		
Project Formulation	K. Tamaki,	0300 8568662

Advisor		
Project Coordinator	Shakh Talib Fatah	5630690
Town Municipal Administration		**20 June 2005**
Nazim, Gulberg Town	Farooq Niamal Ullaha	0300 820 1199 9246258
Town Officer	Altaf Abro	
Nazim, Gulshan-e-Iqbal Town	Muhammad Abdul Wahab	0333 214 3727
Korangi Association of Trade and Industry		**17 June 2005**
Chairman	Abdul Haseeb Khan	0300 8269200
Former Chairman	Akbar Farooqui	0300 3646909
Secretary	Nihal Akhtar	0300-3723077
Lubricants Association	Main Zahid Hussain	0300 8233364
Plastics Manufacturers Association	Ehtishamuddin	0333 2135870
Board Of Investment, Karachi		
Director General	Nasreen Ali	9215081
Administration Director	Mukhtar Ahmed	
Project Coordinator	Nadeem Akhtar Chandio	
Project Coordinator	Mohammad Saqib Hafeez,	
Karachi Water and Sewerage Board		**15 June 2005**
MD/EDO KWSB	Brigadier Iftikhar Haider	923 881 333 2371080
DMT Sewerage	Asrar Ahmed	9231887
DO Planning	Shahid Saleem	0333 2109772
	Javed Khan, consultant planning	
DO Revenue	Muhamad Suleman Chandio	9230318 0300 8286243
DO Finance	Muhammad Anees Farooqui	0333 2109772
S.E. (BT)	Najam-e-Alam Saddiqui	4314725
	Gulzar Ahmad Memon (E&M Sew)	
KW Water Improvement Project	Robert T. Board , MM	9231885/6
Government of Sindh, Pakistan		

Planning and Development Department		**28 June 2005**
ACS (Development)	Ghulam Sarwar Khero	9211405
Special Secy (Tech) P&D	Ms Rehanu Memon	9211424
Chief Economist, P&D	Muhammad Ali Khaskheli	92111401
Chief (PP&H)	Khalid Mahmoud Siddique	9212344
Chief (Foreign Aid)	Hassan Ali, Foreign relations	9211413
Local Government, PHED, Rural Development		
Advisor to CM for Local Government	Waseem Akhtar	9211340
Secretary, ACS	Mohammed Salem Khan	9211536
Acting Secy LG Board	Iffat Malik	9211280
Finance Department		
Secretary	Malik Asrar Hussain	9206519
Additional Secretary (Resources)	Naheed S. Durrani	9206512
Additional Secretary (Development)	Muhammad Waseem	9203215
Additional Secretary (Local Finance)	Sualeh M. Farooqui	9203148
Additional Secretary (Budget & Expenditure)	Javed Hanif	9203134
Program Director (DSSP) Sindh	Abdul Kabir Kazi	9206514
Program Officer IMU/SRP	Fazal Karim Khatri	9206512
Sindh Katchi Abadis Authority		**28 June 2005**
Director General	Mir Nasir Abbas	9211275
Deputy Director, Monitoring	Syed Manzar Abbas	9211270/74
Masterplanning Department		
EDO Masterplan	Atique Baig	
DO Masterplan	Hafiz Mohammad Javed	
Town Planner	Iftikhar Ahmed	
DG Mass Transit	Malik Zaheer-ul-Islam	
Deputy Director Mass Transit	Mirza Anwar Baig	
Deputy Director Mass Transit	Javed Sultan	
Director Planning, Liari	Sarfaraz Ali	

Development Project	
Assistant Director, Malir Development Project	Muhammad Saleh Bhuto
Executive Engineer, Malir Development Project	Om Prakash
DO Building Control	Akhlaq Ahmed
EDO E&IP	Raees-ud-din
DO Kachi Abadis (Revenue)	Mazhar Khan
Deputy Director Kachi Abadis	Adil Abbasi
System Secretary, Liari Development Project	Saifullah
Librarian, City Government	Majib Bukhari
Librarian, Census Organization	Ms. Abida
Deputy Director, Sindh Bureau of Statistics	Maqbool Ahmed