

'Understanding Asian Cities'

Case of Karachi

Final Report - November 2004

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Abbreviations and Local Terms

Abbreviations

ABAD	Association of Builders and Developers
ACHR	Asian Coalition for Housing Rights
ADB	Asian Development Bank
ADP	Annual Development Plan
BOT	Build Operate & Transfer
BOO	Build Operate & Own
BOR	Board of Revenue
CBR	Central Board of Revenue
CCB	Citizen Community Boards
CBO	Community Based Organization
CDGK	City District Government Karachi
DCO	District Coordinating Officer
GKRP	Greater Karachi Resettlement Plan
GKP	Greater Karachi Plan
GDP	Gross Domestic Produce
GOP	Government of Pakistan
GNP	Gross National Produce
HEC	Higher Education Commission
HFI	Housing Finance Institutions
HDI	Human Development Index
IMF	International Monetary Fund
IDA	International Development Authority
ISD	Illegal Subdivision
IFI	International Funding Institutions
IT	Informational Technology
ISO	International Standard Organization
KAPCO	Kot Addu Power Company
KMC	Karachi Municipal Corporation
KDP	Karachi Development Plan
KAIRP	Katchi Abadi Improvement & Regularization Programme
KFC	Kentucky Fried Chicken
KPF	Khushal Pakistan Fund
KESC	Karachi Electric Supply Corporation
KWSB	Karachi Water & Sewerage Board
KDA	Karachi Development Authority
KRTC	Karachi Regional Transport Corporation
KMP	Karachi Metropolitan Plan
KBP	Khushhali Bank Programme
MPD	Master Plan Department
NGO	Non Government Organization
NFC	National Finance Commission
NWFP	North West Frontier Province
ODA	Official Development Assistance
OPD	Open Plot Development
OPP-RTI	Orangi Pilot Project Research and Training Institute

PIAC	Pakistan International Airlines Corporation
PWD	Public Works Department
PPL	Pakistan Petroleum Limited
PTCL	Pakistan Telecommunication Company Limited
PEMRA	Pakistan Electronic Media Regulatory Authority
PPAF	Pakistan Poverty Alleviation Fund
PO'S	Partner Organization
SLGO	Sindh Local Government Ordinance
SAP	Structural Adjustment Programmes
SKAA	Sindh Katchi Abadi Authority
US\$	United States Dollar
USD	United States Dollar
URC	Urban Resource Center
UNDP	United Nations Development Programme
UC	Union Council
WTO	World Trade Organization
WB	World Bank

Local Terms

Anjuman	Organization
Aurat	Woman
Bhatta	Bribe
Chingchi	Motorcycle Driven 6 Seater Vehicle (Local Means of Transport)
Dallal	Middlemen
Hakeem	Local Doctors Practicing Eastern Medicine
Ittehad	Unity
Jhuggis	Impermanent Structures
Kabari	Solid Waste Dealer
Katchi abadi	Squatter Settlement
Nazim	Mayor
Naib Nazim	Deputy Nazim
Saiban	Shelter
Shirkatgah	Interaction Space (Name of an NGO)
Tibiya	Eastern Medicine
Thalla	Building Components Manufacturing Yard
Tehsils	Sub Districts
Zilas	Districts

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11. CDGK EDO Finance
12. CDGK EDO Health
13. CDGK EDO Education
14. CDGK EDO Transport and Traffic

1. Profile of Pakistan

1.1 Context and Political Structure

Pakistan is situated in South Asia (Refer Map1), a federal state consisting of four provinces; Sindh, Punjab, Balochistan and the North-West Frontier Province (NWFP) (Refer Map 2). Each province has an elected provincial assembly. There is an elected National Assembly, which is the lower house of parliament, and a Senate that constitutes the upper house. In the national assembly, each province is represented in proportion to its population, whereas, in the Senate each province is represented equally.

Every province is divided into *zila* or districts that are further divided into rural and urban *tehsil* or sub districts. The tehsil is divided into union councils (UCs) that are the lowest administrative units. The average population of a union council lies between fifty to seventy thousand people. The larger cities, which include the provincial capitals, are run as city districts and are subdivided into tehsil or towns, and the towns are further divided into UC's.

Districts (*zila*), Sub- districts (*tehsil*), Towns and UC's form Local Government and are headed by indirectly elected *Nazim* (Mayor) and *Naib Nazim* (Deputy Mayors), who are elected by the directly elected councilors. Thirty- three per cent of all elected seats are reserved for women and 5 per cent for workers and peasants. There are 103 district governments, 335 tehsil councils and 6,022 UCs in Pakistan. (Refer Appendix 1)

According to the Local Government Ordinance, (commonly known as the Devolution Plan) enacted in 2001, all three levels of local government have considerable autonomy and can raise funds and plan and implement physical and social developments independently. The local government is supported by a bureaucracy who is subservient to them. The Zila Nazim is responsible for the district administration as a whole and is assisted by a senior bureaucrat, the District Coordinating Officer (DCO), who coordinates the functioning of all government departments in the district.

Before the enactment of the Devolution Plan to the district level, the provincial government and its line departments controlled all planning and implementation. It ensured that all areas within the province were represented at the provincial level and got a fair share of the revenues, subsidies and grants. This was a top-down bureaucracy controlled government structure with its cumbersome procedures.

According to the Local Government Ordinance 2001, revenue generation has been decentralized to the district level, but executive decision- making, especially for projects beyond 50 million Rupees lies with the provincial government¹. Similarly, the provincial government can fire the indirectly elected Nazim of a district, meaning that the executive control remains with the provincial government. Since the Nazim and Naib Nazim are indirectly elected they do not have popular support, which is why there is not much resistance to their being elected or fired. This makes the devolution of power to the local level incomplete.

At the district or city district level, revenues (mostly generated through property taxes and octroi) are centralized with the city government. There is a fixed sharing with the towns that are expected to raise most of their development funds independently. This means in effect that, some towns earn more than others depending on the tax collection possibilities within their areas. This

¹ Discussion with Prof. Nauman Ahmad, DAP-NED University.

situation has created disparity amongst the towns, resulting in uneven development within districts and city districts.

At the administrative level, the directly elected councilors are subservient to the executive decision making powers of the indirectly elected Nazim and Naib Nazim who are not directly answerable to the communities. So, wherever communities are organized and can dialogue and negotiate with their Nazim and Naib Nazim through the councilors, their demands are met, whereas those who are unable to do so remain marginalized.

1.2 Demographic Trends

Pakistan has 2.3 per cent of the world's population. According to the 1998 census, its population was 132.4 million, which had grown at the rate of 2.6 per cent per year. In the same period, its urban population grew at the rate of 3.5 per cent per year and was estimated at 43 million.²

Demographic changes are important in the political context of Pakistan for a number of reasons. One, the number of seats in the national and provincial assemblies for each province is allocated on the basis of population. Two, election constituencies are designated as urban and rural and the nature of constituencies can change if peri-urban areas are included or excluded from urban constituencies. Three, allocation for the Annual Development Plan (ADP) of the federal government takes the rural-urban divide into account. Four, the National Finance Commission (NFC) is responsible for allocating funds to the provinces from the collective revenue pool on the basis of the population of each province.

The province of Sindh, whose capital city is Karachi, is the most highly urbanized area of all Pakistan with 48.9 per cent urban population. But the Punjab, where the urban population is 31.3 per cent, due to its larger numbers, has more urban dwellers. The NWFP and Balochistan have relatively smaller urban populations at 16.9 and 23 per cent respectively.³

During the period 1947 to 1951, the rate of urbanization in Pakistan increased from 3.79 to 4.13 per cent due to the in migration of refugees from India. This trend continued from 1951-1981, with the urban growth rate rising from 4.9, 4.7 to 4.3 per cent per year between 1951-1961, 1961-72 and 1972-1981 respectively (refer, table 1). It declined to 3.5 per cent per year in the period 1981-1998, but the household size for the urban areas remained at 7, the same as it was in 1980.

The rapid rate of urbanization is due to three sets of migrations: one, in 1947 when India was divided: two, from East Pakistan in 1971 due to the creation of Bangladesh: and, three, as a result of the war in neighbouring Afghanistan in the 1980s. Another major factor is the rural to urban migration when the so- called "green revolution" and "industrialization" policies enacted by the then government drove small cultivators off their lands and in to the cities in the 1960s.⁴

The differences between the size of the populations in urban and rural areas of Pakistan are considerable. Rural areas form 68.5 per cent of the total population of Pakistan compared to 32.5 per cent in urban areas (refer; table 1). Rural areas represent the majority of the population and dominate the assemblies, usually succeeding in acquiring more funds from the national exchequer.

2 Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

³ ibid

⁴ ibid

To date, the population under 15 years of age is 45.06 per cent in rural areas as compared to 40.08 per cent in urban areas (refer; table 2). The growth rate of rural areas is 2.2 per cent per year compared to the growth rate of urban areas at 3.5 per cent per year, which shows an increase in the number of urban centres (refer; table 1).

Table 1: Pakistan Population Size, Rural – Urban Ratio and Growth Rate, 1901-1998

Year	Population (in '000)			Proportion		Annual Growth Rate		
	Total	Rural	Urban	Rural	Urban	Total	Rural	Urban
1901	16,577	14,958	1,619	90.2	9.8	-	-	-
1911	18,805	17,116	1,689	91.0	9.0	1.27	1.36	0.42
1921	20,243	18,184	2,058	89.8	10.2	0.74	0.61	2.00
1931	22,640	19,871	2,769	87.8	12.2	1.13	0.89	3.01
1941	28,244	24,229	4,015	85.8	14.2	2.24	2.00	3.79
1951	33,740	27,721	6,019	82.2	17.8	1.79	1.36	4.13
1961	42,880	33,240	9,640	77.5	22.5	2.43	1.80	4.84
1971	65,309	48,715	16,594	74.6	25.4	3.67	3.33	4.76
1981	84,253	61,270	23,583	71.7	28.3	3.10	2.58	4.38
1998	130,580	87,544	43,036	68.5	32.5	2.61	2.2	3.5

Source: Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 2: Pakistan - Population Under 15 Years

Pakistan	Total		Rural		Urban	
	Actual	Per cent	Actual	Per cent	Actual	Per cent
Population below 15						
1981	36,519,208	44.51	27,269,107	46.84	9,250,182	38.8
1998	56,064,747	43.4	38,851,441	45.06	17,213,306	40.08

Source: Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

1.3 Poverty

According to the Human Development Report, Pakistan ranks 127 out of 162 on the human development index (HDI) rank. The official poverty line adopted by Planning Commission in 1998-99 is 670 Rupees per capita per month, and it has been estimated that one- third of the total population lies below the poverty line⁵.

⁵ Human Development Report 2002, Oxford University Press, NY, 2002

Thirty- one per cent of Pakistan’s population earns 1 US Dollar per day. Life expectancy for every 100 live births is 60, with only 20 per cent births being attended to by skilled health staff. Government expenditure on family planning in the period 1996-98 has only been 0.15 per cent of GNP, which is substantiated with large donor funded programmes on population planning. Contraceptive use is limited to 26 percent in urban areas and 6 per cent in rural areas although 91 percent married urban women have access to modern contraceptive aids⁶. Public sector expenditure on the military is 4.5 per cent as compared to 0.7 per cent of GDP on health and 2.7 per cent of GNP on education (refer; table 3 and 4).

Poverty decreased from 46.53 per cent in 1969-70 to 17.32 percent in 1987-88. This was due to the high growth rate achieved by the investment of the public sector in heavy industry like the steel mills, setting up of basic industries and creation of domestic demand for local goods, investment of remittances from overseas Pakistanis (especially the Middle East), and international financial sanctions for Pakistan as a result of the government support to controlling Soviet expansion in the region during the 1970s and 1980s⁷.

Poverty increased from 17.32 per cent in 1988 to 33.5 percent in 2000. The unemployment rate is 19.13 per cent and in income distribution terms, the share of consumption of the lowest income 20 per cent households fell from 9.4 to 4.1 percent, whereas the share of the highest income 20 per cent increased from 27.6 to 41.1 per cent (refer; table 3).

There are a number of reasons for this. One, debt servicing of both external as well as public debt, Two, implementation of the structural adjustment programmes involving high taxation, increase in the price of utilities, privatization of state- owned enterprises, increase in trade tariffs and decrease in public expenditure. Three, adherence to the WTO laws, involving free trade, low import taxes, high export taxes; leading to a decline in agriculture as part of the GDP from 53.2 per cent to 24.2 per cent, increase in manufacturing from 7.8 to 26.4 per cent and services and trade from 39 per cent to 49.4 per cent⁸. These changes have gone to the disadvantage of the small farmer, unskilled labour, and daily-wage earner, pushing them into the category of the poor, while they have encouraged the emergence of a new middle class of traders, small-scale entrepreneurs, and service based professionals.

Table 3: Pakistan: Poverty

HDI Rank	127
Life expectancy at birth	60.0
Adult literacy rate	43.2 % (15 and above – 2000)
Population below Income Poverty Line	
-	
1 US Dollar a day	31.0 (1983-2000)
2 US Dollars a day	84.6 (1983-2000)
-	
National poverty line	34.0 (1987-2000)
-	
Population using adequate sanitation facilities	61 % (2000)

⁶ Human Development Report 2002, Oxford University Press, NY, 2002

⁷ Zaidi, Akbar, “Issues in Pakistan’s Economy”, Oxford University Press, 1999, Karachi

⁸ Human Development Report 2002, Oxford University Press, NY, 2002

-	Population using improved water sources	88 % (2000)
-	Population with access to essential drugs	50-79% (1999)
-	Births attended by skilled health staff	20 %
-	Contraceptive prevalence	24 %
-	Health expenditure public sector	0.7 (as % of GDP – 1999)
-	Education Expenditure public sector	2.7 (as % of GNP – 1998)
-	People living with HIV/AIDS	0.11 (% age 15-49 – 2000)
-	Share of income or consumption:	
*	Poorest 10 %	4.1 % (Survey Year: 1996-97)
*	Poorest 20 %	9.4 % (Survey Year: 1996-97)
*	Richest 20 %	41.1 % (Survey Year: 1996-97)
*	Richest 10 %	27.6 % (Survey Year: 1996-97)

Source: Human Development Report 2002, Oxford University Press, NY, 2002

Table 4: Pakistan: Macro Economics and Poverty Issues

Macro Economic Indicators	As Percentage (%) of GDP		
	1949-50	1996-97	1999-2000
• Agriculture	53.2	24.2	24.2
• Industry/Manufacturing over time	7.8	26.4	26.4
• Others (mostly services and trade)	39.0	49.4	49.4
• Imports of Goods and Services		23 -19	
• Exports of Goods and Services		16-16	
• Official Development Assistance Received (ODA)		2.8-1.1	
• Total Debt Services		4.8-4.6	
		23-26.8 (as % of exports of goods and services)	
• Public Expenditure on : (1997-98)			
• Education		2.7	
• Health		0.7	
• Military Expenditure		4.5	

Source: Human Development Report 2002, Oxford University Press, NY, 2002

1.4 Emerging Social Trends

a) Increased Literacy

During 1981-1998, urban literacy increased from 47.12 to 63.08 per cent. Female literacy increased from 37.27 per cent to 55.16 per cent. Much greater changes in literacy occurred between the age groups of 10 - 14 years where literacy increased from 45.75 to 72.64 per cent and female literacy increased from 43.16 to 70.98 per cent, with the per year growth rate for literacy increasing from 0.09 to 1.53 per cent. (Refer; table 5)

This was not the result of government investment; rather, the establishment of private schools and informal sector institutions may be given the credit for this. The estimated private consumption expenditure on education for the period 1985-1991 increased at a cumulative rate of 6.9 per cent in real terms or 3.8 per cent on a per capita basis⁹. The private schools lobby became very powerful during the 1990s and continues to grow due to an increasing demand for it.

b) Decline in Married Population and Fertility

Married population of 15 years and above declined from 64.46 to 58.35 percent in urban areas in the period 1981-1998. The percentage of total married population declined from 69.17 to 61.38 for the same period. In the age group of 15-24 years, the married population decreased from 27.07 to 20.09 percent and, for women, it fell from 41.54 to 29.86 percent (refer; table 6). These trends are closely related to the increase in literacy and the number of working women. Due to these changes, the fertility rate declined from 7 in 1985 to 5.6 in 1995¹⁰.

c) Access to Information

Almost 60.32 per cent of Pakistani urban households use television as their main source of information (refer, Table 7). The electronic media includes national and international channels broadcasting through satellite connections that are an important source of information and influence the changing social values.

⁹ Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

¹⁰ *ibid*

Table 5: Pakistan- Socio-Economic data - Literacy (%)

	1951			1961			1972			1981			1998			Total Karachi 1998
	All Pakistan	Rural	Urban	All Pakistan	Rural	Urban	All Pakistan	Rural	Urban	All Pakistan	Rural	Urban	All Pakistan	Rural	Urban	
Total literates (%)	18.9	NA	NA	13.6	10.9	33.0	21.7	14.3	41.5	26.17	17.33	47.12	43.92	33.64	63.08	67.42
Male	25.3	-	-	20.1	17.5	42.2	30.2	22.6	49.9	35.05	26.24	55.32	54.81	46.38	70.00	71.17
Female	11.7	-	-	6.1	3.2	21.2	11.6	4.7	30.9	15.99	7.33	37.27	32.02	20.09	55.16	62.88
Per annum Increase in literacy				- 0.53			0.74	0.31	0.77	0.50	0.33	0.62	1.04	0.95	0.94	5.09
B/W and 14	NA	NA	NA	28.2	NA	NA	24.8	17.1	44.9	25.97	17.94	45.75	54.70	45.61	72.64	74.72
Male	-	-	-	38.7	-	-	31.4	24.8	49.3	31.33	24.76	48.06	60.87	54.34	74.16	75.22
Female	-	-	-	15.2	-	-	16.4	7.1	39.6	19.63	9.71	43.16	47.66	35.44	70.98	74.17
Per annum Increase in literacy							-0.31			0.13	0.09	0.09	1.69	1.63	1.53	5.22
B/W and 24	-	-	-	25.2	NA	NA	30.3	20.7	52.4	35.76	24.52	58.28	53.71	43.56	71.65	73.65
Male	-	-	-	36.7	-	-	41.2	32.5	60.8	45.50	35.79	64.32	65.36	58.96	76.15	76.05
Female	-	-	-	11.8	-	-	18.0	7.5	42.6	24.7	11.99	51.05	41.69	28.16	66.70	70.19
Per annum Increase in literacy							0.46			0.61	0.42	0.65	1.06	1.12	0.79	4.65
Between 25 and 34	NA	NA	NA	13.3	NA	NA	22.7	15.1	42.2	28.58	18.73	50.76	42.54	30.84	62.89	
Male	-	-	-	20.1	-	-	33.6	25.4	53.3	40.29	30.05	61.86	55.24	45.53	70.92	
Female	-	-	-	5.1	-	-	10.7	4.2	28.8	15.78	6.83	37.39	28.83	15.92	53.44	
Per annum Increase in literacy							0.85			0.65	0.40	0.95	0.82	0.71	0.72	

Source: Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 6: Pakistan: Socio-Economic Data - Married Population (%)

	1961			1972			1981			1998			1998 Karachi
	All Pak	Rural	Urban	All Pak	Rural	Urban	All Pak	Rural	Urban	All Pakistan	Rural	Urban	
Above 15 years:	60.95	NA	NA	68.19	69.53	64.54	68.75	70.58	64.46	63.04	65.58	58.38	56.13
Male	56.03	-	-	63.07	64.33	59.81	65.24	66.97	61.36	59.83	62.13	55.80	53.33
Female	66.80	-	-	74.20	75.49	70.54	72.24	74.56	68.23	66.53	69.17	61.38	59.59
B/W 15 and 24:	NA	NA	NA	35.34	37.40	30.57	34.99	35.71	27.07	29.03	32.27	20.09	11.59
Male	-	-	-	18.11	19.58	14.77	21.05	21.04	16.07	47.23	20.00	11.15	10.18
Female	-	-	-	54.89	57.48	48.84	50.74	52.17	41.54	40.61	44.64	29.86	28.19

Source: Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 7: Pakistan – Sources of Information 1998

	Total Households	Television	Radio	Newspaper
Total	19,200,000	6,785,821 35.34%	4,599,041 23.95%	4,072,674 21.21%
Rural	12,950,000	3,013,890 23.27%	3,007,409 23.22%	1,743,551 13.46%
Urban	6,250,000	3,771,931 60.35%	1,591,632 25.47%	2,329,123 37.27%

Source: Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

1.5 Housing Trends

According to 1995 estimates, about seven million people live in *katchi abadi* or squatter settlements, and another 12 million in settlements created out of the informal subdivisions of agricultural land, ecologically unsafe areas or wastelands on the city limits¹¹. The conditions in the two types of settlements are similar, except that 70 per cent of *katchi abadi* are earmarked for regularization. The estimated current figure for houses in informal settlements in the urban areas would be 3.5 million with a population of 24.5 million. Thus, about 57 per cent of the urban population of Pakistan lives in informal settlements¹².

Table 8: Pakistan – Housing

Annual housing demand	370,000
Urban	857,000
Rural	459,000
Formal sector annual supply	About 25 per cent of demand
Population in <i>katchi abadi</i>	7 million (estimated)
Population in informal settlements	12 million (estimated)
Population in <i>katchi abadi</i> and informal settlements	24.5 million (estimated)

Source: Statistics Division, Government of Pakistan, “1998 Census Report of Pakistan”, December 2001, Islamabad, as analyzed by Hasan Arif in, ‘Urban Change: Scale and underlying causes, the case of Pakistan’, 2002

1.6 Poverty Alleviation Programmes

a) The *Katchi Abadi* Improvement and Regularization Programme (KAIRP)

This is a programme of the government of Pakistan, which is being implemented by the Sindh *Katchi Abadi* Authority (SKAA), for the regularization of squatter settlements and the provision of infrastructure to them that applies to settlements established on government land before 23 March 1985 with more than forty houses¹³.

Community participation and determination of the target groups are important constituents of the regularization programme. A notified settlement is upgraded by providing infrastructure services to the area and by demolishing houses or parts of houses, which obstruct the implementation of the upgrading plan. The upgrading work is carried out by the funds generated through lease money and development charges are collected from the residents.

The *Katchi Abadi* Improvement and Regularization Programme was an important part of the fifth and sixth Five-Year Plans of the government but despite the considerable resources available to the implementing agency and the involvement of the ADB and the World Bank, out of 1, 75,000

¹¹ Statistics Division, Government of Pakistan, “1998 Census Report of Pakistan”, December 2001, Islamabad, as analyzed by Hasan Arif in, ‘Urban Change: Scale and underlying causes, the case of Pakistan’, 2002

¹² *ibid*

¹³ For details on KAIRP, refer section 5.4.2; “Master Plans and Housing Policies of Karachi”.

katchi abadi houses eligible for lease, only about 18,000 had acquired lease in the project areas by the year 1988¹⁴. In addition, very little physical upgrading had been undertaken.

The reasons for the slow progress are several. People who had a de-facto status were not interested in acquiring lease, the bureaucratic procedures were cumbersome, community participation was limited, most of the funds were utilized in shifting settlements which were found ecologically unsound, the standard of work undertaken was substandard, and there was no coordination between the needs of people and the projects identified by the councilor.

But SKAA programmes have undergone a major overhaul in recent years. This may have been due to the close working and training alliance between the local government and the Orangi Pilot Project, Research & Training. (For details on OPP-RTI, refer sections 3.7.1 & 7.3.1) The process of acquiring a lease has been made a one- window affair while, earlier, it had 11 steps, the local CBOs areas are consulted in all decision making for the area, and account keeping has been made transparent. The positive impact of this reshaping is evident from the fact that they have been able to generate 150,416 million Rupees in lease charges against an investment of 48,227 million Rupees in development¹⁵.

b) The Pakistan Poverty Alleviation Fund (PPAF II)

The Poverty Alleviation Fund was incorporated as a private company, limited by guarantee under the regulatory supervision of the Securities and Exchange Commission of Pakistan, through a World Bank soft loan of 90 million US Dollars. It was established to enhance the availability of resources and services to the poor¹⁶.

The PPAF has programmes including micro-credit which provide loans to partner organizations at an interest rate of 6 per cent, provision of community infrastructure in the form of grants on a cost- sharing basis, capacity building of partner organizations in the form of grants, and the capacity building of communities and partner organisations to improve their effectiveness in implementing poverty alleviation programmes.

The Apex Pakistan Poverty Alleviation Fund (PPAF) proposes to increase its network of partner organizations (POs) with the intention of delivering these services to the poor through them.

The PPAF updated project information document (No. AB113) shows that it has disbursed 41 per cent of its funding through these small and emerging NGOs. Clients have doubled every year for the past three years and, as of March 2003; partner organisations have extended 187,000 loans from PPAF funding to more than 180,000 borrowers, 41 per cent of who are women. The average loan size is approximately 150 US Dollars, well below the individual loan ceiling of 500 US Dollars¹⁷.

For development of physical infrastructure at community level, PPAF reports that it is; 'currently working with 24 partners and has approved 6,564 projects for implementation in 75 districts of the country. Of the 3,223 projects currently underway, 2,730 have been completed¹⁸.

¹⁴ Hasan Arif, "Housing for the Poor, Failure of Formal Sector Strategies", City Press, 2000, Karachi

¹⁵ Hasan Arif, Mohib Masooma "Reporting on Slums, A case study of Karachi, Pakistan", 2002, Karachi

¹⁶ PPAF Website

¹⁷ PPAF Website

¹⁸ PPAF Website

All projects that have been identified by the communities are small in size and well within per capita limits. They are being operated and maintained by the community organizations satisfactorily. Within three-and-a-half years of operations, the PPAF's infrastructure schemes have benefited some 1.54 million men and women.

The Poverty Alleviation Fund has recently started working in Karachi with the Orangi Charitable Trust (for details on OCT, refer sections 3.7.1 & 7.3.1) as its partner organizations. For a four-year implementation period, the total cost of PPAF II is envisaged as 368 million US Dollars, including a 238 million US Dollars International Development Authority (IDA) credit and a 10 million US Dollars government contribution¹⁹. The expenses of the PPAF overheads and the re-flow are met from the interest accruing on the initial endowment.

c) The Khushali Bank Programme (KBP)

The Khushali Bank was established as a Public – Private Partnership with ADB funding of 150 million US Dollars as a soft loan. It is an important programme for development and poverty reduction introduced by the present Government of Pakistan (GoP).

Under Phase one of the programme, the federal government disbursed 733 million Rupees from which 380 schemes across all districts were completed. In Phase Two, the Federal and the Sindh government have contributed 1.8 billion Rupees in equal proportion through which 552 schemes were, only 21 of them completed, and the rest had the timeline of September 2001. Rural water supply and drainage schemes were allotted 270 million Rupees, making the total injection into the economy from KBP as 2.80 billion Rupees²⁰.

Low-income groups have consumed up to 2.5 billion US Dollars to run small enterprises. Women are one –third of the total beneficiaries. A majority of the development works by the local government was funded through the KBP. The revised estimates for KBP for 2002-03 was 3285.896 million and no allocation has been made in the budget 2003-04 for KBP²¹.

d) The Khushal Pakistan Fund (KPF)

Initiated by the federal government, the Khushal Pakistan Fund extends loans to local government for infrastructure projects. It is an initiative for poverty reduction through public works. Phases 1, 2, 3 of the programme are pitched at 5.5 billion Rupees. The schemes under this programme have been executed at the district level through community participation. It has created 100,000 new employment opportunities and provided essential infrastructure facilities to a population of 50 million people in the rural and low-income urban areas²². Infrastructure projects include water supply, drainage, road and street paving. The outlay for 2002-03 is 3285.896 million Rupees (54,750,000 US Dollars)²³. No evaluation of the programme has been made so far but press reports have doubted its efficacy.

19 PPAF Website

20 The Khushali bank Programme Website

21 The Khushali bank Programme Website

22 Sindh Profile Report, “Chapter on Poverty; Source : Pakistan Poverty Reduction Strategy”, Compiled by Arif Hasan, , 2004, Karachi.

23 The Khushal Pakistan Fund Website

e) UNDP National Urban Poverty Alleviation Programme

This is a joint project of the Government of Punjab and the UNDP in which each partner has contributed Rs. 20 million. This programme is to be implemented in more than five cities of Pakistan, attempting to incorporate the OPP-RTI's Internal-External development concept (for details on OPP-RTI (refer sections 3.7.1 & 7.3.1). The focus is on utilizing local expertise, generating low- cost development solutions, and increasing the quantum of work. Not much information is available on the project implementation as it is in the stage of being set up²⁴.

f) Sindh Rural Development Programme

It is an ADB funded programme of the Sindh government with the Sindh Katchi Abadi Authority (SKAA) as its main co-coordinator. The programme is to be implemented in 200 villages, attempting to incorporate the OPP-RTI's Internal-External development concept. Social coordination is to be done through OPP-RTI's partner network in the Punjab. To date, the project has not been initiated..²⁵.

g) Southern Punjab Basic Urban Services Programme

A programme of the Government of Punjab funded by the ADB, this is to be taken to 22 cities with infrastructural upgradation in terms of sewerage, water supply, road paving and drainage. Punjab Katchi Abadi and Urban Improvement Directorate will be the project directors, and OPP-RTI is to take up social mobilization²⁶ as a partner organization. The project is in the planning stage and has not yet been launched.

1.6.1 Problems with the Pakistan Poverty Alleviation Programmes

The application and evaluation procedures of the Pakistan Poverty Alleviation Programmes are complex and time- consuming, making it difficult for small NGOs to access these programmes. There is a long waiting period between the application and the disbursement of funds. Most of the decision-making is at the federal and or provincial level, making it inaccessible to local CBOs and NGOs. Monitoring and recovery of loans is through the NGO supported bureaucracy, but no training or technical support is given to the NGOs to undertake the task.

Poverty alleviation funds works where communities have been strengthened through the process of self- initiated development work and have leaders who have evolved through raising and using money locally and can access technical advice for the building of physical and social infrastructure.

1.7 Globalization and its Impacts

The rise in poverty levels from 17.32 per cent in 1988 to 33.5 percent in 2000 is not a coincidence²⁷. It comes as a direct result of the global economic policies adopted by the Pakistan

²⁴ Discussion with Perween Rahman, Director Orangi Pilot Project -Research and Training Institute (OPP-RTI), Karachi

²⁵ Discussion with Perween Rahman, Director Orangi Pilot Project -Research and Training Institute (OPP-RTI), Karachi

²⁶ Discussion with Perween Rahman, Director Orangi Pilot Project -Research and Training Institute (OPP-RTI), Karachi

²⁷ Zaidi, Akber, "Issues in Pakistan's Economy", Oxford University Press, 1999, Karachi

government in the form of structural adjustment programmes (SAP) and WTO laws, introduced by international funding institutions (IFIs) such as the IMF and World Bank.

These models promote the provision of large amounts of loans for development by the IFIs. Because Pakistan's exposure to the IFIs has grown since 1988, the amount of loans taken and the subsequent debt servicing has increased. A model of liberalization of economy, privatization, and cutbacks in public sector spending, high taxes and increase in utility prices is made a part of the ToR of the loan package. Therefore, the "trickle down" effect promised as a result of macro economic growth has turned into a means of macro level rich- poor divide. The aspects that have directly impacted on the development of Pakistan and may be called the agents of globalization are discussed below.

1.7.1 Structural Adjustment:

The IMF's Structural Adjustment Programmes (SAP) was introduced in Pakistan at the end of the 1980s and beginning of the 1990s. Since the initiation of SAP, the average growth rate of Pakistan has fallen as a compulsion to lower its fiscal deficit and has lead the State to cut back on public expenditure and on the allocation of development funds.

Government spending on development was 7 per cent of the GDP in 1988, but in 2002 it went down to 3.6 per cent of GDP. This is when the military budget is around 6 per cent of GDP and military expenditure is the second-largest component after debt servicing. There has been a decline in poverty related subsidies from 5.2 billion Rupees in 1991 to 284 million Rupees in 2001. At the same time, the tax burden increased by 4 per cent for the lowest income group while it decreased by 21 per cent for the highest income group²⁸ (refer, Table 3 and 4).

As a result, at least six million children between the ages of five to nine are today out of school. Of the remaining 14 million children, quality public education is not accessible to them. About forty per cent of children younger than five years are malnourished, and 55 per cent of the population above ten years of age is illiterate²⁹. This inequality in social sector spending is exacerbating the rich-poor divide, increasing the numbers of unemployed youth and street children, and creating an estranged society.

1.7.2 Privatization

The GoP takes privatization as an important part of economic reformation in the Social Action Programme introduced in the 1990's. Over the past 10 years, privatization of government assets, utilities, sale of land and assets have cost 120,000 jobs³⁰. Several of the assets sold were quite lucrative, such as public sector banks. Through policy level interventions and advocacy, civil society organizations stopped the sale of land, water and solid waste management from being privatized, but the battle is far from over.

The worst affected are the two public sectors of education and health where huge cuts have been made. Although private sector schools and hospitals have responded to the need, their exorbitant fee is unaffordable for the poor. In the last five years, there has been an increase of over two

²⁸ Human Development Report 2002, Oxford University Press, NY, 2002, as quoted by Hasan Arif in, "Power, Politics and Poverty in Pakistan", 2003, Karachi

²⁹ *ibid*

³⁰ *ibid*

hundred per cent³¹ in the cost of utilities like electricity, water, telephone, gas, water and sewerage, which has led to the closure of small-scale informal sector industries. There has been an increase in transport charges in the last five years by a 100 per cent.

The cutbacks in public spending and privatization have led to the winding up of the Karachi Regional Transport Corporation (KRTC) and today; all public transport in Karachi is privately owned and operated. The sale of the Transport Corporation's land assets, including the terminals, was prevented by SHEHRI (for details, refer section 3.7.4) a Karachi based NGO, through court action but the process continues to gain momentum, signaling the failure of governance.

As many as 38 state-owned institutions, most of them profitable are on the list of the Privatization Commission to be put on sale in the near future. Of these, three are from the telecommunication sector, seven from oil and gas, two from the banking and finance sector, five are from the power sector, sixteen from industry and real estate, two from insurance, while the shares of three organizations, Pakistan International Airlines Corporation (PIAC), Pakistan Petroleum Limited (PPL) and Kot Addu Power Company (KAPCO) will be offered through the stock market. The transaction structures of the Pakistan Telecommunication Company Limited (PTCL), Telephone Industries of Pakistan and Carrier Telephone Industries for privatization are also under review³².

Projects are being promoted on Build Operate and Transfer (BOT), and Build Operate and Own (BOO) basis. There is no focus on the public good and on developing cheap alternatives for civic infrastructure since contractors are interested in mega projects which yield high profits. There are no social housing projects or subsidized housing by the State. There are only projects like the KAIRP, or loans at subsidized rates of 8-9 per cent interest, offered by public and private banks to access the open markets. Both options are difficult to access by the poor due to the cumbersome paper work involved.

1.7.3 The WTO Regime

The fundamental assertion in the WTO agreement is that economic growth is linked to economic stabilization. This is to be achieved through tax reforms, expenditure management, external adjustment, and debt management. Reduction of deficit is taken as the main indicator of economic stability. Tax reforms include the levying of General Sales Tax (GST), an increase in revenue collection performance, high tariffs on industries and export, and increase in utility charges. All of these reforms have impacted on the average citizen and dealt a death blow to small industrial units.

Pakistan now faces a major problem of having a large number of sick industrial units and cannot compete in the open market except in textiles, agricultural products, and fisheries. The light engineering industry, which employs 60,000 people (of an original total of 1, 85,000), is closing down because it cannot compete with Chinese products. A Pakistani motorbike manufactured locally costs 32,000 Rupees compared to an imported Chinese motorbike of 14,700 Rupees³³. Local markets are flooded with all manner of Chinese goods, selling at half the price of local products that is damaging the local entrepreneurs and shopkeepers.

³¹ *ibid*

³² A report by Daily "DAWN" newspaper published on 11 March ,2004

³³ Current markets rates prevailing in Pakistan

The positive impact of globalization on environment is that it requires the local industries to qualify for management systems like ISO 9000 to sell their products. Getting the ISO certification is a cumbersome and difficult procedure and requires raising environmental standards. It is meant to ensure that industrial effluent is treated, hazardous waste disposed off properly, and the physical working conditions of the individual units is improved but this has resulted in the local industrialists demanding garbage disposal and large-scale sewerage treatment plants from the local government. The absence of these services is creating a conflict between the industrialists and local government.

Globalization and its accompanying trade policies are open to international investment but the response for Pakistan is poor since the law and order continues to deteriorate in the country. Trade related services and the corporate sector have grown, which has brought the superficial affluence of leased cars and houses, luxury apartments, private clubs, restaurants, expensive shopping malls, and protected recreation outlets like water parks, children's recreational parks, and air conditioned eateries to the big cities of Pakistan. With recreation being increasingly privatized and occupying all public space, conventional parks, cinemas and playgrounds have almost disappeared. In almost all big cities of Pakistan there are an increasing number of fast food chains carrying international brand names that are economical meals-on-wheels in their countries of origin but in poor countries like Pakistan are value added as "foreign" and therefore "modern" means of entertainment.

