

Arif Hasan's research work and analysis on human settlements and urban and rural development is contained in a number of books authored by him and in papers in international academic journals. Much of this work has broken new ground in urban and development studies and is used as teaching material in many universities in the developed world. He has converted his work on Karachi into articles which have been published over time in the national print media. These articles in essence are a synopsis of his research work on the city and its issues. As such, these articles are not only relevant for planners, teachers and students of urban and development studies but also for politicians, policy makers and laymen who do not have the time and interest to examine the original research texts and analysis.

Arif Hasan is an architect/planner in private practice in Karachi. He studied architecture at the Oxford Polytechnic and on his return to Karachi in 1968, established an independent practice which slowly evolved into dealing with urban planning and development issues in general and of Asia and Pakistan in particular.

He has been a consultant and advisor to many local and foreign CBOs, national and international NGOs, and bilateral and multilateral donor agencies. Since 1982, he has been involved with the Orangi Pilot Project (OPP) and is one of the founders of the Urban Resource Centre (URC), Karachi and its Chairman since its inception in 1989. Both institutions have received international recognition and are being replicated both nationally and in a number of other countries.

Arif Hasan has taught at Pakistani and European universities, served on juries of international architectural and development competitions, and is the author of a number of books on development and planning dealing with Asian cities in general and Karachi in particular. Between 1989 and 1998 he was associated with the Aga Khan Award for Architecture as a Technical Reviewer, member of its Steering Committee and Master Jury. He is currently on the board of several international journals and research organizations including the Bangkok based Asian Coalition for Housing Rights and is a Visiting Fellow at the International Institute for Environment and Development, UK.

He has received a number of awards for his work including the UN Year for the Shelterless Memorial Award of the Japanese Government (1990), the Prince Claus Award of the Netherlands Government (2000), and the Hilal-i-Imtiaz of the Government of Pakistan (2001).

Planning and Development Options for **KARACHI**



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Foreword

Pakistan is the fastest urbanizing nation in South Asia. The big urban centres that as recently as a decade or two ago used to be small towns, are becoming cities. The share of agriculture in the nation's GDP and labour force is shrinking. Services, manufacturing, trade, construction and transport, largely concentrated in urban locations, have emerged as the major economic sectors of Pakistan. The balance has already shifted in favour of urban areas and the rural areas' economic, political, administrative and social dependence on them is growing. An urban Pakistan is in the making.

Local governments and provincial and national institutions tasked with making policies and managing the urban centres of the country have been unable to understand and cater to the ground realities and complexities of urbanization in Pakistan. As a result, our development priorities and strategies in general, and those for urban and rural settlements in particular, are contributing more to their problems than to solutions. The complexity of the issue is exacerbated by a multitude of new dimensions that conventional planning theory and methodology do not address. These include rapidly changing demographic patterns and social realities and value systems; a powerful growing and as yet formally not recognised informal employment, transport and economic sector; speculation on land and property that in the absence of viable institutions and laws marginalises the poor; and pressures from IFIs and global capital, out to make a quick buck.

Karachi is the financial capital and the largest city of Pakistan. The economic and social opportunities it offers have attracted people from every corner of Pakistan and also from neighbouring countries. This has led to the emergence of a multi-ethnic population and a cosmopolitan culture. The city is expanding both in demographic and physical terms at a very fast pace. This is creating physical, environmental, social and

economic stress and conflicting political interests. The city contains all the problems, potentials and processes third world megalopolises are known for. Because of its rapid growth, it offers one of the best cases for understanding the dimensions of urbanization in Pakistan and in large third world cities.

'Planning and Development Options for Karachi' is a compilation of articles contributed over the years in Daily Dawn by Arif Hasan, Pakistan's internationally known architect, urban planner and teacher. This compilation is an effort by Shehersaaz (City Makers) to address the acute scarcity of quality urban literature with special reference to Pakistan by making these articles available in the form of a book for students, teachers, policy makers, social activists, development practitioners and those who opt to think and struggle for humanising the urban places we live in. The book is structured by grouping together articles that deal with a certain theme or issue so as to help readers understand a certain issue in a sequential manner. However each article is complete in itself, making the reader understand the context, subject matter and development options that it proposes. Included are couple of articles at the end of this book that are not concerned with Karachi. These have been made part of the book as they follow the same vigour of an alternative development perspective Arif Hasan stands for.

Shehersaaz duly acknowledges Daily Dawn for allowing the reproduction of these articles.

Abdul Shakoor Sindhu
Islamabad
2 February 2009.

One

Karachi's Development and the Principles of Urban Planning

To overcome problems created by massive rural-urban migration, industrialisation, increased trade, a phenomenal rise in the number of vehicles, and their related environmental and socio-economic repercussions, Third World cities and governments have invested huge amounts in planning and in development projects. Some cities have done well while others have become increasingly degraded and difficult to live in. An analysis of the successes and failures of these cities in dealing with growth, points to four planning principles which if followed can help make cities less conflict prone, economically sustainable and liveable for the vast majority of their population. These four planning principles are discussed below.

One, planning has to respect the ecology of the region in which the city is located. Not doing so results in vulnerability to cope with natural disasters, depletion of subsoil aquifers, desertification of natural green areas, flooding, pollution of water bodies, the death of fauna, flora and areas of recreation, and an increase in environmental related diseases and stress.

Two, land use has to be determined on the basis of social and environmental considerations and not on land value alone. Not doing this is one of the major reasons for social conflict and fragmentation as it results in traffic congestion (which the best traffic engineering projects have failed to overcome); pushing the poorer sections of the population out of the city and thus

creating disparity, economic loss and social conflict; an increase in commuting time and hence in transport costs and mental stress; the death of multi-class recreational and entertainment space; and a loss of self-respect among the more marginalized population.

Three, development must cater to the needs of the majority. This "vast" majority consists of lower income and lower middle income groups. They are people who live in informal settlements, far away from their places of work; they are pedestrians, commuters, hawkers and run small informal businesses. In many cities development has catered to transport and traffic problems but has failed to cater to the economic and social well-being of this majority. Such cities may have beautiful planned elite areas but they also have high crime rates and social conflict due to which the rich ghettoise themselves thus increasing disparity and exclusion. Such cities include San Paulo, Rio, Mexico City, and Johannesburg. Karachi is well on its way to becoming like them.

And four, the tangible and intangible cultural assets and heritage of the city have to be protected. Doing this establishes social and political continuity and gives the people of the city an identity and a pride in its history. It also helps in bridging ethnic and class differences which is a priority since most Third World cities are now multi-cultural.

In the planning of Karachi and in the formulation of its development projects, none of the above principles have ever been considered and as a result environmental, social and economic conditions have deteriorated and continue to do so. It must be mentioned, however, that Karachi's master plans and the Karachi Development Plan 2000 did take some of these principles into consideration but then these plans were never implemented and nor did their provisions become law. We have ignored the ecology of the region in which Karachi is located. Due to this the regions subsoil aquifers have been depleted

because of excessive use. Recharging them is difficult, if not impossible, since we have lifted sand and gravel for construction purposes from the river beds and streams due to which storm water run-off cannot be controlled. This has resulted in the desertification of the Karachi region and the natural green areas that were a part of the metropolitan area of the city. We have also reclaimed mangroves and drainage channels for building elite townships due to which Karachi floods with the minimum of rains and due to which our natural flora and fauna have all but disappeared. Sewage is discharged into the natural water bodies destroying and/or polluting marine life and promoting environmental diseases.

Land use in Karachi is entirely determined by land value. As a result, wholesale markets, cargo terminals, storage and warehousing are in locations that add to traffic congestion and pollution. Space required for these facilities is now available only in katchi abadis which further adds to congestion, pollution and environmental degradation of already degraded settlements. In KDA Scheme - 33 alone, over 800 acres of amenities have been commercialised. In addition, about 30,000 houses in katchi abadis have been bulldozed since 2000 to make way for commercial development. Due to this a population of 270,000 has been rendered homeless or has shifted to areas outside the city. This relocation has caused a major deterioration in their socio-economic conditions, which is the last thing a government wishing to promote equity could wish for.

Previous and recent development projects in no way cater to the needs of the majority. There is no social housing programme for the city due to which katchi abadis are the only housing option available to the lower and lower middle income groups. Karachi's Mass Transit Programme has been in a limbo since 1977 and the most recent proposals for it are questionable in economic and also in environmental terms. Hawkers are evicted from their locations rather than being rehabilitated in an organised manner. They are removed from parks and recreation

areas due to which the poorer sections of the population (to whom they cater) no longer visit these areas. The needs of pedestrians and commuters have never been and are still not a priority. Unemployment is one of the major issues for the majority of younger Karachiites. They do not possess the skills for the jobs that the market economy and globalisation is creating. The institutions to provide these skills do not exist or are in a terrible state. There are no plans to upgrade them or establish new institutions.

The cultural heritage of the city is being systematically destroyed and can only be salvaged if its preservation is linked to a larger city development plan which takes into consideration the three planning principles mentioned above and removes lacunas in the present laws and regulations. These lacunas are well known to the authorities yet no action is taken to address them. Some of the mass transit solutions which are being proposed consist of building elevated transitways through the heritage zones which will destroy the little heritage that is left of Karachi's unique colonial architecture. That such transitways will be a disaster for Karachi's built-heritage has been well established, yet the proposals persist.

The new projects being developed along Clifton Beach, the non-transparent sale of Bandal and Buddo islands for development purposes to a private company, the continued encroachment on the mangroves and the proposed expressway from Jinnah Bridge to Quaidabad are all in violation of all the four principles discussed above. However, the donkey-cart race patronised by the Sindh Governor recently was a step in the right direction. One hopes that it was not a one off affair and will be institutionalised. Similarly, the protection of the part of Clifton Beach in the city government possession from commercial construction is a welcome step. One hopes that more such steps will be taken to protect Karachi's natural environment and promote a more citizen friendly physical environment.

A new Karachi master plan is under preparation. It is recommended that the four principles mentioned in this piece should be enshrined in the plan and the rules, regulations, procedures and institutions required to implement them should be developed. A city is much more than an "engine of growth" and making it "investment friendly" cannot be achieved simply by "improved investment-related-infrastructure" and security systems but by seeking to remove the causes of poverty, exclusion and social conflict. Sensitive physical planning can help in achieving this objective.

Two

A Development Plan for Karachi

The purpose of a development plan is to create a physical environment and support structures that promote social harmony, economic betterment, and improved health conditions. An understanding of the city and its trends is a prerequisite to preparing such a development plan. A lot of material on the city is already available. However, gaps have to be identified and for that further research is required. A synopsis of what we know is given below.

Demographic Trends

An analysis of the 1998 census tells us that the vast majority of Karachiites are young, literate, increasing unmarried and increasing unemployed. Studies reveal that they are also alienated from mainstream politics and consider the absence of entertainment, culture and employment to be their main problems.

Employment

About 75 per cent of Karachi's working population works in the informal sector. Over the years this sector has developed strong links with the formal economy. Structural adjustment and globalization of the economy are having an adverse effect on the informal economy. Unless this economy is supported and or the

formal sector expands through local and global investment, unemployment is going to increase. Absence of physical infrastructure and reliable utilities, corruption and insecurity are some of the reasons that prevent the formal sector from expanding.

The housing supply gap

About one-third of Karachi's housing demand is met through the formal sector. This demand supply gap is densifying existing settlements, creating katchi abadis and vulnerable populations, pushing the poor to the city fringes and increasing the rich-poor divide. It is also increasing transport problems and creating difficulties for the poor in accessing health and education facilities.

Sewage

Most of Karachi sewage has been planned informally (and also formally in most cases) to dispose into the natural drainage system. Government plans however, are for taking this sewage to the sewage treatment plants through trunks laid along the main roads. Government plans conflict the reality on the ground and as such treatment plants receive no more than 20 per cent of the sewage. Raw sewage thus pollutes the sea. This has caused immense environmental degradation and ecological damage. Alternative to government plans have been presented by NGOs which can solve this problem effectively in economic and technical terms.

Water issues

40 to 50 per cent of water leaks out of the system in Karachi or is tapped illegally. Valves have been removed from the system, pumping stations are not maintained or there is a mismatch between pump sizes and the pumps, leakages have not been Identified and a system of management at the Union Council

(UC) level has not been developed. The physical rectification of the system and its management cannot take place without mapping the existing infrastructure. This work too has been done for certain areas of the city and pilot projects for rectification have been initiated within certain Ucs.

Solid waste management

Solid waste does not reach the existing land-fill site for two reasons. One, that there is only one land-fill site and as such it is too far away from most of Karachi. Two, that the recycling industry is located within the city and as such garbage is sorted within the city for recycleable material and is then transported to the recycling units. Detailed studies of this problem and its financially viable solutions have been prepared both by NGOs and by government agencies.

Transport issues

Karachi's major problem is transporting people from the suburbs to their work areas. More specifically from North Nazimabad, Orangi, Baldia, Landhi-Korangi and Gulshan to the Central Business District, Saddar, SITE, Landhi-Korangi Industrial Estate and the Steel Mills. This can be done through the circular railway and its proposed extensions. If this is done, the nature of inner city mass transit required for Karachi will be very different from what has been previously proposed. Also, commuters have increased to an extent that a exclusive right of way for mass transit vehicles is required. Protected bus lanes have therefore become a necessity for the main corridors of the movement. In addition, bus depots, bus terminals and bus workshops are required for both intra-city and inter-city buses.

Traffic

There is a need for a larger traffic plan for the city which segregate through and local traffic not only at the city level but

also at the sector and neighbourhood levels such as Saddar, Napier Quarters, Old Town Quarters, Khadda, Lyari, Sher Shah. The Northern Bypass which is being built will take port traffic out of the city. However, the wholesale markets (Dhan Mandi, Chemical Market, Metal Market) and small scale industrial activity which exists between M.A. Jinnah Road and Estate Avenue will continue to generate heavy traffic in its narrow lanes. These activities are also increasing and further densifying already heavily dense areas. In addition, these activities are building their warehouses in various Karachi katchi abadis which in the long run will create further congestion and traffic problems. It is necessary that the wholesale markets and industrial activities are shifted to the Northern Bypass. However, for that to happen, the original plan of the Northern Bypass (68 kilometres) will have to be restored. The present modified plan is hardly a bypass and it opens up very little land for Karachi's increasing needs.

Built heritage

Karachi's rich built heritage is located in the areas which have been taken over by small scale industrial activity, wholesale markets and warehousing. Thus, this heritage is rapidly disappearing in spite of attempts at identifying and listing buildings for protection. If the proposed traffic and transport proposals are implemented, the possibility of salvaging Karachi's heritage will become easier.

Absence of a shared space

The city desperately needs the creation of a space of entertainment and culture that can be shared by all classes. If such a space is not created, nurtured and institutionalized, the ghettoization of the rich will continue with the demand for an increase in security services and armed guards. This will further utilise the city.

Noise and air pollution

The implementation of the transport and traffic proposals will help minimize air and noise pollution. What is required further is a financial proposal for facilitating the introduction of CNG as an alternative fuel for all public transport.

Health

With the increasing withdrawal of subsidies, curative health care has become out of reach for the vast majority of Karachiites. Preventive health programmes therefore are a priority and need to be funded and promoted. NGO programmes point a way out. In addition, most of Karachi's preventive health institutions consist of small private clinics for whose provision no building rules and regulations exist. Thus, strictly speaking they are illegal and many of them provide health service by paying bribes to government agencies.

Education

Like health, subsidies on education have also been withdrawn. The vast majority of Karachiites receive education through formal and informal private schools and tuition centres. These institutions exist in people's homes which have been converted for education purposes. They too are strictly speaking illegal because they violate government land-use regulations.

Culture

There are many Karachi events which the state can support and convert into multi-class events. In addition, there is a need for a proper zoo, a metropolitan museum, a contemporary art museum and the linking up of these institutions with the educational institutions (especially schools) to create a Karachi identity and culture.

Karachi Master Plan Department

It is necessary to create an effective planning agency for Karachi. Proposals for such an agency have already been put forward and have been notified. This should be a priority.

Building and zoning regulations

Karachi's building and zoning regulations have been derived from the post-Second World War urban development model based on the welfare state. As such, they are anti-pedestrian, anti-mixed landuse and do not have the possibility of supporting the manner in which health, education and small scale commercial activities are delivered in Karachi. As such, they are irrational and will always be violated or will result in gross injustices, further fragmenting society.

Integrating formal and informal

It is important that the formal and the informal (planned and unplanned) are integrated. This integration cannot take place without a documentation of both. Such a documentation is missing and a special department needs to be created within the planning agency to carry out this work with help from relevant NGOs and citizen's groups.

Transparency and consultations

Karachi is a city littered with failed developed projects. It is interesting to note that professionals and citizen's groups had predicted the failure of these projects for the very reasons for which they failed. These projects include the Metrovilles, the Greater Karachi Sewerage Plan, the Lines Area Re-development project, the ADB funded Baldia Sewage Project and the Karachi Mass Transit 1992 Proposal. To avoid such failures it is necessary to: i), advertise all projects at their conceptual stage and exhibit them at a central place; ii), establish a steering

committee of interesting groups to study the concept and invite public opinion on them; iii), project development and implementation should take place under the supervision of the steering committee; iv), accounts of the project should be made public every three months; and v), one government official should be in-charge of the project from its inception to completion. In addition, the government agencies should publish a list of their real estate assets along with their landuse every year.

Three

The Mega Projects that Karachi Needs

Two mega projects are under construction in Karachi. One is the Lyari Expressway and the other is the Northern Bypass. The Lyari Expressway at best is a controversial project. It has been criticised by academics, professionals and NGOs. In spite of this criticism it is being built without any public consultation or consideration of the concerns that have been raised. The Northern Bypass is an extremely important project for the city. However, it has been curtailed to subsidise the Lyari Expressway. This curtailment is not in the interest of the city either as has been discussed in numerous articles in the print media. Unfortunately, no landuse plan has been developed for either of the projects and the necessary social and environmental impact studies required for such planning have not been carried out. Such studies are normally a part of the project design and an Environmental Impact Assessment is required under law. In addition to these two mega projects, the twenty-nine billion Rupees Tameer-i-Karachi Programme is also being implemented. This programme seeks to improve the existing Karachi infrastructure and surprisingly considers roads, bridges and flyovers; sewage, water and solid waste management; and GIS as something separate from a city master plan. Consequently, it has already identified 256 schemes in different sectors without a master plan being in place. However, none of the mega projects whose implementation would bring about major physical and social improvements in Karachi and pave the way for the city's economic revival are being considered for

design and implementation. These projects have been discussed for the past two and a half decades by government planners, academics, professionals, concerned citizens and NGOs.