A newly rich class has emerged that lives surrounded by guards and security systems in suburban localities. These areas are far removed from the inner city slums and fringe squatter settlements in physical and cultural terms, which have created a clear spatial, and physical rich-poor divide in the city and investment opportunities for commercial facilities to crop up and cater to an expanding middle class.

The so called "posh" or upscale areas in large cities have deteriorated considerably since the rich are not concerned with the city development and do not construct their own roads or get the neighbourhood garbage collected, supply electricity, or get sweet water in the pipelines. The rich feel that they have nowhere to go but to Dubai with their business, US or UK for education, Canada for health services, and Australia for great weather. The wealthy class has withdrawn from patronizing public services and facilities and has instead developed private facilities that can promote international quality education, services and entertainment.

The poor areas on the other hand have grown and developed, as communities are relying on self-help and NGO support. There are entrepreneurs in all low income settlements that are running small businesses, setting up schools and clinics and undertaking sewerage and water networks development. These settlements are upwardly mobile and sometimes house almost half the population of the cities.

2. Political History of the City

2.1 Early Development

In 1728, the estuary of the Hub River to the west of what is now Karachi, which then formed the port of Kharak Bunder, silted up. The Hindu merchants who used this port were forced to look for other means of access. In 1792, they chose the bay of Karachi eighteen miles to the east and established a small town near its existing fishermen's village called "Kolachi jo Goth". This town came to be known as Karachi (refer, Map 3).

Kolachi began growing into a city in the early eighteenth century as a transit trade route between the Indian peninsula, Central Asia, Africa and Eastern Europe (refer, Map 3). In 1839, the British occupied the city and used it for landing troops and armour for their campaigns in Afghanistan to contain the Russians. In 1843, they annexed Sindh to the Empire and made Karachi its administrative centre.

After 1843, Karachi expanded rapidly, the population increasing from fifteen thousand to fifty-six thousand by 1870³⁴. The new railroad network linked Karachi to agricultural Sindh and Punjab which had developed as a result of the perennial canal irrigation system introduced by the British making it an export route for the voluminous agriculture produce. By 1922, the population of the city had increased to 203,000³⁵ (refer, Map 3).

The Czarist and later Soviet pressure on the western frontier of British India increased Karachi importance, and it became a strategic naval and military cantonment. During the Second World War, or the European War of 1939-45, it was used again as a landing port for troops and materials for the eastern front, and was developed to meet the growing military needs. In 1941, the population of the city was recorded as 4, 35,887³⁶.

In 1947, when the British Indian Empire was partitioned and the new state of Pakistan was created, Karachi was made its first capital (refer, Map 3).

In 1947, Karachi's population was just above 400,000 people, but with the influx of refugees from India between 1947 and 1951 it became 1, 37,000. Majority of the migrants were poor and destitute who occupied all open spaces in the city centre. All public amenities and civic services were greatly over stretched as a result and maintaining health and sanitation became a major issue (refer, Map 3). Most of these refugee settlements were multi-ethnic and multi-class.

A number of civil servants, intellectuals, poets and politicians also came to live in Karachi lending it an administrative and intellectual value. There was an immense cultural, ethnic and linguistic change as a 92 percent Urdu speaking predominantly Muslim population replaced over 61.2 percent Sindhi speaking predominantly Hindu population. These changes have had a major effect on the culture, politics and development of the city.

In 1950, the Karachi Improvement Trust (KIT) was established, and in 1952, the KIT prepared a master plan for the new capital with the assistance of a Swedish firm, MRV. This was known as "The Greater Karachi Plan" (GKP), or the MRV plan, but it was rejected as being technically inappropriate and because the new government of the day lacked both the finances and the political will. In addition there were civic disturbances in 1953 in the city after which the government termed it an unsafe city to develop a federal capital.

By 1958, when the first martial law government took control of the country and decided to shift the capital from Karachi to Islamabad, the Greater Karachi Plan was abandoned. Karachi was carved out not as the administrative centre of the country but as an industrial and commercial base with a port facility, a dream that pushed many people from the rural hinterland into the big city in search of employment. To deal with the influx of refugees and provide housing for the industrial labour, "The Greater Karachi Resettlement Plan" (GKRP) was announced which was

³⁴ Hasan Arif, "Housing for the Poor, Failure of Formal Sector Strategies", City Press, Karachi, 2000

³⁵ *ibid*

³⁶ *ibid*

partially implemented because industrialization did not keep up pace with development of housing and related physical and social infrastructure.

During the period 1968 - 1973, since Karachi was the hotbed of intellectuals and political activists, the city was actively engaged in a movement against dictatorship. After the restoration of parliamentary democracy, Pakistan again became a federation and Islamabad its federal capital.

From 1973 to 1977, was the period of socialist reform and populism in Pakistan. Karachi Master Plan 1975-85 prepared earlier was implemented to respond to the needs of the urban poor. Many schemes like the Metrovilles and Katchi Abadi Improvement and Regularization Programme (KAIRP), were introduced in what may be called the golden age of development plans.

In 1977, when Ziaul Haq's martial law regime came to power after executing the elected prime minister of the country, Zulfikar Ali Bhutto, most of these development plans were wholly or partially abandoned. During the 1980s, this conservative regime lent support to Muslim militants in Afghanistan to help them oust their socialist government, and because of the civil war that ensued in Afghanistan, 3.7 million refugees crossed over to Pakistan³⁷. A majority of them settled in refugee camps in the NWFP and Balochistan, but almost six hundred thousand also made their way to Karachi³⁸, bringing with them a culture of arms and drugs. At about the same time, the regime enacted anti- women laws, banned several forms of cultural activity and entertainment, and banned all students' cultural activities in educational institutions.

The regime promoted ethnic, linguistic, and religious politics to weaken the movement for the restoration of democracy, leading to violence and riots. In the absence of State control, the informal and the private sector stepped into housing, transport, water, and other sectors that provided civic amenities.

In 1988, the military-supervised democracy returned to Pakistan with Benazir Bhutto coming to power, but the outfall of the war in Afghanistan continued to affect civic life in Karachi. Between the years 1992 to 1998, Muslim militants from Afghanistan, the Taliban, came to power in Afghanistan and Karachi became a landing ground for war supplies and a stronghold of Afghans refugees who had settled in the city. Attempts were made to Talibanize the city but it was successfully resisted by civil society.

In 2002, a Devolution Plan was introduced in the administrative structure of the country. The Plan was meant to give greater authority to district governments and thereby promote better local governance. The caveat was that the plan bypassed provincial governments, which meant, in effect, greater federal control. This was opposed by the smaller provinces and especially by the province of Sindh.

2.2 Administrative Structure

Before the enactment of the Sindh Local City Government Ordinance, 2001 (SLGO 2001) which instituted the Devolution Plan for local governance, Karachi was divided into five districts, each with its own district council, with the Karachi Municipal Corporation (KMC) as the parent institution of the district councils. The KMC's functions were limited to operation, maintenance and management of water supply, drainage, sewage, roads, solid waste management, street

³⁷ ibid

³⁸ ibid

lighting, road signs, parks, recreation areas and social welfare institutions. The Karachi Development Authority (KDA) and other agencies under the control of the provincial government carried out the development planning and implementation of physical and social facilities.

The development of water and sewerage infrastructure was taken care of by the Karachi Water and Sewage Board (KWSB), and electric supply was the domain of the Karachi Electric Supply Corporation (KESC) in the public sector. There were a number of other autonomous development authorities in Karachi working under the federal government like the Karachi Port Trust, the Jinnah Airport Terminal, the Railways, and the Armed Forces. The lack of coordination between the KMC, KDA and all the federal agencies meant that there was no compliance with the city master plan, and with building regulations. This lack of coordination amongst the civic agencies and the arrogant attitude of the federal government towards the city government resulted in a number of development projects being duplicated wasting public funds. This attitude of the federal government is reflective of their non-recognition of the effectiveness of an elected city government, the informal sector of a city and development work done by the low-income communities.

In 2001, the government decided to devolve the local government and its planning and development functions to make the process of development transparent and manageable at the neighbourhood, town, and city level. As a result of the Devolution Plan, Karachi is now a city district divided into 18 towns (refer Map 4) and 178 Union Councils (UCs). Each town and UC has its own Nazim and Naib Nazim (Mayor /Deputy Mayor). The district has its Nazim and Naib Nazim, with indirect elections to choose the Nazim and Naib Nazim through elected councilors (for details, refer appendix 1). The total number of the representatives of the city government is 225, with 178 seats for the Nazim of UCs, 59 seats for women, nine seats for workers and peasants, and nine seats for minorities.

2.2.1 The New System of Governance

After devolution, all planning, implementation and O&M have been centralized with the city government, or they have been allocated to the towns and UCs who have been given a similar role as the city government. Every town and UC can raise funds independently and decide on the development and the operation and maintenance issues related to education, basic health, solid waste management, water and sewage. KMC, KDA, KWSB and all provincial government departments stand dissolved and have been absorbed into the city government. The Police do not come under local government and it is still subservient to the provincial government for political reasons.

The shortfalls of the new system are many. For one, funds given at the UC level are utilized effectively if the concerned communities are organized and can access their councilors, negotiate technically and participate in the development of their communities. Weaker communities are marginalized as they do not have access to information, are technically weak and are not organized to negotiate effectively with officialdom.

The changeover is still in process. Setting up of offices, deputation of the work force for planning, operation, and maintenance of social and physical infrastructure for 18 towns and 178 UCs is a difficult and expensive process. Most of the towns and UCs do not have the managerial, technical, or financial resources to take on development works. The setting up of stipulated institutions like the Citizen Community Boards (CCBs) which were supposed to include NGOs, CBOs and prominent citizens, and support the changeover have not been made.

There are no direct checks and balances on the Nazim and Naib Nazim as they are indirectly elected and are not answerable to the communities. In addition, administrative bureaucrats such as the area DCO is subservient to the Nazim. Due to indirect elections, influential contractors, middlemen and establishment nominees who have no political background have come into power. Meanwhile, most of the politically prominent citizens or active civil society members do not wish to contest indirect elections since they have to rely on the vote of the directly elected councilors who are often manipulated by political parties and the government in power. Thus, indirect elections have deprived Karachi of its potentially more sincere leaders.

The resources of the city government are mostly generated through property taxes, octroi and other assets that are centralized. Only 15 per cent of the fund is shared with the Towns and UCs who are expected to generate most of their own funds through residual taxes such as road signage, business and commercial activities, road usage, death and birth registration. The money generated by local taxes, which amounts to about 85 per cent, is spent on administration, operation and maintenance, and on contingencies (refer table 10). The federal government by Build Operate and Transfer (BOT) and Build Operate and Own (BOO) projects that are executed by contractors and financed by donors generates funds for development. The total fund disbursement by the federal government to all levels of city government is 619 million Rupees³⁹, a small allocation for a city of Karachi's scale.

There is no cross subsidization amongst towns which results in uneven development. The financial disparity amongst towns is due to their *ad hoc* administrative boundaries that do not guarantee similar revenue generation opportunities for all. Areas like Saddar, SITE, Gulshahn-e-Iqbal and Jamshed Town (refer Map 4) lie in the city centre and constitute a major business district, whereas areas like Lyari, Gadap and Orangi Town (Refer Map 4) constitute the inner city slums and peripheral informal settlements which have very little opportunity to garner taxes.

One significant change due to the new set up has been in planning for the city, especially for the poorer areas. Earlier, planning done by conventional bureaucrats was based on a top-down approach, which assumed that development requires foreign consultants, loans and technical expertise to be successful. That development model acknowledged no informal sector, and believed in setting up a system of municipalities to make the city work. Today, there is a growing number of mid career professionals who have interacted with institutions like the Orangi Pilot Project Research and Training Institute (for details on OPP-RTI, refer sections 3.7.1 & 7.3.1) for over two decades and have a changed mindset when it comes to developing the poor. This means supporting the informal sector, encouraging local development models, and planning without the help of foreign consultants and loans.

Because of this change, OPP-RTI was appointed technical advisor for the Greater Karachi Sewerage Plan (GKSP). According to the OPP-RTI directors, there are various reasons for this change in government attitude. One, the young professional class with whom OPP had interacted on various projects in the past has come of age and is in decision-making positions. Two, government officials who were opponents of the informal sector and local planning models have been discredited over the years for corrupt practices. Three, civil society groups in Karachi have come together as a NGO/CBO network as a united front on development issues. And, four, OPP continues to have a dialogue with the government.

Another positive aspect of the devolution process that can result in better development models for the city is that wherever communities have been supported by non-governmental organizations to

³⁹ Discussion with Prof. Nauman Ahmad, DAP-NED University

access technical training, maps and documentation they have become strong and a significant change is noticed. One such example is the work undertaken in UC 6, Orangi Town with the support of the OPP-RTI (for details refer section 7.3.2).

2.3 Budgetary Allocations for Development

Before devolution, the Karachi Metropolitan Corporation was generating its revenues from levying octroi, conservancy tax, fire tax, slaughtering fee, ticket fee of recreational areas, land rent, rent of shops and markets, income from health and education institutions, sale of land and cottage industries and development charges. The total revenue generated at 5507.88 million Rupees came to 458 Rupees per capita in 1999-2000, far less than the total expenditure at 5576.19 million Rupees, which came to 464 Rupees per capita (refer, Table 9). The deficit of 68.31 million Rupees was taken care of by loans and grants from the federal or provincial governments. The reason for the deficit was the inability of the KMC to manage its finances, lower its establishment and O&M costs, and recover adequate taxes.

The KMC spent 35 per cent of the budget on development, of which 50 per cent was inbuilt establishment and O&M costs. Forty-three percent was shared with the District Municipal Corporations (DMCs) for development, operation and maintenance with the DMCs mostly responsible for carrying out municipal functions like solid waste disposal spent three-fourth of their budget on salaries. Twenty-two percent was spent on establishment, contingency and operation and maintenance costs of the KMC (refer table 9). Altogether, the establishment and O&M costs of the city came to 71.75 per cent of the total budget.

Similarly, although the stipulated per capita expenditure on development by KMC was 163 Rupees against a per capita cost of 101.3 Rupees for establishment and O&M cost. In reality, 344 Rupees per capita was spent on establishment versus 144 Rupees on development.

The high establishment costs were a result of over staffing done due to nepotism and gaining of popular support by the political party's officials, financial mishandling and reliance on loans, grants and donor funding for development, which resulted in little development. The projects undertaken with external support became expensive due to the inbuilt kickbacks of contractors and government officials. To meet the shortfall, the quality of work was compromised, which resulted in substandard construction. In the year 1999-2000, a total of 2487.08 Rupees was planned for developing the health and medical, education, recreation facilities, sewerage systems and roads (refer, Table 10). This was 530.61 Rupees more than the allocated development budget. There were no plans indicated for meeting the shortfall and it would have resulted in either borrowing or no development activity being initiated.

After the devolution of the local government in 2001, the KMC, KDA and the KWSB were merged to form the City District Government Karachi (CDGK), with the city government generating its revenues through all the assets and functions that were earlier with KDA and KWSB. It gets grants and releases from the federal government, city development authorities, Karachi Building Control Authority, the Mass Transit Cell, Information and Technology, the devolved departments of the government of Sindh, works and services and transport and communication, water and sanitation. This has increased the city budget almost five-fold, bringing it to 27,704.13 million Rupees (refer table 9), but the number of staff, establishment and O&M costs, liabilities and other committed expenses has also increased.

The allocations of development expenditure at 45 per cent, establishment and O&M cost at 25 per cent, and Towns and UCs share at 38 per cent present the same hidden costs, as was the case

earlier with the KMC (refer, Table 10). In the absence of a streamlining of city offices, there is a lot of duplication of the work, with the resultant overstaffing and financial confusion. A comparison of the two administrative models before and after devolution reflects that the transition of Karachi city from a decentralized administrative and financial set up to a centralized one has not yielded any positive results.

Table 9: Comparison of Budgets of Karachi 1999-2000 and 2003-2004

Items	KMC 1999-2000 Rs. In Million	Per Capita for 12 Million Population Rs in hundred	CDGK 2003-2004 Rs. In Million	Per Capita for 12 Million Population Rs. in hundred
Total Revenues	5507.88	458	27,704.13	2,308.6
Total Expenditure	5576.19	464	27,582.38	2,298.5
Total Expenditure on Development	1956.47	163.0	130,32.0	1,086.0
Total Expenditure on Establishment O&M, Contingencies	1216.40	101.3	7085.20	322.4
Deficit / Surplus	68.31	5.6	+121.75	10.08
DMC's / Towns , UC's Share	2403.32	200	10680.87	890

Source; Budget highlight cards of the City District Government Karachi

Table 10: City Government Expenditure on Social Sector

Items	KMC 1999-2000 Rs. in Million	Per Capita for 12 Million Population Rs. in hundred	CDGK 2003-2004 Rs. In Million	Per Capita for 12 Million Population Rs. in hundred
Total Expenditure on Health + Medical	840.13	70	1792.52	149
Total Expenditure on Education	NA	-	5170.62	430
Total Expenditure on Recreation & Social Facilities	283.94	23.58	NA	-
Total Expenditure on Sewerage	143.50	11.91	5016.80	418
Total Expenditure on Communication & Transport	1119.51	93.25	67.87	5.5

Source; Budget highlight cards of the City District Government Karachi

2.4 Demographic Trends

Karachi is the only port and largest city of Pakistan (refer, Map 5). According to the 1998 census it accommodated a population of approximately 10 million, spread over 3,527 square kilometers.⁴⁰

⁴⁰ Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

In 1947, the population of Karachi was 4, 50,000. Of the original population, 61.2 per cent was Sindhi speaking, 6.3 per cent was Urdu speaking, 51 per cent was Hindu and 42 per cent was Muslim (refer, Table 12). By 1951, the overall population had risen to 1.137 million and the growth rate from 3.70 to 11.50 per cent per year. The Sindhi speaking population had declined to 8.6 percent and the Hindu population to 2 percent, whereas the Urdu speaking population had risen to 50 percent and the Muslim population to 96 percent (refer Table 12). The moving out of the predominantly Sindhi- speaking Hindu population after Partition and replacement by an Urdu -speaking Muslim population changed the culture and spatial arrangements of the city centre tremendously.

All pen land and empty buildings of the fleeing Hindus were taken over by the Muslim refugees. The Hindu temples and Dharamshalas lost their usual importance in the living culture of the city and their celebrations and festivals became limited to the community which was left behind. All refugee settlements became multi ethnic and multi class. Saddar Bazaar became a hub of cosmopolitan activities. Almost all educational, administrative, entertainment and civic agencies were located there and accessed by politicians, students, diplomats, professionals and working class people alike.

In the years from 1951 to 1972, the population of Karachi increased by almost 200 per cent (refer, Table 11). There was a mass migration of rural migrants who came to work in the newly developing fishing industry and poultry farms for which government was providing credit and land. In addition, the industrialization of Karachi increased local and international trade and port activity that attracted labour to migrate to Karachi.

Karachi's population increased from 3.6 million in 1972 to 7.4 million in 1987 or by 106.38 per cent (refer table 11). It is estimated that 50 per cent of this increase was due to rural –urban and urban –urban migration within Pakistan. The remaining increase was due to 3, 50,000 refugees from Bangladesh and 3, 00,000 Iranian and Afghan war refugees.⁴¹ The numbers of illegal immigrants from Bangladesh, Sri Lanka, Burma and Philippines also increased during this period.

From 1981 to 1998, the percentage of migrants coming to the city decreased from 32.62 to 21.95 (refer, Table 13). Currently, an estimated 3, 50,000 persons are added to the city every year⁴².

This means that the metropolis comprises 10 per cent of Pakistan's total population and 25 per cent of urban population. Within the province, it comprises 30 per cent of Sindh's population and 63 per cent of Sindh's urban population⁴³.

Table 11: Population Growth

Year	Population	Increase/Decrease Over Last Census / Survey	No. of Years in Between	Per cent Increase/ Decrease	Average Annual Growth Rate
1941	435,887	135,108	10	44.90	3.70

⁴¹ Hasan Arif, "Understanding Karachi, Planning and Reform for the Future", City Press, Karachi, 1999

⁴² ibid

⁴³ Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

1951	1,137,667	701,780	10	161.00	11.50
1961	2,044,044	906,377	10	79.70	6.05
1972	3,606,746	1,562,702	11	76.50	5.00
1981	5,437,984	1,831,238	9	50.80	4.96
1998	9,802,134	4,540,422	17	86.29	3.52

Source: Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 12: Demographic Change Due to Partition

Item	1941	1951
Population	450,000	1,137,000
Sindhi spoken as mother tongue (percent)	61.2	8.6
Urdu spoken as mother tongue (per cent)	6.3	50
Hindu population (per cent)	51	2
Muslim population (per cent)	42	96

Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 13: Karachi - Migrant Population in Urban Karachi

	1981		1998	
Male	997339	35.25	1212882	24.17
Female	701441	29.49	852397	19.73
Total	1698780	32.62	2065279	21.95
Population w.r.t total urban	5208132		9339235	

Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

2.5 Economy

Karachi contributes 20 per cent to the country's GDP, 40 per cent of employment in large-scale manufacturing, 50 per cent in total bank deposits, 20 per cent of federal revenues, 40 per cent of provincial revenues and 62 per cent income tax⁴⁴.

It has 4,500 formal sector industrial units. The major industries are textile, leather, paper, marble, ceramics, rubber, plastic, glass, iron, electronics, pharmaceuticals, food products, agriculture, dairy products and stationary. Several of these are export-oriented but 75 per cent of the working population is employed in the informal sector in garments, leather, textile, carpet and light engineering works. There is a link between the formal and informal sectors, with the formal sector sub contracting work to the informal establishments to save costs which accounts for the quicker growth in the informal sector as compared to the formal one.

⁴⁴ Hasan Arif, "Urban Change: Scale and underlying causes, The case of Pakistan", 2002

So, although the total employed population has decreased from 45.18 per cent in 1981 to 27.67 in 1998, the number of self-employed workers has increased from 27.81 to 30.12 per cent compared to the total employed population, and the total number of employers has increased from 2.48 to 3.31 per cent as compared to the entire population of the country. The growing importance of the city in the country's economy is reflected in the increase of cargo handled by Karachi Port Trust, which were 2.8 million tones in 1951 and 23.74 million tones in 1991⁴⁵.

2.6 Social Indicators

Karachi's social indicators are better as compared to the rest of Pakistan. Literacy is 67.42 per cent as compared to 63.06 per cent for urban Pakistan. Female literacy is 62.88 per cent compared to 55.16 for urban Pakistan (refer, Table 14). This has increased by almost 20 per cent from 1981 to 1998. There was an increase of almost 300 government schools for girls during the period 1996-1999 (refer, Tables 18 and 19).

Education has become a priority for households in Karachi, but people are interested in private schools, colleges and institutions of higher education because the quality of public sector education facilities is poor. In the period 1996-1999, a total of 1082 schools were added to the city by the government but the enrolment increased only by 5044 children. The government is not investing in higher education and the number of professional colleges, technical institutes and universities has remained the same (refer, Tables 18 and 19). The private sector has stepped in here, too, and is growing fast.

There is a growing trend for acquiring higher education amongst women, almost 80 percent of the medical college seats, 70 percent of the Karachi University seats and 90 percent of the seats in different schools of architecture are taken up by them. The trend for women to be better educated is supported by a decline in the number of married women in the age group 15-24 from 66.28 per cent in 1981, to 27.68 per cent in 1998 (refer, Table 15). Increase in the number of women studying and working means a larger work force that needs employment opportunities and equal rights. The increase in the number of female teachers in Karachi has been consistent and in 1999-2000 there were 9454 female teachers compared to 4172 male teachers (refer, Table 18 and 19).

The indicators for health facilities in the public sector are grossly inadequate. There are a total of 2152 doctors, 648 nurses and 91 midwives working in 11 general and 9 specialized public hospitals, and the total number of beds in public hospitals is 3397 (refer, Table 20 and 21). Taking the population of Karachi at 12 million, this works out to one bed for 3500 people, one doctor for 5000 people, and one nurse for 18,000 people and one midwife for 131000 people. The demand supply gap is being met by the formal and informal sector private hospitals and clinics, which are usually expensive and out of the reach of the poor man.

Karachi has a relatively young population, with 37 per cent people being below the age 15, and 20 per cent of the population in the age group of 15 to 24, who would soon contribute to population growth. This population momentum, influenced by past fertility patterns, could generate a relatively high population growth (refer, Table 15).

Thirty-eight per cent of population increase in Karachi from 1981 to 1998 was due to migration, with 38 per cent migrants from the Punjab and 29 per cent from the NWFP. This explains the 31.94 and 11.42 per cent of Punjabi and Pushto speaking populations of the city (refer, Table 16).

⁴⁵ Hasan Arif, "Understanding Karachi, Planning and Reform for the Future", City Press, Karachi, 1999

Eighty per cent of the population is informed through print and electronic media, while 72 per cent have access to television airing both national and international channels. This access to information through the electronic media has widened people's views regarding international and national politics, culture, lifestyle and material aspirations

Table 14: Urban Literacy

	1981		1998	
A. Total Urban Literacy				
Male	1,274,820	61.55	2,764,751	72.20
Female	837,671	50.47	2,040,250	63.94
Total	2,112,491	56.62	4,805,001	68.44
Population between 10 and above	3,730,980		7,020,498	
B. Between 10 and 14				
Male	200,133	56.64	459,691	75.99
Female	182,867	57.16	422,175	75.26
Total	383,000	56.88	881,866	75.64
Population between 10 and 14	673,293		1,165,935	
C. Between 15 and 24				
Male	409,989	68.08	839,273	76.77
Female	313,511	64.10	689,809	72.22
Total	723,500	66.30	1,529,082	74.65
Population between 15 and 24	1,091,302		2,048,387	

Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 15: Urban Marital Status

	1981		1998	
A. Total Urban Married Population				
Male				
Female	1,008,960	59.50	1,718,571	53.30
Total	880,129	64.63	1,551,452	58.99
Population between 15 and above	1,889,089	61.78	3,270,023	55.85
	3,057,687		5,854,563	
B. Between 15 and 24				
Male	79,146	13.14	108,241	9.90
Female	183,195	37.45	264,341	27.68
Total	262,341	24.04	372,582	18.19
Population between 15 and 24	1,091,302		1,093,231	
C. Between 25 and 49				
Male	677,130	81.75	1,191,496	73.55
Female	685,243	89.57	1,054,073	83.31
Total	1,263,373	85.20	2,245,569	77.83
Population between 25 and 49	1,482,828		2,885,240	

Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 16: Karachi - Mother Tongue

	1981 (in Percentage)	1998 (in Percentage)
Urdu	54.34	48.52
Punjabi	13.64	13.94
Sindhi	6.29	7.22
Pusho	8.71	11.42
Balochi	4.39	4.34
Seraiki	0.35	2.11
Others	12.27	12.44

Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Note: 1981 figures are in % households 1998 figures are in % population

Table 17: Karachi: Sources of Information

Source of Information	1981 (%age)	1998 (%age)
TV	NA	72.04
Radio	NA	36.19
Newspapers	NA	49.85
Total with information sources	NA	81.24

Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 18: Number of Institutions, Enrollment and Teaching Staff in Karachi, 96-97 to 98-99

INSTITUTIONS	NO. OF INSTITUTIONS				ENROLEMENT				TEACHING STAFF			
	TOTAL		FEMALE		TOTAL		FEMALE		TOTAL		FEMALE	
	96-97	98-99	96-97	98-99	96-97	98-99	96-97	98-99	96-97	98-99	96-97	98-99
Schools	40689	41771	6539	6848	3048472	3043428	1036544	1081754	144806	141037	43786	42660
Non Professional Colleges	206	210	74	74	266492	273199	99790	111202	6468	5850	2418	2331
Professional Colleges	71	71	15	15	48042	49226	17483	18726	2066	2031	629	663
Technical Institutions	105	107	65	65	28017	5640	2131	1952	1108	1100	306	295

Universities (P)	7	7	-	-	31643	4009	8695	11596	1547	1843	233	326
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Source: Development Statistics of Sindh 2001, Bureau of Statistics, Government of Sindh

Table 19: Number of Primary Schools by Sex and District in Karachi, 1997-98 to 1999-2000

Karachi District	1997-1998		1998-1999		1999-2000	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Primary Schools	1244	414	1259	411	1267	386
Enrolment	139674	162280	124659	151169	126449	150240
Teaching Staff	4061	9381	4105	9263	4172	9454

Source: Development Statistics of Sindh 2001, Bureau of Statistics, Government of Sindh

Table 20: Medical & Paramedical Personnel (Government) by Category and District in Sindh, 1998 To 2000

Karachi Division	Doctors	Nurses	L.H.V Technicians	Radio-Graphers	HEALTH TECHNICIANS	DISPENSER / DRESSERS	X-RAY TECHNICIANS
1998	2451	643	66	3	81	305	61
1999	2448	642	67	3	81	302	61
2000	2512	648	65	3	81	304	61

Karachi Division	LAB TECHNICIANS	O.T TECHNICIANS	X-RAY ASSISTANTS	LAB ASSISTANTS	O.T ASSISTANTS	MIDWIVES	DAI'S
1998	122	83	2	58	34	87	204
1999	122	82	2	58	37	87	207
2000	125	88	2	60	37	91	218

Source: Development Statistics of Sindh 2001, Bureau of Statistics, Government of Sindh

Table 21: Government Hospitals, Dispensaries, Rural Health Centers, T.B Clinics & Basic Health Units with Their Bed Capacity by District in Karachi, 1998 To 2000

Karachi Division	Hospitals		Hospitals Beds				Dispensaries No.
	General & Teaching	Civil, Specialized Taluka & Others	Teaching	Civil, Specialized Taluka & Others	R.H Centers	Basic Health Units	
1998	11	9	2013	1168	110	70	21
1999	11	9	2025	1168	110	70	23
2000	11	9	2025	1192	110	70	22

Source: Development Statistics of Sindh 2001, Bureau of Statistics, Government of Sindh

2.7 Employment Trends

The unemployment rate for Karachi is 17.56 per cent that is lower than 19.13 per cent for the rest of Pakistan. But the total employed population has decreased from 45.18 per cent in 1981 to 27.67 in 1998 (refer, Table 21). The worst hit has been the population that is 60 years and above (refer, Table 21).

The Pakistan Institute of Labor Education and Research (PILER) states industries working on contract rather than on the basis of permanent employment as one of the reason for the increase in the number of unemployed in Pakistan. Contractual work is favored as it means giving lesser wages, little or no social security and old age benefits, longer working hours, and no investment in improving infrastructure, especially if the contractor is working from home. Unregistered contractors in the informal sector are working for industries based at home and on the site. The advantage for the work force is that they do not have to leave home for work so transport costs are saved and women have the advantage of working and keeping an eye on their children at the same time. This is especially true of the carpet, textile, garments, leather and light engineering industries in Karachi.

The number of self-employed has increased from 27.81 to 30.12 percent from 1981 to 1998. This is due to the support of some government and NGO poverty alleviation programmes that are giving credit for small enterprises. One successful example is the Family Enterprise Economic Programme of the Orangi Pilot Project – Research and Training Institute (OPP-RTI) (for details refer section 3.7.1). This programme is run by the Orangi Charitable Trust (OCT). Loans vary from one thousand to seventy thousand and the interest is charged at 18 per cent. By 1999, OCT was supporting 6,555 units with a total loan of 123,738,610 Rupees. Of this, 97,327,482 Rupees had been paid back with a mark up of 22, 2999,610 Rupees. The recovery rate is 97 per cent⁴⁶.

Table 22: Karachi - Employment Trends

	1981 (Percentage)	1998 (Percentage)
Total Employed	33.43	27.58
Less than 25 years of age	17.72	13.39
Above 60 years of age	33.25	18.74
Between 25 and 59	49.37	42.09
Self employed with respect to (wrt) total employed population	27.81	30.12
Government employed wrt total employed population	20.45	15.00
Employed non-government wrt total employed population	47.09	49.38
Employer wrt total population	2.48	3.31
Unpaid family help wrt total employed population	2.17	2.19
Unemployment rate	17.14	17.56

Statistics Division, Government of Pakistan, “1998 Census Report of Pakistan”, December 2001, Islamabad, as analyzed by Hasan Arif in, ‘Urban Change: Scale and underlying causes, the case of Pakistan’, 2002

2.8 Land Use Trends

In 1870, the urbanized area of Karachi district was 13 square kilometers. The 1971 census report gives the figure of 289 square kilometers. The 1974 Master Plan defined metropolitan Karachi as

⁴⁶ Hasan Arif, “Understanding Karachi, Planning and Reform for Future”, City Press, Karachi, 1999

349 sq. km and the 1988 Karachi Development Plan gives a figure of 3, 2520 sq. km. The present area of Karachi division is 3,527 sq. km. At the current rate of urban land conversion of about 6,780 acres per year, Karachi will outstrip its present divisional boundaries in the coming years⁴⁷.

Much of the land acquired for formal sector development in Karachi initially belonged to 1,200 *Goth* (villages) that are located within Karachi division. A large number of these Goth have now become a part of the urban sprawl and since they no longer hold any land for agricultural and pastoral activities, they have lost their self-sufficiency. Of the nearly 400,000 acres of the 425,000 that make up Karachi's metropolitan area and account for 94 per cent of all land in the Division, is in public ownership (refer, Table 24). The Karachi Development Authority owns only 29.3 per cent of land and the rest is distributed among provincial, federal agencies and cantonment boards. There is a conflict of interest amongst these agencies that results in hindrance to the development and administration of the city. Federal land agencies, especially the armed forces, are exempt from many regulations and do not adhere to city master planning making the urban development uneven.

Land is an important issue in Karachi. There is a constant struggle to acquire and develop land through legal or illegal means. A powerful nexus exists between formal sector developers, politicians, and bureaucrats, manages to acquire all vacant land especially that earmarked for amenity purposes. Through this nexus, developers are able to violate byelaws and zoning regulations, encroach upon infrastructure reservations, and to sell government land and properties at throwaway prices.

The major formal sector developers are represented by a powerful organization called the Association of Builders and Developers (ABAD). This body continues to support grandiose plans of city development whose main victims are the urban poor and lower middle-income groups. ABAD and its member organizations have no housing schemes for the poor classes, as they are termed as incapable of affording the ABAD schemes.

In addition to formal sector manipulations related to land, there is also a lot of informal development. Around one thousand acres of government land is encroached upon for developing informal settlements each year. Net earnings from this land are estimated to be around 300 million Rupees per year⁴⁸. This is shared among middlemen, government officials, the local police stations, and local councilors. In addition to these encroachments, middlemen with the support of government officials also appropriate land developed by the KDA. Estimates for this encroachment are not available. A large number of multi-storied buildings are illegally constructed in the planned areas and, according to the Karachi Building Control Authority (KBCA), they would number about 200 per year and are mostly in the inner city and its low-income extensions⁴⁹. These buildings replace earlier ones that are usually not more than four stories high. The owners of the buildings get a small share and a flat to live in, while the total land transactions by the contractors in land conversions amounts to at least 5 billion Rupees a year⁵⁰.

⁴⁷ *ibid*

⁴⁸ Hasan Arif, "Understanding Karachi, Planning and Reform for the Future, by City Press, 1999

⁴⁹ *ibid*

⁵⁰ *ibid*

Table 23: Karachi - Land-Use (%) – 1987

Total Area	101, 256,101 hectares
Land-use by percentage of total area:	
- <i>Katchi abadi</i>	5.65
- High density housing	2.71
- Medium density housing	3.54
- Industries	5.3
- Developed/semi-developed vacant land	9.84
- Institutions/services/utilities	1.0
- Defense	9.01
- Agriculture	4.56
- Other	49.89

Statistics Division, Government of Pakistan, “1998 Census Report of Pakistan”, December 2001, Islamabad, as analyzed by Hasan Arif in, ‘Urban Change: Scale and underlying causes, the case of Pakistan’, 2002

Table 24: Land Holdings in Karachi – 1988

(All land is sold on a 99-year lease)

Agency	Acres	Per cent of Total
Karachi Development Authority	124,676	29.3
Cantonment Board	18,596	4.4
Karachi Municipal Corporation	24,189	5.7
Defence Housing Society	16,567	3.9
Steel Mill	19,461	4.6
Port Qasim	12,961	3.0
Port Trust	25,259	3.6
Railways	3,119	0.7
Private	27,862	6.5
Government of Sindh	137,687	32.4
Government of Pakistan	4,051	1.0
Coop. Housing Societies	15,721	3.7
Sindh Industrial Trade Estate	5,380	1.3
Total	425,529	100.0

Statistics Division, Government of Pakistan, “1998 Census Report of Pakistan”, December 2001, Islamabad, as analyzed by Hasan Arif in, ‘Urban Change: Scale and underlying causes, the case of Pakistan’, 2002

2.9 Housing Conditions

The housing needs of the metropolis are estimated at 80,000 units per year. Approximately, 26,700 units are produced through the formal sector and the remaining demand - supply gap is filled through the development of squatter settlements, informal sub division of agricultural land on ecologically unsafe areas or wastelands on the city fringe and the densification of the low income inner city areas classified as slums (refer, table 25).

According to the 1987 estimates, 37 per cent of Karachi’s population lived in peri-urban squatter settlements, 34 per cent in semi permanent high-density housing, and 7 per cent in semi-permanent houses on small plots in planned areas. Only 13 per cent of the population lives in permanent houses on medium size plots in planned areas, 6 per cent in large bungalows and 3 per cent in apartments⁵¹ (refer, Table 28). Estimates done in 2002 show an almost hundred per cent increase in the numbers of squatter settlements from 37 to 55 per cent and in bungalows from 6 to 12.8 per cent (refer, Table 28). These trends are in keeping with the increasing disparity between the lowest and highest income groups in Pakistan as discussed in section 1.3.

According to estimates, the number of residents in katchi abadis has almost doubled from 2,600,000 to 5,000,000 from the 1980s to 2000 (refer table 26). This has raised the percentage of katchi abadi to almost 55 per cent of the total housing stock in the city (refer, Table 28). This trend is complimented by the decreasing numbers of households in high density inner city areas from 164,000 to 148,000 (refer, Table 27), indicating that most of the lower income population is opting to reside in newly developed katchi abadi on the outskirts of the city. The increase in the number of katchi abadi over the years has been due to the continuous inability of the State to meet the housing demand supply gap. Whatever housing has been provided by the state was unaffordable for the poor, there were no credit schemes to facilitate the purchase of land or to build a house and the procedures of public sector housing loans were long and cumbersome.

The increase in the number of katchi abadi does not in any way reflect on the quality of low cost housing that has been improving. The number of permanent housing units has increased from 360,370 to 452,760 from 1980 to 1986 (refer, table 29). The number of RCC roofs has increased from 42.54 to 56.04 per cent. This is due to an increase in the security of tenure levels in katchi abadi and to KAIRP who provides the services of small contractors who arrange the cash on credit and also give technical assistance in designing and building a house.

Table 25: Karachi Housing

Annual housing demand	80,000 units
Formal sector supply	26,700 units (1999 data)
Katchi abadi supply	28,000 units

Statistics Division, Government of Pakistan, “1998 Census Report of Pakistan”, December 2001, Islamabad, as analyzed by Hasan Arif in, ‘Urban Change: Scale and underlying causes, the case of Pakistan’, 2002

Table 26: Population of Katchi Abadi

	‘70s (1978)	‘80s (1985)	(1988)	‘2000 (Projection)
Population	2,000,000	2,600,000	3,400,000	5,000,000
Number of Households	227,000	356,000	465,000	680,000

Statistics Division, Government of Pakistan, “1998 Census Report of Pakistan”, December 2001, Islamabad, as analyzed by Hasan Arif in, ‘Urban Change: Scale and underlying causes, the case of Pakistan’, 2002

⁵¹ Hasan Arif, “Understanding Karachi, Planning and Reform for Future”, City Press, Karachi, 1999

Table 27: Population of Slum Areas

	'70s (1974)	'80s (1986)	'2000 (Projection)
Population	709,000	1,036,000	1,064,400
Number of Households	109,077	164,000	148,000

Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 28: Karachi - Composition of Population in Different Types of Housing Units

	1987	2002 Estimated
Squatter Settlements	37%	55%
Semi Permanent high density	34%	
Semi permanent in planned areas on small plots	07%	
Permanent in planned areas on medium plots	13%	
Large bungalows	06%	12.8%
Apartments	03%	

Statistics Division, Government of Pakistan, "1998 Census Report of Pakistan", December 2001, Islamabad, as analyzed by Hasan Arif in, 'Urban Change: Scale and underlying causes, the case of Pakistan', 2002

Table 29: Condition of Housing Stock

Type of houses	1970s (1969)	1980s (1981)	Most Recent (1986)
Permanent	22,888	360,370	452,760
Semi-Permanent or semi – pucca	179,730	36,370	534,688+
Not permanent or katcha	86,382	137,285	90,552+
Total	490,000	853,033	1,078,000

Source: Hasan Arif, "Understanding Karachi, Planning and Reform for Future", City Press, Karachi, 1999

2.10 Evictions

The Katchi Abadi Regularization and Improvement Programme (KAIRP) of the Sindh Katchi Abadi Authority (SKAA)⁵² has earmarked about 70 per cent of the katchi abadi of Karachi for regularization. But the threat of eviction hangs over the rest that means over 50,000 housing units⁵³ especially in those informal settlements that have been established after 1985, as according to the KAIRP act these are not regularisable.

⁵² For details on KAIRP and SKAA, refer sections 5.4.2

⁵³ URC Website

According to the estimates of the Urban Resource Centre (URC)⁵⁴, a total of 16,470 houses have been bulldozed as a result of evictions since 1992 (refer, Table 30). These estimates are based on reported cases and do not include the shops, businesses, schools and health units which were also demolished. The emotional, social, and psychological damage caused to the communities are never taken into account. In fact, there are numerous cases that are not reported in the press at all.

Most evictions are a result of, one, badly conceived and designed urban renewal and resettlement government schemes, two, mega projects such as the construction of flyovers, mass transit system, and city beautification programmes, three, Incomplete legal decrees and four, the lack of access to information and technical support by the affected communities. Many of these evictions and demolitions violate state laws and procedures, but they are made possible by a powerful politician-bureaucratic-developer nexus which takes advantage of unclear land titles, application of incomplete legal decree, badly planned infrastructure and urban upgrading projects. They make a mockery of state laws and, in the process, damage the physical and social environment of Karachi.

Table 30: Karachi - Evictions

Total number of houses bulldozed since Jan 04 to June 04	1850 Units
Cumulative cases from 1992-96	12,000 Units
Total number of house bulldozed since 1992	16,470Units
Estimated loss to the urban poor	Rs.2.5 billion

Source: URC website

The incidence of fire destroying informal settlements has increased over the years. Investigations show that all such incidents have occurred in settlements where the land was highly prized by land grabbers and developers. Since January 1997, a total of 1,139 houses have been burnt in different settlements. These incidents have rendered more than 9,185 population homeless⁵⁵.

Box 1: Demolitions in Liaquat Colony

Liaquat Colony is one of the 42 sectors into which Lyari was divided in 1972 for the purpose of regularization. During the survey, a dispute arose between the people of the area and a local MPA who wanted to grab the open plots and declared a portion comprising 450 houses as an amenity plot thereby denying lease to them. In early 1998, the MPA announced building a school and playground there, so, in June 1998, the police and the KMC tried to demolish the houses but failed due to an organized resistance from the residence. Finally, on 17 October 1998, the KMC demolition staff along with the police and rangers bulldozed 40 houses and 150 shops. The operation came to halt only after strong resistance by the community. After 6 November, an MPA arranged for a visit by the Sindh Governor to the area to inaugurate the construction of schools plans to bulldoze the remaining houses. Due to strong pressure from local and international NGOs and CBOs, along with the community activist, the operation for further eviction was abandoned. The fate of the concerned people still hangs in the balance.

Summarized from Source: Hasan Arif, "Understanding Karachi, Planning and Reform for Future", City Press, Karachi, 1999

Box 2: Burnings in Rahmanabad

Rahmanabad was a katchi abadi established in 1970's in Federal B Area. Bungalows built on 400, 600, and 1000 square yards surrounded it. Most of the houses were permanent and built over a period of 22 years. The residents were daily wage earners employed by local factories, scrap collectors, or building industry, while the women worked as domestic help. The total population of Rahmanabad was over 10,000.

According to the KAIRP of the Sindh Katchi Abadi Authority, Rahmanabad was to be regularized according to the SKAA Act of 1987, but before this could happen it was destroyed by the local councilor, the son of a powerful builder. The councilor had been harassing the families to clear the land on the grounds that they were occupying public land designated for a park. There were no documents to prove the claim.

In February 1992, he gave verbal notice to the residents to leave. When the residents refused on the basis of a court order, the councilor exerted pressure on them through the District Commissioner, who offered them alternative plots in Baldia Township. Basic facilities such as water and electricity were unavailable in Baldia and the community was reluctant to leave.

On February 23, the demolition of Rahmanabad began by KMC bulldozers under the vigilance of the police. When the residents resisted this, the police opened fire on unarmed people, killing one person was killed and several were injured. Twenty-five women were reportedly raped and people's houses were looted. The settlement was completely demolished and an investment of about 200 million Rupees made by the people over a period of 22 years was turned into rubble.

There was a lot of protest by human rights groups, local NGOs and women groups. The residents did not pursue the matter due to lack of trust in the authorities. About 20 per cent were resettled in Baldia, while the rest managed to reclaim part of their old land. Here, they built their huts once again because the Rahmanabad case had become big in the media.

The local councilor and builder left them alone for some time, but after two years, in December 1993, a mysterious fire broke out in the settlement, destroying the 700 huts and displacing 10,000 people. The fire was started by some unidentified people throwing fire crackers into the settlement. The residents started to rebuild again but, within a few months, another fire broke out and more than 200 huts turned to ashes. Although the residents were resilient and they rebuilt their huts, most of them want to move out due to the uncertainty of their future.

Summarized from Source: Hasan Arif, "Understanding Karachi, Planning and Reform for Future", City Press, Karachi, 1999

Box 3: Evictions and Lyari Express Highway Project

To deal with the problem of traffic congestion in the inner city, in 1989, the government proposed the building of an elevated Lyari Expressway along the Lyari River from the port to the Super Highway (Refer map 8). The construction of the project has commenced since 2000. This project is estimated to lead to the eviction of approximately 25,000 households.

The proposal was taken notice of by the URC as it was to lead to a major eviction and resettlement project. To oppose it collectively URC organized some concerned NGO's, citizen's groups and affected communities who have protested against the displacement of more than 25,000 households, businesses and educational and social facilities worth over 3.5 billion Pakistani Rupees. This project would also increase the atmospheric pollution level and speculative grounds for real estate developers. The displaced communities and their resettlement was an additional toll that had to be added to the exorbitant price of the expressway.

Due to widespread opposition to the project, it was shelved for a few years. The Lyari Expressway was brought to life again in 2000 by the military government. The actual work or, rather, the bulldozing related to the project, began in January 2002 with the help of the army and other law enforcing agencies. A token relief effort was made in the name of Lyari Expressway Resettlement Projects in Baldia, Hawkes Bay and Taiser Town, three lower income residential schemes on the periphery of the city.

The government anticipates building a six-lane highway of 68 kilometers, demolishing 11,964 housing units, 42 religious places (mosques, churches, Hindu temples) and 1035 shops, workshops and factories. The estimates and studies carried out by NGO's Urban Resource Centre (URC) reflect that the damage will be threefold: the dislocation of 200,000 people, the disruption of the education of 18,000 children, and it would render 80 per cent of the families jobless.

It is estimated that the evictions of settlements in the way of Lyari Expressway may cause a cumulative loss of over two billion Rupees to the poor resident. This economic fallout of the affected is hardly compensated for since the average cost of each dwelling unit of 120 square yards is estimated on 500,000 Rupees since these units possess infrastructure and utilities connections. The compensation has been worked out on the flat rate of 50,000 Rupees, plus an 80 square yard plot in a far flung peri-urban settlement. This amount is inadequate for a housing unit without infrastructure and utility connections. The affected communities have contributed over 3 million Rupees for litigation against this project.

Several public protests and discussion forums were organised between January and August 2003 by concerned political parties, civil society organizations, and community based groups, categorically rejecting the project. The UN and ACHR have also been involved in the resistance process promoting international protest against it. The project has continued with some small breaks. By May 2004, an estimated 6,059 houses and commercial premises would have been demolished.

Facts about Lyari Express Highway

Project: The National Highway Authority in partnership with CDGK, FWO and many contractors and subcontractors.

Donor: Unknown as government is not making information public

Design: A 16.5 km- long corridor with 16 bridges, 4 interchanging flyovers.

Total Cost: 5.081 billion, of which 2.273 billion is for earth works only.

Total Affected: Govt. estimate 81,540; URC estimate 200,000.

Total Demolitions: Govt. estimates 13531 housing units, 25,400 commercial units

NGO estimates: 1222 commercial units, 36,000 residential units 58 places of worship, including; (mosques, tombs, churches) 250 multi storied structures. 20,000 children's education disrupted. No account of the infrastructure costs.

Estimated Monetary Loss to housing stock: 600,000,000 Rupees, approximately @ Rs 200,000 per plot

Estimated compensation: 80 sq yd plot and 50,000 Rupees per affected person

Actual plot of 120 square yards 500,000 Rupees as per market rate

Total Demolitions (till May 2004) = 6,059 houses and commercial premises.

Summarized from Source: URC Website

2.11 Poverty in the City

A comparison of the planned and unplanned settlements most of which belong to the lower income strata, brings out the differences amongst the areas of Karachi and demonstrates inequalities in economy and provision of social and physical facilities.

The comparative study of difference in selected social and housing indicators for the period 1981 and 1998 (Arif Hasan: 2003) shows marked improvement for the entire city, but the settlements of the poor remain underdeveloped compared to the richer formal housing schemes.

Table 31 confirms that the general incidence of poverty is higher in households of larger sizes with higher dependency ratios. It also shows that households in unplanned low income settlements are less educated and are dependent on daily wage labour for income earning as compared to the residents in lower income planned settlements. Their employment is uncertain and they are generally under employed with very little access to municipal services, they have to pay more in percentage terms of their income for health and education and are unable to save.

Improvement in low income, unplanned, settlements in terms of access to services is defined as 'having a connection but no supply'. So, although piped water connections have increased, the amount and quality of water supply has declined. Similarly, electricity connections have increased and with it hours of load shedding and voltage fluctuations. In the same way, increase in educational opportunities and access to health services has increased due to private informal service delivery mechanisms that are costly and in many cases provide inadequate service at costs, which are beyond the reach of the poor.

People try to solve these problems on their own, and there is a marked difference in the attitude of the residents of low-income formal and informal settlements. The former rely on the government to better their lot, whereas the latter depend on self-help and local resources. Due to the absence of technical, managerial and credit support, their solutions that poorer communities arrive at are substandard and sometimes create a new set of problems like, wasted finances and time, duplication of work and a loss of self-help spirit. This is especially true of work related to physical infrastructure and housing. Most of the time, local government does not relate its work to any of these projects in a planned manner, which results in duplication and or destruction of people's work. In cases where support is available through NGOs like the OPP-RTI (for details, refer sections 3.7.1 & 7.3.1), people have invested millions in development works. Households living in informal settlements, which are not earmarked for regularization under the KAIRP, live with very little sense of security.

Table 31: Karachi - Comparison between Planned and Unplanned Area

Item	Planned Area	Unplanned Area
Demography		
Average household size	6.9	7.3
%age gender distribution (male)	54.0	65
%age gender distribution (female)	46.0	35
%age population < 20	48.6	56
Crude birth rate	1.3	3.6
Housing		
%age permanent structures	70-90	20
%age semi permanent structures	10-30	75
%age temporary structures	-	5
Built up M2 area per person	19.25	11.59
Rooms per HH	3.2	2.2
Number of persons per room	.50	3.3
Floor space per HH in M2	131.42	85.82
Access to Utilities		
%age water connection	83.0	50.3
%age electricity connections	98.41	75.8
%age gas connections	75.3	35.1
%age sewage connections (estimated)	85.0	12
%age solid waste management (estimated)	60.0	10
Education		
%age of population literate > 10 years	76.0	48 – 67
%age population with primary education	9.5	21.7
%age population with secondary education	19.8	16.3
%age population wit intermediate education	11.7	4.3
%age population with bachelors and above	19.1	3.1
%age primary enrolment (male)	87.0	60
%age primary enrolment (female)	83.0	49
Employment		
%age population employed	65.7	64.7
%age population self employed	24.9	25.3
%age population unemployed	9.4	10
%age labor force participation	32.0	38
%age housewives	31.0	34
%age students	29.0	20

3. Physical and Environmental Conditions in Karachi

3.1 Housing Stock

The physical conditions in Karachi improved from 1981 to 1998. The numbers of one- room houses decreased from 44.94 to 30.09 percent, while the numbers of three- room houses increased

from 13.96 to 21.12 per cent (refer; table 40). The average number of people per room also decreased from 3.1 to 2.89. These changes are reflective of the increase in number of houses in peri-urban informal settlements where larger plots are available at affordable prices to the urban poor.

Meanwhile, conditions in the inner city areas have degraded over years where all the major wholesale markets are located. These markets were built to serve a population of 400,000, which has swelled to over 10 million. As a result, there is extreme congestion and environmental degradation. All the up- market retail outlets and middle and lower middle income residents have moved out and their place has been taken up by storage facilities on the ground floor with only bachelor accommodation available for densities as high as 2,400 people per hectare⁵⁶. The infrastructure has not improved or expanded to deal with such high population densities and collapses frequently. Dialogues held by the URC with the wholesale market organizations reveal that they are willing to move out of the city on to the Northern bye pass or any other feasible location if proper physical and social infrastructure is provided to them.

Most of the new high-rise buildings in the inner city are illegal and since the streets are narrow there is little light and air ventilation. Apart from small pockets, the worst environmental conditions in the city prevail in this area where mostly the working classes reside.

3.2 Water

Karachi requires 600 to 800 MGD of water per day while the actual supply is 360 MGD of which 40 per cent is lost in leakage and pilferage. This makes the actual supply around 250 MGD. This gap in demand and supply effects the lower income settlements where people have to buy water from tankers at rates much higher than official connection rates. The numbers of water connections in formal settlements have increased from 44.45 to 74.38 per cent.

The government has been increasing bulk water supply to Karachi. The Indus K-II scheme was commissioned in 1998 with a capacity of 100 MGD⁵⁷. According to KWSB estimates, there are 1.7 million consumers in Karachi but only 758,500 are on the billing role and only 163,000 are regular taxpayers⁵⁸.

Water supply to areas without a supply system is through tankers, donkey carts and public water tanks organized by the communities, commonly known as Awami Tanks (for details, refer box 4). The water that is supplied through tankers is of poor quality and often mixed with ground water, which is brackish in Karachi. All these systems are worked through the permission of government staff on the payment of a bribe. The number of water tankers in Karachi is 5,000 and they operate about 50,000 trips per day, earning 10 million Rupees per day⁵⁹. This means that they supply 8.5 MGD of water per day taken from the legal supply system, creating a shortage for consumers who are legally connected. Shortage is also created due to leakage in transmission lines. According to estimates, even if 50 per cent of the leakages were fixed, it would increase the supply by 81 MGD⁶⁰.

⁵⁶ Hasan Arif, "Understanding Karachi, Planning and Reform for Future", City Press, 1999, Karachi

⁵⁷ *ibid*

⁵⁸ *ibid*

⁵⁹ *ibid*

⁶⁰ Hasan Arif, "Understanding Karachi, Planning and Reform for Future", City Press, 1999, Karachi

3.3 Sewage

The daily generation of sewage in Karachi is 350 MGD, of which the official treatment plants despite the installation of treatment plants treat only 20 – 40 MGD by the city government with an installed capacity of 151.50 MGD. The remaining sewage is carried to the sea through the natural open drains. Formal and informal industrial and manufacturing zones of the city (refer, Map 10) also generate large amounts of toxic industrial waste and sewerage affluent which is the biggest source of marine pollution and has led to the depletion of mangrove forests and marine life around the coastline.

The reason why the sewerage does not reach the treatment plants is because over 55 per cent of the population lives in informal settlements, which are not connected to the formal system. Even 80 per cent of the formally planned areas discharge their effluent indiscriminately, directly into the sea, because either their trunk sewerage system has not been connected to the treatment plants or the old lines laid in the 1950s have become choked or broken down. The result is an irony where the city government's trunk sewers run dry and the treatment plants do not work since they are not operated to capacity.

Meanwhile, the natural creeks (*nala*) have not been cleaned for decades. They are full of sewerage sludge, solid waste, and have often been encroached upon. These nalas pass through the city and become an environmental hazard, eventually falling into the sea and polluting it. For the most part, these drains are unlined and the major katchi abadi of Karachi lie along their banks. In addition to sewage, these drains also carry the industrial affluent, part of which is toxic. During heavy rains, the drains overflow into the settlements on their banks, causing large scale damage to housing and polluting the adjoining areas.

3.4 Electricity

Electric connections have increased from 65.78 to 93.79 per cent over. Although there is no major demand –supply gap in terms of connections, consumers experience regular power failures and load shedding. The total installed capacity of KESC is 1,738 MW, but the actual supply is 1,553 MW⁶¹. This is due to the transmission and distribution through obsolete lines that are not maintained. Rigging of electric meters, illegal connections by big industrialists, small workshops and domestic consumers, is common practice. Attempts at legalizing these connections are not very successful since the KESC staff is happier with a bribe for illegal connections than with demands for new, legal connections. The consumer too, is content because he does not have to pay for the connection charge and a deposit, which are unaffordable for lower income groups.

Table 32: Karachi - Physical Conditions

	1981	1998
No. of Housing Units	858,000	1,457,000
Rental Housing	26.40%	32.48%
One Room Houses	44.94%	30.09%
Three Room Houses	13.96%	21.12%
Average Persons / Room	3.1	2.89
Electric Connections	65.78%	93.79%

⁶¹ ibid

Water Connection in House	44.45%	74.38%
Water Connections Outside House	45.39%	7.41%
RCC Roofs	42.54%	56.04%

Source: Hasan Arif Archives

Table 33: Karachi - Environmental Conditions

Water	
Requirement	600-800 MGD
Supply	360 MGD
Leakage	40 percent
Demand and Supply Gap met through	50,000 tankers per day
Sewage	
Generated	350 MGD
Treatment Capacity	151.5 MGD
Treated	40 MGD (estimated)
Rest goes into the sea	
Solid Waste	
Generated	6,600 tons per day
Lifted by city government	2,200 tons per day
Recycled	1,850 tons per day
Public Transport	
Buses	2240 on 55 routes against 110 classified routes
Mini Buses	6296 on 110 routes against 1197 classified routes
Coaches	3506 on 75 routes against 96 classified routes
Total	12042 on 240 routes against 403 classified routes

Source: Arif Hasan Archives and DG Mass Transit, CDGK.

Table 34: Karachi – Treatment Plants

Treatment plant (TP)	Install capacity (MGD)	Actual treatment (MGD)
TP I	51.0	7.0
TP II	45.50	15.0
TP III	54.0	5.0
Total	151.50	27.0

Source: URC estimates calculated from KWSB and OPP reports, 1998

Box 4: Awami (People's) Tanks in Karachi

Most Awami Tanks are mostly underground reservoirs that are used to store and distribute water to area residents where there are no pipelines laid for public or private tap water supply. The earliest tanks were constructed in neighbourhood mosques or churches, either collectively by the community or by individual philanthropists. Other public locations such as graveyards, communal open spaces, and playgrounds were also used as sites for water reservoirs. In some places, residents allow the use of their house tanks as Awami Tanks. The capacity of these tanks is usually 1-2 tankers or 6,000 gallons.

In addition to the tanks built by the area residents through their own resources, the Rangers have also constructed such tanks in public places, for instance in Orangi, Baldia, and Surjani Town and recently in Manzoor Colony. Commercial water contractors enlisted by the Karachi Water and Sewerage Board (KWSB) and Pakistan Rangers supply water to these tanks. The contractors get their water from authorized hydrants and deliver it to designated locations according to the schedule made by the Rangers. The water is supplied free of charge to the residents and the transport costs are borne by the government. People use containers to carry the water to their homes.

Each Awami tank serves an informally defined area and its residents. Awami tanks are needed as a cheap means of supplying drinking water to areas without water supply lines. It is affordable to residents who otherwise have to buy the water from commercial sources, but residents see this as a makeshift measure and would prefer to have a piped water supply installed. Judging by the overall water shortage in the city, piped water to new areas will take some time, so improving the Awami tanks system may be the answer to present needs.

Summarized from: Noman Ahmad and Mohammad Sohail, "Alternate water supply arrangements in peri-urban localities: Awami (people's) Tanks in Orangi Township, Karachi

3.5 Solid Waste

Taken from: Arif Hasan, "Understanding Karachi, Planning and Reform for the Future", City Press, 1999, Karachi

In the last 25 years, nine major internationally funded studies have been prepared for Solid Waste Management for Karachi. The recommendations of these studies have never been implemented fully. Even if they had been, they would not have solved Karachi's solid waste management problem because none of them recognized the crucial role of the recycling industry, most of which is in the informal sector, in the disposal of solid waste in Karachi.

In 1991 the URC started to look at the relationships between the various formal and informal actors involved in the solid waste management process for Karachi. Its research ultimately focused on the recycling industry, as it emerged that it was the major player in this sector. Subsequently, Mansoor Ali, a Karachi engineer who had been working with the OPP did his MSc. and PhD thesis on the subject and scientifically quantified the role of the recycling industry in solid waste management⁶.

Karachi generates about 6,600 tons of solid waste every day. Eight hundred tons of this is removed at source by housewives and sold to about 15,000 kabaris who pick up the waste from people's homes. This solid waste consists of glass, plastic, metal and paper. In addition, waste pickers collect from katchra kundis and from the streets and market another 700 tons of solid waste. This waste consists of paper, rags, plastic, metal objects, glass and bones. Contractors

employ these waste pickers and there is an understanding between them and the KMC staff that is of benefit to both of them. Because of this understanding, solid waste is not lifted from the kutchra kundis and does not find its way to the land fill sites but to the yards of waste dealers and to recycling factories (see Box 14: Waste Pickers and the Recycling Industry).

Box - 5: Waste Pickers and the Recycling Industry

About 700 tons of recyclable waste is collected from the KMC neighbourhood garbage dumps or kutchra kundis as they are called. This activity is carried out by about 21,000 waste pickers, most of who are young Afghan boys and who work in groups of 5 to 20. Each group is linked to a “contractor”. For their convenience, the waste pickers scatter the waste on to the public spaces around the kutchra kundis, creating large-scale environmental pollution. The pickers collect paper, plastic, rags, bone and metal. They put these in big plastic bags and carry them to sorting places. If the sorting point is near the kutchra kundi, the pickers carry it there physically or on bicycles. If it is far, a donkey cart or a Suzuki pick-up is hired for this purpose. Most of the sorting places are located near the nallas, under bridges, in open spaces meant for parks and playgrounds, in abandoned public latrines and even at bus stop sheds. The contractor pays bhatta for the use of these spaces to functionaries of government departments who own the space or to neighbourhood toughs and to the police. KMC garbage collection crews and drivers do not lift garbage from the kutchra kundis regularly so as to help the pickers in their work. In return the contractor pays the KMC drivers and crew between Rs. 50 to 150 per day. In addition, the cost of the diesel saved by not making the journey from the kutchra kundis to the distant land fill sites, is also pocketed by the KMC staff.

A contractor who hires 4 to 6 persons to separate different items and to pack them in separate containers operates the sorting point. From the sorting point the packed waste is taken to Sher Shah factories for primary recycling or to dealers who are also located in Sher Shah, for refined sorting. Alternatively, in a few cases, it is taken directly to factories in Korangi, New Karachi, Orangi and in Sher Shah itself for recycling or sent to recycling factories in the Punjab industrial cities. The journey from the sorting place to Sher Shah or other locations is by pick-ups and sometime by trucks. Since these vehicles are overloaded, they pay Rs. 150 to 200 per trip as bhatta to the traffic police. In addition, Rs. 10 to 15 are paid at every police chowki (post).

Paper and bone are the two main items that are collected from the dumps. Others such as plastic, glass and metal are removed at home by housewives and sold to the kabaris. Paper is turned into cardboard and bones are boiled to remove grease from them. The grease is used for washing soap factories and also for soap making. The bones are ground and mixed with poultry feed. The grease-removing process is very polluting and since these Sher Shah factories are in dense residential areas, there is constant conflict between the residents and the factory owners.

In addition to picking from dumps, pickers invade all the city markets, even in high income areas, after they close at around 7:30 pm. Here the contractors, and sometimes the pickers as well, pay the market administrators, caretakers and or shopkeepers for the waste they collect.

(Source: Urban Resource Centre)

Waste is not only recycled: KMC staff operating the garbage pick-up vans are paid up to Rs. 50 per van to deposit the waste at locations where informal developers are reclaiming land. About 350 tons of solid waste and building material debris per day is used for this purpose. Another 400 tons of organic waste is used by pottery kilns as fuel or is burnt to extract metal from it. The kiln owners and metal extractors pay the KMC staff for this waste as well. In some cases the kiln operators have located their kilns near the land fill sites.

Waste from high-income localities, where waste pickers are not allowed to operate, contains considerable recyclable material. The KMC van operators do not take this to the landfill sites but to scavengers' colonies where the inorganic waste is removed and sent to the recycling factories. The KMC staff receives payment for performing this service as well.

The kabaris and the middlemen, who organize waste collection through pickers, sell it to middle dealers of which there are an estimated 800. There are also 1,000 main dealers who also perform secondary reprocessing through manual or mechanical means. These dealers then further sell to the recycling industry. Increasingly the middlemen are employing heroin addicts for waste picking purposes. These addicts have invaded a number of localities in a big way.

The recycling industry transforms paper into paper board; glass into bottles and sheets; plastic into toys, utensils and electrical conduits; bones into ornaments and poultry feed; and all types of metals into various utensils, mild steel bars and machinery items. In addition, rags are turned into fluff for upholstery. There are over 435 recycling factories in Karachi⁷ and the vast majority of them are informal. They are located in densely inhabited inner city areas, Sher Shah, along the Lyari Corridor and in a number of katchi abadis. The residents of the areas consider them to be a nuisance. Many of the recycling factory owners also consider these locations inappropriate and have bad relations with the people of the neighborhoods in which they are located.

The recycling industry plays a very important role in garbage collection and disposal and in the economy of Karachi. It provides employment to over 55,000 families and its annual turn over is over Rs. 1.2 billion. In addition, its total production of recyclable material is 1,230,800 tons per year⁸. Also, it is expanding every day and becoming more sophisticated. It has strong links with industrial cities in the Punjab such as Gujranwala where most of Karachi's plastic is recycled. The table below sums up the solid waste collection in Karachi.

Table – 35 Solid Waste Collections and Disposal in Karachi

	Tons Per Day
Separated by housewives	800
Separated by waste pickers	700
Fuel for kilns	350
Used for land reclamation	350
Lifted by KMC	2,200
Not picked up (most of it dumped in natural drains)	2,200
Total	6,600

Source: Arif Hasan's Conversation with Mansoor Ali, January 1999

From the above facts, it is obvious that a de facto financial and organizational inter-dependence exists between the various actors in the solid waste management of Karachi and the recycling industry. There is a need to recognize this inter-dependence and institutionalize it so that the system can function. To this end, the following recommendations should be considered: One, the

possibility of shifting the recycling industry to the proximity of the landfill sites should be studied. This shifting will shift the entire activity of waste picking to the landfill sites as well. Two, the recycling industry will require land, water, electricity and wastewater disposal. In addition, it will require land for housing its workers. This should be provided to them at a cost. Three, middle men, who organize waste pickers should also be given land for storage of the picked material and for housing their labor on an yearly renewable lease basis. They should pay for picking recyclable material from the landfill site. The KMC/private operator should be responsible for spreading this material for picking. And four, technical support and credit should be provided to the recycling industry so as to improve its functioning. The development of the above proposal means the creation of a garbage city. If it can be achieved, Karachi's solid waste problem will not only be solved but will become financially sustainable. A lot of fragmented but innovative work is being done on solid waste management both by the urban district councils and by NGOs.

3.6 Traffic and Transport

Till 1996 Karachi had a government owned public transport system that had to be shut down, as it was inefficient and running at a loss. The Karachi circular railway (KCR) exists but is running at a loss due to lack of commuters and unavailability of extensions into most of the residential areas (for details on KCR, refer section 7.2.3). Karachi's transport system consists entirely of the private sector with a fleet of about 18,000 buses. Most of the buses are owned by individuals who have borrowed money for the purchase from informal moneylenders at high rates of interest. Operators purchase a mini-bus, whose cash value is one million Rupees, at three to four million, and this sum is recovered from them in monthly installments over a three to four- year period.

The public transport is of extremely poor quality and is insufficient at peak hours. The bus owners routinely flout rules and regulations because there is an understanding between them and the police. Many peri-urban areas of Karachi, which have been developed by the Karachi Development Authority (KDA) as housing schemes, remain unoccupied because of the absence of transport. The lower income groups are the worst hit by the transport crises. The buses are uncomfortable, they stop and start at will, and at peak hours people are forced to sit on the roofs. The transport industry observes no environment friendly regulations and emits diesel fumes.

Karachi's traffic is the main cause of air and noise pollution in the city. Noise levels in central Karachi in areas adjoining the main artery of M.A. Jinnah Road and Guru Mandir section (refer, Map 5) vary between a minimum of 72 to a maximum of 110 decibels. This situation is resulting in hearing impairment, stress, insomnia and other stress related diseases. The level of air pollution is obvious from the samples taken in Saddar schoolchildren who had 0.38 mg/l of lead content in their blood, and traffic policemen who had 0.45 mg/l of lead content in their blood. There are no formally planned bus terminals, depots and workshops available in the city. All these functions are illegally performed on the city roads leading to congestion, environmental degradation and encroachments.

3.7 Civil Society in Karachi

Karachi did not traditionally have a very active "civil society". It has developed over years as a result of resistance to the successive military governments in Pakistan. In recent years, professionals, academic institutions, NGOs, CBOs and other communities have started coming together to press for change and reform. They have been supported by NGOs like the Urban

Resource Centre (URC)⁶², which provides a space for interaction, networking, and lobbying on issues of common concern to NGOs, CBOs and other interest groups. The recently formed NGO/CBO network (refer Appendix 4) has been instrumental in creating a strong lobby which comes together on all city related issues and projects. They have challenged and successfully stalled and or altered large-scale infrastructure projects funded by the World Bank and Asian Development Bank for the city of Karachi. Members of the NGO/CBO network sit on each other's boards and are able to influence policies and decisions.

Civil society organizations operate through legal action, demonstrations, party conferences, seminars, workshops, open forums, information dissemination through newsletters, publications, pamphlets and videos. Negotiations with political parties and different tiers of government have been arranged by the URC through workshops and forums. NGOs like the URC and SHEHRI research and generate information, prepare alternative plans to insensitive government projects, and disseminate it to the communities supporting them to lobby for it.

Shehri-CBE, lobbied successfully with the Sindh government to set up an Oversee Committee for the Karachi Building Control Authority. This committee was composed of NGO representatives, citizens, and government officials. Similarly, Aurat Foundation has been able to train women councilors to understand the new local government system and their role in it.

OPP-RTI and similar NGOs research and promote self-help for health, education and physical infrastructure. OPP's work has been replicated by SKAA in its KAIRP. This adoption of the alternate concept of development by an official body has made considerable impact on the planning priorities of the government. The OPP also extends technical expertise and support to Karachi towns and UCs.

Academic Institutions like Departments of Architecture and Planning at Dawood College of Engineering and Technology, NED University⁶³ and Social Works Department of Karachi University, share their research on social, economic and physical planning issues with the NGOs, CBOs and related government departments. Staff members of NGOs, CBOs and academic institutions lecture regularly at the National Institute of Public Administration (NIPA). This brings them in touch with bureaucrats and decision makers and they are able to share their ideas and to work with them.

The local print and electronic media have started supporting city related issues and are regularly holding discussion forum and airing programmes around these issues. Most of the NGOs publish a critical documentation of their work through monographs, books, and newsletters voicing their concerns regarding the local government and global economic policies, environment concerns and human rights. These NGOs include IUCN, Shirkatgah, HRCP, OPP institutions, URC, TRDP, Aurat Foundation, TRC, and PILER, to name a few. Much of the research literature is in English but the newsletters which are also published by a number small community-based NGOs and CBOs are also published in Urdu and/or Sindhi. These publications are widely read, especially those in vernacular languages, and discussed by the activists and staff in the NGO sector.

Over the years, civil society groups have questioned government projects and offered alternatives. These alternatives have been partially accepted for mass transit programmes, the provision of bus terminals and workshops for transport, and building of the Northern Bye Pass that would de-

⁶² For details refer section 3.7.2

⁶³ For details refer section 3.7.3

congest the inner city especially if the wholesale markets are shifted to the Bye-Pass. In addition, NGO propose low cost sanitation and drainage models for the city are under discussion and are being partly implemented. NGO proposals for solid waste disposal are also being discussed and, increasingly, decisions are being made in a more transparent manner. The Karachi Public Transport Society, an NGO supported by the government of Sindh, has recently initiated a public-private partnership transport system called “Metro Bus” on two routes in the city. This system is efficient, follows traffic regulations, is fairly economical, and still maintains standards of service.