One such mega project is the construction of double tracks from the Karachi Port to Pipri where a container terminal can be built. This will remove all container movement from the city and enormously benefit trade, commerce and industry. Another project is the construction of an oil pipeline from the refineries to an oil terminal outside of the city. At present, oil is pumped from the oil terminal in Keamari to the refineries and then pumped back to the Keamari oil terminal from where tankers carry it through the city to various locations in Pakistan. The building of the pipeline will remove 25,000 oil tankers from the streets of Karachi. Another mega project is the shifting of the Dhan Mandi and the Metal and Chemical markets from the inner city to the Northern Bypass and the development of infrastructure to make that possible. However, this shifting should not be carried out in the unscientific and non-transparent manner in which the shifting of the Karachi Sabzi Mandi has been designed and implemented. It should be done with the involvement of the mandi operators and other interest lobbies and space for future expansion and labour housing should be an integral part of it. By this relocation more than 4,000 trips per day of heavy vehicles will be removed from the inner city and numerous properties will be vacated making an urban renewal plan for the inner city possible. It is heartening to note that the Karachi Iron and Steel Merchant's Association has initiated this move and are negotiating to shift their workshops, godowns and manufacturing units from the inner city to near the Steel Mills. However, the city government planning agencies have to make this shifting a part of a larger inner city rehabilitation plan without which the advantages of such a shift will be negated by the development of inappropriate landuse in the inner city. And finally, the construction of the circular railway and its extensions into the suburbs which will remove a major part of the commuting public from increasingly congested road

corridors to the comfortable environment of a railway system, reducing travel time and the hazards of air and noise pollution related diseases. The conversion of public transport to CNG, though not a mega project, would complement the projects mentioned above. Research on the possibilities of initiating this conversion process is currently being carried out by Karachi NGOs through dialogue with other transport related interest groups.

The environmental, social and physical benefits of these projects are obvious. They will also be of enormous benefit to trade, commerce and industry. They will help in the revival of culture, recreation and entertainment, both at the city and at the neighbourhood level. Culture and recreation related activities are adversely affected by massive environmental degradation, environmental related diseases and the loss of time in commuting. Without the building of these mega projects, the physical infrastructure improvement plans proposed by the Tameer-i-Karachi Programme will only marginally improve physical conditions (and that too for the time being) but will certainly not solve Karachi's larger development related problems.

What one fails to understand is why these important projects which have been discussed for over two decades and which can bring about such positive changes for the city's economy and its physical and social environment, are not implemented, especially when they can repay their cost with interest over a ten to twenty year period. Their non-implementation is certainly not because of a lack of funds. When the government wishes to implement a project it finds the funds for it. For example, the Kuwait Development Fund has been mobilised for funding the Lyari Expressway and twenty-nine billion Rupees are being mobilised to fund the Tameer-i-Karachi programme.

Published in Daily Dawn, Karachi, 25 February 2004

Four

What Karachi Requires

"The road to hell is paved with good intentions"

English proverb

The Local Body Ordinance was imposed on us by an unelected government in 2001. It was supposed to be the panacea for all our governance and development related problems. Through indirect voting in a ruthlessly manipulated political system based on coercion and the buying and selling of loyalties, 2,314 councillors in a city of 13 million cast their votes for electing our first Nazim. He was in office for four years and during this period conditions with regard to employment, water supply, sanitation, drainage, education, traffic congestion and management, transport, security and electricity continued to deteriorate while our cultural heritage was destroyed as never before. The Nazim also initiated the preparation of a "master plan" for Karachi and ordered that it should be completed in six months, something that was humanly impossible for such a large city especially when its physical and social conditions had not been monitored since 1978 and nor had they been documented since the questionable documentation for the UNCHS supported Karachi Development Plan 2000 in 1987. What is more surprising is that professionals and consulting firms, throwing professional ethics to the winds, did not only bid for this impossible task but did everything possible under the sun to undercut each other to get the contract. As a result, it took more than nine months for consultants to be selected for this six-month assignment. The local government during the tenure of

the first Nazim did build roads that eased the flow of traffic but many of these have since been washed away and almost all of them were flooded during the recent rains. He also built a number of parks most of which are not being maintained. However, he had a reputation for being honest and sincere, something rare in this age of public cynicism.

Our present Nazim has been elected through the same process of indirect votes and has been in office since September 2005. During his one-year tenure deterioration in all the sectors mentioned above has continued to an extent that people have stopped believing that things can improve. They are angry and frustrated. The Nazim has been preoccupied with the removal of traffic congestion and provision of drainage for the city, both important issues. For the former he has initiated grand projects such as flyovers and under-passes; signal free roads (which are a disaster for pedestrians); and proposed an elevated expressway from Jinnah Bridge to Quaidabad. These decisions are not a part of traffic, transport and landuse plans for Karachi for such plans do not exist. As such, these decisions, unrelated to larger planning realities, are ad-hoc in nature and like similar projects for Karachi in the past, and for other Third World cities such as Manila, Bangkok, Cairo and Tehran, they are not going to deliver. Decisions taken with regard to regulating the movement of trucks, eviction of hawkers from Saddar, removal of smoky buses and the shifting of illegal cargo and transport terminals (all well intentioned) have backfired because of an absence of an understanding of landuse and socio-economic issues. Meanwhile, the reclamation of Karachi's nullas and mangrove swamps for housing the elite and for gentrification continues, making it increasingly impossible to drain the city during the monsoons or to maintain the outfalls.

The provision of housing, transport, and employment, in our context, are the most important requirements of city planning. However, since the present devolution plan was put in place, no social housing programmes have been initiated as a result of

which katchi abadis continue to grow. In spite of the fact that there are no social housing schemes, local government has demolished over 22,000 houses in the last five years, many of them in notified katchi abadis, making over 200,000 persons homeless. This process is pushing the poor out of the city, far away from places of work, recreation and health facilities. It is depriving school going children of their schools and family members, especially women, of their jobs, thus impoverishing the impoverished even more. This, along with unemployment, has increased social conflict and crime in an already fragmented city, the last thing that any city would want. The recent attempt by local government for providing housing for low income groups in Taiser Town is based on a strategy that failed miserably in the 1980s. The failure of this strategy has been documented in great detail by researchers and alternatives have been suggested. Obviously, the city government politicians and planners are unaware of this. In addition, the Taiser Scheme, even if we assume (a big assumption) that its plots will reach the target group, is on too small a scale to make a difference. Decisions regarding a mass transit system for the city have yet to be finalised. Newspaper reports suggest that there is utter confusion regarding this important programme although it has been studied to death since 1972. Meanwhile, the destruction of Karachi's built-heritage has further increased (aided by serious anomalies in KBCA bye laws and provincial legislations which no one wishes to address) and the roads and services infrastructure, where this exquisite heritage is located, lies in ruins. Developing workable plans for its rehabilitation is not a priority.

It is true that much of Karachi's problems have not been created by our two nazims; they have inherited them. It is also true that the city government does not have control over large areas of the city that "belong" to federal agencies and cantonment boards. However, conditions are going to become much worse unless the decision-making power in Islamabad and the well-intentioned local government in Karachi realise that Karachi's

problems cannot be solved by poorly conceived, badly planned and uncoordinated mega projects, local and international consultants, foreign loans, master plans based on faulty TORs and grossly inadequate information, and fancy visions for a city that deny its existing realities. Karachi's problems can only be solved by understanding and respecting the ecology of the region in which Karachi lies along with the physical and socio-economic assets that the city possesses; learning how to manage and maintain these assets; and planning to build on them rather than ignoring or discarding them in favour of building high profile parallel systems that serve only a small percentage of the city and that too inadequately. For example, the circular railway corridor exists and can be rehabilitated and extended, yet we are preoccupied by promoting economically unsustainable and environmentally questionable projects such as the Maglev Rail Project for Corridor - 1.

What has been suggested above can only happen if four important things are put in place. One, political decision-making has to be informed. This can only happen if proper research and monitoring of Karachi's development related issues is done on a continuing basis and through the establishment of a process of consultation between those who have knowledge and information, interest groups and the politicians. The former requires an effective and independent institution and the latter an institutionalised process supported by politicians who have humility, love and affection for the city and its people rather than a megalomania for quick fix mega schemes. Two, informed decision-making has to be turned into realistic plans. This can only be done if effective institutions, manned by competent and well-paid professionals are created. The city government does have competent professionals in certain departments but they have diminished in number over time and are not supported by a properly organised middle and lower level cadre. In addition, these institutions have to have rules and regulations that are followed so that they are not subject to constant political interference leading to ad-hoc

transfers and appointments, corruption and ineffectiveness. For instance, more than one professional in the city government has said to me that they are given orders to do such-and-such in such-and-such time but there is no organisation below them to effectively carry out such orders or even to support them in the planning process. Three, the plans have to be implemented. For this a transparent and accountable system of tendering, supervision and monitoring has to be put in place which involves community representatives and interest groups. There is a serious need to revisit the existing system and question the PC-1 and PC-2 process which are the basis of most of the problems related to transparency and accountability. And four, development has to be managed and maintained. Again, institutions at the city, town and union council (UC) level have to be created and sustained for this purpose and a process of coordination put in place. At present, at the UC level they do not exist and at the town and city level, they are weak, fragmented and badly housed and badly maintained. It should also be understood that consultants, however competent, cannot replace effective government institutions. As a matter of fact, a consultant is as good as the city government organisation that monitors and evaluates his work and provides him with necessary guidance. In the same way, a plan is as good as the institution that implements it.

The development and consolidation of the institutions mentioned above are a priority for Karachi and without them the city's sustainable growth and management that benefits the vast majority of its citizens, cannot take place. If our Nazim and the power in Islamabad can create these institutions, along with short term measures to mitigate the years of neglect, corruption and the fleecing of Karachi, it will be a far greater "gift" to the present and future citizens of the city than all the underpasses, expressways, fountains and creek cities that are being built and conceived.

Five

Planning for Karachi: An Agenda for Citizens and NGOs

Planning, like politics, is the art of the possible. Therefore, planning can only be effective if it relates to the social, economic and political reality of the society and region it is meant for. For Karachi, there are four major realities that must be taken into consideration if planning and its implementation is to be doable. This article discusses these realities. Good governance is a necessary component of the planning and implementation process. An important aspect of planning related governance is the relationship between the various actors in the planning and development drama. The more equitable this relationship, the more appropriate and realistic planning will be, Karachi's concerned citizens, NGOs, CBOs and interest groups, should therefore aim at making this relationship more equitable. This article also attempts to promote a possible agenda for this purpose. But first the realities.

The first reality is that much of Karachi's physical and social sector facilities are provided by a non-formal sector of entrepreneurs and so-called mafias, often in defiance of state rules and regulations. The scale of their activities, which is increasing every day, is enormous. For example, Karachi requires about 80,000 housing units every year. However, between 1987-92, building permits were issued for an average of 26,700 housing units per year. Of these, only 3 per cent were supported by loans from the House Building Finance

corporation (HBFC). Part of this large demand-supply gap is taken care of by dallals through the creation of approximately 28,000 housing units each year in katchi abadis. A minimum of 1,000 acres of state land is occupied every year in the process for which poor communities pay a minimum of 560 million rupees to dallals and corrupt government agencies. The rest of the demand-supply gap is taken care of through densification of existing inner city areas, illegal construction in planned areas and postponement of construction. Strictly speaking, all housing activity without building permits is illegal.

Similarly, 30 per cent of Karachi's 6,450 tons per day solid waste is recycled or used as fuel for pottery kilns. The recycling industry, which has an estimated turn over of 1.2 billion rupees per year and which provides employment, directly or indirectly, to over 40,000 persons, also operates in defiance of state laws and regulations. It is estimated that 30 per cent of the time of the Karachi Metropolitan Corporation (KMC) solid waste management related staff and vehicles is spent in working informally for the recyclers.

In the field of transport, Karachi depends entirely on the private sector. The vast majority of the 15,000 plus Karachi mass transit vehicles are individually owned and have been purchased by informal loans at about 100 per cent per year interest. It is these money lenders who for the most part control Karachi's transport today and are likely to do so for the foreseeable future. Bus owners have paid back an estimated 24 billion rupees to these money lenders for their vehicles. These buses, especially the mini buses, operate in areas where there are no roads and link Karachi's unserved low income suburbs to the city. No formal bus company would operate in these conditions. In the same way water tankers are purchased and according to the Water Tanker's Association, they operate over 50,000 trips a day with a daily turn over of 10 million rupees.

In the field of employment, according to the Karachi Development Plan 2000, 75 per cent of jobs in the city are

generated by the so-called informal sector which increasingly services the needs of formal sector industry and produces cheap consumer items for the low and lower income groups. In 1974, this "informal" sector employment was calculated at 66 per cent. Similar figures can be quoted for water and sewage infrastructure in low income katchi abadis and lower middle income planned areas. The list is endless.

Most of these services providers have now come of age. They have formed associations to protect and promote their interests. The city cannot function without them and the state is in no position to replace them. They constantly lobby with government agencies for infrastructure and support for their activities. There is a need to make use of their knowhow, support their good practices and get them to agree to regulate their damaging ones. But that can only happen if a sympathetic understanding of how they operate can be arrived at and through a dialogue with them. Such an understanding already exists with a number of Karachi NGOs and professionals who are constantly in touch with them and have documented their work.

The second reality is that every plan for Karachi has emphasised that urban management of what exists should be the top priority for the city and that we should build on what we have. However, priority has not been given to this recommendation. On the contrary, priority has been given to promoting plans that are not compatible with the social and economic realities of the identified beneficiaries or to grandiose projects that are capital intensive and environmentally disastrous. Most of these grandiose projects are not implemented even through crore of rupees are spent on designing and promoting them. The metroville projects had to be abandoned since they could not meet their objectives and could not attract the target group. The Lines Are Redevelopment Project has created a high density slum in the city centre and deprived the city of valuable land for its desperately needed urban infrastructure. And this, only because it was based on wrong wishful assumptions. The 3

billion rupees (in 1991) Lyari Expressway Project, promoted in its various forms as an alternative to the Northern Bye-Pass, has also been abandoned. Environmentally it would have been a disaster, since it would have taken heavy diesel vehicles from the port to the Super Highway through the city centre. In addition, it would have opened up land speculation, introduced degraded land-use practices in the heart of the city and displaced 25,000 houses, businesses, schools, health facilities and infrastructure worth at least 8 billion rupees! All this was foreseen by opponents of the project. Similarly, the present mass transit proposal for a 13 kilometre corridor costing 668 million US dollar has been in the doldrums for the last 6 years for financial reasons. It will be an environmental disaster and will not be affordable for poorer Karachiites. Similar projects in other Third World cities have not solved transport and traffic problems. Cheaper to build, environmentally friendly and much larger scale alternatives are staring us in the face. Also in these 6 years no attempts to improve the existing transport modes have been made, even though 85 per cent of Karachiites will still be using them even if all 3 mass transit corridors are ever completed.

It would not be out of place here to mention that 470 million rupees were spent on the preparation of the Karachi Development Plan 2000. It was not implemented for a number of political and technical reasons, which should have been foreseen as they were by certain observers and evaluators of the plan. Similarly, the Greater Karachi Sewage Plan has ignored existing ground realities. It has not even documented the community and councillor built infrastructure that serves the needs of the majority of Karachiites. As a result, the treatment plants function at only a fraction of their capacity and implementation of the Baldia project, which is part of the Plan, has been a failure. As a result, 400 million rupees have literally gone down the drain. NGOs and professionals have presented alternatives to the Plan that would bring down costs to 15 to 20 per cent of the current estimates simply by catering to ground

realities. Large water schemes are also being developed but so far no serious attempt has been made to plug the major leakages in the system through which 40 per cent of Karachi's water is lost. And then there are a number of flyovers that have been, or are being constructed, which make no sense to a number of private and government employed traffic and transport specialists. Most of these grand projects have been designed by teams of local and foreign consultants and have received technical assistance from donor agencies. Many also have large loans attached to them.

From the above discussion, it seems that contractors, consultants and loan pushing agencies are determining Karachi's physical and hence social development, or lack of it. Even if well-intentioned, they have powerful financial interests in this development game. Karachi's concerned citizens, NGOs, CBOs, interest groups and service providers have at various times objected to many of these projects but often not at the initial stages of the project and seldom collectively. Their involvement at the conceptual stages of the project is essential so that the projects can be compatible with reality. Also, to give seriousness to their objectives, they should be technically sound and for this they need professional assistance.

The third reality is that land in Karachi is treated unashamedly as a commercial commodity and not as an asset for the benefit of the city. A powerful informal politician-bureaucrat-developer ("formal" and "informal) nexus gobbles up not only all state land, legally or illegally, but also land in ecologically sensitive zones. This deprives the city of space for recreational and cultural activities and for infrastructure for its transport, cargo and storage related requirements. It also deprives the city of its natural environmental assets. Communities and NGOs are constantly struggling to protect open spaces, prevent the misuse of amenity plots and stop natural drainage channels from being encroached up. Many lives have been lost in this struggle and many NGO activists have been threatened, beaten and

wounded. Where the title and land-use of the land under dispute has been clear, NGOs and citizens' groups have had greater success in protecting land.

The fourth reality is that no radical institutional reform for Karachi is possible unless there is a consensus between the different political groupings and the establishment which are all pulling Karachi in different directions. This consensus relates to Karachi's position in Sindh and the relationship of the provinces with the Centre. It must also be understood that while a metropolitan government is preferable for a large city, we cannot wait for it indefinitely. Also, that a metropolitan set-up does not necessarily mean a solution to Karachi's problems. Many Third World cities have metropolitan governments, but conditions in many of them are worse than in Karachi, with little hope for the future.

However, one thing is clear from examples from all over the world, that if what is now called civil society, can be involved in planning and its implementation for its city, conditions and institutions improve. But for this civil society must have an agenda that strengthens its negotiating power with the establishment and makes its relationship with the powers that be more equitable. To this end, Karachi's citizens, NGOs, CBOs, professional organisations, service providers and those government agencies that are already involving interest groups in their work (such as the Traffic Engineering Bureau of the Karachi Development Authority) or supporting the work of communities (such as the Sindh Katchi Abadi Authority) should come together to promote and institutionalise the following four point agenda. One, a space for interaction between government agencies, interest groups (formal and informal) and communities must be created, nurtured and institutionalised over a period of time. This means that citizens and interest groups have to be supported by scientific research and the media so as to interact effectively with government agencies and deeply entrenched vested interests in the development,

consultancy and real estate business. Two, all plans at city, sector and or neighbourhood level must be publicised at the conceptual stage and objections and suggestions should be invited especially from formal and informal interest groups, professional and academic institutions, and from the beneficiaries and victims of the plans. All costs should be stated upfront. Only after this process, should detail work on the plans be undertaken. Three, steering committees for various policy decisions, plans and implementation processes must be created. These steering committees must have a representation of NGOs, relevant formal and informal interest groups (for example, transport related plans, representatives of the formal and informal transporters must be on the committee) and professional expertise in them. In addition, these committees must have executive power. And four, all public sector institutions must prepare and make public a list of their real estate holdings, its current and proposed land-use and market value. Such real estate holdings should by law only be used for the benefit of the city and its poorer sections of the population strictly according to a master plan and not as a commodity or for the development of ad-hoc commercial complexes. In addition, no land-use change should be permitted without proper public hearings and again decisions on them should only be taken by committees of interest groups, NGOs, concerned professionals and representatives of communities which are likely to be effected.

The implementation of this agenda will go a long way in promoting institutional reform and city plans that are realistic and doable. It will promote transparency and accountability and at the same time it will strengthen the movement for a politically acceptable local government reform.

Published in Daily Dawn, January 1999

Six

Densification of Karachi

I gather from press reports, emails and visits from fellow architects that the Government of Sindh has decided to get the Karachi Building Control Authority (KBCA) to revise its building by-laws and zoning regulations to increase floor area ratios all over the city and in the business and commercial districts in particular.

A report in the press also mentions that the chief minister even favours the construction of 100-storey buildings in the metropolis.

In layman's language, the floor area ratio (FAR) lays down the area one can construct on a plot of land. For example, if the FAR is 1:6 then on 1,000 square yards one can construct six times the plot area (or 6,000 square yards) and the building can be any number of storeys unless there is a height restriction under the by-laws.

The reason being given for increasing the FAR is that it will make investment in building and real estate more attractive. It is hoped that this step will also attract foreign investment and reverse the decline in the real estate and construction business. However, it has to be understood that the real reason for this decline has less to do with a low-density FAR and more to do with political uncertainty, a looming economic crisis, lucrative opportunities in the UAE for real estate investments, and the graft, corruption and complicated and time-consuming

procedures involved in getting building approvals.

Increasing the FAR means the increasing of densities. It can be argued that Karachi is a low-density sprawl as compared to other mega cities, except for certain areas of Gulistan-i-Jauhar, Lyari Town and parts of Liaquatabad. The latter two have high densities in complete violation of building by-laws and zoning regulations. It is also true that transport systems and utilities are relatively expensive to operate and difficult to manage in large, low-density decentralised cities, especially huge ones like Karachi. Also, transport systems in such cities are less likely to be efficient as compared to those in high-density centralised cities.

An increase in density means an increase in the number of persons living or working per unit of area (which in our case is calculated per acre). This increase requires a corresponding increase in infrastructure in terms of water, sewage and electricity. It can be argued that this can be augmented over time as has been done in many other cities of the world.

However, it is difficult to understand how we will manage this given the financial and managerial constraints faced by our planning and implementation agencies, and the absence of political will and a consensus between the different actors in our urban drama on overcoming these constraints.

An increase in density means an increase in vehicular and pedestrian traffic and requires additional road space and improved transport systems. The question therefore is how much more traffic (if any at all) can the existing road network in the areas which the KBCA wishes to densify accommodate before clogging them up completely? Also, can the existing transport system take care of the additional number of people that will move in and out of the densified areas or will they remain stranded on the roads for hours?

If available data is to be believed, and there is no reason why it should not be, Karachi's central business district (CBD) at present requires transport systems that can cater to at least 20,000 passengers per hour. This can only be provided by segregated light rail and metro or through a rapid transit system of buses. Karachi's transport system in the CBD currently caters to no more than 3,000 to 4,000 persons per hour and is under increasing pressure. Therefore, increasing the FAR has to be accompanied by the building of high-capacity mass transit systems in the transport sector and improved traffic management. The provision of appropriate transport systems to cater to high densities will require at least a decade to plan and complete after decisions regarding them are taken.

Normally questions related to densification and the nature of the linkages it requires with transport and utilities are determined by an urban design exercise which takes place as part of the structure or development plan for a city. Such an exercise is carried out separately for different areas.

For Karachi's commercial districts this would require at least a year of work (after the terms of reference have been developed and consultants appointed), another six months of analysis and stakeholder consultation before by-laws can be framed and may be another few months before they become law. From the look of things, this process will not be followed and ad hoc decisions will be taken as they have been taken in the past.

It is therefore suggested that the increase in the FAR which the politicians are seeking should be determined (if an urban design exercise is not politically possible) by the number of vehicles an area can accommodate and the existing transport facilities in that area. These are not difficult to calculate and the city government has very competent planners and technocrats who are capable of doing this and more.

Since by-laws are being revised for the business districts as

well, it is essential that at least 30 per cent or even more of all built-up area should be reserved for residential accommodation, for two reasons. One, it will reduce the use of cars and public transport if persons working in the area also live there. And two, the area will not die at night, as it does today, and in the process expensive infrastructure and utilities will be fully utilised.

Cities that have grown without proper urban design exercises or without rational FAR controls during their periods of economic growth and investment, like Bangkok and Manila in the '80s and '90s, have immense traffic- and transport-related problems which even mass transit systems and the building of scores of kilometres of expensive expressways and signal-free roads have not been able to overcome. Karachi must not be allowed to suffer such a fate. We still have time.

Seven

Architects, Local Government and Karachi's Buildings and Public Spaces

A discerning visitor looking at buildings and public space in any city can easily assess four things. These are the state of the architecture and planning professions in the city; the quality of education provided by academic institutions in these disciplines; the culture of the local government representatives, decision makers and the elite; and the state of civic agencies. Karachi scores poorly on all four counts.

Over the last decade and a half, a very large number of institutional and public use buildings have come up in Karachi. These include schools, colleges, private sector universities, additions to public sector universities, hospitals, maternity homes, pedestrian bridges and administrative buildings. Except for a handful they are all climatically unsuitable, functionally inappropriate, aesthetically displeasing and of no particular architectural style. Most of them are aggressively monumental and adorned with fake Islamic symbols. The architecture of the marriage halls is better for at least it has a certain style and reflects its function and the culture of its users.

A few good commercial buildings have been built in Karachi, especially in the last decade. However, most of them fit badly in the urban landscape adding to vehicular congestion at their entrances and exit points, especially to their car parking spaces.

This is more serious in the congested central business district and the old city and on the corridors that have been declared "commercial" by the city government. The reason for this is that byelaws and zoning regulations for these sensitive areas have been developed without urban design exercises. An urban design exercise relates various social, environmental, architectural, heritage, governance and infrastructure issues to each other and to the larger city context. Such exercises have never been carried out for any area of Karachi although volumetric studies for the planning of Nazimabad were carried out in the 1950's. It is a matter of concern that in this city of 15 million no academic institution offers a degree in urban design, conservation or in urban and regional planning.

In recent times, a lot of monuments on roundabouts have been built by commercial concerns as a "gift" to the city. Again, most of them are aggressive and aesthetically displeasing if not downright ugly. In many cases, the roundabouts and the green spaces developed in them are inaccessible to citizens. In addition, the city is becoming increasingly unfriendly to pedestrians and to the hawkers and vendors that serve its lower income citizens. Pavements have disappeared and away from the VIP corridors where the majority of Karachiites live, they are non-existent. There is no planning for accommodating activities that evolve around bus stops or a proper relationship between them and pedestrian bridges. There are no pedestrian prescients or enforcement of rules related to zebra crossings. Being a pedestrian is simply hell in Karachi and this hell is increasing with every passing day.

The issues above do not say much for the architectural and planning professions. The vast majority of their members produce bad work. Also, as professions they have failed, unlike in many other countries, to influence the decision makers and their clients. They must honestly ask themselves why this is so. The issues above do not say much for the decision makers and clients either. The present state of architecture and public space

is the result of their bad taste, wrong priorities, neglect of heritage, lack of interest in the needs of the pedestrian and commuting public and their failure to involve the best in the profession in the development of the city. It is only through such an involvement that they can develop the necessary knowledge and institutions required for the creation of a better physical and hence a better social environment.

For instance, the building of the Muhammad Bin Qasim Park was well-intensioned and is a great contribution to the city of Karachi. However, if a conservation architect had been associated with it, the new construction would have been somewhat different in colour and texture from the Jahangir Kothari Parade so that the Parade would stand out as a historic monument of a different age. Also, if architectural profession had been associated, it is unlikely that the fences would have blocked the view to the ocean and to the entrance pavilion to the Parade. May be certain aspects such as the street of sea shell and fish vendors would have been preserved in the design; the physical and social relationship between the mazar, vendors and the ocean (which had evolved over time) would have been respected; and the relationship of the various functions within the mazar would have been enhanced rather than violated. And perhaps lime mortar instead of cement would have been used for conservation related work.

The recent development projects also point to the need for a major improvement in management and technical skills within local government agencies. The flyover and underpasses which have been built, except for the Hino Chowk flyovers, are of a very poor quality as compared to those built in other Asian cities. Also, no project is ever completed. Debris is not lifted, the last paving stones and manhole covers are not installed, the spaces below the flyovers in many cases remain in shambles for months after the completion of the flyovers. The massive road works that have been carried out in Karachi over the last few years have resulted in terrible sufferings for the people of this

city simply because of poor planning and management. The question one is forced to ask is whether this was because of professional constraints or simply because the decision makers did not care?

To create a better physical environment, the architecture and planning professions and the decision makers have to come closer together and this relationship should be institutionalised. The professions should create a cell with full time architects working in it for this purpose. Given the large and lucrative architectural practices in this city, the cost of such a cell can easily be afforded. The local government should consult with this cell on all architecture and planning related issues. It should also be decided that for all institutional buildings architectural competitions will be held and will be judged by an international jury. In addition, international urban design competitions should be arranged (through an association of the professions and local government) for Saddar, the inner city and the new developments on the Northern Bypass. These competitions should be exhibited in a big way and discussions, with NGO and CBO involvement, should be arranged around them. This will not only create an awareness of important urban design and architectural issues but, if properly managed, will also create a new vitality in the professions and in local government institutions which Karachi desperately needs. Many cities, such as Istanbul, have benefited enormously from such a process. However, for the process to be meaningful, professional institutions and local government agencies have to have a certain level of dedication and competence. How does one assess this? If it is not there, how does one create it? These are important questions that need to be answered.

In the print and electronic media many commentators constantly point out that our people do not follow rules and regulations, they are rowdy and in some cases the word "uncivilised" has also being used. However, it has to be understood that the physical environment to a very great extent determines how

people behave. The difference is obvious if you compare how people behave at the Divo bus terminal or at the airport as compared to Badami Bagh or the Cantonment Railway Station. The same difference was visible when travelling in a Karachi mini bus as compared to the green bus (when they functioned) although the people in both cases were the same.

Eight

"Illegality" and the Built Environment in Karachi

Illegality has been put in parenthesis in the title and the text, because laws are strange things. Thousands of people were convicted under built environment related apartheid laws in South Africa and Israeli law and planning regulations have been developed in a manner that makes the demolition of Palestinian homes and occupation of their lands legal!)

In a recent judgement the Sindh High Court has decreed that no illegal building can be regularised. The Court has applied the law and concerned citizens, the press and many NGOs are happy about it, as they should be. However, the judgement does not solve the "illegality" related problems of Karachi's built environment. This is because the city has tens of thousands of illegal buildings in its metropolitan area. In addition, there are also thousands that have been "regularised" over time through patronage and corruption and those whose major violations of zoning regulations have been "condoned". If one adds the katchi abadi structures and their multi-storeyed commercial centres to the list, then the number of illegal buildings are not in tens, but in hundreds of thousands. Most of these will collapse beautifully in case of an earthquake, along with many of their legally built sisters.

in addition to these illegal buildings, there are large scale violations of land use, encroachments of every variety and polluting and dangerous industrial and storage activity in the

heart of the city. If all this "illegality" is put an end to in the present conditions, Karachi will become a city of stranded, homeless, starving and jobless people and the collapse of its economy will impoverish its elite as well, except those who can manage to migrate. If on the other hand, we do not move to integrate much of this activity into a larger city plan in a phased manner, we will keep the system of insecurity, bhatta, coercion and corruption that accompanies the present status quo alive, and will continue to torture and torment the poorer sections of our society who are the main victims of it. In addition, we will continue to further devastate our already devastated environment. Again, if we move to regularise all this "illegality" without conditionalities and eventual plans, as one keeps hearing the government intends to do, then all hopes for an improvement in Karachi's built environment conditions can be written off for the foreseeable and perhaps even the distant future. For these reasons, it is necessary to understand the scale of this "illegality" and the causes for it. Only after such an understanding can a rehabilitation plan be prepared and implemented that integrates and or phases out much of this "illegality" without further destroying the environment.

Illegal buildings and violation of zoning regulations for which most concern is shown are those that take place in the elite and upper and middle-middle income areas. However, these are not the most serious violations as far as the larger physical and social environment is concerned. They acquire this importance because of activists in these areas and their access to the press and the corridors of power. These violations are the result of irrationally high and manipulated land values; a powerful nexus between politicians, bureaucrats and developers in which billions of rupees exchange hands under the table every year; and large scale corruption and patronage at all levels of the establishment. But there are other factors also. One of these is the failure of the state to provide viable alternatives to densification along with necessary social and physical infrastructure, which includes good roads and transport from

work areas to the suburbs. This is illustrated by the fact that after the building of the Liaquatabad Flyover, which reduces travel time from the city to the Super Highway, real estate interest has been revived beyond the Sohrab Goth on the Super Highway.

The most serious violations have occurred, and continue to occur, in the old city and its adjacent inner-city quarters. Here densification has been the highest (in certain areas over 1,800 persons per acre) and all rules and regulations have been violated and overtaken by demand. Here there is congestion and massive environmental degradation and there are many reasons for this. One, that natural population growth forces families to build upward since they cannot afford the cost of formal sector government or private development on the city's fringes and nor do they have any access to credit for house or land purchase. Their only other option is to move to a katchi abadi and live in insecurity, which many are forced to do. Two, the old city contains Karachi's wholesale markets and small scale industrial activity. These have been expanding rapidly to cater to increasing demands and require space for workshops, warehousing, accommodation for labour, cargo terminals and space for the services sector to transport. Since the state has never even considered providing these facilities elsewhere, slowly this whole area has become a large warehouse along with sweat shops and garbage sorting and recycling industries. Old buildings have been pulled down and reconstructed as warehousing and day-wage labour accommodation, violating all building bye laws and zoning regulations. Due to shortage of space, all these activities now occupy the pavements and are over-flowing on to the roads. For lack of space they have also expanded into the Lyari river bed and around the KMC and City Court complexes. By the way, this is where most of Karachi's historic architecture, (much loved by its elite) is located. It is important to note that many associations of market operators in the old city and its neighbouring quarters have often requested the Karachi administration to provide them with alternative space, which is easily accessible by heavy vehicles from the

Super Highway, Port and the railway, for their activities. These requests have fallen on deaf ears and so the "illegality" not only stays, but grows.

There are other forms of "illegality" as well. There are thousands of schools and clinics in residential houses in violation of zoning regulations. However, area plans have never provided space for these activities in a manner that is compatible with the way in which these sectors operate in Pakistan. Our planning standards are derived from the European town and country planning acts which were developed to cater to the requirements of a welfare state in which the government provided centralised health and education facilities in each neighbourhood and sub sector. As such, these planning standards are inappropriate to our needs (we never became a welfare state) and will continue to be violated. Again, it is common in Karachi (as in the rest of Asia) to have businesses in your homes. Consequently, there are tens of thousands of workshops and commercial outlets in people's homes. In Orangi alone, the number is more than 42,000. These are strictly speaking illegal activities since our zoning regulations promote segregated and not integrated land-use planning. Again, this is because of our borrowing from our colonial masters. Even if these illegal commercial and industrial activities were banned, they would have no where to go since we have not planned for them either. And then, what is wrong with integrated land-use as long as it is planned for and does not cater to hazardous activity?

Then there are encroachments. There are illegal bus and cargo terminals, workshops and depots on roads and on other public spaces. In many cases, permanent structures have been constructed to fulfill these requirements. Even state agencies have encroached on public space for these functions. But then this was bound to happen since we have not built or catered for these requirements either. Unless we cater to them they are bound to develop in an informal manner, through a process of corruption and coercion, wherever space is available.

The city also has an estimated 60,000 plus hawkers who occupy pavements and streets wherever there is active transport activity or main markets. In many places, the local government has constructed shops in an ad-hoc manner to accommodate them and charges rent from them. Hawking is one of the few options left to jobless Karachiites and given the increasing scale of unemployment, it is increasing rapidly. These hawkers cannot be wished away or dislocated without serious social and economic repercussions. They need to be rehabilitated sympathetically or they will keep coming back. And if they are prevented from coming back, there will be an increase in unemployment, social conflict and crime.

And finally, there are the katchi abadis where over 50 per cent of Karachi's population lives and which grow at the rate of seven per cent every year. No building bye-laws or zoning regulations apply to them. And why should they not grow? Karachi requires 80,000 housing units a year and the formal private and public sector supports the building of only about 28,000 and these too are unaffordable for poor families. Therefore, there are only two options for those effected by this demand-supply gap; either live on the streets or live in katchi abadis. Wisely and fortunately for the city, they opt for the latter.

Who pays to make all this "illegality" possible? It is Karachi's lower and lower-middle income communities. The "beneficiary" of each "illegal" activity pays bhatta, either to government agencies, the police or to powerful mafias. These "beneficiaries" live in a constant state of insecurity and security, such as there is, can only be purchased or acquired through some form of patronage after running from pillar to post and being treated with insults, suspicion and hostility by officialdom. There are numerous other forms of "illegality" and coercion as well that are closely related to the problems of the physical environment and these include drugs, forced prostitution and child labour. However, to describe these subjects a separate article would be required. The amount of bhatta that is paid by

informal service operators and communities every year to mafias and government agencies is around five to six billion rupees. This is a modest estimate and relates only to "illegalities" related to the built environment. Bhatta extorted by traffic police, police stations for "crime" related issues, staff of lower courts and other government agencies is in addition to this sum and definitely much larger.