The formation of the Citizen-Police Liaison Committee established by local residents to provide protection and guidance to victims of crime has also proved very successful. Similarly, the Pakistan Women’s Lawyers Association provides legal help to women who have been affected by the civic conditions in the city or are the victims of domestic violence.

The expanding advocacy role of NGOs, CBOs, academics and concerned citizens has been recognized by the State. The setting up of Citizen Community Boards (CCB) in the Local Government Ordinance 2001, the State has found a constitutional way of including civil society in local governance and formally recognized them as important partners in development. These boards, under the SLGO section 109 (12), also receive a generous amount of development funds except that at present there are very few operational boards.

In donor circles, too, there has been a growing recognition of the local organizations. They are interested in working with the local NGO’s and CBO’s and are helping the NGOs and CBO’s strengthen their technical, financial, management and administrative capacities. Of the 60 million US Dollars allocated for various educational projects in Pakistan, USAID, which re-established its offices in Pakistan, recently, has pledged a minimum of one million dollars per district for the seven districts in Sindh for NGO/CBO development. The ADB, too, has approved a preparatory technical assistance (TA) grant of 120,000 US Dollars to help plan a health and education project in Sindh⁶⁴. Both the projects involve NGOs as active partners. The NGO/CBO network is skeptical of such initiatives and is careful to not get involved as consultants in any donor project that might compromise their integrity and independence.

Civil society groups like the URC are asking for a large city plan publishing all real estate owned by government agencies and the imposition of a non-utilization fee on unused land to lower speculation and make land available at more affordable prices to lower middle income groups and poor communities. They also demand the publication of details of all development projects for the city at their conceptual stage and their exhibition at a central point in the city to maintain accountability, transparency, and the goodwill of the people.

The URC has been lobbying for the creation of a steering committee of relevant interest groups (including; NGOs, CBOs, journalists, academics) is necessary which can hold public hearings, modify public projects, and supervise its detailing and implementation. Quarterly accounts of development projects need to be published in national newspapers so that the concerned civic agencies are kept accountable to the citizens.

64 Sindh Profile Report, Compiled by Arif Hasan, 2004, Karachi

3.7.1 The Orangi Pilot Project (OPP)

Taken and adapted from: Hasan Arif, "A case study of the Orangi Pilot Project-Research and Training Institute, Karachi, Pakistan", 2003, Karachi

Orangi Town is an administrative unit of Karachi with a population of 1.2 million of which 86 per cent people live in katchi abadi. In 1980, the Orangi Pilot Project (OPP) was established as a result of an understanding between Agha Hasan Abidi, the Chairman of the Bank of Commerce and Credit International (BCCI) Foundation, a Pakistani charity, and Dr. Akhtar Hameed Khan, a renowned Pakistani social scientist. The purpose of the project was to develop models of community participation and local resource mobilization that could overcome the problems government programmes face in upgrading poor settlements and in poverty alleviation.

Dr. Khan had definite views on development and the organizational culture that should accompany it based on his experience of various projects he had initiated. These views have shaped the culture and methodology of the OPP-RTI and the other institutions he has created. They are the strengths of the OPP-RTI, and according to some people, also its weakness.

The OPP-RTI considers itself a research institution whose objective is to analyze outstanding problems of Orangi and to discover viable solutions to them through action research and extension education. These solutions can then be applied with modifications to other settlements and become part of local government and State policies. The OPP-RTI does not fund development but by providing social and technical guidance, it encourages the mobilization of local resources and the practice of co-operative action. Based on these principles, the OPP-RTI has evolved a number of programmes (reaching out to over four million people), some of which are described below.

a) The Low Cost Sanitation Programme

This programme enables low-income families to construct and maintain an underground sewage system with their own funds and under their own management. For this programme, the OPP-RTI provides social and technical guidance (based on action research), tools, and supervision of implementation to lane and neighborhood organizations that it fosters. The OPP-RTI's work has shown that people can finance and build underground sanitation in their homes, lanes and neighborhoods. This concept is called "internal" development by the OPP-RTI. However, people cannot build "external" development consisting of trunk sewers, treatment plants and long secondary sewers. This only the State can provide. Internal development is 70 per cent of the total cost of the sewage system and external development is 30 per cent. In Orangi, people have invested 86.28 million Rupees (US\$ 1.438 million) on building 6,251 lane sewers, 417 secondary sewers and 93,995 latrines in their homes⁶⁵. The government's investment in external development is ongoing and is the result of OPP-RTI's low cost designs and lobbying for their implementation through the community organizations that have been created. If the State had done the work that the people have done, it would have cost 604 million Rupees (US\$ 10.06 million). The OPP-RTI has lowered costs as a result of technical research, which has modified engineering standards and made them compatible with the economics and sociology of low-income groups with the concept of community participation. Local government, NGOs and Pakistan projects funded by international development agencies such as DFID have adopted these standards. For every one Rupee that the OPP-RTI has invested in capital costs, research,

⁶⁵. OPP-RTI, 92nd Quarterly Progress Report, September 2002.

extension and administration of the sanitation programme, the people of Orangi have invested seventeen rupees.

The programme is being replicated in 160 Karachi settlements through government agencies, NGOs and CBOs. It is also being replicated in ten cities of Pakistan through CBOs who are pressurizing government development agencies to accept the OPP-RTI model for “external development”. Some agencies have already accepted the model. Replication in the villages of Punjab has also started. In addition, government and NGOs are applying the “internal-external” model, now called the Component Sharing Model for rural water supply where communities invest in village level infrastructure and government develops the water source⁶⁶.

According to the Component Sharing Model, the people and the government agencies work together as partners for the development of an area or community. The internal development is financed, managed and maintained by the people while the external developments are taken care of by the government organization under close supervision and interaction with the OPP-RTI or its CBO/NGO partner organization. The OPP-RTI is consultant to all these initiatives and is responsible for training NGO activists, government engineers and administrators, and local communities who are implementing these schemes. Training is also provided to local technicians from other cities and settlements at the OPP-RTI where the trainees live in the OPP-RTI hostel in Orangi and interact with local technicians and communities. In the process, many of these technicians not only upgrade their skills but also become excellent social organizers.

The OPP replication model has evolved over time as a result of trial and error and after many failures and modifications. Today, the OPP-RTI is increasingly involved in policy issues and in promoting macro-level solutions based on its models on sanitation, housing and economic issues. This has led the OPP-RTI to document 222-katchi *abadi* in Karachi along with physical and economic proposals for upgrading the natural drainage channels (or *nalla* as they called) of Karachi through which most of city’s sewage flows⁶⁷. This is the only documentation of informal settlements that exists.

Recently, 20 young people underwent 90-day training for survey, documentation, designing and estimation of existing and or proposed infrastructure in low-income settlements. Training of additional young persons continues who after their training become, not only an asset to the community to which they belong, but also a part of a larger movement to create self-reliance, freedom from foreign loans and grandiose projects and a more equitable relationship between low income communities and government agencies and their plans. The OPP-RTI documentation and its model, when applied to Karachi, reduced the cost of the Asian Development Bank (ADB) funded Greater Karachi Sewage Plan for the Korangi sector of the city to less than one-third of its original cost. This led to community pressure on the Governor of Sindh to cancel a US\$ 100 million loan from the ADB for the Korangi Sewage Project and the OPP-RTI model was accepted.

As a result of OPP-RTI’s sanitation programme, tens of thousands of dirty lanes, not only in Orangi but in many Pakistani towns, have become clean and have been converted into spaces for community interaction and playgrounds for children. The organizations that have built their sanitation systems have moved on to develop solid waste management, tree plantation, schools and health programmes. More recently, these organizations have applied the “component sharing

⁶⁶.Ibid.

⁶⁷.Ibid.

model” to acquiring electricity from State agencies and developing security systems in an increasing law-and-order-problem ridden city.

The OPP-RTI programme is also being replicated in Central Asia, Nepal and in certain settlements in South Africa with OPP-RTI advice and training.

b) The OPP-RTI’s Low Cost Housing Programme

The OPP-RTI carried out a study on the “sociology, technology and economics” of housing in Orangi. This study clearly identified that the local building component manufacturing yards (or *thalla* as they called) are crucial to housing in Orangi since they act as architects, contractors and credit suppliers to low-income house builders. As a result, the OPP-RTI has provided loans and technical assistance (based on research) to *thalla* in Orangi so that they can mechanize their production, improve their products, train their staff and increase their production. New and cheaper roofing elements have also been introduced. In addition, the programme also trains masons in using the new technologies and components that are being developed at the *thalla*. Also, house builders are given advice on how to relate to the *thalla* and masons and on design, light, ventilation and other hygiene related design aspects. To provide such advice, the OPP-RTI is in the process of training para-professionals who are mostly young unemployed youth from the Orangi communities. These para-architects are paid a fee by house builders or those who want improvement to their homes. The OPP-RTI’s housing programme thus tries to create a more equitable relationship between the actors in housing drama, as a result of which housing has improved in Orangi.

So far, 57 *thalla* have been mechanized due to which employment has been generated and machine made blocks and roofing elements are being fabricated, not only for Orangi, but for the rest of Karachi as well⁶⁸. In addition, 96 masons have been trained and three para-architects after a training of two years at the OPP-RTI have established the Technical Training and Resource Centre (TTRC). The low cost housing activities including training, designing and documentation are now all being undertaken by the TTRC with a little back up support by the OPP-RTI. Research for new methods and techniques is still carried out by the OPP-RTI. Another group of seven Para-Architects are being trained. Approximately 4,000 buildings per year benefit from OPP-RTI’s technical research and extension work⁶⁹.

c) OPP-RTI’s Education Programme

Through social and technical guidance, this programme improves and upgrades the physical conditions and academic standards of private schools in Orangi of which there are 782⁷⁰. These private schools cater to the needs of the vast majority of Orangi School going children. Physical improvements are made with loans from Orangi Charitable Trust (a sister organization of the OPP-RTI) and advice from OPP-RTI. Academic improvements are made by arranging teacher’s training through existing relevant organizations; provisions of books and audio-visual aids for libraries and publication of manuals and guidebooks for teachers.

Financial support is extended during three stages of the establishment of these schools. One, a small start up grant of 3,000 Rupees (US\$ 50) to 12,000 Rupees (US\$ 200) is given for the setting up of the schools in people’s homes. Two, within a year, the school is institutionalized and

⁶⁸.Hasan, A., Working with Communities, City Press Karachi, 2001.

⁶⁹.Ibid.

⁷⁰.OPP-RTI, 92nd Quarterly Progress Report, September 2002.

needs funds for physical expansion. At this stage, an interest free loan of 20,000-30 000 Rupees (US\$ 333.33 to US\$ 500) is given. This support is important for the survival of the school. And three, a loan with interest of 50,000 Rupees (US\$ 833.33) is made available to improve the schools from an informal to a formal educational institution⁷¹.

OPP-RTI has provided 393 loans to such schools⁷². Teacher's training through Allama Iqbal Open University is also being coordinated. The education entrepreneurs hold their monthly meetings at the OPP office where they share information on registration and teaching methods.

d) CBO-NGO Programme

The OPP-RTI in association with the Urban Resource Centre (URC), a Karachi NGO working on urban issues, operates a CBO-NGO programme. The programme brings them together as a network where these organizations present their work to each other and learn from each other. These presentations also lead to the documentation of work.

The OPP-RTI also arranges lectures at its office by prominent planners, sociologists, economists and educationalists for Orangi residents. This interaction between professionals and low-income communities benefits both of them, and these events are well attended and have broadened the horizons of Orangi residents.

e) Research, Training and Documentation

OPP-RTI's research and documentation is a continuous affair and is published and disseminated through monographs, regular reports, and books, both in English and in Urdu. They have had a major impact on how low income housing settlements are viewed by government agencies in Pakistan and have changed the perception of multilateral and bilateral donors regarding development issues of third world countries.

Training and orientation has been provided by OPP-RTI to Pakistani NGOs and CBOs, UN organizations, World Bank, ADB, USAID, government agencies, groups from Central Asia, Nepal, South Africa, Vietnam, Cambodia, Japan, and numerous local and foreign academic institutions. Since 1992, 957 training groups consisting of 3,116 members have visited the OPP-RTI⁷³.

Youth training programmes are organized at the OPP-RTI, in response to the demand from the younger residents of Orangi and of the CBOs and NGOs from other areas. The purpose of the training is to enable young people to establish the Orangi models in their areas and/or to sustain them where they exist. Besides technical training, an effort is being made to create youth resource centers for vocational training and for promoting access to information regarding government programmes and projects for poverty alleviation.

The OPP-RTI research programmes and their documentation have provided NGOs, CBOs and government agencies with models for overcoming the physical, social and economic problems faced by low-income settlements and communities

⁷¹ Arif Hasan's interview with Salma Mir, Coordinator of the OPP-RTI Education Programme, March 2003.

⁷² Ibid.

⁷³ OPP-RTI, 92nd Quarterly Progress Report, September 2002.

f) OPP-RTI and Academic Institutions

Much of OPP-RTI's early research was supported by the Department of Architecture and Planning (DAP) at the Dawood College in Karachi. This was because architects working with the OPP-RTI were also visiting teachers at the Dawood College. Many projects of the architecture and planning course were linked to Orangi Town. As a result, a large number of architecture and planning graduates who understood the problems of the informal settlements were produced and are now important professionals and/or government officials. The Department of Sociology and Social Work of Karachi University also has strong links with the OPP-RTI. The Dean and teachers of the DAP at the NED University in Karachi are all graduates of the Dawood College. OPP-RTI's principal consultant and staff lecture regularly at the National Institute of Public Administration where government officials are trained. This lecturing has won over many converts from the bureaucracy to the OPP-RTI concept.

g) Support to the Orangi Town Union Councils (UCs)

With the enactment of the Devolution Plan 2001, Karachi has been divided into 18 towns and each town into a number of union councils. Orangi is one of the towns and has 13 union councils. The OPP-RTI has surveyed every union council and provided them with maps identifying the existing physical infrastructure (along with problems with it), social sector facilities, and solid waste disposal problems. It also helps the union councils in determining how best they can utilize the grants for development that are made available to them. The OPP-RTI office also provides space for elected UC representatives and community groups to interact with each other. Orientation programmes related to the OPP-RTI models for the UC representatives are also arranged. As a result of this documentation, requests from other Karachi UCs and from other parts of Pakistan are being made for similar documentation.

h) Impact

Physical and social conditions in Orangi have improved because of the work of the OPP-RTI. Infant mortality and child mobility figures have declined. Expenditure on health has declined. Real estate prices have increased. Similar improvements are discernable at the replication projects. However, the OPP models have yet to become a part of government planning policy of the improvement of low-income settlements. The model is opposed by a strong lobby of engineering consultants and contractors (both national and international), development related bureaucrats, and a number of public representatives. Supporters in civil society in Pakistan also feel that there are weaknesses in the OPP-RTI that prevent the programme from becoming a part of government policy and implementation processes. But many NGOs, UN (GEF, LIFE and PLUS), World Bank and other donor programmes in Pakistan such as the DFID funded FAUP, have borrowed from the OPP-RTI model. OPP has prepared a book on the documentation of the physical and social infrastructure in 300 katchi abaddis of Karachi. It has also prepared UC plan books. These publications have strengthened the communities technically and they are able to negotiate better with official agencies for acquiring facilities. These documents have also added to the archives of the city to be used by academics, researchers and government agencies.

i) Funding

The OPP-RTI's main donor has been the Infaq Foundation. The Foundation now feels that the OPP-RTI can stand on its own feet and is phasing out its support. Increasingly, the OPP-RTI has

to depend on international NGOs for funding purposes and on fees from its training programmes. Since, the OPP-RTI budget is only 8.48 million Rupees (US\$ 0.141 million)⁷⁴ a year, it is not difficult to raise. In addition, the OPP-RTI has been able to build up considerable reserves over the last 22 years of its existence.

3.7.2 The Urban Resource Center (URC)

The Urban Resource Centre (URC) began as the Urban Studies Forum (USF) in 1989 at the Department of Architecture and Planning (DAP) at the Dawood College Karachi. Its founders were teachers at DAP some of who were also working with the OPP institutions. The initial purpose of the USF was to identify social issues in urban planning and document disseminate them.

However, within six months of its creation, the USF was converted into the URC and became an independent organization with its own premises and a Governing Council and General Body. Its objectives were also redefined from being simply a studies forum to also involving itself in advocacy on policy matters on Karachi projects and development. Currently, its objectives are:

- To collect information regarding the city and its plans and to disseminate it to the media, NGOs, CBOs, concerned citizens and formal and informal interest groups.
- To analyze local and federal government plans for the city from the point of view of communities (especially poor ones), interest groups, academia and NGOs.
- On the basis of these analyses to hold forums in which all interest groups are present so that a broad consensus may be arrived at.
- To identify and promote research and documentation on major issues in Karachi and to monitor developments and processes related to them.
- To create professionals and activists in the NGO/CBO and government sector who understand planning issues from the point of view of local communities, especially poor ones.

The URC has a Governor Council consisting of well-known professionals, academics, NGO and CBO representatives and grass root social and political activists. In addition, it has a five member full time staff. To achieve its objectives, the URC carries out the following activities.

It keeps files of news clippings on all major Karachi issues and these are available to researchers, students and the media. From these files, it brings out a monthly “Facts and Figures” publication that is sent to over 1,600 individuals and organizations.

It analysis Karachi’s development plans/projects and provides a space for interest groups to discuss them, air their views and recommendations regarding them. These are documented, published in the media and become a basis of debate and discussion. The more important issues are developed into pamphlets and books.

⁷⁴. Ibid.

It arranges lectures by eminent professionals and experts on national and international development related issues that are attended by grass root activists, NGOs, government officials, academia and representatives of interest groups. This helps organizations and individuals to relate their work to larger national and international issues.

It operates a Youth Training Programme (YTP) whereby it gives one-year fellowships to young university graduates and community activists who help it in research, documentation and interaction with communities and interest groups. Through these fellowships the URC seeks to broaden its base in society as a whole.

It promotes and supports a network of CBOs and NGOs for networking on major Karachi related development issues and projects.

It monitors and documents evictions, identifies vulnerable communities and informs them of possible threats to them, and publishes on eviction issues which in turn get taken up by the print and electronic media.

In short, the URC aims at creating a space for informed discussion on Karachi related development issues for its various interest groups and through this space it seeks to promote environmentally friendly and pro-poor development. So far URC's work has had the following impacts.

The Karachi Mass Transit Project (KMTP) was modified as a result of pressure from citizen's groups to become more environment and cost friendly. The movement was initiated by the URC.

The URC's movement for the revitalization and extension of the Karachi Circular Railway (KCR), which had been abandoned by government planners, has led to an acceptance of URC proposals. Plans for KCR's development are currently underway.

The Lyari Expressway Project, which was to displace 25,000 families and businesses, was shelved a number of times due to a movement against it by local communities supported by the URC. It is currently being built but opposition to it is fierce and is being supported by information and lobbying by the URC. The government's improved rehabilitation plan for the affected is the result of this opposition.

The Northern Bypass Project, which had been shelved, was pushed by the URC and is now under construction. URC's research, negotiations, forums and support to the Karachi transporters have led to an understanding of their problems by the media and by relevant government agencies.

URC has developed plans (in collaboration with hawkers and the city government's Traffic Engineering Bureau) for the rehabilitation of over 3,000 hawkers who are periodically evicted from the centre of the city. These plans are being discussed with the city government. Similar plans for other areas are being researched into.

URC's research on solid waste management (which was carried out in collaboration with scavengers and solid waste recyclers) has led to the informal recycling industry being accepted as an important interest group in this sector. The research and forums around it have documented the positive role of the industry, its problems, its economics and developed plans for its future.

The URC has been a promoter of the Orangi Pilot Project-Research and Training Institute's (OPP-RTI) alternative sewage disposal plans for Karachi around which the URC has created a CBO-NGO network supported by professionals and local communities.

Thirty young graduates and community activists have so far worked with the URC YTP project. Twenty of them have joined other organizations both in the NGO and government sector taking with them the knowledge of the relationship between plans and poor communities. As a result, links between the URC and the organizations the young professionals are working with have been created.

The media and the government (even if it does not agree with the URC analysis of its plans) consult with the URC. This has generated discussion and debate on issues which was never discussed before in the media and in the government planning institutions.

A number of lessons have been learnt from the URC experience that are of relevance to planning and policy issues for Karachi. The important lessons are:

Government plans are insensitive to environmental and social issues and are not cost effective because they do not consult with relevant interest groups regarding them. A process of such consultations does not exist in government agencies.

Government planners, academic institutions, professional bodies and the media do not have knowledge or understanding of the informal processes which provide services to the vast majority of low income Karachi communities. When they interact with them their responses are positive.

In young educated Karachiites there is an immense longing to address the problems their city and its inhabitants are faced with but they do not know how they can become a part of a process for improving the physical and social environment of Karachi.

A powerful nexus between politicians, bureaucrats, developers, contractors and consultants (local and international), and international financial institutions, oppose the promotion of transparency, accountability and cost effectiveness for development programmes in Karachi.

3.7.3 The Work of the DAP at the Dawood College and NED University

In 1979, the Department of Architecture and Planning (DAP) at Dawood College reviewed its curriculum and came to the conclusion that "architecture in the context of Pakistan must be seen primarily as a society responsive environmental design discipline" and DAP should produce "socially responsive architects".

To promote this philosophy, DAP at the final year level introduced the "Comprehensive Environmental Design Project" was launched for final year students. The purpose of this project was to help students identify and understand the actors and their relationships shaping the built-environment in Pakistan, in general, and in Karachi, in particular. Students were given a problematic area of the city to study. They were divided into four groups to research the issues related to administration, the economics of the area and social and physical problems. The groups then came together and developed a common understanding of the built-environment and the inter-dependence between the physical conditions and the social, economic and administrative imperatives. Individual architectural or built-environment related projects for the area followed this. A smaller exercise, similar to the CED Project, is carried out under the Environment course in the first year. In addition, DAP has a very close relationship with the OPP and the URC, and

staff members of both these organizations teach at DAP, while members of the DAP staff are on the governing boards of both OPP and URC.

A close relationship evolved between the DAP, OPP and URC after the Environment and CED courses and the exercise brought major change of perspective to architectural education. Students met land-grabbers, transport and water tanker mafias, low income communities, market associations, inner city slum organizations, and government agencies and their plans. As a result, DAP has documented the underworld of development extremely well over the past 20 years. It is not surprising that almost all architects working in the development field or involved in advocacy are graduates or teachers of the DAP programme.

A Young Professionals Training Unit (YPTU) was also established at DAP with the aim to provide a one-year fellowship to young professionals to work with communities or NGO projects involved in research and advocacy. At present, there are 13 YPTU fellows. YPTU was linked to the OPP's Youth Training Programme and to the URC's Fellowship for University Graduates Programme.

In 2000, NED University decided to set up a Department of Architecture and Planning. Most of the faculty members are Dawood College graduates who have worked under DAP-DCET. A Journal of Architecture and Planning is published and lecture series are organized regularly in which pertinent issues of urban planning, conservation, urban renewal and urban design are discussed. A Master's programme in Urban and Regional Planning (MURP) is being run in which staff members of active NGO, CBOs and related government organizations teach regularly. The students of MURP are mostly mid career government employees and young graduates of architecture and engineering disciplines.

3.7.4 Shehri --- Citizens for a Better Environment and the KBCA Oversee Committee

Taken from: Arif Hasan, "Understanding Karachi, Planning and Reform for the Future", City Press, 1999, Karachi

Shehri, which means citizen, was formed in 1988 in Karachi by concerned professionals to provide civil society with a platform to take action in arresting the deterioration of their living environment and propose reform with a view to improving the quality of life in the city.

Shehri works on many fronts related to different aspects of the built and natural environment. This work involves research, dissemination, holding of discussion forums, proposing institutional reforms, and working for transparency and efficiency in local government and development institutions. But the main achievements of this organisation are related to its struggle against the construction of illegal buildings, bye-law and zoning violations by developers, and ad hoc and often illegal land-use changes in Karachi.

This struggle began in 1988 by challenging the construction of illegal buildings in PECHS. This was followed in 1992 by a survey of the built environment in the Garden Road area. This survey established that the vast majority of new constructions in the Garden Road area were illegal and were destroying its social and physical environment. After they survey, negotiations were initiated with the KBCA that established that these illegal constructions were the result of a powerful connection between politicians, bureaucrats, and developers.

Shehri then went to court and sought relief, and although the courts were supportive, it was discovered that the builders used the stay order provided by the court to their own advantage by misinterpreting its provisions. In this, the KBCA staff supported them. To overcome this problem, Shehri then wrote petitions to all levels of the judiciary to make them aware of the

advantage taken by the builder and the KBCA when injunctions are granted by the courts in favour of the builder to restrain the KBCA from performing its statutory duties. Due to this effort, the judges are now becoming more discriminate in the wording of the injunction. Through this process, Shehri was able to identify the actors and the processes in land-use violations in Karachi and to make this knowledge public.

Because of the knowledge it had gained, Shehri pushed for amendments in the Sindh Building Control Ordinance (SBCO) and was instrumental in getting them drafted in 1966. Although they have yet to be implemented, through the pressure tactics of this civil society forum and due to press campaigns, a KBCA Oversee Committee was formed in 1996. This Committee includes, apart from government functionaries, technical people from relevant professions, representatives of Shehri, representatives of academic institutions, and eminent citizens and lawyers. In addition, a sub-committee is in the process of reviewing byelaws and zoning regulations.

The Oversee Committee has already taken a number of steps to help the public in its struggle for a better environment and for promoting transparency in the working of the KBCA. A public counter has been established permanently for the benefit of the aggrieved public where, on payment of a prescribed fee, the plans and documents of any project can be obtained, and other information and assistance is also provided. Besides the KBCA staff, a representative of the Oversee Committee is also employed at the counter (his salary is paid through donations) to help the citizens. In addition, public warning notices against illegal construction have been made mandatory for KBCA to publish through the media. This helps people to know the status of any construction.

In its struggle against land-use changes Shehri has been able to prevent the sale of Gutter Baghicha (a sewage farm, now in the centre of the city) and the auctioning of Karachi Transport Corporation (KTC) bus depots that were to be converted into commercial buildings. They can now be used to construct public recreational facilities, and the KTC plots can also be used for the needs of the transport sector. Shehri's advocacy has led to the creation of "Green Courts" which have now been upgraded into environmental tribunals, a requirement under the Environmental Protection Act, 1997.

Not surprisingly, the developer's lobby has been active against Shehri and has physically attacked staff members, even going as far as death threats. Regular citizens have now started approaching Shehri for help and advice in how identifying illegal construction and land-use changes in their neighbourhood which is given by the Legal Resource Sub-committee. The Anti-pollution Sub-committee and a Park and Recreation Sub-committee provide information and awareness to the public.

Shehri has a two-member full-time staff while the rest are volunteers. Its future programmes include a study of byelaws and building procedures in Sukkur, Larkana, Hyderabad and Sehwan and taking a case to court regarding the sale of adulterated petroleum. The case is meant to test the law on National Environment Quality Standards.

The organisation regularly updates the city administration and development agencies through fax, letters and contacts, regarding issues of illegal construction, land-use changes, environmental degradation, and misuse of official powers. As a result of its work, local government officials regarding Karachi's development, environmental and institutional issues, now increasingly consult Shehri.

3.7.5 The Citizens – Police Liaison Committee

Taken from: Arif Hasan, "Understanding Karachi, Planning and Reform for the Future", City Press, 1999, Karachi

A group of industrialists and professionals of Karachi with the help of the Governor of Sindh, Justice (Retd) Fakhruddin G. Ibrahim, established the Citizens-Police Liaison Committee (CPLC) in 1989. Mr. Nazim Haji and Mr. Jameel Yusuf were appointed joint heads to oversee the functioning of the CPLC. The Committee was authorized to: oversee the working of police stations through five district CPLCs established adjacent to the respective Senior Superintendent of Police (SSP's) offices; educate and assist the citizens to enforce their rights vis-à-vis the police; assist the police in the performance of their legal duties; motivate citizens to help the police in "Beating Crime Together"; and, assist the citizens who are victims of crime. The CPLC also has a Central Reporting Cell (CRC) located at the Governor's House and District Reporting Cells located at District SSP offices for easy access to the general public to lodge their complaints.

The notified functions of the CPLC include: to ensure that FIRs are duly registered and no FIR/complaint is refused; to find out if dilatory tactics are being adopted by the investigating officers in crime cases; to ensure that the process is being done properly; to collect statistics of various kinds of cases registered and disposed off; to find out if all registers required to be maintained at a police station are being properly and regularly maintained; to find out if anyone is unlawfully and unauthorized detained at the police stations; to assist the police in taking steps for the preservation of peace and the prevention or detention of crimes; to see that no gambling den or any unauthorized/illegal business is being carried out in the area; to report the acts of misconduct or neglect of duty on the part of any police officer; and to perform such other functions as may be assigned by the government. The CPLC also registers citizens complaints, keeps a record of car thefts, dacoities, kidnappings, accidents and all such matters related to police assistance.

The CPLC has a Central Command Computers Systems that allows quick and easy access to information by computerized record keeping and assists the police. There is also Criminal Identification and Sketching System that develops sketches of suspected criminals in order to identify them. A graphic information system for crime analysis is also available at CPLC that allows satellite imaging of the city. CPLC keeps detailed record of crimes reported and those solved. Detailed mapping and statistical record of the information provided is easily available.

CPLC has played an important role in educating and informing the citizens of Karachi about their duties and rights regarding crime and in their dealing with the police. In the past ten years, 229 cases of kidnapping for ransom have been reported and due to CPLC's efforts, 72 gangs were apprehended, 187 cases (82 per cent) solved and 300 criminals arrested. The number of kidnappings has fallen from 79 in 1990 to around 20 in 1997 and 1998. Recent data on the theft and recovery of stolen and snatched vehicles from Karachi shows that with CPLC's help, around 65 per cent vehicles were recovered.

It is necessary to reiterate that the CPLC is a citizen's group and it is their effort to maintain peace in one of Asia's most violent cities. Although the government supports the CPLC's initiatives, it provides only 19 per cent of the organization's finances; the rest of the contribution comes from private assistance.

4. Socio-Cultural Change in the Society⁷⁵

4.1 Change in Low Income Settlements

The first generation migrants who came to live in the city accessed the patronage of politicians and bureaucrats to survive in an urbanized environment. The second, and now a growing third generation, was born and brought up in Karachi, and is now better educated and confident of its rights and demands.

They negotiate with the government and are organized as youth and community based organizations. The lower income settlements (mostly informal katchi abadi) in which a majority of the poor reside are upwardly mobile. They are no longer purely working class settlements and now contain a growing middle class. A majority of the younger population is educated in private schools, has access to information technology and or media, and has aspirations to be socially mobile. An increasing number of women are working as entrepreneurs, family planning beginning to be practiced, and there are a growing number of nuclear families.

There are lesser employment opportunities in the formal sector, but since there is more contractual work being done a strong link has developed between the formal and informal industrial units. Small enterprises, which were setup by the people, are growing in number due to an increased access to credit and technical expertise through NGO support. The physical and social conditions of lower income settlements have become better and more consolidated.

4.2 Changes in Government Attitude and Approach

Before the 1980s, most of the planning and development undertaken by the State was conventional and revolved around First World models. Senior bureaucrats were trained to treat the poor charitably but not with the respect due to people capable of helping themselves. The bureaucracy was above the elected representatives and controlled decisions and development. There were no pro-poor laws and policies, and the informal sector and non-governmental organizations were treated with hostility and suspicion.

Due to the political instability of the past five decades, Karachi has developed a very active civil society consisting of NGOs, CBOs, the media, charitable trusts, professional's forums, youth groups and public-private liaisons. There are many pilot projects being run in the different development sectors and even young bureaucrats have adopted the participatory jargon. The poor and their supportive informal sector are being recognized in official planning and those NGOs who have worked diligently over the years and established their credibility are being consulted by the State.

Due to the implementation of the structural adjustment programme, there has been a cutback in public expenditure and the State is promoting privatization with projects being given to contractors on BOT & BOO. Land is treated as a commodity and planning is done in a piecemeal manner. Due to the coming together of the NGO / CBO network, sustainable and community responsive alternatives to city planning and development are being advocated, but in government circles development plans are project based rather than a comprehensive, long term commitment.

⁷⁵ Referred from; Hasan Arif, Presentation on local government presented at University of Manchester, 2001

4.3 General Changes in Society

The effects of urbanization and globalization are visible all over the society. The rural elite no longer dominates politics, and there is an increasing number of urban areas in which the middle classes and entrepreneurs reside and affect local politics.

Urban communities do carry a sense of belonging to their respective clan, caste and tribe but are organized as neighbourhoods, categorized on the basis of class. Due to the breakup of the traditional social structures dealing with personal and property law, such cases are being settled through the formal legal process. Elite-supported charities are no longer prestigious or popular, and social welfare NGOs are not on the forefront. Instead, the number of NGO's related to human rights, women issues, planning and development, health and education, have grown and are supporting the low-income communities. Due to government cutbacks in public expenditure, there has been an increase in the privatization of social facilities that has exacerbated the rich-poor divide. For instance, previously, higher education was only available in the public sector.

This meant that students from all over the city studied in the same institutions, interacted with each other, and shared a common culture and physical space. Today, with a decline in the quality of public institutions, the rich are opting for private institutions at home or abroad, the middle classes aspire to do the same, and there is an increasing number of students going overseas to study or work. In the low-income settlements too, a hundred per cent education facilities are private (refer table 36). There are an increasing number of women studying, working, and marrying late. The divorce rate has increased by 300 per cent because of greater economic mobility and access to legal aid for women. IT revolution and satellite TV channels are affecting the lifestyle, aspirations and culture of the people. There is an increased awareness of environment, development and human rights issues.

5. Master Plans and Housing Policies in Karachi

Since 1947, the growth in housing needs and the resultant formal sector housing policies and master plans can be divided into six phases.

5.1 Phase 1: 1947-1957

After the partition of India when Karachi became the capital of Pakistan, 600,000 refugees from India moved into the city and its population rose from 400,000 to a million in 1951⁷⁶. A vast majority of the refugees was poor and destitute. They were allowed to occupy all open spaces in the city centre including parks, playgrounds, school buildings, and cantonment land. This resulted in the formation of impermanent tent settlements (locally referred to as “*Jhuggi*”) and encroachments all over the inner city. Tent settlements were made of material donated by European countries to the newly established State of Pakistan with one family housed in each tent and a community tap and toilets provided for every four tents⁷⁷. The *Jhuggi* was made of cardboard boxes, reeds, bamboo, cloth and other recycled materials. Since then, many of these settlements have been shifted elsewhere, but some still survive in the ecologically hazardous zones of the city.

⁷⁶ Facts and Figures from, Hasan Arif, “Housing for the Poor, Failure of Formal Sector Strategies”, City Press, Karachi, 2000

⁷⁷ Information collected through interviews with Planners; Islamuddin Siddiqui and Shahab Afroz Alvi, ex-employees Karachi Development Authority (KDA).

5.1.1 Welfare Policy: Provision of Infrastructure and Built Units

By 1950, the refugee influx had stretched the municipal services of the city, and the government spent 70 to 80 million Rupees⁷⁸ in this period on providing water and sanitation to the squatters. With the passage of time, maintaining even minimal standards and protecting the health of the residents became impossible, and a decision was taken to rehabilitate the refugees according to the following plans:

a) One- Room Units

In an attempt to solve the congestion of the inner city where several refugees had settled, the government undertook the construction of one-unit housing units for the refugees employed in the lower grades of government jobs. These units of 80 and 120 square yards were built in five townships: Liaquatabad, Orangabad, Shah Faisal Colony, Golimar and Malir Colony⁷⁹ (refer Map 4 and 5). They were partially financed by the grants and donations given by the international community to the newly established State of Pakistan. Developed as welfare, these units were subsidized by the State and given to the beneficiaries at an installment rate of 2 Rupees per month⁸⁰.

Due to the meager income of the refugees, there were many defaulters and the recovery of funds became difficult. Eventually, the government had to waive off the dues. Some beneficiaries who sold the cheaply acquired housing units in the open market and moved back to the city for better employment and services exploited this situation. Presently these schemes house lower middle to middle income residents and are fully developed medium density areas lying near the city centre. The concept of built units was abandoned after this attempt, since the finances and administrative resources required to meet the increasing housing backlog were not available to the newly established State.

b) Government Employees Quarters

To accommodate the mid level government employees, various schemes of built units called “quarters” were planned and executed by the government. These included: Jehangir, Jamshed, Aluminum, Platoon, Martin, Kleaton, Pakistan and Garden Quarters. These compound style walled neighborhoods were planned in different areas of Karachi to accommodate different categories of government employees.

The lower category quarters like Aluminum in Lines Area were makeshift and consisted of a cemented platform on which pre-fabricated aluminum panels were assembled and erected. This type of settlement had common toilets and community water taps. A nominal rent was charged to the residents by the government for maintaining common facilities⁸¹.