To deal with the problems of the "illegalities" of the physical environment and its social and economic repercussions, the city requires a rehabilitation plan. The form of the plan can only be determined by sympathetic research into the dynamics of Karachi's unplanned growth. However, certain priorities are obvious. These are: One, the building of the Northern By-pass and the shifting of wholesale markets, warehousing, related labour accommodation and cargo terminals to it. If only the bye pass is built (as is now being proposed) without building these other facilities, deterioration of the inner city will continue to increase. Two, development of the circular railway and its extensions into the suburbs and improvement in the road and transport systems on the corridors from major low income settlements to the work areas and the completion of missing link roads. Most of these missing links are of very small lengths. Three, changes in building bye-laws and zoning regulations so as to accept integrated land-use policies, develop a criteria for their partial regularisation and future implementation, help rationalise land prices and develop pro-pedestrian planning parameters. Four, to provide bus terminals, bus depots and workshops for inter-city and intra-city transport and link them to the intra-city rail and road transport systems. Five, to rehabilitate hawkers on pedestrianised streets and give their organisations the task of preventing an increase in their numbers on these locations. This can be done in a manner that will generate considerable revenues for the city and in a manner that improves the physical and social environment considerably. And six, the development of low income and lower-middle income housing near the city centre which is easily accessible

from the major corridors of movement. Many successful models (such as Khuda-ki-Basti model), are available for large scale replication. And then, there are issues related to culture and entertainment, without which no city can function in this day and age.

Non-availability of finances, as is often made out to be, is not the major constraint in developing these projects. The constraints are an absence of political will, wrong priorities, a passion for mega projects as opposed to problem solving, corruption and the absence of institutions to develop and implement plans through community and interest group involvement. In short, a planning agency with teeth is required for Karachi. Such an institution has been on the cards since 1989 in the form of the proposed Karachi Division Physical Planning Agency (KDPPA). It is hoped that the government will expedite the creation of such an agency so that proper planning for the city can be undertaken. It is encouraging to note that the government's task force for the Programme for the Economic Revival for Karachi (PERK) has recommended the creation of KDPPA and that the Sindh government has endorsed it.

However, it must be understood that simply changing of building bye laws and zoning regulations without a planning process, which every successive Sindh government attempts to do, will not solve Karachi's problems. It must also be understood that for a rehabilitation plan to be successful, a greater importance has to be given to the sociology and culture of the communities that form the city, than to strict building codes and environmental standards borrowed from other cities. Existing practices have to be identified, the good ones supported and the bad ones regulated. This can only be done through an understanding born out of love and affection for the city's past, its present residents (whom planners and officialdom attack at every meeting), and the changing needs of its younger generation, rather than through a cold, calculated planning exercise consisting of beautifully phrased laws and regulations

that have little relationship to the realities of the city. A Chinese proverb says "let not the best become the enemy of the good". Karachi's future planners should make this their motto and should understand what this means in our context.

Nine

Housing Imperatives For Karachi

Housing is without doubt the most important issue facing the vast majority of people living in Karachi. The failure to resolve it is creating stress, uncertainty and homelessness for the poorer and lower middle class sections of society and increasing the rich-poor divide. Since Independence a large housing demand-supply gap has always existed in Karachi. Previously this gap was accommodated in katchi abadis. However, this is becoming difficult as land that could previously be used for katchi abadis is now required for meeting the demands of global capital and the emerging middle class. Due to this, prices of land in katchi abadis have become unaffordable, even to the better-off among the poor. As a result, entire families have now started living on the streets and in public spaces. Surveys suggest that the majority of these are those who have been evicted from their previous homes due to rising rent and land use changes or due to the breakup of extended families, often because of disputes related to ownership or to a lack of space. Once, Karachi housing related professionals were very proud that unlike other mega-cities of South Asia, people did not sleep in the streets in their city. This is no longer the case.

The demand for strategically located land by commercial interests, often promoted by profit seeking mega projects, is also evicting people from existing katchi abadis. Since 1997, more than 50,000 Karachi households have had their homes bulldozed. More than half these evictions have taken place in the

last four years. In addition, since then 1,777 huts have been burnt rendering more than 12,000 people homeless. Nineteen minor children, four young girls and six adults were burnt alive in these incidents. Plazas have been constructed on some of these locations.

About 50 per cent of the evictees have been offered a plot of land in a relocation site. Urban Resource Centre surveys of the relocation sites, which are 20 to 25 kilometres away from the city centre, show that relocation has impoverished the affectees. This is because their travel costs have increased by more than 100 per cent, their women can no longer work, their children's education has been disrupted, utilities are not available unlike previously, and the long hours of travelling to and from work increase stress and disrupts family and social life.

News items in the press indicate that the state intends to demolish katchi abadis in key locations and build eight storey flats and commercial centres in their place. The affected katchi abadis residents are to be allotted an apartment in these new developments. This proposal is an open invitation to corruption and will not serve the interests of the residents. It has failed in the case of the Lines Area Project in Karachi and has never been successful in other countries except where there are strong governments and the affectees are formally employed persons. Fish vendors, hawkers, motor mechanics and small commercial enterprises cannot operate from high-rise apartments. Therefore, the upgradation of katchi abadis is the only viable solution. However, under the present rules only abadis that were formed before 23 March 1985 are eligible for regularisation. This means that about half of the katchi abadi population is vulnerable to evictions. In the interests of justice, equity and pragmatism, it is necessary to extend this cut-off date to 30 June 2007. The Punjab government has wisely extended it to 31 December 2006.

The major objection of the anti-katchi abadi regularisation

lobby is that they are "eye-sores". However, experience from other Third World countries shows that they can be made extremely attractive with very little investment. The author of this piece has offered to be an honorary advisor for a pilot project of this sort for two katchi abadis.

Surveys for the Karachi Strategic Development Plan 2020, a comparison of the 1981 and 1998 census and other official documents show that housing conditions in Karachi have deteriorated. For example, in 1978 the katchi abadi population was 55 per cent of the total population of Karachi. In 1980 it was 43 per cent. This decline was due to the social housing policies of the Bhutto government in the 70's. In 1998 it

was 50 per cent (700,152 households) and in 2006 it was 61 per cent (1,200,000 households). Asian Development Bank figures indicate that 50.5 per cent Karachiites live below the poverty line. For katchi abadis this figure is 89 per cent of which 54 per cent are chronic poor. This is a major increase from previous surveys. In addition, in 1980 Housing Census houses with separate latrines were 74 per cent, separate kitchens 65 per cent and separate bathrooms 69 per cent. In 1998 Census, these figures have fallen to 47 per cent, 48 per cent and 34 per cent respectively. The Karachi Strategic Development Plan 2020 survey shows that 34.4 per cent of households earn less than Rs 5,000 and 41.4 per cent earn between Rs 5,000 and Rs 10,000 per month. It is estimated that these households spend 75 per cent of their earnings on food items and 18 per cent on utility bills. This means that the current housing market cannot possibly be accessed by over 75 per cent of Karachi households. Given the above conditions a massive social housing programme for Karachi is required. An essential ingredient of this plan has to be strategically located land on or near the main corridors of movement or near major work centres. Such land is available but hoarded for speculation. To bring it into the land market a heavy non-utilisation fee of at least 10 per cent per year of its value is required. This will also make land prices more

realistic.

In addition to the extension of the cut-off date, the imposition of the non-utilisation fee and the adoption of upgrading of katchi abadis rather than redevelopment, a few more ingredients for social housing are required. One, between now and such a time as we can close the demand-supply gap informal settlements will be required. Plans should be developed for providing zones at socially appropriate locations for the creation of settlements on the Khuda Ki Basti model for a five year period. Two, given the changing sociology of Karachi the major demand in the next decade is going to be for low and lower middle income built units rather than plots. These can be provided on the basis of recovery of their costs at Rs 10 to Rs 20,000 down payment and a monthly payment of Rs 1,500 to Rs 3,000 for over a 15 years period. If the price exceeds this it should be subsidised from other sources. However, the major problem for making such housing initiatives successful is related to accurate targeting and making speculation difficult. Models for both of these can be developed with the help of katchi abadi CBOs. Initial research also shows that with changes in byelaws and through innovative layouts, development costs can be halved of what they are today. However, none of this is possible without political will and the creation of effective institutions committed to making this possible.

Ten

Solid Waste Management for 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 recognised 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 Urban Resource Centre (URC), a Karachi NGO, 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 focussed on the recycling industry as it emerged that it was a major player in this sector. Subsequently, Mansoor Ali, a Karachi engineer who had been working with the Orangi Pilot Project (OPP), did his MSc and PhD thesis on the subject and scientifically quantified the role of the recycling industry in solid waste management.

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, about 700 tons of recyclable waste is collected from the KMC neighborhood garbage dumps or kutchra kundis as they are called. This activity is carried out by about 21,000 waste pickers, most of whom 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 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 landfill sites, is also pocketed by the KMC staff.

The sorting point is operated by a contractor who hires four to six persons to separate different items and to pack them in separate containers. 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 sometimes 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.

Paper and bone are the two main items that are collected from the dumps. Others, such as plastic, glass and metal are, as

already mentioned, 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 located 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.

All waste is not recycled. KMC staff operating the garbage pick-up vans is paid upto Rs 200 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 landfill sites.

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

The kabaris and the middle men who organise 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 heroine addicts are being employed for waste picking purposes by the middle men. 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 Karachi 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 neighbourhoods 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 per year. In addition, its total production of recyclable material is 1,230,800 tons per year. Also, it is expanding every day and becoming more sophisticated. It has strong links with industrial cities Punjab such as Gujranwala where most of Karachi's plastic is recycled. The table below sums up the solid waste collection in Karachi.

Solid Waste Collection 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

From the above facts, it is obvious that a de-facto financial and organisational inter-dependence exists between the various actors in the solid waste management of Karachi and the recycling industry. There is a need to recognise this inter-dependence and institutionalise 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 and it will then be in the interests of the KMC solid waste collection staff to take the solid waste to the landfill sites. It will also be economically and logistically more convenient for the waste pickers to operate from the landfill sites rather than from the kutchra kundis. Two, the recycling industry will require land, water, electricity and waste water disposal. In addition, it will require land for housing its workers. This should be provided to them at a cost. Three, middle men, who organise waste pickers should also be given land for storage of the picked material and for housing their labour 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.

Discussions with the informal recycling industrialists and rag picking contractors seem to suggest that they would support such a proposal as it is of economic benefit to them. Further discussions are necessary before a decision on this can be taken.

Published in Daily Dawn, July 1999

Eleven

Towards a Drainage System for Karachi

As predicted in various newspaper articles, research monographs by Karachi academics and professionals and NGO researchers and activists, the monsoons have devastated the city. They will devastate the city again, irrespective of how much money is invested on the rehabilitation of the city's infrastructure, unless three important realities are understood and addressed. These realities are discussed below.

One, Karachi's infrastructure is not mapped or documented and nor is the scale and directions of its growth. Without proper documentation effective planning is simply not possible, even if funds are available. The city's infrastructure has been laid piecemeal over time by the KMC, KPT, KWSB, various cantonment boards and cooperative housing societies. Ad-hoc changes and additions on a large scale have been made to it which have never been mapped. In addition, infrastructure has also been developed by community organisations; MNA, MPA and councillor funds; and NGO projects. What is required to address this serious problem is the setting up of an autonomous mapping unit under the City Government. The mapping unit should collect all available documentation, digitize it, identify gaps in it and remove them through a process of surveys and their documentation. Updating of these maps should be a continuous affair. The establishment of such a unit would be a

great gift to the planners, professional and academic institutions, NGOs and communities of Karachi, and above all, to the UCs and towns of the city whose elected representative and technical persons would have easy access to information regarding their areas. The establishment of such a unit would make planning possible.

The other reality is that Karachi's sewage disposes into its natural drainage system. It has to be understood that this is not by default but has been planned as such. Official policy seeks to change this. However, this change can only happen if we dig up thousands of kilometres of sewage lines and replace them or by establishing hundreds of pumping stations. Neither of these two options is feasible in financial or physical terms and as such sewage will continue to flow to the sea through the nalas of Karachi. Over time, these nalas have clogged up with silt, garbage and encroachments. In many places they are higher than the sewage lines and because of this, and because of their reduced capacity, there is back wash and flooding with the minimum of rains.

What is required is the desilting of the nalas, securing their width, their conversion into box trunks and the setting up of small treatment plants where they meet the sea or the creeks of Karachi. Where this process has been adopted (no treatment plants have been set up so far) such as for the Manzoor Colony Nala, Welfare Colony Nala and three nalas in Orangi, there has been no flooding. Many cities have developed their sewage and drainage systems in this manner and the Orangi Pilot Project-Research and Training Institute has detailed documentation of how this can be done for Karachi along with the documentation of social and physical infrastructure in three hundred Karachi katchi abadis.

The third reality is that there are no drains along the curbs of even major roads in Karachi. Rain water flows through the roads to the nearest nala. This is how it is going to remain for the

foreseeable future. Because of this roads are washed away and areas where there are depressions in them get filled up with water. It is therefore necessary for us to design our roads to take the pressure of flowing water adversely effecting traffic flow. Also, we should identify all depressions and mark them. These areas should be filled up where possible or they should be linked to the nearest disposal system that is available. The process of creating drains along the curbs is a long and expensive one and may take over many years to complete.

Documentations, plans and policy decisions are essential for development but do not bring about development. For policy to be realistic, ground realities have to be taken into consideration and to implement policy and plans, effective institutions are required. Policy decisions regarding Karachi's development plans and projects have been grandiose and not related to the realities on the ground or the priority needs of its citizens, the vast majority of whom belong to the lower income groups and are not car owners. Policy has been based entirely on the megalomania of politicians and the fantasy of their planners. Nor does Karachi have effective institutions to implement plans and projects. According to press reports and various government documents, Rs 460 million were spent on the Karachi Development Plan 2000 and Rs 340 million have been spent on mass transit studies. Neither have yielded any results and an UNDP-sponsored evaluation of the former had identified serious shortcomings and predicted that it would never be implemented because of them. On the implementation and management side the KWSB has borrowed heavily from the ADB for development work. At present it owes the ADB more than Rs 42 billion. It has very little show for this huge debt except sewage treatment plants that function at a fraction of their capacity while Karachi's sewage continues to flow into the sea.

The creation of effective planning and implementation Institutions requires professionalism which cannot be acquired by state organisations because of their low salary structure. It is

therefore necessary to explore other avenues such as hiring professionals on contract. Also, professionalism cannot be created in planning, management and implementation institutions if they are subject to the whims and political considerations of the elected representatives or, as often in our case, undemocratically appointed ministers and governors. Many of Karachi's institutions, who had considerable expertise and knowledge, have been destroyed over time through a process of nepotism and decisions based on political expediency. Rules and regulations need to be revised and procedures put in place to make it impossible to violate them.

The Karachi Nazim, who has inherited a physically ravaged city with demoralized and ineffective management institutions, is now looking for money to set things right. It is hoped that he will take the ground realities of the city into consideration when taking policy decisions, and for doing this he will initiate a process of public consultation with those individuals and institutions who have been working on the infrastructure related issues of Karachi.

Published in Daily Dawn Karachi, 08 August 2003

Twelve

Akhtar Hameed Khan and the Orangi Pilot Project

Dr. Akhtar Hameed Khan, father of the Comilla Cooperatives and the Orangi Pilot Project (OPP), both internationally renowned development models, died in the United States on October 08, 1999.

To carry on his life's work and to further develop it, he has left behind three remarkable institutions in Orangi. These are the OPP-Research and Training Institute (RTI), Karachi Health and Social Development Association (KHASDA) and the Orangi Charitable Trust (OCT). These institutions have, under his guidance, developed sanitation, health, education and income generating models for low income settlements. These models support local initiatives, use local resources and build on the capacity and capability of poor communities to look after themselves and to strike a more equitable relationship with government development agencies and with society as a whole. And development after all, is all about striking equitable relationships. These models do not require large funds, foreign or local, or expensive imported expertise and are totally indigenous. They are being replicated in numerous settlements in Pakistan, both in Karachi and other urban centres, and their principles are being applied to development programmes in South Africa, Central Asia, Nepal, Sri Lanka and India. The OPP-RTI receives training groups not only from these countries, but also from the Philippines, Cambodia, Vietnam, Japan and the First World. Academic institutions dealing in

development, planning and economics, the world over, study these models and international agencies and NGOs try to adapt them to their needs. More recently there is considerable pressure from communities and professionals, supported by concerned bureaucrats, to bring about policy changes that would adopt the principles and models of the OPP.

A lot has been written on Akhtar Hameed Khan's work and the "research and extension" method that he followed. This method, along with the principle of bringing professionals, community activists and government officials to a common level of understanding, is followed today by numerous development agencies and NGOs. Yet, in terms of scale and impact there is something special about Dr. Khan's work and one is forced to ask what that is. The answer to this question lies to a great extent in his personality, upbringing and his life long search for truth.

Akhtar Hameed Khan's reputation as a community development expert has completely overshadowed the fact that he was an ardent student of history and a keen observer and commentator on current social, economic and political affairs. In his analysis and observations he was aided by the fact that he was a scholar of Persian, Arabic, and Pali, who had studied Islamic and Bhuddist classics in their original languages and in great depth. Thus, he had direct access to the sources of Indo-Muslim culture and history, without intermediaries. This was reflected in the way he wrote, even in English, and in his sense of humour. Given this background, it is not surprising that Akhtar Hameed Khan was an Urdu poet of considerable standing in the post 1857 tradition of Hali and Azad. In addition, he had a fine understanding of the contemporary world, an understanding which was heightened by his knowledge of European history, literature and philosophy and by his passion for the national and international print media. "I am a news junkie - I get withdrawal symptoms when there is a newspaper holiday", he would say. He had also been able to observe the West at close quarters, first as a student at Cambridge in the mid-30s and then as a student (1958-

59) and a professor (1973-79) at Michigan State University; and as a teacher at various universities in Europe and the USA. This immense knowledge of history and current affairs fed into Akhtar Hameed Khan's development work, which was seen by him as an integral part of a larger process of change and evolution, at both the national and global level. This is one of the major reasons why Akhtar Hameed Khan's projects differ from other projects that have similar aims and objectives. It is also one of the major reasons why he resigned from the ICS in 1945. In conversations with the author of this piece, he said many times that he resigned from the ICS because after the First World War British rule in India and its institutions had started to decline. He did not wish to belong to a dying system that had lost its vitality and viability. Another factor that occupied his mind was that as an ICS officer he could not solve the problems of the people at large, as those problems were of a social and economic nature and could not be solved through administrative measures. He increasingly wanted to know the causes of the problems and to understand the lives of the people who constantly petitioned him as an ICS officer regarding various issues. After his resignation he worked as a labourer and locksmith in Aligarh so as to know first hand the problems and the way of life of the working classes.

What also gets overshadowed by Akhtar Hameed Khan's reputation is the close link between his background and upbringing and the values that his development work promotes and supports. Akhtar Hameed Khan belonged to a class and a culture of which austerity, frugality and diligence were an integral part. These virtues he never abandoned unlike many of his contemporaries. This austerity and frugality was reflected in the manner in which his project offices and programmes were run. It was also reflected in the lifestyle of Akhtar Hameed Khan himself, and thus no one could accuse him of hypocrisy, as so often happens in projects that try to be austere and frugal. In addition, Akhtar Hameed Khan had not moved away from the fundamental religious, ethical and social traditions of Indo-

Muslim culture, and these traditions are very much a part of the cultural and mental makeup of the poor communities that his development projects work with. He and they related to the same concepts, used the same vocabulary, and had the same values (or at least respect for the same values). He understood their minds, their relationship with each other, and the historic process that determine them. In addition, he understood their relationships with the contemporary world, for he understood not only them, but the contemporary world as well.

In 1980, when Akhtar Hameed Khan began working in the Orangi katchi abadis, he clearly spelt out his objectives. He was the scientist and Orangi was his laboratory. Through action research he wished to develop models that would overcome the constraints that government agencies faced in providing physical and social sector amenities to low income settlements. An integral part of these projects was to empower these communities as well through the development process. He was very clear that the models should be such that they can become a part of government planning policies. However, this did not happen, except in the case of the Sindh Katchi Abadi Authority (SKAA) which has adopted Dr. Khans' methodology and procedures and become self sufficient in the process and successful in meeting its objectives. Since there was a lack of response from government planners and politicians, the OPP opted, much against his wishes, to expand the programmes through NGOs and community organisations both in Karachi and in other urban settlements in Pakistan. It is a tribute to the faith that he had in his young staff and followers that he agreed to such a move and later on supported it. Much later he was to remark, "It was a good move, maybe I have become too old and cautious". But he was neither old nor all that cautious for he constantly pursued his original goal of effecting government policies and challenged the position taken by deeply entrenched and powerful interests in the development business.

He never saw NGOs as replacing the functions of the state. He

was clear that NGOs should develop models, organise communities, support them with technical and managerial advice, and in the process bring about changes in government institutions and policies. Therefore, he was extremely upset when in the late 80s it was being aggressively stated that major functions of the state could be taken over by NGOs supported by foreign money. "This is a recipe for disaster", he said, "They are putting up the Diwani for sale" (this was a reference to the conditions of Bengal before the East India Company took over the establishment from the Nawabs). He predicted very clearly the problems that the donor supported Social Action Programme would face and refused to involve the OPP with it. He was also very critical of seminars, workshops and meetings arranged by donors for promoting this NGO take over concept and described them as "dating and dining get togethers". He strongly felt that the Pakistan state would become self-supporting, viable and strong if appropriate models of development that were compatible with the changing socio-economic conditions of Pakistani society could be developed and implemented. For the development of these models it was necessary to go beyond conventional ways and through "a process of investigation, local consultation, experiment and evaluation". In addition, he felt that "the observance of a populist point of view and the preference for the needs of the common man" were essential if the models were to work. Akhtar Hameed Khan was very conscious of the fact that he would die one day. This consciousness led him to institutionalise his work and so in 1998 the OPP was upgraded into three institutions, OPP-RTI, KHASDA and the OCT. Slowly, he left the workings of the programmes and even decision making to the programme leaders and activists. "I have become a dadi-amma", he would say, "I hold the family together and that is my major function. The family now knows what to do." However, there was one thing that he never gave up and that was account keeping. He kept accounts meticulously and very proudly showed them to visitors. According to him, accounts describe a project or an organisation better than any other document. Whenever

institutions wished to collaborate with the OPP, he would say, "Let us look at their accounts and we will know everything about them".

All of Akhtar Hameed Khan's models have positively influenced the lives of women. This was not an accident for this element was carefully built into the programmes although there was no gender slogan mongering involved. He was touched by the emergence of working women in Orangi and by the fact that better education, health and incomes were becoming possible because of them. He wrote "I consider these working women, these female teachers, these girl students, as the finest achievement of Orangi people; as a shining example of belonging both to past and present; as the best preparation for entering the 21st century". In conversations with the author of this piece, he often said that the emergence of urban working women was the most important sociological change that was taking place in Pakistan and that a subtle promotion for change in the mind-set of society was required to accommodate this revolution.

Akhtar Hameed Khan is no more. Apart from the institutions he has left behind, his finest legacy are the teachers and professors, professionals, social organisers, community activists, concerned citizens and bureaucrats, and grass root communities, who are working all over urban and rural Pakistan and who share a common cause based on his vision of how to evolve towards becoming a more just, humane and rational society, free from fear and exploitation. It is hoped that his death will bring them all closer together so that they can promote his thought structure.

On 15 October he will be buried in the compound of the OPP-RTI building, at the base of the Orangi hills, where almost twenty years ago he began his search for affordable and doable solutions to the problems of the rapidly expanding low-income settlements of urban Pakistan.

Published in Daily Dawn, Karachi, October 1999

Thirteen

Global Capital and the Cities of the South

The Reality

International capital is desperately looking for a home. Cities of South and South-East Asia are attractive destinations since they have a weak regulatory framework and have undergone structural adjustment. Here, this investment, is increasingly determining not only the shape of the city but also social and economic relations.

New terms, such as "world class cities", "investment friendly infrastructure", "foreign direct investment" or "FDI" as it is called, cities as "engines of growth", have entered the development vocabulary. All politicians and official planners in the Asian cities are using these terms and it is largely because of them that the whole approach to planning has undergone a change. Local governments are obsessed by making cities "beautiful" to visitors and investors. This means building flyovers and elevated expressways as opposed to traffic management and planning; high-rise apartments as opposed to upgraded settlements; malls as opposed to traditional markets (which are being removed); removing poverty from the centre of the city to the periphery to improve the image of the city so as to promote FDI; catering to tourism rather than supporting local commerce; seeking the support of the international corporate sector (developers, banks, suppliers of technologies and the

IFIs) for all of the above.

The above agenda is an expensive one. For this, sizeable loans have been negotiated with the International Financial Institutions (IFIs) on a scale unthinkable before. For example, between 1976 and 1993, the Sindh province in which Karachi is located borrowed US\$ 799.64 million for urban development. Almost all of this was for Karachi. Recently, the government has arranged to borrow US\$ 800 million for the Karachi Mega City Project. Of this, US\$ 5.33 million is being spent on technical assistance being provided by foreign consultants. Almost all the projects designed and funded through previous loans have not met their objectives and there is evidence to show that they will again not meet their objectives as the same process for their design and implementation as before is being followed. Many of the new projects are being floated on a BOT process. Looking at them and it is clear that projects have replaced planning. This is especially true of transport related projects. Cities such as Bangkok, Manila, Cairo and earlier Calcutta have made major investments in light rail and metro systems. Other Asian cities are following their example. However, these systems are far too expensive to be developed on a large enough scale to make a difference. Manila's light rail caters to only 8 percent of trips and Bangkok's sky train and metro to only 3 percent of trips and Calcutta's metro to even less. The light rail and metro fares are 3 to 4 times more expensive than bus fares. As a result, the vast majority of commuters continue to travel by run down bus systems. In addition, there has never been more liquidity in banks and leasing companies. However, due to the freedom that these loan giving institutions have today, this liquidity is used to provide short-term high interest loans which do not bring any benefit to the city or to the majority of its residents. For example, 502 vehicles have been added to Karachi per day during the last financial year, more than half of which are cars. It is estimated that about 50 percent of these have been financed through loans from banks and leasing companies. This means that loans worth US\$ 1.125 billion were issued for this investment which could

easily have been utilised for improving public transport systems or for badly needed social housing.

The nature of investments being made in many of the Asian cities and the mindset behind them, are increasing land hoarding; evictions of settlements, hawkers and informal businesses; informal settlements far away from the city and from social sector facilities; exclusion (due to gentrification) of poorer communities from public spaces of recreation and entertainment; and, the ad-hoc urbanization of ecologically sensitive and agriculturally productive land. Monitoring of evictions by the Asian Coalition for Housing Rights, a Bangkok base NGO, has shown that in seven Asian countries (Bangladesh, China, India, Indonesia, Japan, Malaysia, Philippines) evictions are increasing dramatically. Between January to June 2004, 334,593 people were evicted in the urban areas of these countries. In January to June 2005, 2,084,388 people were evicted. In Karachi as well evictions have quadrupled in the last four years and an increasing number of families are now sleeping and living on pavements in the absence of an alternative. The major reason for these evictions has been the "beautification" of the city, mega projects and the land hunger of the developers backed by politicians and bureaucrats. In the majority of cases, people did not receive any compensation for the losses they incurred and where resettlement did take place it was 25 to 60 kilometres from the city centre. The current master and/or strategic plans are not giving priority (unlike in the decade of the eighties) to the socio-economic issues arising out of these trends.

The rich-poor divide has increased as a result of these policies. Subsidies for the social sectors and increase in inflation and price of utilities, especially in countries which have undergone structural adjustment, has multiplied this divide. The economic survey of Pakistan 2006-07 concedes that the gap between the rich and poor is widening and quoting gini coefficient and consumption share of quintile the survey states that the share of

consumption of the richest 20 percent stands at 39.4 while it is 9.5 for the bottom 20 percent population. It further states that the gap is growing in spite of a 7 percent GDP growth. However, the most serious repercussion of this new development paradigm is that the overwhelming power of international capital and consultants and their local partners has weakened government institutions and the democratic political process. Governments have become deaf to the concerns of the environmental and dissenting academic lobbies. And all this in an age where the media is freer than ever before and "consultations" are the order of the day. NGOs and community activists and academics in most Asian cities in which I have worked have the same complaint. They claim that consultations are an eye wash and environmental assessments are rubber stamps. Meanwhile, successful NGO projects, the result of the populism of the 80's, have now in most cases become "respectable" and are in partnership with governments. Also, the NGO movement has undergone a change. It is increasingly an industry manned by "development professionals" and no longer by populist altruism. Most of these "development professionals" have been trained at special courses in First World universities who have turned exploratory Third World practices into development theory!

If this trend continues

If the present trend continues then the rich-poor divide, evictions, informal settlements and exclusion will increase with not only the poor but also the rich living in ghettos surrounded by armed guards and security systems (this is already happening). Governance issues will increasingly become law and order related and not justice and equity related. This will increase fragmentation for the only thing that will hold the city together will be an aggressively upwardly mobile middle class which by its very nature is not interested in issues of justice and equity. In addition, development will take place where the investor is happy and so the other regions will become the

backwaters (again this is also happening). The continuation of the current process is a recipe for conflict.

How can this be changed?

Foreign capital (and local liquidity) has its benefits and must be encouraged. However, it has to fit into a larger development plan based on development principles so that an inclusive and an environmentally-friendly urban environment can be created. These principles could be: one, planning should respect the ecology of the areas in which the urban centres are located; two, landuse should be determined on the basis of social and environmental considerations and not on the basis of land value or potential land value alone; three, planning should give priority to the needs of the majority population which in the case of Asia are low and lower-middle income communities, hawkers, informal businesses, pedestrians and commuters; and four, planning must respect and promote the tangible and intangible cultural heritage of the communities that live in the city. Zoning byelaws should be developed on the basis of these principles so that they are pedestrian and street friendly, pro-dissolved space and pro-mixed landuse.

If South-Asian cities are to be taken as examples, then what is required is: one, a heavy non-utilisation fee on land so as to bring horded land into the market; two, a cut-off date for the regularisation of informal settlements and an end to evictions (where relocation is required, market rate compensation should be paid); three, planned squatting for five years during which programmes for closing the demand-supply gap for low income housing takes place; four, initiation of programmes for built units and plots which successfully solve the issues related to targeting and speculation (apart from the small scale of social housing, the failure to respond these issues is the main reason for the failure of social housing attempts all over the Third World); five, development of rules, regulations and procedures to guarantee that the natural, entertainment and recreational

assets of the city will not be in the exclusive use of the elite or the middle classes; six, a regime for privatisation backed by institutional arrangements that guarantees provision of sustainable employment and development; and seven, an understanding that all programmes and projects will be advertised at their conceptual stage, subject to public hearings before finalisation, supervised by a steering committee of interest groups, have their accounts published regularly, and overseen by one government official from the beginning to the end.

The major question is how can the above agenda be achieved in an age where social and political evolution is in a flux and the economy is controlled globally by undemocratic international organisations? For example, the UN is controlled by five members who won the Second World War; the IMF and World Bank function on the principle of one dollar one vote; the WTO was created out of the green room negotiations that produced GATT. Not much democracy in global institutions in an age of globalisation!

Civil society organisations in many countries have come together to challenge the new urban development paradigm. However, most of them are funded by bilateral agencies and international NGOs who, or the governments they represent, are the promoters of this paradigm. Maybe because of this their success has been limited. There are also international movements seeking to modify the inequities in global relations of trade and aid. Over the last few years they have become weaker. The only viable option seems to be to make this important issue a part of the larger political process within countries. How this can be done effectively is the big question.

(The above text was prepared as a discussion paper for a meeting of the UN University in New York in July 2007)

Fourteen

IFI Loans and the Failure of Urban Development

Between 1976 and 2003, the government of Pakistan has taken loans from International Financial Institutions (IFIs) for urban development projects. These loans amount to US\$ 1,472.44 million (Rs 88.346 billion) and most of them have been for water and sanitation projects. They have multiplied over the years due to the devolution of the rupee and interest. These loans were identified through technical assistance for which an additional US\$ 16.95 million (Rs 1.017 billion) was provided. Technical assistance includes development of human resources and the capacity building of relevant government institutions.

In spite of these huge investments, infrastructure and environmental and socio-economic conditions in the urban areas of Pakistan have deteriorated considerably. The functioning of government institutions has also declined both in terms of efficiency and accountability. Asian Development Bank's (ADB's) own 1996 evaluation of the Karachi Urban Development Project and Peshawar projects, terms both of them as unsuccessful, except for the Orangi Project (termed as partially successful) which was done in association with the Orangi Pilot Project. For the development of projects through these huge loans, foreign consultants were employed and the loans paid for them. Studies by Pakistani professionals and NGOs have identified the weaknesses of these consultants and the problems with the methodologies that they have used in planning and in the processes of project implementation and

monitoring.

Of the US\$ 1,472.44 million loans, US\$ 653.89 million (Rs 3.92 billion or 44 per cent) were taken for various Karachi projects which included traffic and transport related programmes as well. As a result of these loans, the Karachi Water & Sewage Board (KWSB) owes the ADB more than Rs 42 billion. The servicing of these loans is done by making deductions at source in Sindh's annual development budget. Thus both urban and rural Sindh service these loans. Loans taken for infrastructure projects in the rural areas of the province are much larger and have caused serious ecological damage and social and economic stress to local communities.

At present a number of technical assistance programmes and studies are being carried out (or have been carried out recently) by IFIs for Karachi. These studies are paving the ground for a new cycle of loans even larger than the previous ones. These studies include the World Bank/ADB Public-Private Infrastructure Project; the JBIC's Rehabilitation of Hub and Pipri Treatment Works; the JBIC's study for the Revitalisation of Karachi; the ADB's Mega-City Development Project; JICA's Water Supply and Sewage Master Plan Preparation; JICA's Passenger Trip Study for Karachi for the preparation of a transport plan; the World Bank's "Turn Around Programme" in support of operation and maintenance of Water and Sewage System; and JETRO's study for the future development of industry. The city government meanwhile is preparing a master plan for the city of Karachi and is also turning the sewage-carrying-nalas of Karachi into box culverts to overcome the sanitation problems of the city and the KWSB has initiated its own reform process.

There is a direct link between most of the studies and projects that are listed above. However, there is no coordination between them and many of the consultants engaged by the different IFIs are not aware of what exactly the others are doing. Many of the

issues raised in the IFI reports so far do not find place in the terms of reference for the Karachi Master Plan consultancy and as such they are not (and nor will they even be) a part of a larger planning exercise. Many of these plans are duplication of each other and of government initiatives. In addition, the methodology and terminology of these reports and their proposals is not dissimilar from previous reports which have led to projects which have not only not met their objectives, but have harmed existing systems and local communities and for which loans and technical assistance were provided. Reading through these documents one gets a sense of *déjà vu*. There is serious concern in academic, professional and civil society circles that these studies, for which we are paying, will lead to new loans (some of which have already been identified) and given what has been described above, a failure to meet objectives. It is feared, that as in the past, the only beneficiaries of this technical assistance and loans will be international consultants (and their junior local partners), contractors (foreign ones for large projects), and the IFIs themselves as they will be able to push their loans. Planning and its implementation cannot be done in foreign-funded-fragments determined by outsiders in their own interests.

Karachi's professionals, academics, NGOs, concerned citizens and civil society organisations have voiced concerns about many of the previously IFI funded projects and of government funded projects as well. A review of the projects they have objected to clearly demonstrates that they have always been right. Some of these projects include the Metroville Project where it was pointed out (also by a Dutch researcher, Jan Van der Linden) that the target population would not be reached through the proposed methodology; the ADB funded Greater Karachi Sewage Plan where it was pointed out that there was a conflict between the Plan and where sewage actually flowed and was disposed off; the Baldia Sewage Project where it was pointed out that the Rs 1,300 million investment was duplicating much of what already existed and as such what was being planned

would not be used; the Lines Area Redevelopment Project where it was predicted that given the plan and its implementation process, the area would turn into a physical and social slum and would benefit neither the residents of Lines Area and nor the city of Karachi; the Karachi Mass Transit Project where serious objections were raised which have been justified by the research studies of other cities carried out by the Indian Institute of Technology and other international academic institutions. Similarly, the objections raised to the Lyari Expressway are already proving to be correct given the unplanned changing landuse pressures on the Corridor and its adjacent areas. If the Expressway had been subjected to serious public consultations it would probably still have been built since the "powers that be" wanted it desperately for some unknown reasons. However, as a result of these consultations, it is possible that the Expressway would not have been a huge wall dividing the city; it would not have displaced communities who have lived in the Corridor for more than a hundred years; it would not have disrupted the schooling of over 26,000 children and deprived thousands of persons of their jobs. In addition, the consultations would probably have declared the eighteenth century Jewish cemetery, the Hindu cremation grounds and the nineteenth century dhobi ghats as protected heritage, a heritage which we will lose.

If the failures of the past have to be avoided then political decision making regarding development in general, and development projects in particular, has to be informed. Given the wealth of information, knowledge and practical experience available with Karachi's academic institutions, professionals, organised community networks and NGOs, it is essential that a system of consultation between them and the decision makers is established. This is something that the new Nazim of Karachi has also mentioned in a number of the talks that he has given to the citizens of Karachi.

It is proposed that every Karachi plan and proposal at the

conceptual stage should be advertised along with its financial implications and displayed at an appropriate place that is easily accessible to the public. Consultations on the conceptual plan should be held with interest groups (including beneficiaries and victims) and relevant academic and civil society organisations. Concept finalisation should take place only after such consultations and a steering committee of interest groups should be appointed to oversee the detailed design and implementation of the project. One government officer should be responsible for overseeing the project from its inception to its completion and his name should be made synonymous with the project. Accounts should be published every three months and should be available to the public. Establishing this process will not be easy and will require considerable political will. However, once established this process will not only ensure accountability and transparency but will also develop a desperately needed sense of belonging and involvement of the citizens of Karachi in its development and management. In addition, it will help ensure that planning takes into consideration the requirements of Karachi's low and lower middle income groups who are currently marginalized from the planning process. Much of the current mess in Karachi is the result of this marginalisation.