⁷⁸ Facts and Figures from, Hasan Arif, “ Housing for the Poor, Failure of Formal Sector Strategies”, City Press, Karachi, 2000

⁷⁹ Information collected through interviews with Planners; Islamuddin Siddiqui and Shahab Afroze Alvi , ex-employees Karachi Development Authority (KDA)

⁸⁰ *ibid*

⁸¹ Information collected through interviews with Planners; Islamuddin Siddiqui and Shahab Afroze Alvi , ex- employees Karachi Development Authority (KDA)

The higher category quarters such as Jamshed, Jehangir, Capital-C Area, Pakistan and Garden Quarters were two, two-and a- half, and three-room units⁸² with verandah, toilets and kitchens. Communal spaces were provided between the quarters for ample light and air circulation. Most of these compound type settlements still exist, except that the density of population has gone up over the years as the number of people per family has increased and extensions have been made.

Presently these quarters form a substantial part of the city centre. Their nearness to the city centre and major commercial areas of the city has raised the real estate value and the interest of speculators and builders mafia in these areas. The commercial pressure on real estate is immense and lots of the residential quarters have changed their land use to either high-rise apartment blocks or shopping cum office plazas. This land use change unaccompanied by matching infrastructure development is resulting in parking problems, encroachments and congestion, choking of the existing water supply, sewerage and solid waste disposal systems.

c) Co-operative Housing Societies

In the 1950s, the government floated a scheme of co-operative housing schemes for its employees. A total of twenty-four housing societies⁸³ were established under this scheme. Different ethnic, linguistic and common interest groups formed following the first scheme, Pakistan Employee's Cooperative Housing Society (PECHS), and then several other cooperatives. These were registered as housing societies; some of them even formed unions. Most of the housing schemes were named after the place of origin of their residents, their ethnicity, or a famous leader. Sindhi Muslim Cooperative Housing Society (SMCHS), Kathiawar Memon Cooperative Housing Society (KMCHS), Bahadur Yaar Jung Society, Al Hamra Society are a few examples.

The land for these schemes was given by the Board of Revenue (BoR) at the subsidized rate of 50 Paisa per square yard. A few indigenous settlements and Goth (villages) existing in these areas were taken over and planning and physical development was done by the public works department (PWD) of the Ministry of Housing. Development charges were between four to five Rupees per square yard, and the sizes of plots ranged from 200 to 2000 square yards⁸⁴. Today, the value of land in these areas has gone up to 10, 000 Rupees per square yard.

In PECHS, a few prototype house plans were developed by the cooperative society office to be used by any interested member. Service lanes with sewage lines and a possible back entry for servants were provided for hygienic reasons that have since degraded into garbage disposal areas. Amenity plots; parks, and market places are provided in all the schemes and are maintained by the city government or the resident community. Most of the houses are ground- plus- one structures. Due to the increase in population, the density has gone up in some areas, with the larger plots either subdivided into town houses or converted into apartment blocks.

These co-operative schemes now form the centre of the city and are considered one of the best-maintained and most expensive areas of Karachi. However, their nearness to Karachi's commercial corridors like Shahr-e-Faisal and Tariq Road has led to illegal commercialization along and near these roads increasing the density (refer Map 5 and 6). The new high-rise buildings do not have the required infrastructure and utilities leading to an immense pressure on the adjoining residential areas for parking, water supply, sewerage disposal and electricity supply.

⁸² ibid

⁸³ ibid

⁸⁴ ibid

5.1.2 Formation of Karachi Development Authority

Till 1947, all development and planning for Karachi was done by the Public Works Department (PWD) in collaboration with the Board of Revenue (BoR) and Ministry of Housing and Planning. In 1950, the Karachi Improvement Trust (KIT) was established to tackle the problems faced by the city. In 1957, KIT was upgraded to become the Karachi Development Authority (KDA), an autonomous agency with its own funds. KDA has recently been devolved and become a part of the City District Government Karachi (CDGK). In 1952, KIT, with the assistance of a Swedish firm of consultants, Merz Randal Vattan (MRV), prepared the first master plan for Karachi which came to be known as the “Greater Karachi Plan”, or MRV Plan (refer, Map 13).

5.1.3 First Attempt at Master Planning: The Greater Karachi Plan

The Greater Karachi Plan established the growth corridors of the city and proposed an exclusive, detached administrative district in the northern part of the city to be developed as the new capital. The plan envisaged a federal secretariat, legislative buildings, and a university around a large Independence Square. This capital complex was to be connected to the old town with fast mobility links (refer Map, 13).

It was envisaged that multi-storied flats between the old and the new parts of the city could resolve the shortage of housing. The development of 60,000⁸⁵ housing units for the poor was proposed that were linked to the new centre, but this never came to pass because of the delayed development, speculation, and bad social planning.

The overall plan could not meet its targets because the database on which it was founded was grossly outdated. It assumed that the population of Karachi would be 3 million in the year 2000, a figure that was reached in 1969. Then, in 1958, a martial law government was established in Pakistan which decided to shift the capital from Karachi to Islamabad, thus making the new Karachi administrative district a redundant idea. The merit of the plan was that the city has expanded along the same corridors as identified in the plan.

5.2 Phase 2: 1958-1964

Since it was not accountable to anyone, the martial law government of 1958 took a number of decisions regarding master planning and housing which were to have adverse and long lasting effects on the demography and physical layout of the city. It decided to move the poor out of the city since the President was disturbed by the ugliness of their colonies and termed them as breeding grounds for violence and crime. Another decision was taken to industrialize Karachi as part of the Green and Industrial revolutions being implemented in the country. Industrialization pushed many people from the rural areas into Karachi looking for employment, thereby pushing the city’s growth rate to over 7 per cent per year in the early sixties⁸⁶. This increase in adult population resulted in a demand for immediate provision of housing, transport, employment and related social facilities.

⁸⁵ Facts and Figures from, Hasan Arif, “Housing for the Poor, Failure of Formal Sector Strategies”, City Press, Karachi, 2000

⁸⁶ Facts and Figures from, Hasan Arif, “Housing for the Poor, Failure of Formal Sector Strategies”, City Press, Karachi, 2000

5.2.1 The Greater Karachi Resettlement Plan (GKRP)

In 1958, the government of Pakistan appointed Doxiadis Associates of Athens, Greece as consultants for preparing a master plan for the city. The consultants used various surveys and established that there were 119,000 homeless families living in the city centre. The plan estimated that in two decades, Karachi would require 500,000 housing units. On the plan's recommendation, the government undertook to build 300,000 of these units and develop the remaining 200,000 as sites and services schemes. Thirty per cent of the development was to be subsidized and the remaining 70 per cent was to be recovered as installments⁸⁷.

a) Failed Resettlement – Consolidation of the Informal Sector

Two resettlement schemes were planned as part of the Doxiadis Plan, one within the Landhi-Korangi Industrial area to the East, and the other within the New Karachi and SITE industrial area to the north of the city (Refer Map 14). These settlements located 20 km from the city centre were to perform the dual function of accommodating the evicted population of the inner city, and also housing the rural migrant turned labor that was working in the adjoining industrial areas.

In phase-1, 45,000 one- room units were planned with all the utilities, which were to be distributed equally in the two settlements. Due to the lack of funds and slow industrial turnover, only 10,000 units were built till 1964⁸⁸. The slow development was due to delays in the delivery of infrastructure like roads by the State, forcing the investors, labor and inner city evictees to look elsewhere for accommodation and work opportunities.

The people evicted from the inner city slums were left in a lurch since they did not get the promised compensation units and could not go back to the city centre where the land had been cleared out sold to builders and developers. This led them to make encroachments on government property or to make colonies on informal subdivisions in and around the planned townships where utilities like water and electricity were available. This was the beginning of the peri-urban or fringe lower income settlements of Karachi.

Soon, the people who had acquired houses but could not find work in the adjoining industry sold their units to speculators and moved back to the city centre. This turned the overburdened inner city into a slum area.

This failure of the fully serviced settlement concept affected the thinking of government planners and policy makers. They realized that due to the weak economic and administrative base of the State and the people, subsidies by the government and recovery of loan from the people was difficult. It was also realized that housing was not just about brick, mortar and logistics but needed to take into account social and economic factors including affordable development costs and the consent of the people to be rehabilitated.

5.3 Phase 3: 1965-1974

After shelving the Greater Karachi Resettlement Plan, the government decided not to construct houses for the poor in the future. It was also decided that the recovery of house building loans in installments would be discontinued. Despite changing its planning policy, the government remained committed to the idea of evicting refugees from inner city slums and resettling them on

⁸⁷ ibid

⁸⁸ ibid

plot townships. No schemes of slum improvement was in keeping with the planning paradigm of that period which advocated relocating of poor communities to new sites instead of upgrading the area where they lived. The important change instituted was that whenever new settlements were made, they would not follow the earlier sequence of land, infrastructure, housing unit development, and then people coming to live in it. Rather, land and infrastructure would be planned, developed, and given over to people to build their own units over time.

5.3.1 Introduction of the Plot Townships to the west of the city

During 1965-74, three plot townships; Baldia, Orangi and Qasba (Refer Map 4 and 5) were developed to the west of the city. Inner-city squatters were moved and resettled by giving plots with a 99 years lease but, once again, people were evicted from the inner city and resettled in the townships before the infrastructure was developed for the area. In some cases, piped water came by 1982, with still no hope for a sanitation system.

The fate of the plot township was not very different from the Greater Karachi Resettlement Plan, even though units were no longer being built. Only 5,000 plots per year were delivered to respond to the demand for 20,000 per year. This inefficiency of the State to deliver land and the growing demand gave way to the illegal subdivision of pastureland let out on yearly contract to village communities by the state. Around 1300 acres were sold in Orangi, and 6000 acres of land with 60,000 plots were developed and sold by informal sector operators⁸⁹. Today, these squatter settlements have a population of over 1.2 million.

5.3.2 Flats for the Squatters

The concept of rehabilitating low-income communities in medium and high-rise flats on the land, which they occupied in the city centre, was begun in the late 1960s. It was only in the 1970s that schemes were made for Lyari and Lines area. In both cases, a very small part of the settlement was demolished and the proposed flats were constructed. The cost of the flats was too high for the residents and they were bought over by speculators. Meanwhile, the squatters moved out to the illegal subdivisions on the fringe of the city but this intervention set the trend for private developers and builders to buy houses from private owners and convert them into apartment blocks. This unplanned vertical growth has resulted in the demolition of a large number of heritage buildings, increased the density of population the inner city, and the pressure on the existing infrastructure, leading to its degradation.

5.3.3 Setting up of the Master Plan Department

In 1967, the Government of Pakistan sought the support of the United Nations to tackle the problem of housing for the growing number of lower income people in Karachi. The UNDP agreed to help and, in 1968, a semi- autonomous organization called Master Plan Department (MPD) was created within the KDA. The same year, the Government of Pakistan collaborated with the UNDP and the Master Plan Department prepared the Karachi Metropolitan Programme (KMP) to solve the housing problems of low-income groups in Karachi. A master plan was prepared the implementation period for which was to be from 1974 to 1985.

⁸⁹ Facts and Figures from, Hasan Arif, “ Housing for the Poor, Failure of Formal Sector Strategies”, City Press, Karachi, 2000

5.3.4 Karachi Metropolitan Programme and Housing Policies for the Lower Income Group

In 1972, there were about 1.5 million low-income people, of which 800,000 lived in squatter settlements. According to MPD projection, 590,000 households were to be added to Karachi by 1985, of which 250,000 would be from the low-income group. This meant that KDA would have to provide 40,000 plots a year for this group from 1972 to 1985⁹⁰.

The MPD studied the earlier efforts of government to solve the housing problem in Karachi and felt that the reason for their failure was because the social and economic aspects of poverty were not given due consideration. It also felt that the limited government resources were a hindrance in the work in addition to low recovery rate of loans from the users. The KMP recommended three basic housing development programmes for low-income groups in Karachi.

- Utility Wall Development (UWD)
- Open Plot Development (OPD)
- The Improvement and Regularization Programme (IRP)

a) Utility Wall Development (UWD)

This programme was for the relatively less poor class of people. Plots were to be allotted with all basic services and built upon by the owner. These townships were to provide all urban facilities like schools, markets and hospitals and a secure tenure to the owners. Under this programme, 11,000 plots were to be provided by 1980 and another 20,000 by 1985.⁹¹

b) Open Plot Development (OPD)

This programme targeted the very poor class among the low-income group. It provided security of tenure and all urban facilities but no utility wall or plinth. The KMP was to provide 80,000 plots by 1980 through the OPD scheme and an additional 36,000 by 1985⁹².

c) The Improvement and Regularization Programme (IRP)

This programme aimed at upgrading the existing squatter settlements and, wherever possible, giving security of tenure to the residents. It also involved the residents shifting to regularized plots where the upgrading or security of tenure was not possible due to adverse environmental conditions.

The above-mentioned targets of these schemes, under the Metroville Programme, were far below the annual requirement of 40,000 housing units for the 20,000 poor migrants being added to the city each year⁹³, in addition to the local population requirements. But even the target set by KMP was not achieved nor was the other social and economic goals.

⁹⁰ Facts and Figures from, Hasan Arif, “Housing for the Poor, Failure of Formal Sector Strategies”, City Press, Karachi, 2000

⁹¹ *ibid*

⁹² *ibid*

⁹³ Facts and Figures from, Hasan Arif, “Housing for the Poor, Failure of Formal Sector Strategies”, City Press, Karachi, 2000

5.3.5 The Metroville Programme

The Metroville Programme was the first major programme to be implemented under the KMP during 1974-85. Initially, four Metrovilles were planned per year each housing 50,000 people. The first two were to be the UWD schemes and the other two OPD schemes. The main objectives of the programme were:

- To provide the plots, keeping in view the economic condition of low-income group.
- To provide water, electricity, gas, and sewerage connections.
- To provide house building loans to the target population to finance their housing.
- To support and provide proper health services, education, and population programmes.
- To extend technical assistance to builders on self help basis.
- To provide employment opportunities to 40 per cent of the resident labor force within or near the Metroville site.

Orangi Metroville (Refer Maps 14, 4 and 5) was the first Metroville to be planned and developed. It was a UWD scheme comprising 4,133 plots for the 35,000 people living there with all the basic services like electricity, water and gas, sewerage. The prices of the plots were also kept very low at 2, 500 Rupees per plot⁹⁴. It was thought that the low-income groups would respond to the scheme immediately because of the reasonable price and the level of services, but that never happened and the scheme failed. The same fate was met by the OPD and the IRP, details of which are discussed below.

a) Non-occupancy

The plots in the Orangi Metroville were allotted in 1973 and it was only in 1974 that the first owners moved in. Over the years, the numbers of families moving in remained very low and, by 1985, only 700 families were living in the area. This was because the development of a KDA scheme takes a long time, while the poor require immediate shelter. In addition, the tedious paper work and bribing involved in KDA projects is cumbersome and unaffordable to the poor. In the case of the katchi abadi, no paper work and formal requirements exist, which suits the economics of the poor who are pressed for time and security.

b) Missing the Target Group

To target the real poor and needy, it was planned by the KDA that 94 per cent of the allottees would be the people who earn less than 1000 Rupees a month. Later surveys show that around 56.8 per cent residents belonged to an income bracket well above this. The developers and builders changed the nature of low-income settlements to middle income commercial housing because it bought over the plots from the poor at slightly higher prices. The owners were quite happy to sell their plots and move to a katchi abadi where land and other facilities were available immediately. In the case of inner city slum upgrading projects, the builders and developers bought over all regularized plots in this manner.

c) The Middle Class Moved in

A large number of families have now come to live in the Metroville and almost all of them are second owners. They have demolished the old construction and built new units on the pattern of

⁹⁴ ibid

middle class areas of the city and, in while doing this, they have not followed the incremental construction plans of KMP. This influx of the middle directly or through builder built housing has become a common phenomenon in public sector schemes. Once a public sector scheme is launched, the affluent middle class buys out the poor who cannot afford to pay the land and development charges of the KDA. The poor are attracted by the easy payments and dynamic processes of the informal sector and opt for it.

d) Lack of Community Participation

Due to the low turnout of the real poor in the area, the plans related to community participation cannot be carried out. In areas where the poor do settle down, government schemes lack the financial, technical, and managerial support needed for new settlers. In the informal sector, the informal developer (*dallal*) provides the technical and financial support system for house building and income generation, giving the poor possibility to upgrade their lot and develop the means to access education, health and infrastructure.

e) Deterioration of Services

Since the occupancy rate remained very low in the Metroville scheme, services like roads, sewerage, and water mains that had been constructed by KDA deteriorated, causing a huge loss of investment and problems to local residents.

5.3.6 Developer- built Flats

During the early 1970's government gave incentives to the builders and developers in Karachi to construct flats for lower income groups. Land was given at a subsidized rate by the Board of Revenue in Surjani Town, KDA scheme 42 (refer Map 4 and 5). KDA made the plans for construction, delivery, and implementation. The cost of the flats was worked out at 20,000 Rupees per unit. Very few builders showed any interest in this scheme, and those who did take it up, were not able to follow the KDA guidelines for delivery, once again loosing out to speculators and the open market. In addition, construction was delayed which resulted in the people selling back to the builders and second owners and opting to live in the katchi abadi. The builders later sold these flats in the open market. The private sector builders and developers do not wish to build for the poor as they want to have high profit margins and the poor cannot afford their projects.

5.4 Phase 4: 1975-85

5.4.1 The Open Plot Development Townships

Between 1978 and 1981, KDA developed three major townships, Schemes 45, 42 and 33 in Karachi, comprising 164,891 plots. Land for these schemes was acquired from the CBR at 250 Rupees per acre. The subdivision of plots, development, and delivery was done by the KDA. Plots were allotted through a ballot, and payment was to be done by the people in installments. In schemes 42 and 45, over 70 per cent of plots were of 120, 80 and 60 sq yds as they were meant for the low-income group. Scheme 33 was the third and the largest scheme of all and contained 70,000 plots. It was to be developed on the pattern of the cooperative housing societies. Although, the scheme was started in 1978, only three plots were occupied by October 1984 and 62 per cent of the total plots have been built until recently.

a) Attempt at Cooperative Housing in Scheme 33, Gulzar - e - Hijri

A scheme was prepared by KDA and the BoR to develop housing in Gulzar-e-Hijri, scheme 33, spread over 26,000 acres, when 110 cooperative societies were formed consisting of different groups and communities. Land allotment at subsidized rates and internal development was undertaken by BoR. KDA was responsible for the layout, planning, and external development. All costs for external development were borne by the KDA but when BoR made the recoveries it did not share the money with KDA. This resulted in KDA's withdrawal from the project. BoR was unable to manage the scheme, which resulted in multiple ownerships per plot, litigation, and court cases and non-development of the schemes. The numbers of defaulters increased over time, speculators took possession of the vacant plots, and numerous informal Afghan refugee settlements sprung up on the periphery hooking on to the laid infrastructure damaging it.

b) Recent Development of Scheme 45, Taiser Town

Scheme 45-Taiser Town, was developed as an OPD by KDA. It was initially supposed to be developed as a public private partnership. A token money of 100,000 Rupees per acre was charged to builders by the KDA for undertaking external development. Meanwhile, Malir Development Authority (MDA) was formed and scheme 45 was taken from the jurisdiction of KDA and handed over to it. MDA only transferred the assets and not the technical staff and, in the absence of technical expertise, it was unable to execute the planned concept. This administrative mismanagement resulted in the builders, KDA, and MDA going to court, making the process of development ineffective. Recently, the MDA paid back KDA and the builders, and has gone for a complete revamping of the physical planning with the help of a local engineering company. The new developments have been planned responding to the open market and no specific provision for low-income housing has been made.

5.4.2 The Katchi Abadi Regularization and Improvement Programme (KAIRP)

The improvement and regularization of the katchi abadi was an important part of KMP. The 1970s was a period of socialist ideals and anti-capitalist politics. The rights of katchi abadi dwellers were made an election issue in 1971, with the People's Party promising "*Roti, Kapra aur Makan*" (*Bread, Clothing, and Housing*). When it came to power and initiated the process of providing lease to katchi abadi dwellers, KAIRP was made a part of the KMP 1975-85. The main features of the plan were: upgrading of the katchi abadi by providing urban services to the people of these settlements, granting a 99- year lease to the residents, and provision of plots or houses to the affected population of the up gradation process.

In January 1978, in order to gain popular support, the military ruler of Pakistan announced that all katchi abadi existing on or before January 1978 would be regularized and the rest would be demolished. Later, in April 1986, the then prime minister of Pakistan announced that all katchi abadi settled before 23 March 1985 could be regularized. The regularization programme was made part of the Sixth Five- Year Plan, 1983-88, and an estimated 2,103.58 Rupees was allocated for it.

Baldia was the first *katchi abadi* to be chosen for up gradation by the KMC, which consisted of 24,500 plots. Regularization was announced on 1977 but lease operation didn't begin until 1980. Till 1983, the lease figures were below expectations that adversely affected the programme since it depended on the recovery of lease charges.

The regularization programme was not launched in any other squatter settlement and the KMC work has so far been limited to the improvement of water supply and road conditions. The KAIRP for the Sixth Five- Year Plan, 1983-88 and KMP period 1974-85 failed completely. It managed to regularize about 18,000 of approximately 223,000 houses after spending a huge sum of a hundred million Rupees. The KAIRP failed due to the following factors:

5.4.3 Causes of Failure of the KAIRP

a) Market forces not understood

Investment in land in Karachi is considered the safest and quickest way to beat inflation by the affluent Karachi middle class. Thus, most KDA schemes are purchased by this class and held for speculation. Development carried out by KDA is either on too small a scale to override speculation or takes many years to materialize which keeps a large sum of public money unproductive.

The Association for Builders and Developers (ABAD) has a major say in the policy formulation as most of its members are either from or connected to the politicians and bureaucratic circles of the city. It has often managed to subvert government programmes for the poor and changed them into middle-income housing projects since it is more lucrative. Its influence as a pressure group has increased considerably in recent times due to the continuous failure of government policies.

b) The economic condition of poor not addressed

Government policies for the housing of the poor have always been incompatible with the economic conditions of the targeted group. The cost of KDA development is too high for the low-income group. The lease charged by KAIRP is also far too high. Therefore, the residents of squatter settlements tend to think that an announcement for the regularization process is sufficient and, instead of “wasting” their money in acquiring lease, use that amount for the improvement of their homes.

All low-income groups want land for immediate possession and cannot wait for the physical development process to be completed. In the case of KDA, people have to undergo a long and cumbersome process before they acquire land or start construction, which is one of the reasons why people do not apply for the plots. The case of KAIRP is similar since people had to go through long and hectic procedures before registration was complete. They also had to encounter corruption and harassment from State officials during the whole process.

c) Change in status of implementing body

In the past 10-15 years, KAIRP underwent a major reshaping. A separate Sindh Government agency called “Sindh Katchi Abadi Authority” (SKAA) now runs it in Sindh and the staff and director understand the dynamics of low-income settlements. They have acquired this knowledge and understanding through interacting with the OPP-RTI and KAIRP has adopted OPP-RTI’s low cost sanitation programme, appointing OPP as a consultant and trainers for SKAA staff (for details on OPP-RTI, Refer Box). The lease process has been made a one- window affair when it earlier had had eleven steps, work is being done with the CBOs of the areas, and there is a transparency in accounts. The positive results are evident from the fact that SKAA has been able

to generate 150,416 million Rupees in lease charges against an investment of 48,227 million Rupees in development⁹⁵

5.5 Phase 5: 1986-2000

5.5.1 The Karachi Development Plan 2000

The Karachi Development Plan 2000 began towards the end of the Karachi Master Plan 1975-85. It was prepared by the KDA with the assistance of the UNDP and it was decided not to develop any new fully serviced housing schemes till the year 2000, or till the already developed vacant plots were occupied. A few of the objectives of this plan were:

- To develop housing for around 798,611 households by the year 2000.
- To improve the current living space standard.
- To increase people access to services like water supply from 66 per cent of the population to 99.8 per cent, electricity from 90.7 per cent to 99.9 per cent sewerage facilities from 36.5 per cent to 96.9 per cent by the year 2000.
- The establishment of special land use, building and infrastructure standards for this purpose, both in new settlements and in the upgrading of existing katchi abadi.

These objectives were quite ambitious and similar to previous policies. The failure of the KDP 2000 in taking off was largely due to technical shortcomings in the planning process since there was no system of data entry and the monitoring and related planning exercise could not be carried out. The plan also started at a time when much of Karachi's civic needs were taken care of by the informal "interest groups" who were neither consulted nor studied during or before planning. The plan did not have any legal cover because its steering committee could not meet to approve it. Due to all these factors, the Karachi Development Plan 2000 is now ineffective.

5.6 Phase 6: 2000 onwards

5.6.1 New National Housing Policy

A housing advisory board of nearly 40 members, half of them from the private sector, was constituted in the Ministry of Housing and Works to formulate the National Housing Policy 2001. According to the estimates given by the advisory board, the housing backlog in the country was estimated in the 1998 census as 4.30 million units. The annual additional requirement is estimated around 570,000 housing units, whereas the annual production is estimated around 300,000 housing units resulting in a recurring shortfall of 270,000 housing units annually, taking the household size as 6.6 people and the occupancy per room as 3.3 people⁹⁶.

The policy aims to make up for the backlog and to meet the shortfall in the next twenty years, but in order to do so; it stipulates that the overall housing production has to be raised to 500,000 housing units annually⁹⁷. The President and Chief Executive approved the policy measures in principle during presentation of National Housing Policy by the Board on 22 June 2001 that are as follows:

⁹⁵ Hasan Arif, Mohib Masooma "Reporting on slums, A case study of Karachi", Pakistan, 2002, Karachi

⁹⁶ Website; National Housing Policy, Government of Pakistan

⁹⁷ *ibid*

- To create affordable housing, especially, for the middle and low-income groups. One of the cornerstones of the policy is to ensure the development of housing for the poor and for the majority rural population through the use of different incentives like free land, cross-subsidy, and concessionary finance.
- Financial Institutions will be encouraged to give mortgage loans for housing purposes at market rates.
- All commercial banks will be motivated to advance loans for housing projects by earmarking a substantial percentage of their loan portfolio.
- Financial Institutions and Housing Financial Institutions (HFIs) will be encouraged to float long-term bonds at market rates.
- Housing refinance window will be set up at State Bank of Pakistan for long-term funds from multilateral agencies.
- Housing finance institutions will be encouraged to promote savings and provide micro loans for low-income group through community organization, NGOs and CBOs.
- Restructuring of House Building Finance Corporation (HBFC) will be done to enhance its annual disbursement from the present 1.2 billion Rupees to 7.00 billion Rupees over the next five years.
- HBFC will re-introduce bridge financing and bulk financing of housing projects through efficient accounting with appropriate safeguard.
- HBFC and other financial institutions will formulate packages of preferential/ concessional rates with affordable system of installments for repayment to provide affordable credit to low income groups.
- Foreclosure laws will be introduced to ensure effective recovery of loans and advances from the defaulters. Property tax on rented property shall be reduced from the current high rate of 25 per cent to 5 per cent.
- Mark-up on housing loan installment for individuals shall be treated as expense in tax return.
- Banks and DFIs shall extend credit facilities for Balancing, Modernization and Replacement (BMR) of machinery used for Housing and Construction Industry.
- Import of plant and machinery and spare parts by the housing and construction companies, not manufactured locally, will be exempt from custom and import duties in excess of 10 per cent.
- Stamp duties and registration fees shall be adequately reduced to an aggregate total value of one per cent.
- Initiation of low cost housing scheme and provision of cross subsidy to the poor through auction of commercial plots.
- Subsidized micro loaning facilities will be extended for rural housing construction and improvements through micro financing systems and institutions like Khushhali Bank and Zakat funds.
- Provision of trunk infrastructure will be the responsibility of utility agencies. The cost of trunk infrastructure shall not be an additional charge to the public or private housing development scheme.

5.6.2 Situation on ground

The new policy has not made any significant change in the situation of the poor. The loans extended through Khushhali Bank and Zakat funds for housing have a small outlay to make any impact. Meanwhile, Karachi's housing needs estimated at 80,000 units per year, is being met by the formal sector by the provision of 26,700 units, whereas, the remaining 54,300 units are being provided by the development of squatter settlements and through densification of the inner city slums (refer table 25).

Land and credit is still inaccessible to the poor in the open market. The only source of long-term credit for house building through the HBFC does not finance purchase of land. Since it does mortgage financing, the residents of Katchi Abadi and slums who cannot acquire a lease on their plots are disqualified as potential beneficiaries. In addition, HBFC or commercial banks do not provide small loans to suit families whose incomes are too low to guarantee regular repayment. Formalities and paper work involved for seeking loans is a further deterrent as it requires time, lobbying, and catering to corruption. Most of the poor are still accessing housing through the informal sector. As access to land is immediate, small loans and credits are given on personal guarantees and there are no bureaucratic procedures involved.

For the middle and higher income groups, access to commercial loans is comparatively easier. There are numerous schemes floated by private and national banks for house improvements, purchase and leasing. The interest rates vary between 6-8 per cent and the loan can be repaid in installments but, the borrower must be earning a substantial salary or be employed by a government or corporate company who can act as a guarantor to qualify for the house building finance loan. To be able to buy land, collateral is needed. These conditions have limited the credit schemes to some social circles, and there is a trend among young bankers and corporate sector employees to invest in housing. There is still time before housing will be affordable to all.

5.7 Resultant Informal Sector Housing

As a result of the failure of the formal sector housing policies, the informal sector in Karachi has become active in providing civic services. Public transport, water, electricity, housing and employment are being generated in this sector. In the housing sector, the growth and scale of the informal sector can be traced as follows:

5.7.1 Unorganized Land Invasion

From 1947 to 1952, unorganized invasion katchi abadi were created as a result of the refugee influx as an aftermath of the partition of India. There was official acceptance of occupation of state land, parks and open spaces. Water was provided to these settlements and bamboo and mats provided for putting up a shelter. Many of the settlements were named after politicians and government servants who provided them support. Some of these settlements still exist.

5.7.2 Illegal Land Subdivisions (ISD)

From 1952 onwards, due to the shifting of settlements from parks and other amenity plots of the inner city to the fringe areas of the city, led to the development of ISDs on a small scale. The failure of the government's resettlement schemes put pressure on inner city residents to shift to these ISDs and support the informal developers in their work even though it was not legal.

During 1958 – 1968, the military government decided to demolish the katchi abadi within the city and shift the residents to two townships at a distance of about 20 kilometers from the city centre. As a result of the failure of these schemes, ISDs started to develop along the roads and around the settlements connecting the townships to the city. Corrupt government officials gave support to middlemen for the development of these settlements, thus creating a close working relationship between middlemen and government agencies. This was the beginning of what is called the “land mafia”. At the same time, the government shifted inner city settlements to two un-serviced plot townships in west Karachi around which some major katchi abadi developed again, informally supported by government officials.

In the decade 1968 to 1978, a de-facto security of tenure was created for the vast majority of irregular settlements on State land through the KAIRP. Since they were regularized they grew rapidly with politicians supporting corrupt government officials and middlemen. A number of such settlements are named after politicians who helped in their creation and preservation. In 1977, the military took over from the People's Party but did not change the katchi abadi policy. In 1978, the Katchi Abadi Act was enacted providing guidelines for the improvement and regularization of these settlements.

From 1978 onwards, the expansion of katchi abadi has continued. In periods of military rule, the Army has sought the support of the dwellers against major political parties by buying votes for local body elections from these colonies, while in periods of "democracy"; the parties in power have extended the cut off date for regularization.

5.7.3 Inner City Densification

The majority of inner city slums house the pre-independence working class of Karachi. Because of this, they have a legal status and political representation and are the beneficiaries of large government funds for water, sanitation, roads and social facilities. But because of misuse of resources by civic agencies the social indicators (except tenure security) within these slums are far worse than those for the katchi abadi. Another reason for the failure of these projects and for the poor conditions within these settlements is that there has been very little community involvement in the development process and a very strong reliance on the elected and traditional community leadership.

5.8 Conclusion

5.8.1 Issues in formal sector master planning and housing policies

Master Planning has always been taken by the KDA as a one-time assignment and not as a continuous process. The fundamental structure of planning which requires studying the current situation, noting growth trends, assessing future requirements through surveys of housing conditions, land use patterns, socio-economic conditions, jurisdictional topography, and distribution of responsibilities, fiscal management and an inquiry into the prevailing has been done in a cursory manner.

The review of legislative codes, Acts and Ordinances concerning urban development, their consolidation, framing of new legal instruments for regular updating of data-base, monitoring the implementation organizational cooperation, linking of planning decisions with investment decisions, and budgeting procedure of other agencies was not made an essential part of the planning process. It has remained a common practice in planning and policy formation to start afresh each time a new government comes into power. The previous plan is then merely consulted as a passing reference and not evaluated for its successes and failures. The only exception to this is the KDP 1986-2000, but this evaluation was not adopted by the planning agency for any improvement in the future.

All the plans of Karachi have been made under the auspices of the now defunct KDA, which did not possess any legal or administrative control on the nineteen other land owning development agencies of the city. Thus the capacity of KDA to execute the plans was grossly over-estimated. The planning process was reduced to a residual exercise that was only conducted under the directions of the donors or the UN agencies and never enjoyed the political mandate of any

government. The Steering Committee that was setup in 1989 to approve the Karachi Development Plan and was chaired by the Chief Minister of Sindh, never met to legally approve and adopt the plan. The reason for the delay was the power the developers and builders mafia was able to exert on the politicians, as they would have been the major group affected by the KDP 2000.

The planning process, which has been organized in the most traditional manner, was faulty and inadequate. The basis of the assumptions was drawn from sample surveys in the absence of a comprehensive view on social realities. This led to under/ over estimations. Physical data was obsolete and not upgraded.

To date, Karachi does not have a comprehensive mapping base that is otherwise required for all kinds of planning and development exercises. Data gathered by the Defence institutions is not for public access. The property ownership records or the alignment of jurisdictions are inappropriate and obsolete.

In the KDP-2000, the KDA suggested various options of investments for the concerned institutions that are autonomous in their conduct. Thus it is impossible for the planning agency to execute the various components according to the outlined framework.

Interest groups who actually decide about the fate of the city were not invited to the policy or plan making tables, during the KMP-1975-85 or the KDP-2000. Transporters, shopkeepers, estate agents, brokers, dealers, religious and political groups, professionals and businessmen were kept out of the process, although representatives of localities mostly builders and developers were invited to contribute their ideas to the planning process.

Metropolitan institutions have always remained an outreach of the provincial and federal government, and the control of municipal affairs is with the provincial and federal bureaucracy. In the absence of an effective local government, planning and operation and maintenance institutions, it is difficult to imagine any urban planning that goes beyond being a mere academic exercise.

6. Hundred Household Survey: Case Study of Planned and Unplanned Low Income Areas of Karachi

6.1 Introduction to Orangi Town

Orangi Town is an agglomeration of around 1300 acre of formally planned Orangi Metroville scheme around which many informally planned settlements have developed reaching a cumulative population of 1.2 million making Orangi Town as Karachi's largest low income settlement (Refer, Map 4 and 5). Failure of the formal sector Metroville scheme led to the majority of the area being subdivided and sold by land grabbers, whose relationship of mutual financial interest with the concerned government officials, politicians and city administration made it possible.

Union Council-6, Orangi Town, comprises; Ghaziabad, Gulsan-e-Bihar and Gulshan-e-Zia. Subdivision in the newer parts of UC-6 is still going on and the new settlers are mostly second-generation residents of other parts of Orangi or poor migrants from other parts of the city. Over the years, the settlements have come together and through the support of some community groups; OPP-RTI and councilor funds have acquired basic utilities like sanitation, electricity, and

road pavement. The one problem that remains is the supply of water, which is still not available to almost half the population.

The 100 household surveys were carried out in all three settlements of UC-6, Orangi Town (for data details refer, Appendix 2).

6.2 Introduction to Lyari Town

Lyari Town is a formally planned low-income settlement located near the port in the south of Karachi. (Refer Map 4 and 5). Some of the settlements of Lyari are as old as 250 years. Its early residents include Sindhi, Baloch, Katchi and Gujrati working classes. Presently it is occupied by lower to low-income communities. There are some wholesale markets (Mundi) in and around Lyari that cater to the national and international trading activities of Karachi.

In 1976, the KMC gave ownership rights to the residents as a 99- year lease. Most of the houses are two or three- storied structures with five to six families sharing the premises. These are extended families spreading over three generations. Thirty to forty people live on 80- 120 sq yd plots. Direct water supply in the area started in 1994, but the quality of water is poor. An underground sewerage system is also operational. The area is well connected through the public transport system but the quality of roads is poor due to overflowing sewerage and inefficient construction. Open spaces are virtually non-existent in this area. The general environmental quality has degraded due to densification, rampant commercialization, and ad hoc bus terminals.