Published in Daily Dawn, Karachi, 10 February 2006

Fifteen

The Partitioning of Clifton Beach

The Defence Housing Authority (DHA) has taken over the Clifton Beach and developed it from McDoland's to the Salt and Pepper Restaurant. A stone embankment wall has been built on which people can sit and view the sea; a well paved service lane and parking for cars have been provided; on a one kilometre stretch steps leading to the beach have been built on which attractive seating arrangements for visitors have been developed; well designed kiosks supplying food and drinks have been placed along the promenade; and in addition, flood lights now light the entire beach. This development is indeed a valuable addition to Karachi's recreational facilities. Thousands of people, old and young, men, women and children, visit it every week and enjoy themselves. Yet, there is a down side to this development and this piece is all about that down side.

While I was walking one day along the beautifully designed promenade I saw two persons in blue uniform manhandling a pappar wala. They had taken away his pappar bag. They were dragging him away by his hair and cursing him. On enquiry, I was told by the uniformed men that they were DHA security persons and they had orders not to permit vendors from frequenting the beach between McDoland's and the Salt and Pepper Restaurant. "But if vendors are not permitted then what can people buy for food?" I enquired. The uniformed persons responded that they can purchase food from the kiosks provided by the DHA. Since I had purchased from the kiosks, I knew that it was far too expensive for poor families to afford. Immediately,

It occurred to me that by banishing vendors from the beach the DHA had also banished the poor. I requested the Urban Resource Centre (URC) to initiate a small research on the subject and I made some further enquiries myself.

The research and enquiries reveal that the DHA has banned all *chabbari walas* (vendors and hawkers), *ketley chai walas*, *pappar walas*, *channa* and *mongphalli walas*, *bunder ka tamasha walas* (monkey performances) and *jogis* (snake charmers) from the beach. The only food now available along the DHA occupied stretch is at the kiosks set up by the DHA, the Pizza Hut outlet which is located in a container on the promenade, and the Walls Ice Cream mobile which is permitted to operate on the beach. The prices of food and drinks from these outlets are unaffordable to poor and lower middle income families. A comparison of these prices and what is available at the two locations is given in the attached Box. As a result, the poor no longer frequent the DHA occupied stretch of Clifton Beach. They now visit the beach accessed from the Jahangir Kothari Parade. Unlike the DHA occupied beach, there are no cars parked along this stretch. The people who visit it are visibly more badly dressed, comparatively under nourished, wearing inferior clothes and with children who often do not wear shoes. The difference is startling. However, this stretch of beach is more colourful as there are camels, horses and *rehris* all beautifully decorated and women too wear reds and oranges and bright blues. There are places at the exit of the beach where there are arrangements for washing your feet and shoes.

Muhammad Shoaib visits this stretch of beach every Sunday with his five children and his wife. He comes all the way from Baldia. He does not go to the DHA occupied stretch although he says that it is much more attractive and he would love to go there but if he goes there and gives in to his children's demands, he will end up spending more than two hundred Rupees. If on the other hand, he does not give in to his children's demand, they will be unhappy and will look down on him. In addition, unlike

before the place has changed and he feels uncomfortable there since people like him no longer visit that stretch of beach. He says that the DHA occupied beach is now called *Ameeron ka Sahil* (beach for the rich) and the stretch that he now frequents is called *Gharaiboon ka Sahil* (beach for the poor).

Tasnim teaches at a government school. She is twenty-two years old and lives in Baloch Colony. She and her friends visit Gharaiboon ka Sahil regularly but they prefer the DHA occupied stretch. When they receive their salaries at the beginning of the month, they visit Ameeron ka Sahil and enjoy spending some of what they have earned.

Both Tasnim and Muhammad Shoaib have heard that the entire beach is going to be developed for rich people. These rumours are floating around the sea front. They are worried that they and their families will lose the only inexpensive recreational area left in the city. "Wherever you go now you have to pay. Travel costs have become high. At Allauddin Park and at Fun Land they rob you. Where should poor people take their families?" asks Muhammad Shoaib. He adds "why do they not just gather us together and throw their atom bomb on us? It would be easier for them and for us."

Meanwhile, the pappar, chai, channa walas still try and operate on the sly on the DHA occupied beach. When they are caught by the DHA *daroghas* (security persons) they are cursed, beaten and their goods taken or thrown away. Another punishment that is meted out is to put them in a car and leave them far away at a lonely spot so that they have to walk back. Many of the chabbari walas are young boys in their early teens and URC interviews of them show that they come from the very poor backgrounds and some of them have to borrow money on a daily basis to be able to purchase their sellable items. Altaf is sixteen years old and sells pappar. He has been caught twice by the daroghas. I asked him as to why he does not sell at the Gharaiboon ka Sahil. He responds that there are already too many people selling there and

also that he has been selling on this beach since he was seven years old. He feels he has a claim to sell here. In addition, he says that the people selling on the other beach will not allow him to sell there since it would affect their sales adversely. He wants to know if the DHA daroghas have the right to treat the vendors as they do. "They are not the police, they are not the law, but then where can a poor man seek justice? If I go to the police, they will lock me up."

There is also a *bunder wala* (monkey performer) He is over fifty-five years of age. His *bunder's* (monkey's) name is Aloo Master. He says that he has performed on this beach for more than twenty-five years. He cannot do that anymore. He also feels that both he and Aloo Master have a claim on this stretch of beach. "Rich people do not like poor people but they do like animals. For Aloo Master's sake they should let us perform. I can hardly feed him now. He puts with starvation without complaining for he understands the problem. For the poor there is no *sunwai* (hearing)."

Karachi has lost all its multi-class recreational and entertainment places. Saddar, the old town institutional and community buildings and spaces, cinemas, have all gone. They have been the victims of massive environmental degradation, absence of social and cultural considerations in urban planning, and an elite that has chosen to ghettoize itself out of fear and ignorance and in the process it has usurped the city's natural assets for its own benefit. Clifton Beach has been an exception to this, but not any more.

The DHA occupied beach can be given back its multi-class environment without adversely affecting the facilities and ambiance that the DHA has provided. Chabbri walas and vendors can be provided special spaces within which they can operate and areas can be reserved for monkey and performances. If the poor and rich cannot share public space, then we

are heading for major conflicts similar to those in Johannesburg and Rio de Janeiro and the rich will be as much the victims as the poor.

Box: A comparison of Rates: Survey of Clifton and Sea View (DHA Occupied) Beach

S. No.	Item	Rate at Clifton Beach	Rate at Sea View
1.	Local cold drink	Rs 2	Not available
2.	Branded cold drink	Rs 12	Rs 12
3.	Tea	Normal Rs 6 Doodh patti Rs 10	Rs 10 -
4.	Juice	Rs 10	Rs 12
5.	Biryani small plate Large plate	Rs 5 Rs 10	Not available
6.	Polka/Walls Ice Cream	Kulfa Rs 5 Cup Rs 10 Corento Rs 20	Chock bar Rs 15 Feast Rs 25 Cornetto Rs 25
7.	Pappar	Rs 5	
8.	Kite	Small size Rs 10 Large size Rs 15	Rs 15 Rs 20
9.	Burger	Round Rs 10 Large Rs 15	Chicken Burger Rs 35 Beef Burger Rs 25

10.	Sandwich		Rs 15
11.	Coffee		Rs 20
12.	Roll		Chicken Rs 25 Beef Rs 15
13.	Showarma		Rs. 40
14.	Broast quarter		Half Rs 60 Full Rs 120
15.	Head massage	Rs 10	
16.	Samosa	Rs 2.50	
17.	Doorbeen (binoculars) (5-10 minutes)	Rs 5	
18.	Chaat Small Large	Rs 10 Rs 15	

Source: Urban Resource Centre Survey.

Sixteen

Understanding Karachi's Traffic Problems

Karachi's traffic and transport problems are increasing rapidly. There are huge traffic jams every day inconveniencing hundreds of thousands of commuters; pavements and even entire streets have been encroached upon at all key transit locations, making both vehicular and pedestrian movement almost impossible; and the ensuing anarchy makes effective traffic management difficult, to say the least.

The reasons for these conditions are obvious for those who have monitored and documented the growth of Karachi. In the absence of alternatives, manufacturing, warehousing and informal cargo terminals have taken over the narrow lanes and open public spaces of the inner city and are rapidly moving into residential areas and katchi abadis which are spread all over Karachi. An increasing number of heavy-duty-polluting vehicles crisis cross the city to serve these facilities. Again, in the absence of formal bus terminals, depots and workshops, entire pavements and roads are now used for the performance of these functions, and the absence of a rail based mass transit system has congested the main arteries of the city and encouraged an increasing number of commuters to purchase cars and motorbikes, thus adding to traffic volume. These trends are creating massive environmental degradation, inappropriate land-use changes and mental stress and various respiratory diseases and allergies in the Karachi population. It is also

destroying the city's rich cultural heritage; depriving the citizens of recreation and entertainment facilities (or access to them where they exist); and most serious of all, fragmenting the city into isolated rich and poor areas. Added to this is a non-existent sewage disposal system and deteriorating solid waste management.

The city government's response to these problems so far has been the building of roads, inner city flyovers and expressways. These may ease traffic flows on certain corridors for the time being but will not tackle the issues listed above and as a result Karachi's traffic, transport and environment related problems will keep increasing with every passing week. It is feared that Karachi may end-up being a commuter nightmare such as Bangkok or Manila, both of which have no shortage of expressways and flyovers and both of which have rail based mass transit systems on a few of their main corridors of movement.

To tackle Karachi's problems, what is required urgently is a plan for decongesting the city; decentralising some of its functions; segregating through and local traffic and fast and slow moving traffic; removing certain environmentally degrading functions to the Northern Bypass or off the Super Highway; and opening up new areas for the development and/or relocation of inner city manufacturing and warehousing facilities along with area development plans for Saddar, Lea Market and Liaquatabad and an urban renewal plan for the inner city. In short, what is required is a land-use plan where not only land value but also social and environmental concerns determine landuse.

Some of the decisions taken by the local government are detrimental to the implementation of such a land use plan. For example, it has decided to commercialise thirteen main corridors of the city in Phase 1 and 8 in Phase 2 of its commercialization plan. This means a huge increase of traffic and densities and an over-taxing of an already inadequate

services infrastructure. It has also decided to build the Lyari Expressway, which in the absence of effective land-use planning and its implementation means massive land-use change and densification of the over-congested Lyari Corridor. Already the factories and godowns demolished in the alignment of the Expressway have relocated in the dense settlements on either side of the river creating further densification, degradation and an increase in traffic volume in these settlements. Informally land speculation has also begun and is likely to play havoc with the city. In addition, if the existing plan of the Expressway is implemented, it will also wipe out an important part of Karachi's history as embodied in the eighteenth and nineteenth century villages (and the communities that live there) that are to be demolished to pave the way for the Expressway. The decision to curtail the length of the Northern Bypass was also unfortunate as now the Bypass will terminate much nearer to Sohrab Goth on the Super Highway than before, thus increasing congestion on the main exit from the city and considerably reducing the areas to be opened up for future development.

The city government has repeatedly ordered a ban on the movement of heavy vehicles (both of cargo and transport) in the inner city. However, it has not been able to impose this ban and it cannot for obvious reasons. In the narrow lanes between Estate Avenue in SITE and M.A. Jinnah Road, Karachi's main wholesale markets and small scale manufacturing are located. Trucks have to serve these markets and industry, and hotels for businessmen, and middlemen from other parts of the country and transport facilities for them are (and quite naturally also) located in this area. This economic activity cannot be wished away and its requirements cannot be banned by an order and nor should it be.

The main markets in this huge area are the Dhan Mandi, the Metal Market, the Chemical Market and the garbage recycling industry which has developed along the Lyari Corridor, and for want of space in the River bed as well. The Dhan Mandi is by far

the largest market and its operators have constantly expressed their desire to move to an area which is easily accessible for heavy cargo vehicles. The Chemical Market should not be in the inner city. Due to unsafe storage of chemicals products, the incidence of disease is high in the inner city and a number of children have died as a result of leakages. Studies of the environmental, social and economic issues of the inner city have been carried out by the Department of Architecture and Planning, NED University and also by the Urban Resource Centre with the involvement of the various interest groups of the inner city. Similarly, negotiations with the garbage recycling industry were held by the Governor's Task Force for the Improvement of Municipal Services and as a result a solid waste management proposal involving the recycling industry, was prepared by the consultants to the Task Force and a presentation of it was made to the Karachi District Nazim. The recyclers and the middlemen and scavengers who serve the industry were interested in relocating to garbage landfill sites provided they were given land, electricity, access roads and water. They were willing to pay for these services. Meanwhile, the residents of the inner city, especially Lyari, have constantly been asking for the removal of warehousing, godowns, manufacturing units and transport and cargo terminals from their localities. However, this is only possible if the markets are shifted. Once they are shifted, the areas they vacate can be turned into amenities and this will completely change the environmental conditions of the inner city, remove congestion and make the rehabilitation of the inner city possible. This is all the more important since a major part of Karachi's built heritage lies between the lower reaches of the Lyari River and M.A. Jinnah Road. A detailed study of this heritage, along with the outline for a scientific conservation plan was developed under the supervision of Professor Yasmin Cheema, by the Heritage Cell at the Department of Architecture and Planning at the Dawood College. This study was prepared over a period of three years and a presentation of it was made to the Advisory Committee for Sindh Cultural Heritage of the government of Sindh.

It is important to note that the process that has degraded the inner city is also taking place in Saddar and its adjacent areas. Manufacturing and storage has crept in due to which heavy vehicles in fairly large numbers come into the area. In the absence of a proper plan to accommodate hawkers and effectively segregate through and local traffic, and vehicular and pedestrian traffic, there is complete anarchy and almost all public space has been encroached upon. The solution does not lie in removing the hawkers (and adding to the already high figures of unemployment) but in a rehabilitation plan. Such a plan has been prepared by the Urban Resource Centre and hopefully will be presented to the city authorities for consideration. In addition to rehabilitating Saddar, the plan, if implemented, will also generate considerable revenue for the city and can be self-financing.

Though the above recommendations will help, the needs of Karachi commuters and transporters have to be met. It has to be understood that the development of the Karachi Circular Railway (KCR) and its extensions into the suburbs is environmentally, economically and socially a far better solution than the building of the elevated transit-ways on the main corridors of the city. A KCR master plan has already been prepared by a Karachi consulting engineering firm. Government city planners have certain valid objections to the plan but they can be easily addressed if there is a willingness to take an informed decision and arrive at a consensus. However, the rail mass transit proposal has to be linked to inter city and intra-city bus terminals, and depots and workshops for transport vehicles have to be provided. The Traffic Engineering Bureau many years ago had identified 36 plots for this purpose. One wonders why most of them have not yet been made operational.

There have been a number of news items suggesting that mini-buses should be phased out. It is unrealistic to think that this can be done in less than ten to fifteen years. However, converting mini-buses to CNG will improve environmental conditions and

hence positive changes in land-use will take place. Simply by this action a process of rehabilitation of run down city areas will commence. A feasibility study proposal to convert Karachi transport to CNG, along with its socio-economic implications, is currently being carried out by a Karachi based NGO.

The recommendations indicated above cannot be carried out without sound political decisions. Such decisions can only be taken if the political leadership establishes a process of continuous consultation with interest groups, academic institutions, NGOs and professionals who are involved in research work and programmes related to physical and socio-economic aspects of urban development. These decisions cannot be turned into effective plans without a competent, independent, and free-from-constant-interference-planning agency. And these plans cannot be implemented without the setting up of interest group steering committees for different components that guarantee transparency and accountability. Funds for development are available and can be generated through innovative means. A process of guaranteeing their proper utilization remains the major problem and this cannot be overcome except through the creation of effective institutions.

If we are to solve Karachi's traffic and transport problems, we have to move away from crisis management, ad-hoc-half-thought-through projects (often imposed from Islamabad), and from denying reality in favour of "politically attractive" grandiose mega projects, the likes of which have failed miserably in other Asian cities. We have to realize that without competent and effective institutions urban planning and management is impossible and that you cannot have effective institution without initiating and institutionalizing a genuine consultative process with the major actors in the urban development drama.

Seventeen

Karachi's Traffic: The Infrastructure Issues

Traffic jams are becoming common in Karachi. Their main cause is the absence of effective traffic management. However, congestion on Karachi roads can be considerably reduced, management made much easier and environmental degradation for the inner city reversed, if a number of infrastructure projects, which are discussed in this article, can be undertaken.

Karachi has about 15,000 mostly individually owned intra and inter city buses. There are no bus terminals, bus depots or bus workshops for these buses. As a result, they use the roads for this purpose. A services sector to these functions develops around them. This service sector consists of eating, sleeping, relaxing, massage and toilet facilities for the transporters; mechanics, washing and servicing facilities for the vehicles; and hawkers and beggars for the commuters. All these facilities are performed on the roads. As a result, in numerous key locations in the city (example Saddar and Lea Market) over 70 per cent of road space is used for these functions. In addition to causing congestion and obstacles to traffic movement, it causes large scale environmental degradation and inappropriate land-use changes at important locations along major corridors of movement. Conflicts between transporters, shopkeepers and residents are common wherever these facilities develop in an ad-hoc manner. As a result, many transporters park and service their vehicles outside their homes. This creates problems in their neighborhoods, since most of them live in the narrow lanes of

the inner city, katchi abadis or lower middle income planned areas.

Karachi transporters have demanded space for these facilities for years but without much success. They have also offered to share the cost for the development of these facilities and bear the cost of their maintenance and operation. When Mr. Zia-ul Islam was commissioner Karachi, some work on this issue was initiated. Subsequently, the Traffic Engineering Bureau (TEB) of the Karachi Development Authority has done a remarkable job of identifying and getting notified 32 plots in land hungry Karachi for building terminals, depots and workshops. The TEB has also developed plans and estimates for developing some of these plots on an incremental basis. In addition, the NGO Shehri Transport Corporation plots so that they may be used for transport related facilities. If work on these facilities is not undertaken immediately, it is more than possible that many of these plots will be encroached upon. Currently negotiations between TEB, Karachi Municipal Corporation, the transporters and certain NGO representatives are taking place to see how these plots can be best developed.