The 100 household surveys were carried out in all three settlements of UC-5 and 10, Lyari Town (for data details refer, appendix 2).

6.3 New social trends

a) Household Size

The average household size for Karachi is 6.7, which is lower than the overall average household size equal to 7.3 for lower income settlements(refer, Table 31). Lower income settlements have higher household size due to extended families, higher birth rates and the difficulty in acquiring independent affordable space for housing nuclear families. Lyari is one such settlement with an average household size of 7.09. It is high rise high density area. The high density of the area is due to its location in the historic inner city quarters where scarcity of land and market pressures have forced a high rise, high density development pattern which has put great pressure on civic amenities.

Orangi's average household size is 6.8, which is almost the same as the rest of Karachi. This is due to a higher literacy rate, adoption of family planning methods, and the trend towards nuclear families. Orangi is thus representative of an urbanized population living in the peri- urban, low income, informal area of the city. The availability of affordable land in katchi abadi such as Orangi Town also provides an opportunity to people to own low-rise low density housing with individual families able to live independently.

b) Age of Population

All over Karachi, including its planned and unplanned lower income areas, a majority of the population (36.4 per cent to 43 per cent) is below 15 years of age. This young population requires

adequate education, health, recreational facilities and employment opportunities in the years to come.

According to a survey conducted in 1987 by the Applied Economic and Research Centre (AERC), the literacy rate in planned areas was 76 per cent and 47 per cent in unplanned areas. This situation has further improved because according to new data available on the area, 88 per cent children in Lyari and 90 per cent children in Orangi go to school, with 5.7 per cent to 11.12 per cent of the household income being spent on education.

The increase in literacy is due to the availability of the private sector, both in planned and unplanned areas of Karachi, which has become the main provider of education. In Lyari, no one attends public sector schools and in Orangi a maximum of 5 per cent students attend government schools. This may be either because the numbers of government school are very few or because the quality of education they offer is very poor. Both in the newer and in the older settlements, especially the unplanned ones, there are more private schools, and only people who cannot afford to pay the fees of private schools send their children to government schools. (Refer, Table 32)

There are 509 schools (refer, Table 36), and innumerable tuition centers and technical training centers being run in Orangi by individuals, youth groups, and NGOs. The ratio of government versus private school is 0 to 100 per cent, showing the preference of lower-to-lower middle-income groups towards English medium private education that is supposed to improve the chances of getting good employment in the future.

Table 36: Government and Private Schools in Orangi

Schools	Government	Private
Pre-primary	0 (0.0%)	203 (100.0%)
Primary	56 (21.5%)	205 (78.5%)
Secondary	20 (16.5%)	101 (83.5%)
Total	76 (11.0%)	509 (89.0%)

Source: Akhtar Hameed Khan: OPP Programmes, 1994

Table 37: School Students in Orangi

Schools	Total	Government	Private
Pre-primary	5,602	0 (0.0%)	5602 (100.0%)
Primary	42,049	16,787 (39.9%)	25,262 (59.1%)
Secondary	32,940	9,473 (28.7%)	23,467 (71.5)

Source: Akhtar Hameed Khan: OPP Programs, 1994

Taken from Arif Hasan's, "Understanding Karachi, Planning and Reforms for the Future".

Table 38: Male and Female Students in Orangi

	Schools	Students	Male	Female
Pre-primary	203	5,602	2,905 (51.85%)	2,697 (48.14%)
Primary	261	42,049	22,896 (54.45%)	19,153 (45.54%)
Secondary	121	32,940	18,491 (56.13%)	14,449 (43.86%)
Total	585	80,591	44,292 (54.95%)	36,299 (45.04%)

Source: Akhtar Hameed Khan: OPP Programmes, 1994

Table 39: Male and Female Teachers in Private Schools in Orangi

	Schools	Teachers	Male	Female
Pre-primary	203	253	10 (3.95%)	243 (96.05%)
Primary	205	644	204 (31.7%)	440 (68.32%)
Secondary	101	921	243 (26.4%)	678 (73.62%)
Total	509	1,818	457 (25.1%)	1,361 (74.86%)

Source: Akhtar Hameed Khan: OPP Programmes, 1994

Table 40: Male and Female Teachers in Government Schools in Orangi

	Schools	Teachers	Male	Female
Pre-primary	0	0	0 (0.0%)	0 (0.0%)
Primary	56	336	158 (47.2%)	178 (52.98%)
Secondary	20	235	128 (54.5%)	107 (45.53%)
Total	76	571	286 (50.1%)	285 (49.91%)

Source: Akhtar Hameed Khan: OPP Programs, 1994

Some other trends which can be deduced from the statistics given in tables 36 to 40 are that there is an almost equal male and female literacy rate, co-education is acceptable, and working women are increasing in numbers due to the economic needs of the family. This means that the majority of the next generation will be literate with a non-traditional outlook to the social, economic, and political aspects of society. In the next eight to ten years, these millions of young men and women will require employment and its related infrastructure like transport, housing, and affordable social amenities. Also, with the impending globalization and opening up of markets to regional and international influences, more technical training for developing skilled labor, credit facilities for promoting local entrepreneurs, and centers for professional training will have to be planned and provided by planners and rulers.

c) Average Income and Employment

The average income of the surveyed settlements in Orangi is 4150 Rupees per month that is lower than the surveyed areas of Lyari at 6479 Rupees month. This is because 90 per cent residents in Orangi are working as labor in small businesses and workshops in Orangi. In comparison, in Lyari 29.6 percent people are labor and 50.8 per cent own small businesses. The availability of wholesale markets and port and transport related activities in the old city quarters provide job opportunities.

With 11.7 per cent government jobholders in Lyari versus 5 per cent in Orangi and 15 per cent for Karachi, it is obvious that Lyari enjoys a higher degree of political patronage that began in the 1970s. The ruling Pakistan People's Party, which had a strong constituency in Lyari, undertook public sector reforms and provided jobs in the State sector.

The low level of 2-5 per cent private jobs and self employment in these two lower income areas, is in sharp relief to Karachi's overall figure of 49.3 per cent jobs in the private sector and 30 per cent self employment (refer table 22 and appendix 02). To compete in the open market economy, lower income areas require credit facilities and technical vocational training centers which would bring them at par with the rest of the city.

In Orangi, OPP has tried both approaches successfully through its small credit scheme and para professional training programmes. The OPP's micro-credit programme borrows from commercial banks and then lends to small family businesses without red tape and collateral. Interest is charged on the loan at 18 per cent. Up to 6,555 units are being supported by OCT loans of 124, 738,610 Rupees with a recovery rate of 97 per cent. The Youth Training Programme is imparting skills like mapping, documentation, planning, cost estimation and site supervision. Some of these young entrepreneurs have set up small offices and are also given further training.

The difference of up to 1500 Rupees between the formal income of the respondents and the their expenses reveal the informal income generation activity in each household. This is substantiated by the 1.79 and 1.3 number of income earners per household in both areas. Supplementary income is usually generated by a second job such as the literate daughter of the household giving tuitions, the women and children working from home for garment factories, or the main income earner engaging in a part time job.

d) Income and Expenses

The average income in both areas falls between 5000 - 6500 Rupees per month. House ownership is 100 per cent and 98 per cent in Lyari and Orangi respectively, there is no rent to be paid and almost 50 per cent of the income is spent on food, 10 per cent on transportation, and up to 25 per cent on health. Both areas have 100 per cent underground sewerage disposal system with nominal sums being spent on occasional maintenance.

The high cost of public transport is because the government has revoked the facility of public transport, leaving the field open to private buses and mini buses. Health features as the second largest expense at 12.8 per cent in Lyari and 27.8 per cent in Orangi. Since underground sanitation is available, the biggest source of health problems in both the areas seems to be the water supply.

In Lyari, all water supply is through the lines laid by KMC, whereas in Orangi, 51 per cent of water supply is through water tankers, 26 per cent through KMC lines and 3 per cent through donkey carts. In Lyari, the infrastructure has aged badly due to lack of maintenance; sewerage lines often seep into water mains and contaminate it, with only brackish and salty water available to 61 per cent households.

Water borne diseases are a major issue in lower income settlements of Karachi. There are all sorts of hospitals, clinics, and dispensaries being operated by qualified and unqualified medical practitioners, but the focus is on curative rather than on preventive medicine, except for the government's immunization programme. Orangi Pilot Project has been working with local clinics on a preventive health programme and the results achieved are illustrated in table 22.

Table 41: Health Related Changes in Orangi, 1984-89

	Orangi Township	
	1984	1989
Infant mortality (out of 1,000 births)	121	37
Morbidity	17 %	8.2 %
Use of family planning among women	NA	53.93 %
Immunization	NA	98 %
Knowledge of causes of diseases	NA	85.6 %

Knowledge of prevention of diseases	NA	85.3 %
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Source: AKMU Survey 1984 and OPP-RTI Survey 1989

6.4 Housing Trends

a) Ownership

The ownership figures for housing in Karachi is 59.3 per cent as compared to 98- 100 per cent ownership by residents in lower income settlements. This is due to the affordable prices and procedures of acquiring land and credit in present- day katchi abadi as compared to the formal sector schemes.

In the case of Lyari, most of the owners are second to third generation residents who spend 4 per cent income on house maintenance that reflects their sense of belonging to the area and commitment to upgrading its real estate value. In Orangi, being a newer housing stock, more is spent on construction than on maintenance, but in both these localities, up to 80 per cent people save to invest in housing.

The reasons for residing in the areas differ. In Lyari, people live together as a matter of tradition and due to the availability of work. In the case of Orangi, most of the new residents have bought land because it is affordable and easy to access.

b) Land Values and Plot Sizes

Land values in Lyari are 8-10 times more than in Orangi. This is due to its nearness to the city centre and business zone of Karachi. A majority of the plots are between 80-100 sq yds and under commercial pressure. There is large-scale conversion of ground floor residential units to multi storied apartment blocks with shops on the ground floor. The pressure on utilities and infrastructure is greater in Lyari with residents spending 4 per cent of their income per month on maintaining old properties. Orangi, being on the suburbs of the city, offers larger plots of land (up to 97 per cent being 120 sq yds) where most of the houses are new or being developed incrementally, so maintenance cost is almost non-existent at the moment.

In Lyari, 62 per cent people are dissatisfied with the size of the plot but find it difficult to move out since 70 per cent of the properties have extended family ownership and multiple owners. Due to uncontrolled construction around the area that has resulted in buildings cutting into each other's light and air, about 48 per cent residents wish to move because of the adverse environmental conditions.

In Orangi, 96 per cent people are satisfied with the size of plots as these subdivisions by the informal land developer (dallal) correspond to the KDA standards needed for regularization as well as are responsive to the communities' needs of accommodating nuclear family units. Due to the availability of land and larger plot sizes the development is mostly low-rise low density.

c) Security of Tenure

In both the formal (Lyari) and informal (Orangi) settlements, residents feel a sense of security due to 100 per cent ownership. Being a formal sector scheme, the people in Lyari possess legal documents (*de jure* status), whereas in Orangi, they have acquired lease through the katchi abadi improvement and regularization programme (KAIRP) on the basis of *de facto* status.

6.5 Water Connections

In Lyari, all households have water connections provided by the Karachi Municipal Corporation (KMC). Services like sanitation and water were planned and given by the government to Lyari residents. According to the survey, 20 per cent of the supply is insufficient, 40 per cent is of bad quality, and the remaining 40 per cent is irregular. It is the same as in the rest of the city due to shortage of water, bad quality supply, and 40 per cent water loss through cracked pipes and pilferage (refer table 33).

In Orangi, only 30 per cent residents have piped water, the rest rely on water tanks, donkey carts and Awami Tanks, making water supply very expensive with families spending 5 per cent of their income on procuring safe water.

Table 42: Comparison between Planned Areas and Katchi Abadi

Service	Planned Areas Percentage served	Katchi Abadi Percentage served
Piped water	84	50
Electricity	95	76
Gas	75	35
Sanitation	Estimated 85	Estimated 12
Solid waste management	Estimated 60	Estimated 10

Source: Tabulation of AERC Survey, 1989

6.6 Sewerage Connections

Approximately 95 per cent residents of Lyari and 90 per cent of Orangi have an underground sanitation system. In Lyari, most of the work has been done by the government and is of substandard quality with incorrect gradient and poor quality pipelines. Being a low-lying area, drainage is a problem, and the lines are often choked and flooding the streets.

In Orangi, the people on self-help basis have laid 80 per cent of the sewerage lines, with drainage directly into natural creeks. Due to the influence of the Orangi Pilot Project, 80 per cent of the people are motivated to develop and maintain the sanitation system, while in Lyari, 80 per cent people are indifferent to the problem caused by unsanitary conditions and depend upon government agencies to maintain it, even bribing petty officials regularly to get the work done. The local government on OPP advice has initiated the development of the main creeks and sewers in Orangi.

6.7 Solid Waste Disposal

In Lyari, 71 per cent of the residents depend on the concerned government agencies for solid waste disposal, whereas in Orangi 52 percent residents have resorted to private means.

6.6.2 Physical condition of Housing Units

In Lyari, all houses have plastered walls and roofs of batten and tiles with plaster. These falls into the semi- permanent house category, which are masonry walls (mostly un-plastered) and roofs of either corrugated iron sheets or concrete or brick tiles on steel T-Channels or girders. Most low income and some lower middle income housing in Karachi is semi permanent. (Refer table 29)

In Orangi, due to the incremental nature of housing as well as lower income levels, half the houses have plastered walls and roofs and the remaining half have un-plastered walls with tin sheet roofs. Over time, most of the households aim to upgrade and lay a batten and tile roof.

a) Credit for Housing

In Orangi Town, 85 per cent people build incrementally, depending on personal savings, 10 per cent have taken loan from banks and other institutions, and only 2 per cent depend on the traditional means of the *Thalla* or the building components manufacturing yard for credit.

The monthly savings schemes are usually organized between relatives, friends and neighbors. The accumulated amount is given to one member each month who usually uses it for house construction, marriages, or to set up a small business. The money is paid back in monthly installments.

In Lyari, 60 per cent people depend on savings accumulated through such private saving schemes or foreign exchange sent by relatives employed in the Gulf States since a sizeable number of the male residents of Lyari migrated to the Middle East in the 1970s as labor.

The other means of development in Lyari is through the local builders and developers and the owners do not need to invest their own savings. Builders invest in a plot of land, develop it as multi-storied housing project, and give a fixed number of flats to the owner selling the rest in the open market and making a considerable profit on it. The developer does not need to pay for the land (which is approximately 8000 Rupees per sq yd) and the owner does not need to invest in development but only to acquire new and better quality residential units. This, of course, is leading to uncontrolled densification and immense pressure on infrastructure of the area.

b) Technical Support

Lack of technical support and advice is the major constraint in house building, a factor identified by 60 per cent residents of Lyari and 40 per cent residents of Orangi. The availability of credit and skilled labor were the other factors identified. People realize that although they invest in the brick and mortar of construction, if there is no sound technical advice, in the longer run, they will be spending more on operation and maintenance.

6.7 Social Trends

Lyari is an ethnically, linguistically, and economically homogenous area. Society is organized along traditional lines of extended families that give people a sense of security and belonging. Despite being a notorious den of drug abuse, unemployment, and violence, 75 per cent residents of Lyari term it as safe as any other place in Karachi and want to continue living there.

Orangi, on the other hand, is a heterogeneous community with a multi- ethnic and linguistic composition. In addition, being on the edge of the city, it is vulnerable to crime gangs from other parts of the city that give the residents a sense of insecurity.

To deal with this, the residents have formed lane groups that provide security guard service at night for the neighborhood. Men from all the houses have to share the responsibility. Because old family structures have changed here, there is greater dependency on the neighbors and 100 per cent people of Orangi Town as compared to 38 per cent people of Lyari respond positively to helping and being helped by their neighbors.

6.8 Role of NGOs

As many as 75 per cent residents of Lyari have come to accept the parallel support system provided by the NGOs, youth groups, and social welfare organizations as a parallel support system to the State agencies. Of them, 84 per cent term any reform or change within the State as good and say they can rely on it to deliver the goods. This reflects on the dependency of the older, settled communities on earlier patterns of governance based on political support and clout through which they demand their rights.

Contrarily, 80 per cent of the migrant community living in Orangi believes in the NGO sector as a substitute to the government and depends largely on it for their self-help initiatives. In the absence of any formal planning, this support ranges from acquiring housing to arranging for sanitation, water and electricity. Later, these communities form CBOs, or community based organizations, which work with the NGOs to acquire civic utilities. This marks a clear difference in their attitude in comparison to Lyari. These communities do not demand of but rather negotiate with the State, and are willing partners in development and service provision.

6.9 Conclusion

An analysis of the formal and informal lower income settlements reflects that the physical, economic, and social conditions in both cases are poorer than for the rest of Karachi. With higher household sizes, a higher rate of unemployment, and a dependent population (refer, Table 43 and appendix 02), access to water, sanitation and electricity is difficult in the absence of government support, especially for informal settlements.

But marked improvements are visible in the informal settlements compared to the formal ones (Refer Table 43 and appendix 02). This is due to the self help initiatives taken in the development of sanitation, education, and health and the setting up of economic enterprise by the informal sector with the support of NGOs like the OPP. Formal sector settlements like Lyari are still dependent on State patronage and support and this stops them from developing despite the presence of a number of NGOs in the area. The other reason is that informal settlements have an incremental development pattern that suits the economics of the poor whereas, in formal areas, building rules and regulations apply demanding capital-intensive development.

If supported by NGOs, CBOs, and the local government, the communities can develop faster and come at par with the rest of Karachi in social indicators (Refer Table 43 and appendix 02). This form of development requires technocrats and bureaucrats to rethink planning and evolve low cost development models and technical standards. Conventional development models cannot be implemented quickly. Rather, an ongoing process of technical support has to be extended. Access to land, credit and technical expertise has to be made available and an approach of research and extension adopted.

Table 43: Conclusions: Comparative study of new/old, planned/unplanned Low Income Settlements with Overall Karachi

• Socio Economic and Physical Conditions of LIS (overall) Poorer than Karachi (ov	LIS (%)	Karachi (%)	Causes
For example: - Higher household sizes	7.09	6.7	- Extended family setups -Low rate of birth control

- Higher number of working class/ unemployed	50.8	17.9	- Lack of security of tenure - Unavailability of state/ political support to informal communities - Psychological dependence of formal communities on state
- Higher number of dependant population	48.7	37.6	
- Water Connections	42.0	74.38	
- Electricity Connections	66.6	93.79	
- Sanitation with KMC	35.0	97.7	

• Differences b/w Socio Economic and Physical Condition of New Unplanned Settlements and Old planned Settlements				
	Lyari	Orangi	KKB	
Avg. h.h size	7.09	6.8	6.13	<ul style="list-style-type: none"> • Higher literacy and awareness in Orangi and KKB due to informal , NGO, CBO support • Urbanized / upwardly mobile /go-getters culture of migrant communities in Orangi /KKB vs Traditional/ Consolidated society of Lyari/ political patronage • Self Help in Orangi and KKB vs Dependence on State in Lyari • Incremental/ Affordable Development vs Capital intensive/ Conventional Development • Orangi – near industry • Lyari – Nearness to job market /port, Orangi- near industrial zone, • KKB- undeveloped area few job opportunities
Nuclear families	30%	70.0%	66.6%	
Govt Jobs	11%	5%	0%	

7. Mega Development Projects

Karachi has been a recipient of many mega projects. These are either donor funded or given by the provincial and federal governments as part of development packages for the city. These projects are usually expensive, ill conceived and do not respond to the local conditions resulting in a waste of resources and environmental degradation. In some cases these mega projects have been successfully stalled, altered or rejected by the civic society of the city on the lobbying of NGO's like the URC. Under mentioned are a few cases illustrating the process of development and failures of some mega projects in Karachi.

7.1 Sabzi Mundi (Fruit and Vegetable Market) Relocation Project

a) Introduction and Background

The old fruit and vegetable market (Sabzi Mundi) of Karachi was located in the centre of the city near the Civic Centre on one of the main corridors, University Road which connects the old city and port areas to the Super Highway and adjoining suburbs (refer Map 5). Over the years, the uncontrolled increase in the population of the city, especially the eastern district, and the expansion of Karachi's metropolitan limits made the once distant Sabzi Mundi fall within a dense residential area lying right in the centre of the city.

The heavy traffic and logistics associated with the Sabzi Mundi turned the University Road into a chaotic transit camp for transport and trade. The out spill of the Mundi activities like the auction of truckloads and retailing through hawkers on the adjoining roads resulted in traffic congestion, solid waste accumulation, and the prevalence of unsanitary conditions in the area. Service activities like cheap hotels, cafes, and prostitution dens opened up in the surrounding settlements catering to the drivers, traders, and labor working in the Mundi. The situation worsened with time till the Karachi Municipal Corporation (KMC) decided to shift the Sabzi Mundi to a new site on Super Highway some 30 km away from the city centre.

b) Physical Conditions of the Old Sabzi Mundi

Although the structure of the Sabzi Mundi was designed on modern market standards with provision for vehicular access, loading, unloading, and storage facilities, over the years these facilities became insufficient due to a lack of maintenance. Ancillary spaces such as public toilets, check posts, firefighting systems, dispensaries, eating places and even appropriate storage spaces were almost absent from this facility, visited daily by 40,000 people.

The inadequacy of storage spaces, which were extremely expensive, led to the daily transportation of perishable items in some cases and an accumulation of rotting debris of solid waste which would lie around for weeks in the absence of an efficient solid waste disposal system. The unpaved and broken internal lanes were home to loading and unloading of bulk commodities, which hindered vehicular traffic as well as pedestrian movement.

c) Indifferent Administrative Setup

Karachi Metropolitan Corporation's (KMC) district level agency, District Municipal Corporation (DMC) East was the responsible caretaker civic body for the market. The regulatory organization responsible for the old Sabzi Mundi was the Market Committee, which received more than three million rupees annually as revenues from market operations, but, over the years, it became inefficient and failed to organize even the smallest internal functions like truck loading, parking, scheduling of activities. The DMC and the market committee blamed each other and related agencies such as the Traffic Police, DMC East, and Traffic Engineering Bureau (TEB) of Karachi Development Authority (KDA) for this plight. By the mid 1990s, like all other publicly controlled enterprises, the Mundi fell victim to bad management and corruption.

d) Planning of the New Sabzi Mundi on Super Highway

From 1965 to 1967, the Board of Revenue (BoR) of the Government of Sindh had reserved a 50-acre plot of land for a Sabzi Mundi at the Super Highway on the advice of the then city planners. This land was never utilized. In 1987, the Market committee of the Sabzi Mundi was able to obtain this land from the BoR and work towards relocating the old Sabzi Mundi. In view of how the city had grown, the Committee thought 50 acres may be insufficient, and would not cater to the future needs of the city. With the combined efforts of its members including wholesalers, retailers and cultivators, the market committee was able to obtain an extra 50 acres of land for the project of the New Sabzi Mundi from the government of Sindh.

By the mid 1990s, it had become apparent that the Old Sabzi Mundi could not continue to exist and function on its existing premises. The government of Sindh gave orders for it to be relocated urgently. Bureau of Supply and Prices a Sindh government organization, and the market committee, were put in charge of this project. This decision was taken in addition to building another two markets in Karachi, one on the National Highway, and the other in New Karachi.

This was an attempt at decentralizing the Mundi activities at city level, minimizing the transportation costs and the traveling distance.

Of the three proposed projects, the one on National Highway never materialized and the one built in New Karachi were not successful as a wholesale market. In New Karachi, the KMC built a market and shops were allotted but the administration did not take the end users into consultation and the shops were soon converted into mechanic garages, grocery stores, and other retail outlets.

With the failure of the two projects, the New Sabzi Mundi planned on Super Highway emerged as the only viable option to serve the entire population of approximately 12 million. The New Sabzi Mundi was planned on the allocated 100 acres, although the scientific basis of this allocation remains unknown. Documentation and analysis of the old Sabzi Mundi shows that it was also planned on 110 acres in 1960, but mounting encroachments reduced it to one-third of its original size. If the same space allocation standards were applied to the New Sabzi Mundi after 40 years, the size of the plot was very small as compared to the rise in the population and its corresponding needs.

e) Relocation of the Old Sabzi Mundi

The government of Sindh took a loan from the Asian Development Bank (ADB) of approximately 500 million Rupees to build Sabzi Mundi projects all over Sindh. Of the allocated budget, 280 million Rupees were allocated for the development works of the new Mundi project for Karachi. The land on Super Highway was acquired by the market committee on behalf of its members at the rate of 52 Rupees per square yards.

A joint team of the Market Committee and Bureau of Supply and Prices, Government of Sindh, was made in charge of this project. This was done despite the fact that ADB officials in their loan statement stressed the facilitation of traders of Karachi's Sabzi Mundi as the main aim of the project and this was stipulated in the loan conditions. But the five Sabzi Mundi workers welfare associations and their members who were the direct beneficiaries, protested against government policies, planning and implementation, calling them inappropriate and insufficient. In turn, they were called agitators, terrorists and anti social elements by the government.

The five unions associated with the Old Sabzi Mundi formed an action committee representing the interests of the trades, shopkeepers, wholesalers and middlemen. It held meetings with concerned officials and it was agreed that they would be included in the design and implementation process. According to the research conducted by the Urban Resource Centre (URC), the representatives of the action committee were of the view that 98 per cent of the space in New Sabzi Mundi had been given to corrupt officials and speculators rather than the traders who had been tenants of the State for the past 36 years. This forced them to become tenants of individual landowners, which was an uncomfortable arrangement for revenue generating public amenity.

Over the years, many important issues of inappropriate planning and management related to the project have become obvious. These are discussed below:

f) Inappropriate Allotment Procedures

One of the most contentious issues faced during the inception and development of the New Sabzi Mundi, was its unclear and later unfair allotment procedure. The project began with a provision of 1764 shops and stalls in 1994. These were to be allotted on the basis of a formula worked out

by the market committee giving 45 per cent of the shops to the operators, shopkeepers, landlords, growers and 55 per cent to the newcomers in the business. But soon after the project commencement, political wrangling, illegal subdivision, and favor granting began, multiplying the number of claimants and increasing the number of shops and stalls to 5130. Several lateral entrants into the trade were facilitated in this process by the ruling government.

However, since the allocated land remained the same 110 acres, the sizes of shops and stalls were reduced considerably to accommodate the 3366 new owners. This reduced the sizes to as low as 48 square feet, a size incapable of accommodating the required storage, auction space and related activities of the trade. This situation created a lot of unrest amongst the contending stakeholders, especially the ones who had deposited an application fee of 10,000 Rupees per shop for an originally planned size of 80'x30' per shop for 400 shops.

The unrest led to a delay in the occupancy and operation of the Sabzi Mundi since its completion in 1996 to 2000. The over-booking of shops forced the management of the New Sabzi Mundi to create bifurcations and subdivisions in the constructed structures damaging the infrastructure laid.

Due to the incased number of shops there was a need for better infrastructure facilities which were not provided due to limited funds and capacity. The new claimants hooked on to the existing water, sewerage, and electric lines, damaging them in the process and creating leakages, over flows and a polluted environment. The provincial Ombudsman intervened by ordering cancellations of some allotments but because his orders were not implemented immediately the delay led to further speculation and encroachments.

g) Inadequate and Substandard Infrastructure

An engineering consultant planned the layout of the New Sabzi Mundi on the directions of the market committee. This plan allocated appropriate spaces to 400 shops with a view to accommodate related storage, auction and in market loading – unloading. The shops given were of an adequate size of 80'x30' with covered platforms and multipurpose committee offices were also provided. Other proposed amenities included a mosque, dispensary, post office, bank, restaurant and parking. An allocation for a petrol pump and cold storage were also included.

But with the additional allotments, the number of shops increased from 400 to 1764 to 5130, leading to land subdivisions, pressure on infrastructure and deletion of many facilities. Whatever was constructed was laid waste because the project was delayed by nine years.

Water supply and distribution network, sewerage disposal, solid waste management, power supply and internal automation systems are ill planned, inadequate in sizes and standards, and faulty in construction. In the absence of proper checks on the movement of heavy vehicles inside the Mundi, and loading – unloading activities in internal streets, the roads have sunk and there is a stream of sewerage interspersed with debris of decomposing vegetable and fruit waste. In the event of rainfall and because of a poor drainage system, working conditions deteriorate to dangerously unhygienic levels, and the Mundi become inaccessible with unbearable odors and pools of stagnant water everywhere. Wide- scale encroachments are present all over the premises and security is non-existent that increases the incidents of robbery, petty theft, and infighting.

In short, due to careless planning and the short- sightedness of its managers, the city has lost an opportunity to develop a facility that could have become a major vegetable and fruit trading and processing zone. Rather, what remains is a medieval marketplace that is grossly under serviced

and poorly organized. The reasons for which the Old Sabzi Mundi was relocated to the new premises not only remain but are compounded.

h) Needs of the Target Group Missed

All the decisions regarding the New Sabzi Mundi were made in isolation of the interest groups who are linked to its trade and business. Farmers, middle- men commission agents, retailers, wholesalers; transporters, hawkers, and daily wage labor are some of the actors who collectively form the interest groups. Their organizations and associations who represent their interests and viewpoints were not involved in the process of designing, planning and management. The entire project was carried out at the government level under political influence. The future needs and aspiration of the groups were not incorporated in the development of the Sabzi Mundi. This exclusion has resulted in a chaotic situation in which the local operators do not facilitate internal management because they feel alienated from the project. In addition, the illegal allotments have been done at the expense of the original target groups, which have created an organizational void. Even the needs of the consumers were ignored as the relocation of the Sabzi Mundi away from the city centre has increased the prices of the fruits and vegetables by 10-15 percent⁹⁸.

i) Workers housing not planned

Labor housing is another important matter facing the workers of the New Sabzi Mundi. It has a bearing on the overall performance of the market, as in its absence laborers are forced to travel long distances spending a substantial part of their meager incomes on it. On the other hand this situation has lead to the mushrooming up of informal low-income settlements around the Sabzi Mundi housing these workers and their families. The same conditions were experienced in the Old Sabzi Mundi, however, no lessons were learnt and the same shortcomings have remained in the new premises.

j) Allocation of Land and the Larger Master Plan of the City

Comprehensive planning is usually absent from any development project introduced by the government in Karachi and these projects usually follow the path of ad hoc planning as a response to an urgent need or according to the dictates of the international donor agencies.

The New Sabzi Mundi was allocated land without any adherence to the larger master planning of the city and developed in isolation from its surrounding land use. It was obvious that a project of such magnitude would generate sizeable spill over activities and ancillary and it spaces was vital to facilities transit terminals, retail outlets, security posts and vendor operation spaces. Commercial storage, packaging, export and value added processing could have been developed to give incentive to industrial development along with the business and trade taking place. This would have also provided a means of sustenance to the Mundi.

The absence of an over all future plans for the project has given way to speculation by the builders and private entrepreneurs. To profit from the impact of such a large development as a Sabzi Mundi they have launched various schemes with complementary markets, housing and related facilities attracting investors to the area. It appears that the government has not learnt from its previous experience of public sector real estate development projects from which it was obvious that whenever the government has invested in fixed furnished units, it has suffered grave financial and managerial losses. Yet, over again in the case of the New Sabzi Mundi, the

⁹⁸ Personal observation and discussion with fruit and vegetable vendors

government resorted to building full fledged structures, but not of required and standards and sizes. Therefore, although the government has invested huge amounts of funds, the resultant product is barely capable of paying for itself.

k) Conclusion

Since 2002, the chief minister of Sindh has given over the New Sabzi Mundi to the City District Government Karachi (CGDK). This can be seen as a positive change because it means that the revenue collection and the operation and maintenance will be at the discretion of the city rather than the provincial government Department of Agriculture. Local resources can therefore be employed to control many of the issues discussed above, the most important one being the formation of an independent executive body to run the daily affairs of the market. It is important that this executive body has the representation of all stakeholders, technocrats, and professionals related to the filed.

The second important issue to be tackled by the CGDK is the stock taking of existing facilities, accommodation of anticipated claimants, and the provision of the missing amenities. A similar exercise is needed to study the possibility of a larger plan, maybe to declare this area a vegetable and fruits trading processing and exporting zone, with due provision for housing, transport and related social and physical amenities.

7.2 IFI Funded Projects being Planned and Executed and their Results

7.2.1 Lyari Expressway

a) Introduction and Background

To reduce the bulk of heavy traffic passing through the residential and commercial areas of the city, creating pollution of various sorts and congestion, the Master Plan 1974-85 proposed a traffic and transport plan for the city of Karachi incorporating the Northern and Southern Bypasses (refer Map 8). These projects were meant to divert the heavy vehicle traffic from the port and wholesale markets of Inner City of Karachi to the National and Super Highways which takes them to the north of the country.

The Northern Bye-Pass was designed to accommodate the much needed storage, cargo terminals and warehousing and transport facilities outside city limits, to keep the city free of congestion and pollution and to conserve historically significant parts of the inner city. The old wholesale markets are also expected to be relocated alongside it. Parts of the southern Bypass have been built, whereas the more important northern Bypass was put on the hold due to a lack of political will and planning priority. In 1978, heavy rains caused flooding in Karachi, especially in Lyari, which resulted in loss of life and property. A flood protection plan was prepared for the Lyari riverbed, but this, too, was not implemented.

To deal with the problem of flooding and traffic congestion faced by the people of Lyari, in 1989, the government proposed the building of an elevated Lyari Expressway along the Lyari River from the port to the Super Highway. This was done on the advice and presentation by a group of citizens and some professionals. The Canadian donor agency, CIDA, was involved by Karachi Development Authority to look into the details.

To avoid the eviction of approximately 100,000 people, CIDA consultants proposed an elevated corridor in the middle of the river (refer, Map 9), at the estimated project cost of 6 billion Rupees.

The proposal was taken notice of by some concerned NGOs and citizen's groups who were concerned that the proposal was not based on contextual research and since was planned to cross Lyari, it would dislocate the residential area of Lyari evicting more than 25,000 households, businesses, educational and social facilities costing over 3.5 billion Pakistani Rupees. The project would increase the atmospheric population level and promote the land speculation by real estate developers. It was pointed out by the opponents of the Lyari Expressway that the land use changes would add to the existing warehousing, manufacturing, storage, and other transport uses that were inappropriately placed within the old city. The displaced communities and their resettlement would be an additional toll on the estimated cost of 6 billion Rupees for the expressway. A debate ensued on these issues which carried on for five years with CIDA backing out, apparently giving up the Expressway option in favor of the Northern Bypass Project.

In 1994, the Karachi Municipal Corporation decided to build the Expressway on either sides of the river on BOT basis. The expressway was to go from Mauripur to Sohrab Goth and cost 120 million Rupees. About 8,000 encroachments were to be removed and the expressway was to pass under 12 existing bridges on the river. The design was modified after Federal Works Organization (FWO) of the Pakistan Army got involved with the project and the under passing was abandoned for an option of passing over existing bridges, raising the cost to 3,200 million Rupees. The reason behind this change remains unknown, but the government to build the Expressway contacted an Abu Dhabi Consortium.

The Lyari project was revived in 2000 by the present military government, but this time around it was not the project of the city or the provincial government but had been taken over by the National Highway Authority (NHA) of the federal government as a project of national importance. This high-jacking of the city's land and its unsolicited development led to a lot of protest by concerned professional bodies and communities, but not much heed was paid to it by the government.

The actual work or, rather, the bulldozing related to the project began in January 2002, with the help of the police and other law enforcing agencies, and the demolition and dislocation work has continued without the slightest attention being paid to the directly affected people – the residents and workers of the area. A token relief effort is being undertaken in the name of Lyari Expressway Resettlement Project in Baldia, Hawke's Bay and Taiser Town, three residential schemes located on the periphery of the city. These settlements do not have utilities or job opportunities required for a relocated population to settle down which were causes that led to the failure of some earlier resettlements schemes like the Landhi-Korangi Resettlement Plan. The adverse impacts on the sociology, economy and the planning of the city are recorded for these project but they have not been referred to.

Instead, the government is building a six-lane highway of 16.8 kilometers and estimates demolishing 11,964 housing units, 42 religious places (mosques, churches, mandir) and 1035 shops, workshops and factories⁹⁹. The Lyari Expressway is a typical example of the gross underestimation of social costs of development by the government. In the absence of any public display of the details and design of the project, it remains to be seen if these estimates would not be grossly increased by the time the project is complete. The planning, layout, alignment, right of way, entry and exit details worked out, do not adhere to the international laws of housing, development, and evictions of which Pakistan is a party and in no way do these address the core problem of goods transportation. No independent design vetting, which is a requirement for such projects, has been done to date. The estimates and studies carried out by the Urban Resource

⁹⁹ Source: Urban Resource Centre Publications.

Centre (URC) reflect that the damage will be manifold of the estimates given, dislocating 25,000 households, disrupting the education of 18,000 children and rendering 80 per cent of the families jobless¹⁰⁰.

The Lyari Expressway project is a typical case of an inappropriate choice of development projects. Such expensive design options are based on acquiring large foreign loans and are usually the not looking at other appropriate alternate design options. Loan- based projects are attractive to government officials because they come with kickbacks. In turn, such development projects force the adoption of a certain design and technology which benefits the construction industry suppliers and contractors.

b) Concerns of the Affected Communities

Public consultations and transparency in maintaining accounts which is a need for such large scale public sector projects as the Lyari Expressway, were not considered necessary by the official planners despite the fact that planning professionals in the city pointed to earlier examples where such development models have failed. The professionals named a number of issues: that the Expressway would be a duplication of the Northern Bypass, the target groups were missed out in the compensation package, an inappropriate and expensive design has been adopted which would be difficult to maintain and operate, forced evictions would be a violation of human rights, dislocation of old and settled communities would mean the loss of livelihoods, education opportunities, and social problems would multiply.

These concerns were discussed in various forums but not heeded to by the government. In fact, the project has not even been discussed in legislative institutions like the city council, provincial and national assemblies, nor has it been approved by any one of them.

Action Committee for Civil Problem (ACCP), a group of NGOs, professional bodies, Community Based Organization and concerned citizen has been protesting against the Lyari Expressway project in conjunction with Urban Resource Centre (URC). Various forums, letter writing campaigns, demonstrations and meetings have been held. Currently, a joint petition has been filed to the Court to discuss the recent judgment of the High Court that terms the project of national importance, over ruling all petitions.

c) Types of Affected People

According to Arif Hasan, these are five groups of people likely to be affected by the Lyari Expressway project. Namely:

1. Those living in Karachi Development Authority planned settlements.
2. Those living in regularized squatter settlements.
3. Those living in old villages along the Lyari riverbed with freehold ownership.
4. Squatters in and along the Lyari riverbed who are mostly involved in solid waste collection and sorting as daily wage labor.
5. Commercial units for storage, warehousing, garbage sorting, recycling and small-scale industries.

According to Hasan, the impact of the Lyari Expressway will be different on each group. The most marginalized groups like the garbage pickers living in the Lyari riverbed will become owners of plots of land which, although far from the city, would provide them some security of

¹⁰⁰ Source: Urban Resource Centre Publications.

tenure. But older settlements with leased plots and their demolition would result in parts of the city's history being destroyed. The residents would lose at least two generations of investment in houses, infrastructure, schools, clinics and utility connections. Since commercial enterprises are not recognized as legal land use, no one would be compensated with the loss of livelihood for an unaccounted number of people.

d) Alternatives to the Lyari Expressway

The documents of the 1973-85 Master Plan propose the building of the Northern Bypass as a carrier of cargo traffic. But investing in both projects is a duplication of efforts since the Northern Bypass is an adequate solution to port related traffic as it relieves the inner city roads and areas of heavy vehicular traffic. Meanwhile, the Lyari Expressway forces the traffic to pass through it. The Northern Bypass (discussed in detail in the next section) should have an accompanying master plan for land use allocations and future development for it to be successful because it can accommodate wholesale markets, recycling industry, and the residents of Lyari bed settlements who lie below the flood line. The river can then be dredged and canalized with embankments on both sides and the reclaimed land can offer much needed open spaces to the inner city area.

e) Issues Pertaining to the Lyari Expressway

1) Non Transparency

To date, no presentation of the project concept or details has been made or discussed publicly despite the repeated insistence of direct stakeholders and non-government development professionals. This reflects the dishonesty of purpose of the implementing authorities.

2) Inappropriate Design and Reclamation of Land

The total length of the Lyari Expressway is 16.5 km supported by 16 bridges and exits at four interchanging flyovers. Being an expressway, it should have been a high speed fast moving highway with no exits to decrease traffic jams on the intended cross- sections like Shershah, Liquatabad, and other congested areas. In its present design, the issue of traffic congestion, which the Lyari Expressway set out to solve, is being defeated.

However, the intention behind this proposed design becomes clear when it is tied up to the unnecessary large width of the expressway that is to be 860 feet at Shershah, while it is only 460 feet at Sohrab Goth where it would culminate. It is anticipated by concerned professionals that this extra land at exits and cross- sections is being reclaimed to develop high- rise, high- density real estate to benefit the builders, developers, and the land mafia of the city. If storage, warehousing, and transport related facilities are provided along the expressway this would lead to greater densification of the adjoining areas.

3) Violation of International, National and City Planning Laws

According to national development practices, any large-scale development project within a city, be it a highway passing through it, has to conform to the larger Master Plan of the city. The land use changes, redevelopment, dislocation and resettlement are issues to be dealt with by the city government. In the case of Lyari Expressway, the city government has been kept completely out of the loop, from the conception of the Lyari Expressway project to its execution.

The lack of coordination between the National Highway Authority (NHA) and the city district government Karachi (CGDK) is also obvious from the fact that, while the NHA terms the Lyari Expressway as a corridor for heavy traffic, the CGDK refers to it as a city level road carrying the load of the adjoining areas while the port related heavy traffic is expected to pass through the proposed Northern Bypass. This conceptual issue undermines the statement of National Highway Authority that Lyari Expressway is a project of national importance and interest that stands above the interests of the city.

In going ahead with the expressway project, Pakistan will be violating the Habitat Agenda presented and unanimously approved in the United National Conference on Human Settlements in 1996 in Istanbul. According to this declaration, Pakistan is committed to the full and progressive realization of the right to adequate housing to the entire population. On another occasion, in 1997, Pakistan signed a resolution against forced evictions at the United Nation Committee on Economic, Social and Cultural Rights (UNCESR). The thousands of households being evicted as a result of Lyari Expressway are a direct violation of this resolution, but the authorities are ignoring all earlier promises despite the report of a fact-finding mission from Habitat International Condition (HIC) and Asian Condition for Housing Rights (ACHR) who have highlighted the design problems and the social costs of the project.

4) Forced Evictions and Resettlement Costs

Only the thorny issue of resettlement of the evicted population has been given over to the city government, which is a burden on its meager finances and administrative structure. It is anticipated that it may be a very long time before the resettlement sites at Hawke's Bay, Baldia and Taiser Town are developed, forcing the dislocated people to live in dire circumstances or to sell the land to speculators and go back to the city to create more katchi abadi. Communities resettled at three sites will force kinship groups to come back together and defeat the purpose of resettlement.

Besides the issue of human rights violations, the foremost concern of area residents is the colossal loss of community investment. Economically weaker sections of society can afford to invest in housing only once in a lifetime and any damage to it is irrecoverable. It is estimated that the evictions of settlements in the way of Lyari Expressway may cause a cumulative loss of over two billion Rupees to the low-income residents that cannot be compensated for since the average cost of each dwelling unit of 120 square yards has been estimated at 500,000 Rupees since these units possess infrastructure and utility connections. The compensation has been worked out on the flat rate of 50,000 Rupees plus an 80 square yards plot in a far-flung peri urban settlement, which is absolutely inadequate to make a housing unit and to provide infrastructure and utility connections.

Meanwhile, the value of land along the expressway has risen considerably due to the lucrative future being envisaged. This is in total contravention of the donor stipulations to make proper resettlement. There is no distinction made between a leased property and illegal occupation, but sections of the community with strong political connections have managed to get the design altered to avoid their settlements. Several community groups and residents with valid lease documents have protested and appealed in the court of law, as a response to which the Sindh High Court has to declared the status of Lyari Expressway project as one of national importance in the larger public interest for which private property can always be acquired under law. This verdict has settled the issue in favor of the federal government.

5) Human Rights Violations

The case of Lyari Expressway brings up the fundamental question of what is considered the development of a city, its aim and objectives, and its validity in the face of huge human rights violation. The concept of development has to be challenged and agreed upon because it may be different for different segments of society. If a project benefits a few communities and interest groups at the cost of a large number of people, then it may be called in question. So, if the Lyari Expressway is being constructed for the short-term gain of commercial enterprises at the cost of the long-term life changes it would bring to old settlements and their residents, then its bearings need to be realigned.

This also raises the issue of equal rights for the citizen of a city and why development always adversely impacts the poorer sections of society. It is very seldom that the properties of the affluent are touched by development plans, even if they were acquired illegally. For instance, the construction of the Southern Bypass was halted because it passes through the rich residential areas of Defence Housing Society and there is a combined political and bureaucratic resistance being put up against it.

f) Progress of the Project

The Lyari Expressway project has now been underway for almost one year. The project began by forcibly evicting the residents through bulldozers. When the residents approached the Sindh High Court (SHC) for relief, the SHC gave a stay order for the demolitions of the settlements till 13 August 2002. This was for leased settlements and notified katchi abadis, while demolitions continued in other unauthorized settlements. For this legal recourse, the community had to contribute over three million Rupees, a cost they could barely afford. But they collected this money and have not spent it all.

The URc and ACCP between January and August 2003 organized several demonstrations and discussion forums with support from concerned political parties, civil society organizations, and community-based groups, categorically rejecting the project. In July 2003, a high level meeting was held under the Governor of Sindh to review the progress of work. All the promoters and executors of the project comprising top officials of National High Authority (NHA), Government of Sindh, CGDK and their affiliate contractors and developers attended and declared the progress of work satisfactory and beneficial to the local community of Lyari.

According to the implementing agencies, Lyari Expressway project is meant to achieve two aims: one, to relieve the city of heavy traffic and congestion and, two, to relocate 150,000 people living in unsanitary conditions along the Lyari riverbed to a cleaner and healthier environment.

An important aspect of the project is that despite such claims the administration has never provided project details for review. Even the affected people do not know the schedule of the bulldozers and demolition squad, the list of affected families has not been made public, physical outcome of the Expressway alignment is shrouded in mystery, and so is the expected land use change along its corridor.

On October 14, 2003, the Sindh High Court withdrew its stay order and gave the verdict that the Expressway project is of national importance for which private properties may be acquired under the law. The most important issue facing the authorities is that until the national importance of the expressway is not proved and accepted by all concerned, the implementation of the verdict would be wrong. Secondly, the verdict demands the authorities to minimize damage to the both

residential and commercial property. But since no details of the project are available, it is hard to calculate the extent of the damage. Since January 2002, 5759 houses and commercial buildings have been razed but without any plan.

Thirdly, the verdict entails an accurate assessment of damages to work out the compensation package. This is supposed to include tangibles like property value, infrastructure costs, and intangibles like occupation loss, lack of social infrastructure in a new locality, and the social and psychological effects of displacement on resident communities. Since no environmental and financial impact assessment study has been carried out, the resettlement is being undertaken without any planning and design guidelines.

g) Environmental Impact of Lyari Expressway

The construction of the Lyari Expressway is likely to aggravate the already existing environmental problems of congestion, pollution, and heritage degradation of the areas adjoining it. These problems are, in essence, the problems of Karachi. The areas adjoining Lyari comprise the city quarters where the decaying architectural heritage and old communities of the city are located. The degradation of these areas is due to the presence of wholesale markets, storage, warehousing and transport terminals catering to port activity and dock labor.

The residents of these areas and the businessman in the existing markets have been demanding the removal and relocation of the markets because of the congestion and unsanitary conditions they have caused to the inner city which decaying the architectural heritage as well as damaging the health of the residents and hindering mobility. The ostensible reason for the construction of the Lyari Expressway was to eliminate these problems but, in the absence of a land use plan as a part of the design of the Expressway, it is likely to result in greater congestion when the poorly thought through project is implemented and becomes operable. The solid waste and recycling industry along the Lyari riverbed are also likely to suffer from the project.

h) Conclusion

If the Lyari Expressway project is completed, its beneficiaries will not be the local residents or even the potential user but the contractors who have acquired the works, builders and developers who have grabbed cheap land along the Lyari riverbed, and big investors who may construct storage and warehousing facilities in the future. It is not evident how the transporters will benefit from the Lyari Expressway, since the traffic situation may actually worsen. The displaced low income communities are not likely to benefit from the facility because they do not own vehicles, and only the supra rich who own oil tankers and cargo are likely to find this a means of access. But even that function will be taken over and duplicated by the Northern Bypass, which will traverse the northern periphery of the city for 56 km and link up to Sohrab Goth.

Concerned citizen, professionals, and some development NGOs have been asking this question all along, but the quasi- military government does not feel obliged to answer to anyone except the General Head Quarters. The project has been expedited while the Northern Bypass, which is in fact a better project, has been slowed down. The donors have been very silent throughout the whole process. This highhandedness of the authorities and their complete disregard of the needs of the city have political implications because it will make the people of Karachi feel more insecure *vis a vis* the federal government. It may result in a slow- growing disaffection at the city level.

7.2.2 Karachi Northern Bypass

a) Introduction

The Northern Bypass Project passes outside the city connecting to the Super Highway at the Sohrab Goth intersection (refer, Map 8). The bypass is supposed to carry all port related traffic passing through the city, removing congestion and pollution. The first time it was proposed was in the Karachi Master Plan 1975-85.

Although a simple concept that does not entail controversial issues like forced evictions and resettlement, nor the need for massive foreign funding, the Northern Bypass was not constructed for a number of reasons. Primarily, it was because the KDA was pressured by builders and developers to opt for the Lyari Expressway project and the government was not committed to long-term infrastructure investment when quick financial gains could be made through short-term interventions. The other major reason was the absence of a strong stakeholder's lobby and political support for the bypass and against the idea of the expressway.

Debate over the two mass transit alternatives continued for over ten years. In 1993-94, the government of Karachi accepted the Northern Bypass as a better option and work on detail designs and feasibility studies began. Successive governments, however, kept changing these details at the behest of those proposing the Lyari Expressway project, thereby delaying the project.

Since the military government took over in 2000, the question of the Lyari Expressway and Northern Bypass was revived and, in June 2000, it was decided that construction would commence on both simultaneously. This decision was reflective of the non technical manner in which the administration made major development decisions that involved a great financial outlay that would have a far reaching affect on the low income settlements who would be evicted from areas where they had lived for a couple of generations.

Although the controversy resulted in protests by those who would be directly affected, other people like human rights groups, and non-government development professionals supported the protestors' cause through public debates, meetings, press publications, demonstrations and petitioning in the courts of law. The government remained indifferent to public opinion, and the evictions, demolition, and construction work on the Lyari Expressway project has continued while the Northern Bypass has taken a back seat to it.

b) Details of the Project

According to the Traffic Management scheme proposed in the development plan 1975-85, two bypasses were proposed, one to the south and the other to north of the city. The idea was to form a loop by linking the two through a transversal connection between the Super and National Highways, which would work as a ring road for, inter city traffic. (Refer, Map 8)

In the case of the Southern Bypass, parts of it are already functional roads like the Mai Kolachi Bypass, Sunset Boulevard, and Korangi Road, passing through residential areas of Karachi. The Southern Bypass is not very effective because very little traffic is allowed to ply on Sunset Boulevard since it is the high-income politically powerful residential area of Defence connecting to Korangi Road, which is a part of the National Highway.

In 1993-94, the decision related to the construction of the Northern Bypass was speeded up. A Singapore-based firm was invited to execute the project with assistance from local consultants. Detail studies and feasibilities related to environmental impact assessment, geo-physical conditions, and physical requirements, were carried out. Initially, a 33 km- long double lane road was proposed with the aim to minimize cost. Later, because the loop was too close to the city limits it was increased to 56 and, finally, to 68 kilometers. To accommodate the necessary road and highway related facilities, a 200 meters- wide right of way was reserved along the sides.

According to the proposed design, Karachi Northern Bypass was to have nine at- grade separated intersections and 52 culverts. It would be free from traffic congestion, delays and noise, providing a safe speed limit of 60 km to and from the Super Highway. The Bypass was to run through barren land, which would ensure speedy construction since no eviction, and resettlement issues were involved. The future needs of the city could also be kept in mind and there was the likelihood of the area being developed for storage and warehousing facilities.

If transport and cargo related facilities were provided along the Bypass, wholesale markets, inter city terminals; motels and transport related infrastructure would likely come up quickly, providing relief to the city and to the transit population.

Studies undertaken by the URC, reveal that transporters, warehouse owners, and daily wage labor in the inner city markets was interested in moving out to the land adjoining the Northern Bypass, provided they could have easy access to the new zone.

The wholesale market organization, transporters and daily wage labor have a record of serving the city, but they were kept out of the development project of the Lyari Expressway and the debate around it. To them, easy access means not passing through the city (as is the case of Lyari Expressway) but moving along fast roads with all essential utilities like water, electricity, telephones, banking facilities and labor housing. These stakeholders were willing to pay for the facilities.

c) Positive Impacts of the Karachi Northern Bypass (NBP)

The construction of the bypass is likely to bring about many social and physical changes to the city, a few of which are discussed below:

1) Decongestion of the Old Town Quarters and adjoining areas

According to studies, cargo movement and warehousing activity has changed during the past decades in Karachi, with the volume of port operations greatly increased. In 1951, Karachi port handled 2.8 million tons cargo, 95 per cent of that was transported by railway. In 1991, the port activity escalated to the handling of 26 million tons cargo per annum, 80 per cent of which was transported through roads¹⁰¹. The magnitude of the freight traffic moving through the roads of Karachi and the emerging maintenance problems of roads may well be imagined.

Meanwhile, the population of Karachi has grown exponentially. The wholesale markets, most of which are located in the old city, served 1.3 million people in 1951 and 10 million people in 1991. The chemical market, metal market and rice and grain market (Dhan Mundi) are all located in this area. If the cargo terminals are constructed along the Super Highway, then these markets

¹⁰¹ Hasan Arif, "Understanding Karachi, planning and reforms for future", City Press, 1999, Karachi

will be willing to move out of the congested inner city, where they could be accommodated with plenty of free land for future growth.

2) Alignment of a new development corridor

The ever-expanding city of Karachi is likely to receive development impetus along its northern edge. The already planned or designated townships of Taiser, Halkani and Surjani will then experience accelerated development, and it is most likely that developers and builders would be interested in developing this corridor. If the land use allocations, physical planning and consequent development are rationally done and monitored, the new corridor and townships can become assets to the city and contribute to overall well being. But before this can happen, the issues of land grabbing and the development of squatter settlements will have to be adequately managed.

3) Maintenance of urban roads

At present, the municipal bodies and cantonment boards spend a sizeable proportion of their budgets on road maintenance. Among the various factors responsible for the deterioration of roads is the frequent and unprecedented movement of heavy freight vehicles and goods carriers through residential areas. This cannot be resolved unless the heavy vehicles are provided with an alternate traffic channel. The Northern Bypass can provide that channel and relieve municipal roads from unwanted congestion and the municipalities from incurring heavy costs on repairs and maintenance.

4) Revitalization of inner city area

The inner city of Karachi was once the venue of cultural activities that supported the social life of the city. With the rising congestion and changes in land use, the area has become more commercial and less cultural activity takes place there. For the healthy survival of urban life, it is vital to keep the inner city alive. By moving storage and warehousing from the area, the Northern Bypass can provide such an opportunity to city dwellers to reclaim their lost voice and move towards the revitalization of the city.

5) Regulation of warehousing and storage functions

It is only logical to assume that the Northern Bypass will facilitate the development of warehousing activity along the Super Highway where ample land reserves are available. Besides, the Port Qasim / Cargo Terminal can also be connected to the Northern Bypass through the link road to form a continuous ring road link (see Map 8).

6) Possibility of developing truck terminals

The city is devoid of terminal facilities for trucks and trailers. At present, there are a number of locations in and around the city where trucks and trailers are parked. This parking movement and frequent repairs and servicing of trucks on city roads causes chronic hindrance to vehicular and pedestrian movement especially, in the congested areas. Truck operators wish to keep out of the city but due to lack of alternate spaces, they have no other choice but to park their vehicles within the city. The execution of the Northern Bypass will help get these heavy vehicles out of the inner city with appropriate locations for truck terminals.

d) Reasons for Delay of Northern Bypass

1) Lyari Expressway Proposed as an Alternative

Although the Karachi Northern Bypass was a part of the Karachi Master Plan 1973-85, Lyari Expressway took over due to the importance attached to it by the ruling elite, government officials, development professionals and powerful contractors. Being technically and politically weak, the local government accepted this change because there is no tradition of honoring the master plan of the city, besides, more often than not; government officers were in collusion with real estate developers, contractors and the land and drug mafia. The proponents of the Lyari expressway therefore had more political clout than those opposing the project.

2) Change in Political Decision

Each successive government in Karachi changed the design, nature and concept of the Northern Bypass. This was intentional and aimed at shelving the project, and it is only due to the constant lobbying and intervention of the Urban Resource Centre that the public interest in the project and the issues around it has been kept alive. URC held regular meetings with the stakeholders, government officials, and professional bodies to keep the idea alive.

3) Current Situation of Northern Bypass

In June 2001, despite all resistance, the government decided to build both the Northern Bypass and Lyari Expressway within the allocated budget for the Northern Bypass. To make this possible, the Northern Bypass alignment was changed and reduced in length, and it now joins the Super Highway just beyond Sohrab Goth, instead of at a further inlet near the link road.

The Northern Bypass and Lyari Expressway will connect to Sohrab Goth very close to each other creating immense traffic congestion and pollution problems. The six lanes of the original design for the bypass have been reduced to four to cut costs.

Given the speed of work on Lyari Expressway, it definitely seems to be the priority project. Even if the Northern Bypass is built, the original design will be greatly compromised without the related infrastructure and facilities that will make it no more than an alternate road in the city. It is imperative for the success of the bypass to be developed as a zone for transport, warehousing, and cargo related facilities.

7.2.3 Karachi Circular Railway

a) Introduction

Proposals for a light railway mass transit system for Karachi have been in the offing since 1977. The original plan consisted of revitalizing the Karachi Circular Railway built in 1962, and branching it out into the suburbs (refer, Map 18). The KCR's circle was to be linked together by a part elevated- part underground transport spine, and this bisecting link was to pass through the centre of Karachi, joining Saddar and the surrounding residential and commercial areas to each other (refer, Map 18).

If the project had got off the ground, it would have solved several of the city's major issues like inner city congestion and pollution caused by thousands of racing mini-buses, the conflict of movement between regular traffic and heavy cargo movement through the city, the time and fuel

spent in commuting from the north to the south of the city. The Circular Railway would have provided a cheap, pollution free, and quick means of public transport.

For some inexplicable reason this scheme was dropped, instead, the World Bank Consultants as part of the Karachi Development Plan 2000 prepared a new mass transit plan. According to this plan, there were to be six corridors of elevated transit way on the major arteries of movement in Karachi (Refer Plan 15). This scheme was challenged by the Citizen's Forum on Mass Transit (CFMT), a group of concerned professionals and NGOs organized by the Urban Resource Centre (URC) to debate issues concerning the construction of Priority Corridor One, the elevated transit way, was riddled with the following problems:

- The elevated transit-ways would mean the loss of urban space and decrease the width of roads where they would become at grade.
- The environmental impact of buses plying at a height of 7.5 m and those on the roads below would worsen the existing air and noise pollution.
- The increased traffic on these transit ways would lead to land use changes. The middle-income groups would move out of this area and it would most likely be taken over by transporters and port workers.
- The transit ways passing through the old city would ruin the architectural history of this part of the city, which would give way to high rise construction needed to pay the high cost of the elevated roads.
- It was argued that the aim of KMTP should be to develop alternative corridors of movement to remove congestion from the existing routes and connecting the low-income settlements (LIS) dwellers that do not own cars to their places of work. None of these corridors would pass near any low-income settlement. In fact, most of them were catering to middle and upper income areas whose residents are not interested to use public transport.
- Above all, it was pointed out that many of the proposed corridors were running parallel to the KCR (refer plan)

As a result of these arguments, the plan was revoked to accommodate three corridors, of which KCR was one. Corridor one, starting from Merewether Tower and passing along M.A. Jinnah Road, was to be built on an urgent basis. A Canadian-Pakistani joint-venture company was engaged on BOT basis to construct it.

Once again, the CFMT highlighted the concerns raised earlier since the proposal still included the development of an elevated transit way. The concept and prioritization of the project were questioned. According to Table 43, the numbers of areas and population served by Corridor One were worked out against the cost incurred on an origin- to- destination basis, which clearly indicated the rehabilitation of KCR as the first priority.

The CFMT also felt that keeping in view the history of delayed development projects in the city, once Corridor One was constructed, there would be no further progress and this will result in massive congestion along MA Jinnah Road. The third and the most emphatic objection was the degradation and eventual disappearance of the architectural and cultural heritage of the city along Corridor One as a natural consequence of real estate development and environmental impact.

In response to the objections raised, KMTP's Corridor One was shelved in 1997 by the government in favor of the alternative scheme of reviving the KCR.

Table 44: KMTP Corridors: Origins, Destinations and Costs

Corridor	Km Length	Cost by Rule of Thumb	From	To	Work Areas Served	Residential Areas Served
Corridor 1 Phase 1	13	US\$ 665 million	Karimabad	Tower	Saddar CBD	Jahangir Road Quarters Liaquatabad Karimabad
Corridor 2	11	US\$ 485 million	Orangi	Cantt. Station	SITE Saddar	Orangi Golimar Pakistan Qrts
Circular Railway and Main Line	97.8 Existing	US\$ 150 million			SITE Port CBD Landhi-Korangi Steel Mills	Liaquatabad Nazimabad SMCHS PECHS Drigh Colony Landhi Korangi Gulshan-i-Iqbal

Source: Arif Hasan: KMTP Citizen's Concerns and Possible Alternatives (prepared for the CFMT), 1994

b) Details of Karachi Circular Railway

The existing circular railway and its main line linkages provide alternative corridors and a rehabilitated and extended circular railway can act as a major mass transit mode in the city. According to the Karachi Master Plan 2000, over 45 per cent of all work trips are made to five work areas in Karachi. These are SITE, Port, the Central Business District (including Saddar), Landi-Korangi Industrial Area, and the Still Mill and Port Qasim. The areas where the majority of these trips originate are Orangi, Baldia, Landhi-Korangi colonies, Liaquatabad, North Karachi and numerous katchi abadi along the railway tracks and nala of the city.

The Circular Railway connects all the work areas mentioned above and many of the residential areas where the work trips originate. If extensions to the Circular Railway are made into the residential areas, the vast majority of the commuting public can travel from their homes to their places of work by train without having to travel through congested and polluted corridors. This alternative proposal consists of developing 11 extension lines, some of them already in existence.

By the construction of these lines all the low-income areas of Karachi will be linked to their work areas and to the upper income and middle-income areas. The extension of Line 7 to the Super Highway will make it possible for people coming from upcountry by road to transfer to the rail system to reach their destination in Karachi instead of traveling through the congested city. Line 9 and 11 (to be developed in the future) link the Boating Basin and Clifton Beach to most of the lower and lower-middle income areas of Karachi and can be used on holidays by people wishing to reach the beach for recreational purposes. Today they travel by buses. Line 9, which already exists, can be used after the Hawks Bay scheme is completed and running trains on it becomes economically viable. Thus, by adding 31.65 km to the existing 97.8 km of the circular and main line railway tracks, the alternative plan can be implemented. None of the proposed extensions would require the dislocation of people and businesses and the railway track will pass through wide medians.

However, simply improving the Karachi Circular Railway and the building of its extensions will not solve the problems of transport in Karachi. Certain additional development will have to be carried out. These include one, linking the railway stations to the road system in Karachi; two, developing the railway stations into interchange points with raised platforms, bus stains, taxi plazas and cycle stands. Space for shops and hawkers will also need to be developed. Luckily there is enough space at almost all stations for the developments being proposed; three, developing short-trip-bus-routes from the station to commuter destination; four, informing people through mass media about the railway system and interchange facilities and advising them to travel by bicycle to the railway stations so as to catch a train. This system is successfully followed both in Bombay and Calcutta where there are paid cycle stands at every station; and five, building off flyovers at level crossings. There are about 27 level crossings on the Circular Railway.

c) Financial Assessment

According to the May 1992, feasibility prepared by the Japan Railway Technical Service (JARTS) for the Rehabilitation and Extensional at Grade for the Circular Railway and the Main Line, the average cost of the proposal works out to 56 billion Rupees per kilometer including infrastructure, double tracks, diesel / electric rail cars, improved signaling, telecommunications, maintenance depot under passes, and automatic preferential signals and barriers at level crossing and approach improvements. This is in contrast to an average of 182.35 Rupees million per kilometer (at 1992 prices) for the proposed KMTP transit ways for use as bus ways to be later converted to light rail. The difference is phenomenal and will have a major impact on the cost of travel per trip as well.

Apart from the cost aspect the, alternative proposal, it is argued, has a number of other advantages. One, it serves almost all the katchi abadi of Karachi and links them to their work areas. Two, as the whole system will be rail oriented, the existing corridors will become less congested. Three, the railway corridors which are currently under utilized will be fully utilized for transport purposes and eventually real estate development can take place along them as and when infrastructure develops. Four, much of the technology required for the development of the railway system can be developed locally at the Taxila Heavy Complex and the Mughalpura Workshop. Five, the proposal will have no adverse land use and environmental effects on the city centre and the possibility of rehabilitating the historic districts or parts of them will not be wiped out.

Table 45: Major Areas Served

Line	Approximate Length in Kilometers			Major Areas Served	Remarks
	Existing	Proposed	Total		
Circular Railway plus main line within the circle	42	0	42	SITE, Lyari, CBD, Civil Lines Shakra-i-Faisal (SMHS, PECHS, MACHS) KDA-1, Chanesar Goth, Baloch Colony, Drigh Colony, Gulshan-i-Jauhar, Gulshan-i-Iqbal, Liaquatabad, Nazimabad	
Main Line to Pipri from Malir Colony	23	0	23	Landhi (industrial and residential areas) Port Qasim, Still Mills	

Line-1	0	4	4	Baldia Township	Can be extended to the Hub Industrial Estate
Line-2	0	4	4	Orangi Township, Pathan Colony, Frontier Colony, Qasba Colony Paphoshnagar, Aurangabad	Can be extended along Shahrah-i-Orangi to IteHDA Town
Line-3	0	6	6	New Karachi	Can be extended to Surjani Town
Line-4	0	6.4	6.4	Federal B Area, Gulshan-i-Iqbal, Gulshan-i-Jauhar	
Line-5	0	5.25	5.25	Drigh Colony, Shah Faisal Colony, Korangi Industrial Estate	
Line-6	5.7	3.3	9.0	Landhi, Korangi, Quaidabad, Mominabad	
Line-7	11.6	2.7	14.3	Gharibabad, Khokrapar, Malir Cantt., Said Town (on Super Highway)	
Line-8	6.5	0	6.5	Keamari, Clifton, Boating Basin, Bath Island, Shirin Jinnah Colony	
Line-9	9.0	0	9.0	Mauripur, Grex, Hawke's Bay Colony	
Total	97.8	31.65	129.45		

Note: Lines 10 and 11 are not given in the schedule, as they are "possible future extensions".

Source: Arif Hasan's KCR Plan

d) Current Situation

The Government of Sindh appointed engineering Consultants International (Pvt.) Limited (ECIL) in 2001 for the rehabilitation and extension of the Karachi Circular Railway (KCR). They carried out extensive surveys regarding Karachi's growth patterns, emerging land use, and commuter requirements, relating the information to the existing railway corridor before coming with a provisional schematic master plan.

The master plan was proposed to be implemented in three phases. Phase-1 consists of the rehabilitation of the KCR that includes the doubling of tracks between Cantt Station and Landhi so that the KCR can have its own tracks and can be completely independent of Pakistan Railways. This phase also envisages the shifting of railway stations to under flyovers and bridges at the intersections of major roads with the circular railway. This would facilitate inter change of transport modes and firmly link the railway system with the road network.

Phase-1 also includes the plying of commuter buses along the Shahrah-e-Sher Shah from Nagin Chowrangi to the Nazimabad Station; from Orangi Town to the Orangi Town Station; and from Cantt Station and Jinnah Bridge to Saddar. The trains would run every fifteen minutes, and the approximate cost of Phase-1, inclusive of completely new rolling stock (appropriate for intra-city movement), is estimated between 10 to 15 billion Rupees. Phase-1 will considerably reduce the use of road commuters, especially on the main corridors within the circle of the KCR, which would be a welcome change.

Phase-2 of the master plan envisages the building of a loop from the Nazimabad Station through the Nazimabad Town, New Karachi Town and Gulshan-e-Iqbal Town to Depot Hill near the Drive in Cinema. It also includes the building of a spine to Orangi Town and the completion of a loop from Baloch Colony to Korangi and Landhi. A connection with the Quaid-e-Azam International Airport has is planned. The approximate cost of Phase-2, inclusive of rolling stock is also estimated at between 10 to 15 billion Rupees. With the completion of Phase-2, the railway could service almost all of Karachi. This was sure to bring about a major improvement, not only in commuting but also in the physical environment. The use of buses could be limited to short distances, since the railway would be at a distance of about two kilometers to the vast majority of Karachi residents.

Phase-3 of the master plan envisages a loop through Keamari Town and an extension of the Korangi line into Defence Society and its link up with the Shireen Jinnah Colony and the beach.

Phase-1 will rehabilitate and build approximately 48 kilometers of the KCR, whereas Phase-2 will add 121 kilometers to the network. The two phases (169 kilometers) were estimated to cost between 20 to 30 billion Rupees as compared to the KMTP proposal for Corridor One of 40 billion Rupees for the construction of 14 kilometers from Tower to Karimabad. In addition, the building of this network would have no adverse environmental effects since it uses the existing rail corridor and the extensions are on very wide road alignments. The proposed KCR network would link almost all of Karachi's low, lower middle and upper middle-income areas with the major work places.

Another important feature of the proposal is that ultimately the railway network will pass through all the 18 towns of Karachi District. Space for building stations with such facilities has been provisionally identified. The building of such stations will give each town a sense of identity and pride and also give the town governments a pleasant working environment. Such stations can be self-financed through the sale of commercial areas linked to them.

There are problems that need to be sorted out before the execution of the Karachi Circular Railway. These are issues of execution, operation, and maintenance. A couple of years back, the Government of Sindh passed an ordinance creating the Karachi Metropolitan Transport Authority (KMTA). The Ordinance has since lapsed, and it would be necessary to revive it to create an effective KMTA that can manage and steer KCR planning and implementation. Also, the Federal Government must gift the required railway line to the City Government so that the implementation of the Master Plan can become relatively affordable. The process for the creation of an effective KMTA and the transfer of railway land and assets to the City Government should begin immediately since it takes a long time to fulfill bureaucratic requirements associated with these development projects.

Today, there is a tendency in Pakistan to hand over the building of infrastructure on a Build-Operate-Transfer (BOT) basis. There are two problems with this. First, The cost of a BOT project is 2-3 times more than a government built project that means higher cost for the users especially

for the lower income groups. Second, the period of investment recovery is up to 30 years which means that the local population has to pay that long.

The other option is that the government develops the necessary infrastructure, through loans if it does not have the resources, and hands over the operation and maintenance of the system to a private company. In this case, it is estimated that fares can be kept within 10 Rupees per trip that would include the profit of the operating company and revenues for repayment to the government.

The implementation of the ECIL master plan would change the lives of a vast majority of Karachi's citizens and improve the physical environment. Karachi Circular Railway is constantly in the print media, with announcements being made of its revival. However, work has not commenced on detailing the designs, preparing tendering drawings, or on any of the preparatory paper work. One of the major reasons for why this project is floundering is the bus operators lobby that feels threatened by another means of public transport. They pressurize and bribe the government officials to keep delaying the works.

7.3 Local Initiatives Befitting the Urban Poor

7.3.1 Orangi Pilot Project Research and Training Institute

(Refer Section 3.7.1)

7.3.2 Asian Development Bank (ADB)-Funded KWSB Sewerage Plan for Orangi and the Role of; OP-RTI, Ghaziabad Falahi Committees (GFC) and KMC Circle 125 in Modifying it

Taken from: Hasan Arif, "Working with Government, the story of OPP's collaboration with state agencies for replicating its low cost sanitation Programme", 1997, City Press, Karachi

a) Details of the Project

In 1989, under the Karachi Urban Development Programme (KUDP) ADB Loan No. 793 SF-PAK, KMC was responsible for laying the underground sewerage lines, water lines and the construction of roads in the upper part of Orangi. Ghaziabad was one of the Sub Area Projects (SPA-1) in Orangi.

National Engineering Services Pakistan (NESPAK), a private consultant, was appointed by Director Katchi Abadis, KMC (DKA-KMC) to prepare the design of sewerage, water lines and roads. The Karachi water and Sewerage Board (KWSB) was to prepare the cost estimates of the project and execute it. The KWSB called the tender and works were assigned to a qualified contractor. OPP-RTI stumbled upon the project during their regular work in Orangi.

They discovered that the project was estimated at Rs. 1,300 million (USD 22.5 million) but did not pick up the effluent KMC or the people built sewers in to which Rs. 65 million had been invested already. In fact to link up the existing work to the plans prepared by the consultants billions of rupees would be required to relay lane and collector sewers and funds for doing this were not a part of the plan.

b) OPP-RTI's Intervention

A meeting between the mayor Karachi and representatives of the OPP-Research and Training Institute (RTI) took place through the efforts of the technical advisor to the mayor in October 1990, who was aware of the OPP-RTI's approach and the extent of people's work in sanitation in Orangi.