Congestion is also created by port related heavy vehicle traffic that passes through the already congested roads of the city. Estimates for this traffic vary from an average of 36,000 to 50,000 vehicle trips per day. Most of this traffic consists of trucks and much of it of NLC trailers and container carriers which, in addition to creating traffic problems, destroy the city roads. If the Northern Bye-Pass, which was conceived in 1972, as a link between Karachi port and the Super Highway, is ever built, then all port related traffic can be made to bye-pass the city. However, simply building the bye-pass is not enough. At least 350 metres on either side of the bye-pass will have to be protected against all development. If this is not done, then the bye-pass will become unusable for fast moving through traffic. This has happened to a number of bye-passes built for many of

Pakistan's secondary cities.

The building of the bye-pass will also help in solving other port and inner city wholesale market related problems. In 1951, the Karachi port handled about 2.8 million tons of cargo of which 95 per cent was transported by rail and all of it was stored in the Karachi Port Trust (KPT) yards. In 1991, port activity was 23.74 million tons and over 80 per cent of it was by road. The KPT storage and transport support facilities have not kept pace with the demand and as a result, much of the cargo is stored and handled in informal unplanned facilities which have developed and in open spaces and along wide roads in the area adjacent to the port and the old city. The problems this has created are enormous as any visit to these areas will show.

Similarly, Karachi's inner city markets have expanded from serving a population of 450,000 in 1947 to serving a population of 10 million in 1998. The expansion of these markets has taken place within the inner city. Much of Karachi's extraordinary beautiful built cultural heritage has been pulled down to be replaced by warehousing and storage, that this expansion requires, and in the process old community organisations and institutions have ceased to exist and a beautiful built environment has been degraded. What remains needs to be salvaged desperately. Studies by the Heritage Cell, Department of Architecture and Planning at the Dawood College, clearly establish that this salvaging is possible if some of the markets, or even if a part of their activities, can be relocated.

The lanes and even the access roads in the inner city are too narrow to be used by the heavy trucks that serve these markets. Cargo is moved by trucks to suzukis, and from suzukis to hand carts and then in some cases it is carried by hand to the storage areas which are, due to shortage of space, increasingly on the upper floors of the buildings. Due to these reasons, traffic movement in the inner city is difficult, to say the least and there is large scale pollution. The major markets in the inner city are

the Dhan or grain market, the chemical market, the metal market and the cloth market. Almost all their storage is also located over here. The Dhan Mandi is by far the largest of the markets (and the largest grain market in Pakistan) and is represented by Karachi Grocers Association (KGA). The KGA, according to its president, Niaz Ahmed Khan, has lobbied constantly with the government for land near the railway line to where the market can move out. The KGA has not succeeded in acquiring this land. Increasingly storage facilities are now being acquired in katchi abadis or other locations, for both the chemical and grain markets as space in the inner city is no longer easily available. The market operators are fed up of the situation due to the difficulty of vehicular access to their markets and the residents are fed up due to congestion and environmental problems. Residents complain of respiratory and hypertension problems due to markets activities and point out that the chemical market it, among other things, a major fire hazard for their areas.

The construction of the Northern Bye-Pass will open up huge tracks of land. All port and wholesale market related storage and transport activity can be relocated here thus releasing pressure from the inner city. Negotiations with the wholesale market associations can also lead to the relocation of the more polluting or expanding of these markets onto the bye-pass. However, if decisions regarding the planning, relocation procedures and future operation of the markets are left to government officials and politicians, these markets will meet the same fate as the new Sabzi Mandi. Syed Ghulam Jillani, president of the Aarhi Welfare Association and Mehboob Shah, general secretary of the Labour Union of the present Sabzi Mandi, gave a long list of reasons for which they are not willing to shift to the new Sabzi Mandi. The claim that 98 per cent of the allottees of shops in the Mandi are in no way connected to the Sabzi Mandi but are chosen for their connections with bureaucrats and politicians. The shops and other facilities they say should have been owned by the KMC and rented out to the aarhis or allotted directly to them. They also say that the Mandi cannot possibly function

without cold storage facilities, which they claim do not exist, and there is no arrangement for telephones and electricity. In addition, no space has been provided for housing the labour to the Mandi either. Mehboob Shah says that only land was required for it (for which they would have paid), and they would have built their homes and acquired infrastructure on their own, as they have done in the katchi abadis where they live today, next to the present mandi. They also have very serious objections to various procedural aspects of relocation, which they claim are corrupt, and to architectural and engineering design aspects of the new mandi. The development of space for warehousing and cargo terminals will stop the ad-hoc development of these activities all over the city and they will also make the revitalisation of the inner city and the saving of Karachi's built heritage easier.

Another major aspect of congestion in Karachi is related to the movement of 23,000 oil tankers through the city. Oil is stored at Karachi port from where it is pumped to the refinery. From the refinery it is pumped back to the port from where the tankers take it to the interior of Sindh and to other provinces. Most of this movement today is through Clifton, Defence Society and the National Highway. If an oil pipe line, as has often been suggested, is constructed from the refinery to an oil terminal on the National Highway, then these 23,000 tankers will not need to come into the city and their enormous services sector would also move out. In addition to reducing congestion and pollution, this move would also result in considerable savings in energy costs.

The above infrastructure projects are essential if we wish to remove the increasing traffic related environmental pollution and degradation in Karachi. All of them can be carried out incrementally so as to overcome the financial problems that we are told are preventing some of them from being built. Also, by building them to lower standards and improving them over time, we will bring quick relief to the citizens of this city rather than wait for large funds to implement them to higher standards.

A Chinese proverb says, "let not the best become the enemy of the good". Our politicians, planners and citizens must learn to understand the meaning of this proverb, as the unimplementable and unaffordable best is what there are almost always promoting.

Eighteen

Karachi Mass Transit: What we can learn from others

Recently, a seminar on rail based mass transit systems was arranged in Karachi by the Chartered Institute of Logistics and Transport Pakistan and the Mass Transit Cell of the Karachi City Government. In a paper read at the seminar, the Director of the Karachi Mass Transit Cell presented construction cost details of rail based mass transit systems in other cities of the world. These figures were very revealing and welcome. We can now compare our costs with those of similar cities. However, there is much more that we can learn from the experience of others and it would have been good if this too could have been discussed.

Manila, Cairo, Bangkok, Calcutta and Bombay are cities very similar to ours in demographic and social terms. All of them have rail based mass transit systems in operation. Some of them have developed these systems recently. It is important to understand the repercussions of these systems and how they have fared.

In the case of Manila, Cairo and Bangkok, mass transit rail systems have not improved traffic conditions. In all these cities traffic related problems have increased and there are enormous traffic jams in which people can be caught for anything between one to two hours if not more. This is in spite of the fact that these cities have also built numerous flyovers and/or expressways on which millions of dollars have been spent. Traffic moves fast on

the expressways but at the exit to the expressway (except when leaving the city) increased traffic congestion takes place. The recent circular road loop constructed in Bangkok has however eased traffic conditions. Planners feel that if it had been built earlier, some of the expressways would not have been necessary. It is clear from the experience of these cities that effective traffic management and planning to segregate through and local traffic and not inner city expressways, flyovers and rail mass transit systems alone will improve traffic conditions.

In both Manila and Bangkok, there is a continuous increase of bus traffic even on roads where the light rail systems have been built. Taxis are a major cause of congestion as they wait below the stations on the roads for customers. The reason for this is simple. The cost of light rail travel far exceeds that of bus travel. For instance, the sky train fare in Bangkok is between 10 to 40 Bhat or an average of 29 Bhat (Rs 37.5) whereas the same journey can be made by bus in 3.5 to 5 Bhat. In Manila, the fare is less, 12 Peso (Rs 19) when I last used it in 2000. Again, the bus fare for the same journey is less than 25 per cent of the rail fare. Again, neither the Bangkok nor the Manila systems serve the suburbs of the city whereas the major movement of commuters is from the suburbs to the city centre.

Both the Manila and the Bangkok light rail were built on BOT. The fare is cheaper in Manila because the light rail construction cost much less. In Manila it is a simple elevated transit way six metre high in the centre of the road. As such, it is environmentally unfriendly and has degraded the corridors it passes through. In Bangkok the light rail is a sky train transit way at a height, in places, of over 15 metres. Its construction cost is about ten times more expensive than that of the Manila light rail and this explains its high fare structure as well. However, due a booming tourist industry, Bangkok was able to afford its sky train and make it environmentally more friendly by linking it up through well conceived urban design projects with commercial and shopping plazas. This will not be possible in

Karachi given the locations through which the light rail mass transit will pass. The lessons for Karachi from the experiences mentioned above are obvious.

Bombay and Calcutta have suburban railway systems whose travel costs compare favourably with those of buses and as such there is a disincentive for using other than the railway system. The reason for low fares is that these systems were built by the state and with state subsidies. Also, these systems are rail only corridors and as such do not congest the already congested roads as in Manila and Bangkok. They carry people from the suburbs to their places of work and back in better environmental conditions than what polluted roads can offer. Inner city mass transit systems, by linking up with them, become far less extensive, intensive and expensive. The Karachi Circular Railway (KCR), revived and extended into the suburbs, with serve the same purpose even better since its outreach will be far more extensive than that of the Calcutta and Bombay suburban rail systems. However, if it is built on BOT, without a major government subsidy, its travel cost will be much higher than that of bus transport, defeating the purpose for which it is being constructed.

All cities who have built rail based systems have not built elevated transit ways through their historic areas and through the narrow corridors of the inner city. This has been a conscious decision on their part. Thus, in Istanbul, Ankara, Cairo and now Delhi, the light rail systems within the inner city and historic areas are all underground. In the case of Bangkok and Manila, building an underground is extremely expensive since both the cities are built on marshes. As such, it was decided not to build light rail systems in the historic Pahurat and Bang Lamphu districts of Bangkok although they are congested and used heavily by commuters. Similarly, in Manila, transit ways were not built near the historic fort area and major changes were made. To building an elevated light rail through the Macarty district to address environmental and heritage concerns of the citizens and

urban planners.

Corridor One in the case of Karachi, passes through Karachi's historic district where most of its important monuments and recently listed buildings are located. Karachi has a wealth of beautiful colonial architecture in its historic core. It is encouraging to note that in one of its alternative proposals for Corridor One, the City Government is planning to build an underground through this area. It is also interesting to note that building an underground is not at all as expensive as we were led to believe earlier. The Karachi Mass Transit Programme (KMTP) elevated Corridor One that the Canadian firm was to build in 1998, was costing us US\$ 44 million per kilometre. In Istanbul, the cost of the elevated system has been US\$ 26 million per kilometre and in Delhi (where 23 per cent of the system is underground) the average cost has worked out to US\$ 33 million. And what is more surprising is that in Madrid, a First World country, the construction cost for an underground system (through tunnelling which is the most expensive of all alternatives) has worked out to US\$ 53 million per kilometre! As such, six kilometres of underground on M.A. Jinnah Road is economically quite feasible. Its technical feasibility on the other hand was never questioned.

Given what has been discussed above, a rail based mass transit system for Karachi must be subsidised by the government so as to make its fares comparable with other modes of public transport. It must also make maximum use of the rail corridor and provide protection to our cultural heritage along M.A. Jinnah Road so that it can be subsequently upgraded and restored. And finally, if we wish to solve our growing traffic problems, then the rail based mass transit system has to be a part of a larger city traffic and transport plan of which land-use planning and protection is the most important element.

Nineteen

Traffic and Mass Transit Issues: Lessons from Other Countries

"It is very clear today that solving traffic problems by building more and bigger roads is like trying to put out a fire by gasoline" Enrique Penalosa, the mayor who solved Bogota's traffic problems

In the last twenty years a large number of Third World cities have made huge investments in trying to solve their traffic problems and in building mass transit systems for their commuters. These traffic and mass transit related projects and programmes have been studied and evaluated by academics, relevant professionals and practitioners and by civil society organisations and a number of lessons have been learnt as a result. Karachi should benefit from these lessons as the government is in the process of constructing large traffic engineering projects for the city and proposing a variety of mass transit systems.

Bangkok, Tehran, Manila, Cairo, to name a few cities, have built hundreds of kilometres of expressways and hundreds of flyovers. Yet, their traffic conditions have not improved. As a matter of fact, they have become worse over time. Karachi today is far better off than them. The reason for this is that traffic problems are not solved simply by building expressways and flyovers but by effective segregation of through and local traffic, fast and slow traffic, pedestrianisation of appropriate precincts and above all by the development of a rational

landuse policy and its implementation. For example, the building of the Lyari Expressway will lead to real estate development on either side of the river which in turn will generate over fifty thousand additional vehicles to this corridor once this development is complete. If we had not built the Expressway but had invested in relocating the Metal Market, the Dhan Mandi and the Chemical Market to the Northern Bypass and the recycling industries to landfill sites, we could have reduced about 30,000 vehicle trips per day into the old city. This includes heavy vehicles as well. As a result, we would have been able to provide badly needed amenities to the inner city which are now encroached upon by warehousing and cargo handling spaces for these markets and this would have created an environment for salvaging our built-heritage. Similarly, instead of building the KPT underpass, we could have extended the oil pipeline from the refinery to a point on the National Highway and could have created an oil terminal there. This would have removed twenty thousand tankers which now ply between Shireen Jinnah Colony and the National Highway through the Sunset Boulevard. Scores of such examples can be listed for the city of Karachi which also involve the movement of containers. Planners in Manila and Bangkok are of the opinion that the failure of their investments in traffic engineering is the result of ad-hoc decisions not based on a comprehensive traffic and landuse plan. In Cairo, there is an opinion that some of the existing flyovers would have to be removed if Cairo's traffic problems are to be resolved.

All the cities mentioned above have also invested heavily in mass transit systems using elevated light rail and also metro in the case of Bangkok and Calcutta. These systems have not solved their transport problems and nor have they helped in solving their traffic problems either. The reasons for this are that the rail based mass transit systems that have been built are on too small a scale to have a citywide impact; they are too expensive for the lower income groups to use; and they were built on corridors used by the maximum number of commuters although

in most cases these commuters come to these corridors from other locations often far from these corridors. In addition, these systems have not decongested the corridors on which they have been built, as they were supposed to. On the contrary, these corridors have become further congested as the light rail stations have become places of interchange between different modes of commuting.

The reasons for these failures are simple. One, light rail systems are expensive and as such Third World cities have not been able to invest adequately in them. As a result, Bangkok's sky train serves only three per cent of Bangkok's commuting population; Manila's serves only eight per cent; Cairo's only two to three per cent; and Calcutta's and Tehran's metro even less. The rest of the population uses run down and often deteriorating bus systems. Two, since these systems have often been built without subsidies and are supposed to operate without subsidies also, they are expensive to use. The average cost of Bangkok's light rail per trip is 25 Bath as opposed to 5 Bath for a similar journey by bus. The case of Manila is similar. So the poor do not use these systems.

Due to the reasons given above, Latin American cities are now opting, with considerable success, for segregated bus ways which operate in a manner similar to the light rail systems but are much cheaper to construct and as such have a larger outreach. Elevated light rails' cost about US\$ 40 million per kilometre; light rail at-grade about US\$ 10 million per kilometre; and an electric trolley bus system, operating in a manner similar to the light rail, US\$ 3 to 5 million per kilometre. The trolley bus system is also noiseless and as such causes no noise or air pollution and can be extended with comparative ease as compared to the rail systems. In term of outreach what does this mean? Corridor One, 15 kilometres of elevated light rail, Was supposed to be built for US\$ 668 million. At-grade we could have built 68 kilometres and we could have built 225 kilometres of trolley bus systems for the same sum. However,

the pros and cons of these systems have to be studied keeping in view are socio-economic conditions and lessons learnt from other countries.

The Karachi Circular Railway (KCR) connects all the major work areas of the city where according to the Karachi Development Plan 2000, 45 per cent of Karachi's commuting public works. It can be turned into a light rail system and can be extended at-grade into the major residential areas which are Baldia, Orangi, North Karachi, and Landhi-Korangi where 68 per cent of the commuting public originates. This seems to be the most rational project for the city along with the development of trolley bus corridors. It is also possible to turn the KCR corridor into a trolley bus system. However, these are issues that the transport engineers will have to decide in consultation with academics and civil society organisations.

Whatever decisions are ultimately taken, it is important that traffic engineering projects are a part of a larger city level traffic and landuse plan and not ad-hoc local level interventions as they are today. Mass transit systems should not be "prestige" projects but should serve the maximum number of commuters in the shortest period of time, and are affordable, even if their "efficiency" is compromised to some extent. And finally, elevated systems should not be built in the inner city where Karachi's extraordinarily rich built-heritage is located.

The traffic engineering and mass transit projects will change our city unrecognisably, for better or for worse, as they have other cities. For better, only if these projects and systems benefit the bulk of our lower and lower middle income groups who are pedestrians and public transport users and who comprise 70 per cent of Karachi's population.

Twenty

The Karachi Elevated Expressway

The Karachi City Government has decided to build an elevated expressway, called the Karachi Elevated Expressway (KEE) from Jinnah Bridge to Quaidabad. The Expressway will pass over Moulvi Tamizzuddin Road, Club Road and Shahrah-e-Faisal. The objective of the Expressway is to relieve congestion on Shahrah-e-Faisal and provide a fast link between Karachi Port and Port Qasim for port related traffic. The narrowest section of the corridor through which the KEE will pass is from the PIDC to Napier Barracks. This stretch is Karachi's potential tourist area and contains its main five star hotels, Gymkhana Club, Sindh Club, Quaid-e-Azam Museum and Napier Barracks (which are heritage buildings). Frere Hall is also in close proximity. In this stretch the KEE will cover almost the entire road width.

As required under law an Environmental Impact Assessment (EIA) has been carried out by consultants hired by the proponent. The EIA findings are that the adverse affects of the KEE are minor and can be mitigated. At a public hearing on the EIA citizens and professional bodies expressed serious concerns on the concept and design details of the KEE. However, the design details and the financial feasibility are of secondary importance. It is the concept of an elevated expressway through the most prestigious corridor in Karachi that needs to be questioned.

The EIA has stated that elevated expressways in other countries

have solved traffic problems that are similar to the ones faced by Shahrah-e-Faisal and that there is no other solution to these problems apart from constructing the KEE. This view conflicts sharply with a large body of technical and academic literature on transport engineering and with the experience of a number of cities who have constructed elevated expressways through their city centres. Bangkok, Manila, Tehran, Cairo and Dubai have all constructed scores of kilometres of expressways similar to the proposed KEE. These expressways have not solved traffic problems and traffic conditions in these cities are far worse than that of Karachi. Dubai, which is nearest to us in geographical terms, is grid-locked for six to eight hours a day. No country in the developed world today would ever dream of building an expressway to their city centres because of the environmental and aesthetic degradation that they cause. As a matter of fact, San Francisco, New York, Boston, Seoul and Paris have actually demolished their expressways and turned them into public space or housing. This demolition has relieved traffic congestion because it has been accompanied by better traffic management, the development of a larger traffic and transportation plan, segregation of local and thorough traffic and/or the building of segregated bus ways which have supported people opting for taking the bus rather than using a car. In our case none of these alternatives have been explored and nor is the KEE a part of a larger traffic and transportation plan. This was recognised by the consultants during the public hearing.