In the meeting, the OPP-RTI concept of "external" (off site) and "internal" (on-site or neighborhood) development was explained to the mayor. The OPP-RTI described the model according to which people were organized for financing and building "internal development".

They suggested that the KMC adopt this pattern and limit its own involvement to "external development" in sanitation work, thus saving funds and extending the scale of its work.

In November 1990, the representatives of OPP-RTI gave a presentation to the mayor through slides showing the extent of the people's initiative in sanitation development in Orangi and the waste of KMC's resources in substandard work in sanitation carried out at high cost due to over-designing and corruption. The mayor was also requested to visit Orangi.

The mayor Karachi visited the OPP-RTI office in January 1991, inspecting the community-financed and managed sewer lines in Orangi. A series of meetings chaired by the Mayor were held with the staff members and senior KMC officials to convince KMC officials to adopt the development pattern tried out in Orangi.

c) Appointment of OPP-RTI as Consultant to KMC

In May 1991, the mayor invited OPP-RTI to become a consultant to KMC for ADB-funded projects in Orangi and Baldia. The contract agreement was signed between KMC and the OPP-RTI on 1 September 1991 with the understanding that an annual advisory fee of 300,000 Rupees was to be paid to OPP-RTI.

The scope of work to be done by OPP-RTI, as defined in the agreement, included the provision of documentation of existing development works in sanitation for external and internal development, water supply, roads and lane paving, and identification of the required development and its phases of implementation. In sanitation, the design of the "internal" development consisting of lane sewers and small collector drains and "external" development consisting of large collector drains was also included in the OPP-RTI consultancy. An advisory role in design and execution was also agreed upon to integrate the above plan.

For the implementation phase, the OPP-RTI was to have an advisory role and to mobilize the community and provide technical support to it (provision of plans and estimates, supervision of work, supply of tools and shuttering, provision of extension and instruction literature, training of masons, plumbers and activists, and preparation of audio-visual aids). OPP-RTI was also charged with documenting and monitoring the sanitation development.

d) Meetings between NESPAK, DKA-KMC and OPP-RTI to Review the Design

NESPAK, a commercial consultant, was initially given the contract to prepare the design for both the "external" and "internal". After the acceptance of OPP-RTI's concept, KMC limited its role to

only "external" sanitation development. Therefore, NESPAK was asked to design only for "external" development.

The first meeting between NESPAK and members of OPP-RTI was held in June 1991, facilitated by the Project Director, Directorate of Katchi Abadi (DKA)-KMC. The Project Director asked NESPAK to provide the design to OPP-RTI for review. As a consultant to KMC, the OPP-RTI reviewed the design and raised its objections. In some places, the levels were incorrect and the proposed lines were against the slope. In one place, the sewerage trunk line was passing through the premises of a school. The concept of "external" development was not understood or appreciated by NESPAK and DKA. Objection was also raised on the larger-than-required diameter of the pipe.

In the beginning, the Project Director, Sulaiman Memon, was not happy with the OPP-RTI objections. He thought the objections were unnecessary and the result of technical ignorance. But when the OPP-RTI prepared the alternative design for sewerage and provided this to KMC, it was not only passed by NESPAK, but copied and submitted it to the Project Director. Several meetings were held with the DKA-KMC and an understanding was arrived at as a result of which the design was finalized in December 1991. Tenders were floated in May 1992 and external work began in January 1993.

e) Working Relationship Between KWSB, DKA-KMC and OPP-RTI

In the beginning, the site engineers and executive engineer of NESPAK and DKA-KMC were not interested in getting good quality work done. Defects were pointed out by OPP-RTI in writing but the engineers took no action against the contractors.

OPP-RTI used to send monthly monitoring reports to the director DKA-KMC. The senior officials of the KWSB were not happy with these reports. In one instance, at the monthly evaluation meeting in KWSB, Irfan Ali and the Project Director raised the issue of defective work by KWSB. One OPP-RTI member was present in the meeting and tried to explain the defects. Chandio, the engineer in KWSB said, 'I do not know whether OPP-RTI appointment as consultant is legal or illegal. OPP-RTI has no right to ask us for an explanation.' Irfan Ali replied: 'DKA-KMC appointed OPP-RTI as its consultant. The monitoring report from OPP-RTI becomes a DKA-KMC matter when it comes to our department.' Fortunately, the director, Irfan Ali, did not compromise on quality and had regular monthly evaluation meetings with the chairman and the chief engineer of the KWSB. On the basis of the OPP-RTI monitoring report, he raised the issue and clearly declared that substandard work would not be tolerated. He added that payment would not be made if quality was not maintained. Thus the senior officials of the KWSB pressurized their site engineers and the executive engineer to maintain quality and to cooperate with OPP-RTI.

As a result, the engineers came to OPP-RTI and discussed the work. It was also decided between OPP-RTI and KWSB site engineers that defects would be pointed out to KWSB engineers in the weekly meeting with OPP-RTI and if they were not removed, OPP-RTI would mention this in the monitoring report to KMC. The engineers did not point out defects themselves to the contractors but appointed the OPP-RTI supervisors to draw their attention to substandard work and the engineers had it remedied by the contractors. Thus the 18,000 running feet trunk line was laid at a cost of 5.4 million Rupees through an ADB loan that will be repaid by KMC in 20 years.

f) The GFC's Role in "External" Development under the ADB Funded Project

The OPP-RTI was aware of its limitations and knew that it had no authority to prevent the engineers and contractors from doing substandard work, so it involved the people of the area in checking the work.

Several meetings were held between OPP-RTI members and area activists. In one meeting, the plan and design was explained and handed over to the activists. The plan showed details of location, depth of pipeline, and the number of manholes. OPP-RTI explained the specifications of the work, the ratio of cement to be used, the level of excavation needed, the manner of constructing manholes, and how much steel was to be used in the concrete sections.

The people were also explained how to check the quality of pipes. The need for supervising the work was to ensure that the money invested by the people in laying the sewer lines in "internal" development was not wasted.

The activists and members of the GFC have explained this association with the OPP-RTI in their own words. Shamsuddin reports of his first contact with the ADB project, he says, 'One day, I was at home working on the molding machine when some workers started excavation in my lane. I went out and asked them what was going on. They told me to ask the officers standing nearby. I went there and saw the engineers and contractors. On repeating my question to them, they replied that they were laying down an underground sewerage line. I asked them whether sewerage lines would be laid in other lanes too, and when their reply was in the negative, I talked to the people living in the lane and told them what was going on. If I allowed this work to continue, the people of other lanes would raise objections to my being the general secretary of the Ghaziabad Falahi Committee (GFC) and getting a sewerage line laid in my lane! I would not be in a position to face them after this. Lane residents supported my point of view, and the work in my lane had to be stopped due to the resistance created by my neighborhood.'

The next day, Javaid, the social mobiliser- cum- technician of the OPP-RTI, visited Ghaziabad and the residents directed him to Shamsuddin's house. Javaid introduced himself and the OPP-RTI to Shamsuddin who had never heard of this organization before. Javaid explained the OPP-RTI sanitation programme and the ADB funded project, which was to be implemented in Ghaziabad. He further explained that the government would lay only main and secondary lines and the people would have to lay the lane sewers themselves. Javaid also informed Shamsuddin that the OPP-RTI could not control the quality of work and this was something that the community would have to do by checking the depth of the excavation, the quality of material, diameter of pipe, and the ratio of concrete.

The next day, Perween Rahman, director OPP-RTI, visited Ghaziabad and spoke to Shamsuddin and a few other GFC members. She told them that since they live in the area they should supervise the work and if something went wrong they should inform the OPP-RTI. She further informed them that the RTI would provide them with all the necessary details and maps, labeled in Urdu, and explain it to them in detail.

Shamsuddin says, 'While Perween Rahman was talking to me a lot of questions came to my mind. Will the contractor listen to me? Will it be possible for the people to check the quality of work? She also said that if you see the work being implemented against the directions in the maps and specifications, we should not argue with the contractor or engineer but write a note to the KMC project director and provide a copy to the OPP-RTI. I was skeptical about this, why should the KMC director care for my note? Why should OPP-RTI staff be interested in my area? But one

thing she said made sense to me. For the first time in our lives, we have got a chance to control the quality of work in our area and in doing so we would not be helping the OPP-RTI but ourselves because this would give us a good quality sewage system.”

Shamsuddin kept the map, drawings, and specifications, and called a meeting the next day. About 70 people of the area attended, in addition to the members of the GFC. Perween Rahman’s programme was placed before the people assembled there, along with the maps and drawings, and they were asked if they would cooperate. The people were willing but not sure about how they could keep a check on the work and if the contractors and engineers would listen to them. Only three office bearers and four elderly people agreed to give their time for this work.

The next day, Javaid went back to Ghaziabad and held meetings for a whole week with the GFC members and volunteers. In a week’s time, they were able to begin reading the maps and understanding the specifications. Their training included visiting the site, inspecting the work, and relating it to the maps and technical details. The members and volunteers also went to the OPP-RTI and saw the work that had been done in other parts of Orangi. They discussed this with Orangi residents who had undertaken similar work and had very similar backgrounds to theirs. Thus the confidence of the people from Ghaziabad increased.

The other residents of Ghaziabad observed this flurry of activity and started getting interested in becoming a part of the project. More volunteers came forward. When work began, the GFC deputed two members to check every 300 running feet of pipeline. There were 18 members in all, in addition to the GFC members who organized and monitored this supervision. They would observe the work to identify defects and report them to the OPP-RTI staff who would then take up this issue with the project director. The bills of the contractors would not be cleared unless a NOC was received by the KMC from the OPP-RTI, and this could only be done if the Ghaziabad Falahi Committee approved it. Thus, the people became responsible for sanctioning the bills of the contractors.

As the confidence of the GFC activists increased, they started to stop the work directly instead of reporting it to the OPP-RTI. They also initiated direct contact with the project director.

However, it was not all-smooth sailing. A lot of substandard work was done in this period and the OPP and the community, with the support of from the KDA director and the project director, had to struggle to get these defects removed. The most serious defects consisted of badly constructed manholes that were cast in poor concrete, often without a base, and of wall thicknesses that appeared to be of the right size on top but which diminished to less than 2-inches at the base. After casting, it was not possible for the supervisors to determine the real wall thickness of the manholes. 137 such manholes were rectified and 139 were demolished and re-cast. In addition, 13 manhole slabs of substandard quality were also re-cast and 127 manhole covers that had been broken were replaced. Sewer lines were sometimes laid to wrong depths and gradients. 1,908 running feet of such defective lines were dug up and re-laid. Cracked or defective pipes were identified and replaced throughout project implementation.

In the first quarter of 1993, GFC activists identified defective manholes that had been cast without steel in the base and incorrect wall thicknesses. All of them were cast at night during *Ramadan* (the Muslim month of fasting) in the hope that the community, being involved in prayer, would not be able to supervise the casting. This ploy on the part of the contractors did not work and the community identified the defects and they were referred to the OPP-RTI. Through the KWSB engineers, the OPP-RTI asked the contractors to demolish and re-construct the manholes. Attempts were made by the contractors to bribe the OPP-RTI team and community

activists at the rate of 500 Rupees per manhole in the hope that that they would ignore these defects. This did not work, and since the contractors refused to demolish the manholes, the matter was brought before Irfan Ali in March 1993.

The KWSB Director, Irfan Ali, ordered the demolition of the manholes but the contractors delayed action on his orders and tried to create a dispute between rival groups in the area to gain time for the issue to fizzle out. Due to OPP-RTI's connections with the groups, this did not work and the manholes were demolished and the subsequent quality of work improved as a result.

Activists also checked and marked all substandard or cracked pipes with black paint as they lay stacked in piles or in open trenches, and insisted that they were removed or re-laid. Often, this would lead to a confrontation. For example, in Mansoor Nagar SPA, when the community resisted the laying of cracked pipes, the contractors physically threatened the activists. The community, led by a resident policeman, organized itself against these threats and got its way.

In another incident, the engineers and the contractors explained to residents of some lanes that they would build their lane sewers as well, and that all the lanes would have been built by the project had it not been for the intervention of the OPP-RTI. So, people were made to feel that had it not been for the OPP, they would have had free "internal" sanitation as well. Work was started in one lane by the contractor to bribe the people and drive a rift between them and the OPP-RTI staff, but the RTI staff that then approached the area activist, Shamsuddin Sahib, identified it. The RTI staff showed him the project plans of which "internal" development was not a part, and it was explained to him that if "internal" development took place in his lanes and not in other lanes too, it would deteriorate social relations. Shamsuddin Sahib understood this and forced the KWSB engineers to stop work, as a result of which the engineers developed a great deal of respect for him.

In this process, the OPP-RTI had to be extremely careful because if it gave any incorrect information in the reports, or raised an issue in exaggerated terms, this would destroy its credibility and make all coordination between the different partners difficult, if not impossible.

g) Relationship with NESPAK and KWSB Site Engineers

Initially, there was a strong working link between the KWSB site engineers, the contractors, and the NESPAK staff, but with the passage of time, they saw the mutual respect and support between the OPP-RTI and the community and came to respect the hard work and efficiency of the OPP-RTI work and the honesty and dedication of its team. As a result, most of them began to visit the OPP-RTI offices and increasingly made joint visits to the work sites. Some of them also developed "good relations" with community members.

h) KMC-OPP-RTI Relations and its Repercussions

The success of the project led to excellent relations between the KMC and the OPP-RTI. Individual engineers and bureaucrats, who had been antagonistic to the OPP-RTI and to the involvement of NGOs in development work, became OPP-RTI's friends and supporters. The KMC-KAD expressed its desire to work with the OPP-RTI in other settlements on the same principles that were followed in the ten SPAs in Orangi.

In the 14 settlements in Karachi, the KMC had recovered lease money. KMC was anxious to develop these settlements in collaboration with the OPP-RTI on the "internal-external" concept. One settlement was finally chosen as the test case, but then civic strife in Karachi disrupted the

progress of work and, in April 1996, a new person replaced the administrator, who had played an important role in promoting this collaboration.

But because of the relationship that had developed between the OPP-RTI and the KMC officials, the former was able to undertake an experiment whereby a project committee consisting of community activists and representatives were able to access KMC-ADB funds for “external” development in their area. This reduced the costs, improved the quality of work, and cut down on the time contractors took in completing work. In theory, government engineers supervised the project, and the name given to the development procedure was “departmental work.” This experiment was conducted in the KMC Councilor Circle 125 in Orangi. This “departmental work” has become the model for the work undertaken by the SKAA in building the “externals” in the *katchi abadi* of Karachi.

i) Development through Departmental Work in KMC Circle 125, Orangi

In June 1992, the elected KMC council was dissolved for political reasons, and replaced by nominated councilors. Through this process, Haneef Arain, a political activist and OPP staff member, became the councilor for KMC Circle 125 in Orangi where people had laid sewer lines on a self-help basis. The disposal points for a large number of lanes were substandard KMC-constructed open drains. Trunk sewers were required to link lane sewers to the nullah (natural drain) passing through Circle 125.

Haneef Arain approached the OPP for guidance in development work in circle 125 and the OPP agreed to prepare a master plan, design and estimates for “external” development. The identified work consisted of nine sub-projects. These were 1,200 running feet of sewer to the nalas; five repair jobs to existing collector drains, and the conversion of three open drains into trunk sewers. The cost of the project was estimated at 229,000 Rupees (5,725 US Dollars).

In addition to the KMC, which is the parent body, Karachi had been divided into four Zonal Municipal Corporations (ZMCs). Plans for the councilor circle had to be approved by the engineers of the ZMC of which Orangi was a part. In his capacity as councilor, Haneef Arain was able to get the designs approved by the ZMC, but under ZMC regulations, this work had to be tendered and the contract awarded to the lowest bidder or a “favored” one. Haneef Arain was of the view that if the community formed a people’s committee, then it could bid for and get the contract since it would definitely be the lowest bidder. In all his work, Arain was guided by the OPP.

Haneef Arain and the OPP consulted their friends in the KMC regarding this proposal and were told that it was a bad idea because a conventional contractor-ZMC relationship was such that it would be difficult for the people’s committee to do good work in good time. The advice given was that money should be given to the OPP for demonstrating the efficiency of work through a people’s committees supervised by municipal engineers.

On the basis of this advice, a project proposal was prepared and presented before the administrator and the chief engineer of the KMC. The ZMC engineers were part of the negotiation process since the OPP had learnt the importance of involving those partners in the decision making process with whom it was going to work in the field. In addition, their support was necessary because eventually the project money was to be disbursed to the OPP by the ZMC.

After some discussions on the usefulness of this experiment, the proposal was accepted. Mohammad Noman, the technical advisor to the administrator, played an important role in written approval was obtained for the project in October 1994.

j) Roles of Different Partners

In the final arrangement for the execution of the project, the role of the OPP-RTI was that of an advisor to the people's committee and a technical supervisor of the project. In addition, it was decided that the OPP would initially fund each sub-project, and when it was completed, the ZMC would reimburse the OPP. The administrator guaranteed that the reimbursement would be effected.

The KMC was to fund the project. After written approval, it transferred the project cost to the account of the ZMC executive engineer (XEN) who was responsible for approving the OPP-prepared design, supervising the nine sub-projects, and for reimbursing their costs to the OPP.

The people's committee was to manage the project and employ labor from within the community to execute it. Each sub-project was to have a separate committee, which consisted of four people: Haneef Arain, one supervisor, one purchaser, and one accountant. Haneef Arain chose the committee members for the first sub-project in consultation with the OPP. The members of the committee had all been activists of the OPP's low cost sanitation programme in Circle 125.

The development work undertaken by SKAA in katchi abadis of Karachi is done as departmental work also. This has resulted in the work being done in half the time at half the cost.

k) Project Implementation

To begin with, work was undertaken only for the largest sub-projects. This was the 1,200 running feet trunk sewer. The sub-project cost was 100,000 Rupees (2,500 US Dollars). The sub-project was completed in 40 days in December 1994 and January 1995. A similar amount of work for the UBS programme in Sukkur (see Chapter 4) done through government agencies had taken over one year to complete at four times the cost.

However, soon after the completion of the first sub-project, political strife engulfed Karachi and Orangi and Circle 125 was badly affected by it. The project committee disbursed and the other eight sub-projects never took off.

l) Problems during Implementation

The project committee became functional immediately after the written approval in October 1994. They hired a project office near the site and started to make arrangements for engaging labor from within the community. They pasted all the details of the project (plans, estimates, implementation procedures, progress charts) on the notice boards in the office so that there was absolute transparency regarding the work they were entrusted with.

It is common practice in most Karachi settlements that before beginning public works of construction or repairs, contractors pay a *bhatta* or commission to the toughs of various mafia or political groups. Sometimes, this commission is recovered if the work is large. The musclemen of a certain political group came to the project office and demanded their share when work began on the trunk sewer. The project was explained to them and they were informed that the

community on a non-profit basis was undertaking this and that there was no contractor. When they became convinced of this, they not only withdrew their demand, but offered support as well.

Again, in the period when the work was being planned, one of the ZMC engineers who was to supervise the project gave the contract out privately for implementation. The contractor threatened to take the community members to court if they put obstacles in his work. Meanwhile, the ZMC engineer claimed that the contract was signed before OPP-KMC understanding. A meeting was held with the chief engineer who sorted out this problem so that the committee could continue with its work.

Immediately after the work started, the ZMC site engineers warned that they would check each item of work and ensure that PHED standards were being followed. The OPP and the committee welcomed their interest in this and told them that there should be a daily check. To facilitate this, a time book was kept at a local tea stall and also at the site office. In addition, the OPP told the engineers that it would pay them 100 Rupees per site visit from the project cost. The project engineers never visited the site and issued the project completion certificate without discussion.

m) Replication of Departmental Work Concept

The departmental work concept was successful in KMC Circle 125. It reduced costs and the time period of construction, provided employment to local labor and artisans, and the quality of construction was excellent. In addition, it demonstrated that there are not only artisanal skills in the community but that community members could keep accounts; make purchases, and organize work. On the basis of this experiment, the OPP promoted the concept with SKAA and in the CKAIIP in Hyderabad.

n) Reasons for the Relative Success of the Project

There are a number of reasons why the OPP concept was successfully implemented by government agencies in the ADB-funded KAUP and why good quality design and implementation work was possible. First, there was no problem of finances. Second, both the Mayor and then the director KAD were accessible to the OPP. Third, the KAD project director and KMC engineers had considerable experience in working on the upgrading of katchi abadi and were aware of the problems inherent in this kind of work. They also understood the importance of community participation and the post-development problems of operation and maintenance of infrastructure. Thus, after initial skepticism and after the OPP had established its credibility, they were supportive of the concept. And four, the director KAD, Irfan Ali, was able to take firm and quick action on issues identified by the OPP-RTI in its monitoring reports and with regard to the quality of work. These actions were taken with complete transparency and without compromising principles.

However, another reason for the relative success of the project is that the project area was in Orangi, where, when the OPP-KMC agreement was signed, the OPP had already been working for over 11 years. There was a relationship of trust and the OPP knew the terrain and community leaders and activists. In addition, it had developed awareness in the community regarding sanitation in general and its concept of development in particular. Most of its staff members were residents of Orangi and some were residents of the SPAs where work was undertaken. The OPP was able to use this knowledge and mobilize them for supporting, monitoring and supervising the project.

The problem of providing maintenance of the KMC infrastructure remains. The KMC or the KWSB have not able to plan for this in spite of the repeatedly reminders by the OPP that without maintenance of “external” infrastructure by the KMC, the model would remain incomplete. The OPP team is exploring the possibility of communities taking over this responsibility.

o) Achievements of the Intervention

1) Cost Effectiveness of the Modified Plan

The modified plan prepared for the KMC-KAD by OPP-RTI came to 36.2 million Rupees (625 million US Dollars) as the technical standards were appropriated. It proposed 120,983 running feet of main sewers to which 1,093 lanes with 23,000 households could be connected. Discharging the sewers into natural nala lowered costs, and lane activists supervised the work controlling any mishandling of funds or resources. Presently, the government has allocated a fund of 220,200 million Rupees (3.8 million US Dollars) for converting the natural drains into box culverts. OPP-RTI has been taken on as technical consultants by the CDGK. The total cost of the project has reduced from 2.5 million US Dollars to 4.5 million US Dollars.

2) People motivated to undertake Internal Development

When the people became involved in the supervision of external development, it was explained to them by the OPP-RTI that KMC would not lay the "internal" sewerage lines. It would be the responsibility of the people to lay the sewerage line in the lanes with their own finances. Before the completion of the "external" sanitation, OPP-RTI did the survey of the internal sanitation and supplied the design and estimates to the GFC.

The GFC and OPP-RTI held meetings in the lanes and informed the residents that they would be provided technical assistance if they formed an organization to build the lane sewer and connect it to the sewers built under the ADB funded project. Two people were selected from each lane by the residents and provided with the plans, estimates and tools by the OPP-RTI for building the sewer. They collected the money from the people of the lane, purchased building material and organized the work with OPP-RTI top supervision. There are 20 to 30 houses in each lane and everyone knows each other. The better-off ones sometimes subsidized the poorer families. Problems related to bigger and small plots paying the same cost were also resolved by the lane organization through discussion and dialogue.

In Mujahid Colony, all the 25 lanes were built in 20 days and after that very little motivation were required to convince the people that they could do the work themselves. The artisans and managers of the completed lanes became the motivators and technical expertise for the work in the rest of Ghaziabad.

So far, the people of Ghaziabad have invested 1.428 million Rupees in building 45,735 running feet of sewers in their settlement whereas, the KMC’s investment through ADB funding is 6.984 million Rupees for building 23,280 running feet of sewers.

7.3.3 Khuda ki Basti

a) The Concept of Kuda-ki-Basti

The concept of Khuda ki Basti was developed by concerned planners as a response to the failure of the State to provide housing to the poor. It was conceived keeping in mind the reasons for the success of the informal sector and to demonstrate workable strategies to the State.

In 1985, the DG Hyderabad Development Authority (HDA), Tasneem Ahmad Siddiqui, agreed to try out the new model, the basic objective of which was to make land for housing available at an affordable price to low-income groups and to help them acquire services incrementally over time, at a pace determined by their paying capacity.

Initially, only raw land was to be made available to the people with some provision for tanker supplied potable water. The rest of the services were to follow, for which the residents would pay a small sum of 50 Rupees per month for a period of eight years. It was envisaged that as the population grew, the executing agency (had), would contact relevant government organizations and/or the private and NGO sector to help finance the physical, economic and social facilities in the settlement.

The key to the success of the project was the occupation of the plots, for which speculation was to be made difficult, if not impossible. Changes and modifications were made in the strategy depending on feedback from the field. Procedures for application, payment for the plot, and other dealings with the HDA was made a one-window affair and was to be taken care of by the site office.

b) The First Scheme

The first scheme was established in 1986 on a small part of a larger housing township called Gulshan-e-Shahbaz, on the Karachi-Hyderabad Super Highway. Initially, HDA contacted a number of local leaders, welfare organizations, and residents of the katchi abadi of Hyderabad and Kotri and informed them that un-serviced plots were available in sector D-6 of Gulshan-e-Shahbaz for a down payment of 460 Rupees.

Although a large number of people applied, no one moved in to occupy the plots or build their homes. Conversations and interviews with the residents of the area and local leaders revealed that middlemen and professional land-grabbers of the established katchi abadi had indirectly purchased most of these plots for speculation.

As a result of the initial failure to inhabit the settlement, the HDA changed its procedures in August 1986. It began plot development in a new sector, E-4, far from D-6, to emphasize the fact that this was a new scheme with a new procedure. No allotment was made to the applicants under the new procedure, and only a receipt against the down payment was given. Ownership papers were to given only after the full payment of 9600 Rupees was made.

In addition, applicants were required to build their houses within a month of payment or have the right of possession to the plot cancelled.

c) Reception Area Concept

The idea was to ensure that only families who were willing to stay in the settlement were given possession of the land. People had to move into the area and stay here for fifteen days with their families and belongings to be observed by the staff. If they were considered genuine claimants, they could move into a plot where they had to immediately construct their dwelling.

Vendors of materials for shack building soon established themselves in the neighborhood, and the HDA charged them 100 Rupees as rent for fifteen days from families using the reception area. If the families were unwilling to pay, they could put up their own shacks in an open space identified by the HDA staff

d) Role of the Middleman

The government agency inducted established land-grabbers and middleman into the settlement process at the Khuda-ki-Basti in the early stages of land delivery. They were able to bring a large number of applicants to the Basti and helped the HDA staff in demarcation, handing over plots, and collection of down payments and installments.

These middlemen were interested in acquiring plots for speculation, and knew that the price of property would go up if the settlement were inhabited quickly. The HDA staff gradually discouraged the middlemen and the role was taken over by them.

e) Increase in Price

The down payment of the plot was increased from 460 Rupees to 910 Rupees. This was done for two reasons: it was felt that the people paying 460 Rupees as down payment were bound to be those who could not afford to pay 50 Rupees, plus the monthly installments. A survey of residents showed that people were willing to pay extra for piped water supply, rather than depend on bowzers and open tanks.

f) Cancellations, Transfers and Re-allotments

Constant attempts were made by entrepreneurs and office-bearers of social welfare organizations to acquire land for speculation through inducting fake applicants, building shacks, and keeping them empty.

In addition, a number of residents had not paid their monthly installments and many others sold their houses in the open market. Under the terms and conditions of possession, all such applications were to be cancelled and the property rights revoked. It was decided to regularize such sales and transfer by imposing a transfer fee of 2,000 Rupees per plot on the new owner.

g) Development of Physical Infrastructure

Physical Plan of the Basti

Initially, the size of the plot was kept at 20 feet by 36 feet but at the request of the people, it was changed the size of the plot to 24 feet by 30 feet. This was because the residents wanted to have two 12 feet wide rooms on the road front. According to the Khuda-ki-Basti concept, the physical services were developed by the executing agency incrementally with finances collected through the monthly installments from the residents.

Services

HDA decided that the residents should be given the option of developing the internal services of their blocks, specially the sewerage system. If they did so, then the amount that the HDA would have spend on developing these services would be deducted from the total payment the residents made for the plot. For this purpose, attempts were made to motivate residents to organize at lane level, collect finances, and lay their sewerage lines on the pattern developed by the OPP in Karachi.

Financial Matters

Recovery of installments in the early stages of habitation was more regular, but with the passage of time, the number of defaulters increased. To overcome this problem, the HDA introduced new forms and papers, which were mandatory to establish ownership rights to the plot. To acquire the new papers, dues had to be cleared. This process has usually helped in the collection of arrears.

Water Charges

The HDA imposed a water charge of 10 Rupees per month on the households in addition to the connection charge of 100 Rupees. People considered the charge reasonable and were willing to pay more for better service.

House-Building

As soon as people started to settle on their plots, building material suppliers started operating in the Basti. Mat, thatch and bamboo suppliers set up their businesses in and around the reception area and bricks and cement were sold through building material contractors.

An HBFC housing loan was arranged with the aim of helping the residents in putting up a weatherproof roof over their heads. The HDA tried to advise the residents through its architects on design and construction techniques. Plans and extension material were developed for his purpose but the programme had to be shelved because the HDA staff could not developed an extension programme which could relate to the incremental nature of house construction in the Basti.

h) Provision of Essential Services

Transport

As soon as there was forty to fifty families settled in the Basti, the HDA approached the concerned transport agency (SRTC), to ply buses from the settlement to the Kotri industrial area and Hyderabad so that people could get to their places of work. The SRTC had doubts about the financial viability of these routes but these doubts were set aside due to the personal relations of DG HDA and the SRTC bosses.

Post Office

The HDA approached the postal department to open a post office in the Basti but the department was reluctant. A settlement was reached with the HDA according to which if they could provide a room for the post office and a part-time employee, then a postal system could be established for

the settlement. This arrangement was made by a local community organization in the Basti. Again, the personal contacts of the DG HDA with the postal department were utilized to make this possible.

Bank

For the establishment of a bank in the Basti with a two-member staff, the banking authorities required an initial 8 million Rupees deposit. The HDA undertook to deposit its FDRs of 4 million Rupees if the bank was opened and promised to transact all business related to the developed of the Basti through the bank. Due to this undertaking, the Allied Bank of Pakistan established a branch in Khuda-ki-Basti.

Police Station

At the request of the residents, the DG HDA spoke to the DIG police in Kotri and requested him to provide police for the Basti. After a few weeks, the police began to harass the residents, and they had to request the DG HDA to remove the police force.

Social Facilities

Local entrepreneurs and middlemen played a major role in the development of social sector facilities in the Basti. One of the middlemen established the first school in the Basti and organized sports activities and competitions. A dedicated woman in Block D of Sector E-4 undertook the establishment and promotion of home schools. At one stage, there were forty-two home schools in the settlement.

The role of the HDA in promoting social sector facilities has been at two levels. One, it has encouraged the involvement of social welfare organizations and entrepreneurs by taking them into confidence and involving them in development work, by making amenity plots available for their activities. Two, it contacted a large number of NGOs and government departments and induced them to become part of development activities.

Health

As soon as it was felt that the Basti required health services, the HDA requested the Red Crescent Society to start operating its mobile dispensary on alternate days. Later, when the population increased, the HDA requested the Lions Club to set up a dispensary for another sector of the settlement. The Family Planning Association of Pakistan (FPAP) and the Women's Division were inducted into the Basti by the HDA. The former set up an office in a room given to them by the HDA in the reception area.

Education

Apart from providing amenity plots to entrepreneurs and welfare organizations for the operation of schools, the HDA also arranged for the training of teachers through refresher courses arranged by the Education Programme of the OPP.

The HDA had a carpet-training centre for women established through the Women's Division and the Small Industries Corporation, where the HDA provided two-room accommodation for the centre and the first batch that was trained qualified three months earlier.

Community Organization

The HDA was able to involve these NGOs and government organizations in the development of the Basti because the DG, HDA was aware of the existence of these organizations, their mandates, and the manner in which local administration functions. He also invited MNAs, MPAs, journalists, professionals and local leaders to the Basti and discussed development options with them. In addition, the HDA has been publishing a magazine Khuda-ki-Basti, which deals with the problems and development programmes of the settlement and is financed by the UNICEF and the Women's Division. Copies are sent to various social welfare and community organizations, NGOs, relevant professionals, and libraries.

Each sector of the settlement has two to six blocks of about 100 to 250 houses in it. These organizations, it was felt, would help in the development of internal infrastructure, collection of payments and take on other social sector responsibilities. A working committee for the whole Basti was created. This committee consisted of vocal residents, one or two from each block. The committee broke down as the people were not willing to accept its non-representative nature and because there was a clash of interests in the requirements of different sectors and blocks.

In August 1988, the HDA arranged elections in all the eleven blocks of the Basti for the formation of block organizations. Each organization consisted of three members. Most of the elections were held through the show of hands. The members elected were, by a large, middlemen, land-grabbers, and small-time entrepreneurs and their musclemen. The power of the block organization includes the collection of installments, decisions on development priorities, and the authority to implement them. They cancelled the possession of plots and imposed a transfer fee; operated a block level bank account jointly with the HDA; supervised social welfare activities in the block and had the power to take legal action against unauthorized occupation of HDA land.

The HDA's relationship with the block organizations has not been a very happy one. From the start, there was strong opposition to them from the defeated group within the block, making their functioning difficult. In addition, the leaders tried to pressurize the HDA into giving them benefits that conflicted with the concept of the scheme thus turning the block organizations into lobbying groups.

Credit

The HDA had negotiated a block loan of 5 million Rupees from the HBFC against its FDRs. The loan was meant to help the residents to put up weatherproof roofs to their homes. The value of each individual loan was set between 5000- 20 000 Rupees for a period of five to ten years. To qualify for the loan, the applicant had to invest twice the value of the loan in the construction of his house. Two residents of the same block, who had taken no loan, were to stand guarantee and surrender the possession cards of their plots to the HDA along with that of the applicant. A similar programme operated by the OPP in Karachi inspired this loan programme.

The loan has benefited a number of families and created a large number of jobs in the Basti. The loans carry a mark up rate of 16 per cent and the repayment period is between one and two years. According to the HDA staff, over 80 per cent recovery is being made on these loans.

i) Reaction of the Informal Sector

Land-grabbers and their supporters in the local government were not happy with the scheme when they discovered that they could not make money through speculation. The land-grabbers, supported by the functionaries of the revenue department and the police tried to disrupt the development of the Basti through armed goons. But it was due to the DG HDA's personal connections with the DIG police helped in tackling this problem. The interest of the land-grabbers was because, by early 1988, a plot of land in the Basti was selling for 10,000 Rupees against the allotment price of 1,100 Rupees. Like any new settlement, Khuda-ki-Basti was faced with the problem of easy access for the residents to the job market. Although the HDA managed to operate SRTC buses to the city and the industrial area, the services were not punctual.

It was only with the operation of private sector transport that this problem was eventually resolved. A considerable amount of commercial activity developed in the Basti with the result that almost 30 per cent of the population is locally employed. This activity has benefited from the loans programme of the HDA and by its policy of permitting commercial activity to mushroom in any sector or street of the Basti.

j) Conclusion

The Khuda-ki-Basti scheme in Hyderabad was a pilot project aimed at identifying land delivery and development models that could overcome the constraints faced by public sector policies in serving the shelter needs of the low-income groups in Pakistan. As a result, the project has demonstrated that:

- Land at an affordable price can be delivered to the urban poor without subsidy and without burdening the State;
- Local communities can acquire services in a short period of time if proper representative organizations, supported and backed by the government's administrative machinery, are created and allowed to develop;
- Social sector and income generation facilities can be acquired through the existing programmes run by the government, international agencies, and the NGOs, provided the implementing agency has knowledge of them and they are intelligently tapped;
- Understanding and promoting the organizational, managerial, and technical potential and capacity of local middlemen, entrepreneurs and residents can aid the process of development.

k) Reasons of Success

The reasons for the success of the programme are, briefly:

- The authors of the programme had acquired knowledge of existing government policies related to housing and their inappropriateness and constraints. They were aware of the informal sector strategies and operators, various NGO programmes related to low-income area development, and had a commitment to discovering relevant alternative models.
- Constant monitoring of the development and settlement process in the Basti took place to modify changes in procedures and strategy and to respond to the needs of the settlements.
- The transfer of the vision of the Khuda-ki-Basti development model to the HDA staff motivated them to take on a role not normally enacted by government officials.

- The need for low-income groups to find shelter, their willingness to put up with hardship to fulfill this need, and their ability and potential to respond to initiatives taken in this regard, especially if these initiatives bear the seal of the government or its approval.
- The willingness on the part of the HDA to innovate, bend the rules to suit its objectives, and to attempt to shed deep-rooted prejudices that government agencies and even NGOs have towards low-income communities.

The Khuda-ki-Basti concept has been replicated in three settlements in Karachi.