There are also financial issues that have not been seriously studied. The investment by a foreign company for the KEE is to be recovered by a toll on vehicles using the KEE. At the hearing we were informed that the traffic volume on Shahrah-e-Faisal that would use the KEE was not sufficient for the company to recover their investment. As such, it has been decided to divert all port related traffic onto the KEE in spite of the fact that other options such as the very feasible routes of the Southern and Northern Bypasses are available. So we will now have trucks, container vehicles and tankers plying overhead the Shahrah-e-

Faisal in addition to encroachment on urban space and the denial of sun light in the narrower confines of our most prestigious corridor. Again, this decision conflicts with experience for cities like Bangkok, Seoul and Manila are trying to limit or ban heavy traffic on their inner city expressways. Boston has demolished the expressway carrying heavy traffic and in Riyadh the pollution of the expressway passing through the city was so heavy that they decided to vacate the areas on either side of it and forest them. In addition, the Institute of Architects Pakistan (IAP) has pointed out that for an average toll of Rs 20 per vehicle, 143,835 vehicles per day would be required to use the expressway. Where they will come from is not known.

The building of the KEE is an ad-hoc and ill-informed decision. Nor is it a part of a larger plan. What the proponent should have done was to take a decision for not building an elevated expressway on the Shahrah-e-Faisal and then searched for realistic environment friendly and people friendly alternatives of which there is no shortage. It is the expressed desire of the City Government to turn Karachi into a "world class city". The building of the expressway will certainly not help in achieving this objective.

Twenty one

The Northern Bypass and the Lyari Expressway

The Northern Bypass was proposed by the Karachi Master Plan 1975-85. If the bypass had been built, all port related traffic, which now passes through the city, would have been redirected through it to the Super Highway. Since this traffic consists mainly of heavy diesel vehicles, their bypassing the city would have helped in removing congestion and pollution in Karachi. However, the bypass, for a variety of reasons, was never built and over the years the volume of port related traffic has steadily increased congesting and polluting the city further.

In 1989 a group of public spirited citizens proposed the Lyari Expressway as an alternative to the Northern Bypass. The Expressway was to be an elevated one built over the Lyari River from the port to Sohrab Goth. Subsequently, the local government changed its design and it was decided to build the Expressway along the banks of the Lyari River.

Many professionals, NGOs and citizens of the Lyari Corridor, objected to the building of the Expressway. They were concerned that there would be large scale dislocation of communities living along the corridor along with the destruction of business, social facilities and physical infrastructure. The number of families to be effected were calculated at anything between 12,000 to 25,000. It was felt by opponents of the Expressway that the government did not have the financial and technical capacity to finance and manage a

relocation project of this scale for the effectees and nor did it have developed land at appropriate places for such a project either. It was estimated that the relocation project would cost many times more than the Expressway itself. The opponents also pointed out the large scale corruption and victimisation of the poorer effectees that has accompanied all relocation projects in the past.

Another concern was that since the Expressway was passing through the centre of the city, it would increase environmental pollution along an already congested and polluted corridor. The proponents of the Expressway have pointed out that port related traffic is not sufficiently large to cause any major increase in pollution. However, the opponents pointed out that such traffic would increase in the future as it has done in other cities where heavy traffic passing through the city on expressways built for it has been banned.

Then there were other concerns. Traffic generated by the port and inner city wholesale markets and manufacturing units (Dhan Mandi, Metal Market, Chemical Market, to name a few) required cargo terminals and warehousing which have developed informally in the narrow lanes of the inner city and wherever space was available. This has congested the inner city and caused large scale environmental degradation of which Karachitees are, only too well aware. The Lyari Expressway would not provide space for cargo terminals and warehousing, or for the shifting of the markets which is essential if the enormous problems of the inner city, and of Karachi for that matter, are to be addressed. Such space could only be provided by the building of the Northern Bypass. Also, the Expressway was joining the Super Highway at Sohrab Goth. Sohrab Goth is already congested. The Expressway would congest it further, clogging up their main exit to the city. The Northern Bypass on the other hand, joins the Super Highway beyond Sohrab Goth. Proponents of the Expressway have also pleaded that by building the Expressway they will remove the drugs and land

mafia from the corridor. The opponents have argued that the mafias will simply move to other areas of the city if at all. Sohrab Goth was bulldozed in 1987 using this logic, but drugs and arms have increased many fold since then and much of it in the same location.

Many public hearings and discussions were held on the two alternatives and in 1998 it was decided by the then Mayor that the Northern Bypass alternative was a better solution.

After coming to power the present military government took important steps to undertake the building of the bypass alternative. However, in June 2000 it decided to build both the Bypass and the Lyari Expressway. Consultants to the Expressway project are on record that 1.5 million square yards will be reclaimed from the building of the Expressway and on this the effectees are to be rehabilitated. In addition, it has been stated, though not categorically, that the Expressway will not be used for port related heavy traffic (thus it will not be an environmental hazard) but that it will be developed in a manner similar to the Canal Bank in Lahore.

Most of the previous objections of the opponents of the Expressway still stand but a new concern can now be added. The Lyari Corridor is really the spill over of the economic activity and related residential requirements of the old and inner city where due to a lack of space much of this activity is now taking place on the pavements and roads. If 1.5 million square yards is to be reclaimed for the effectees by the building of the Expressway, the effectees will sell this to the market operators and transporters of the old city since in the corridor land values even for informal possession can be as high as Rs 15,000 per square yard. Projects for Karachi have shown again and again that the market is stronger than government agencies and there is no reason at all to believe it will be any different this time.

Thus, if the Expressway is to be built, it has to be a part of a larger

rehabilitation plan for the old city. It should be preceded by the building of the Northern Bypass and the shifting of the markets and related activities in the inner city and the Lyari Corridor to the Bypass. This will decongest the inner city (something its residents have been demanding for years) and make its rehabilitation possible.

A spokesman for the National Highway Authority (NHA), in a letter to the press has stated that these concerns, including the inner city issues, are all being addressed in the Lyari Expressway Plan. However, the market organisations, the people living along the corridor, the transporters, relevant academic institutions and the Karachi NGOs who have a track record of serving this city, are completely oblivious of these plans.

Karachi has a history of failed plans simply because the involvement, knowledge and considerable research work of various interest groups was not only not solicited but their advice was ignored. Their concerns have always proved to be correct. It is therefore important that the NHA plan is shared with the citizens, academia, press and NGOs of Karachi and public hearings held around it before it is finalised. If this is not done then who will bear the blame if the Plan ends in yet another disaster for the city and for the effectees and projected beneficiaries of the project?

Twenty two

No to the Lyari Expressway

The immense humanitarian disaster (physical, social and economic) that is being created as a result of the building of the Lyari Expressway has been covered by the press. Urban planning considerations for and against the Expressway have also been discussed for many years. Appeals for transparency regarding the project design and for public consultations regarding its concept have also been made by citizens, NGOs, CBOs and professionals. These have been ignored by the government. However, since the decision of the military government to build the Expressway was taken, the authorities have given a number of justifications for its construction. These justifications need to be considered rationally.

What has been said by the authorities, time and again, is that they wish to remove and stop for the future, encroachments in the river bed since they can be washed away during floods. The concern of the authorities as such is for human life and property and is commendable. However, the Expressway is not removing people only from the river bed. More than fifty per cent of the affectees of the Expressway are those whose houses and businesses come in the Expressway alignment and who live above the flood line. In any case for shifting people from the river bed, an Expressway is not required. All that is required is to shift the population living below the flood line. This population is engaged for the most part in the garbage sorting and recycling Business which is also located along the corridor. Discussions with them indicate that they would be happy to shift along with

the businesses to the Northern Bypass or to land fill sites, provided water and electricity is available. To prevent further encroachment, all that is required after that is the channelisation of the river and the building of retaining walls along its banks.

The other reason that has been given is that the building of the Expressway will provide "unhampered and quick access to port traffic". But then, the Northern Bypass is being built for this purpose and after its construction, what need is there for the Expressway? Is it necessary to duplicate this function? It does not make sense. It makes even less sense since many cities who built expressways through the city for through traffic, have long since diverted such traffic onto bypasses since the expressways were creating air and noise pollution. It must be remembered that the Lyari Expressway is being built through the most heavily congested areas of Karachi. To understand what heavy traffic can do, one simply needs to talk to people living on Khayaban-e-Roomi. Since those areas of Clifton were opened to heavy traffic, people no longer sit and play cards on the roundabouts, trees have shrivelled and residents complain of respiratory problems and related diseases. The Defence Housing Authority, for very sound environmental reasons, has not permitted the Southern Bypass to be built through it.

The third reason given for the building of the Expressway is that it will reduce traffic congestion on city roads. Any one living in Karachi knows that the congestion on city roads can be more effectively reduced by other less costly and less destructive means. Karachi's main corridors are broken and cannot be used for more than half their width; they have no footpaths so people are forced to walk on the roads; they are encroached upon by buses and trucks since there are no bus terminals, depots and cargo handling terminals; there are roads linking the corridors that were planned twenty years ago and have still not been built; there are traffic management issues which traffic engineering projects if implemented can solve; and above all there is the issue of traffic management. These comparatively small

projects will bring far greater benefit to the city since they will not only ease traffic flow but will also benefit the pedestrian population and tens, if not hundreds, of Karachi neighbourhoods. The Lyari Expressway will not bring any of these benefits. It is a mega project which includes the construction of sixteen bridges and four inter-change flyovers in a length of sixteen kilometres while the rest of the city infrastructure lies in shambles. One can equate its building with a household that requires bread but opts for buying a Mercedes and as a result continues to starve. It smacks of the same vulgarity.

The fourth reason given for the building of the Expressway is that it will beautify the city and "sea water will get treated sewage water". Presentations of the Expressway project have shown transparencies in which boats are floating on the river and other recreation facilities. This is a fantasy. The Lyari river is actually a sewage channel. In addition, a box trunk is being built in its bed with a massive ADB loan to channelise the sewage to the Mauripur Treatment Plant. After this is completed, theoretically, the river will be dry. But then, it is possible that the planners are not aware of this. Also, the river banks will be unapproachable since the designs show the Expressway to be protected. Even if it is not protected, pedestrians do not cross expressways. And then, expressways and recreation do not go together and there are many other ways of beautifying cities. In addition, in the opinion of many architects the expressway is a disaster in aesthetic terms. It's a roller of coaster supported on high walls when it flies over the existing bridges. Under passes would have been cheaper and less obtrusive. Usually for projects of this sort an aesthetic committee comprising of experts is appointed to review the project. In this case however, no such committee has been appointed.

The building of the Lyari Expressway should be seen in the larger context of the city in general and of the Lyari Corridor in particular. On either side of the Lyari Corridor between M.A.

Jinnah Road in the south and Estate Avenue in the north, are the most congested areas of the city. Densities are as high as four thousand persons per hectare. There are no open spaces and collectively this area has no lung. In addition, this area contains the city's wholesale markets and environmentally polluting industry, both formal and informal. It also contains warehousing and storage for the markets and industrial activity. Residents of these old Karachi settlements have constantly asked the government to shift the warehousing and industry out of their areas so that their environmental conditions can improve. Market operators also wish to leave (but have no option) since managing cargo handling and transportation in the narrow lanes of the old city is becoming increasingly difficult, if not impossible. The Lyari Expressway solves none of these problems of the inner city or of the neighbourhoods it passes through. On the contrary its building is congesting these neighbourhoods even more. This is because the businesses and homes that are being demolished are being relocated within the old neighbourhoods thus densifying and degrading them further.

If the military government wishes to do Karachi a favour, it should stop the construction of the Lyari Expressway. It should build the Northern Bypass and transfer the Dhan Mandi, Chemical Market and garbage sorting and recycling industry to the Northern Bypass. Naturally, the godowns, transport, related businesses and labour working in them will also want to shift. This shifting, if well planned, will improve the functioning of these activities, benefit the relocated residents and can be self-financing. The spaces vacated by these activities in the inner city can then be converted into badly needed amenities. Karachi will change. Traffic congestion will be eased and Karachi's oldest areas will be rehabilitated.

At the same time, retaining walls should be built along the river and the river should be channelised. A lot of land will be recovered as a result. This land can be converted into a green

space, a badly needed lung for a neglected and degraded inner city, a part of which is where Karachi began as a city and which contains the decaying remnants of its glorious architectural heritage.

The Lyari Expressway is a typical example of insensitive planning where a grandiose project is developed ignoring larger contextual realities; where physical results are more important than people and the environment; and where the megalomania of politicians and the fantasy of planners is satisfied. Karachi has had many such projects but they have not benefited the people or the city and many of them remain incomplete. It is high time we realised that planning is all about consensus building, and about people, their homes and employment, and that the vast majority of Karachi's population consists of pedestrians, commuters who use public transport and who work and live in the informal sector which is the back bone of the city's economy. We need to plan to benefit them. That should be our priority. And if we cannot do this then we will simply further fragment an already fragmented city.

Twenty Three

The Revival of the Karachi Circular Railway

The government of Sindh has recently appointed Engineering Consultants International (ECIL) as consultants for preparing what is termed as a Viable Implementation Plan for the Revitalisation of the Circular Railway. ECIL is a Pakistani engineering firm with considerable experience in designing infrastructure and communication projects both in Pakistan and in many other countries.

ECIL has carried out initial investigations and has developed a concept plan on whose details it is currently working. ECIL's conclusions and concept plan are very similar to what many Karachi professionals, NGOs and concerned citizens have been saying and pressing for over the last six years. ECIL's surveys and proposals clearly show that a mass transit system for the city can be built around the circular railway and its subsequent expansion along Karachi's major growth corridors.

It is important to summarise here why and how a mass transit can be built around the circular railway and the many advantages of such a system. According to the Karachi Master Plan Studies 1987, forty five per cent of all employment in Karachi is concentrated in SITE, Landhi-Korangi Industrial Areas, the Port, the Central Business District and Saddar. The KCR and the Karachi main line passes through or adjacent to all these areas except Saddar. However, it is only a seven to twenty minute walk from Saddar, depending on which part of Saddar

you wish to go to. It also serves a large number of residential areas. The main line also serves the fast developing industrial and residential facilities around the Steel Mills.

Also, the KCR intersects all the major arteries which carry commuters into the city. These arteries include Mauripur Road, Maulvi Tamizuddin Road, M.A. Jinnah Road, Dr. Ziauddin Ahmed Road, Abdullah Haroon Road, Chaudhry Khaliquzzaman Road, Korangi Road, Shaheed-e-Millat Road, Shahrah-e-Faisal, Rashid Minhas Road, University Road, Shahrah-e-Pakistan (Super Highway), Allama Rashid Turabi Road, Shahrah-e-Noor Jehan (North Nazimabad), Mangopir Road, SITE Central Avenue, Hub River Road. The majority of these intersections have flyovers or bridges over them. If stations are shifted to these flyovers, an effective road-rail link becomes possible, thus connecting all of Karachi to the rail system. This will also result in the spaces below the flyovers and bridges being used for the benefit of the city.

Then Karachi's suburbs where most of the city's commuters live lie beyond the circular railway and are served by the Baldia, Orangi, North Karachi and Korangi corridors. The railway can be extended to these corridors in phases thus serving all of Karachi. Luckily the width of these corridors makes it possible for them to accommodate the railway.

ECIL's proposal has two phases. In phase one, the northern section of the KCR will be rehabilitated (that is from City Station to Gulistan-e-Jauhar), and double tracked. Stations will be shifted to under the flyovers and bridges to make the KCR-road link possible. Simply by rehabilitating this section and making it operative, the volume of commuter traffic on the roads within the circle of the KCR (including M.A. Jinnah Road, the North Nazimabad and Liaquatabad corridors, University Road and Chakiwara Road) will fall to much less than half (see ECIL maps 1 and 2). This means that there will be at least a reduction of about 7,000 mini bus trips on these arteries alone. Phase one

will take eighteen months to implement.

In phase two ECIL has proposed a spur of six kilometres from the Nazimabad Station to Nagan Chowrangi and the activating of the main line rail corridor. In addition, a spur to Korangi from Drigh Road Station is also envisaged. With these spurs in place the vast majority of Karachi commuters will be using the railway as a means of transport thus reducing commuter traffic further on the main roads.

Hopefully, later on spurs to Orangi and Baldia will also be built. Once that happens, the vast majority of Karachitees will be living within two kilometres of the railway, a luxury few cities in the world have (see Map - 3 prepared by the Urban Resource Centre, Karachi).

However, there are institutional issues that have to be resolved if the KCR proposals are to be implemented. First, if full benefit has to be derived from the KCR, it will have to be a part of a larger Karachi transport plan so that it can be effectively linked to an inter and intra city road transport system. Second, who will invest in the KCR and related infrastructure and who will manage and operate it? The rehabilitation of the KCR will open up the rail corridor to real estate development and speculation. Who will plan for this and manage and control its implementation? Can this real estate development subsidise KCR rehabilitation and in this long run its O&M as well thus making train travel considerably cheaper than the road alternative? How will we relocate parts of the informal settlements along the railway line in a manner that is acceptable to their residents? And the most important question, how can all this be done in a transparent manner making large scale corruption (which has been a part of all development and relocation projects for the city) difficult if not impossible? The government of Sindh had a couple of years back passed an ordinance creating the Karachi Metropolitan Transport Authority (KMTA). The ordinance has however lapsed. It is

suggested that the ordinance be re-enacted and the KMTA made fully functional with funds and technical manpower. Members of professional and academic institutions, interest groups, and NGOs should also be a part of its governing body and other special committees. A KMTA constituted in such a manner should be given the task of developing a transport plan for Karachi (of which the KCR will be a part) and on deciding how to implement it.

The citizens of Karachi should press the government of Sindh for an early implementation of the ECIL plan for it not only provides them with an environmentally friendly and comfortable means of transport but also decongests their heavily polluted roads and neighbourhoods. Through the KCR rehabilitation and extension Karachi still has the possibility of developing a less capital intensive, environmentally friendly and cheap to run transport system than many proposals made to date for a mass transit system for the city. What is more important is that the KCR rehabilitation proposal makes use of a valuable existing facility that has often been written off by transport plans for the city. If the land and infrastructure of this facility remains unutilised, it is feared that in the not too distant future it may cease to exist. This is something that should be prevented at all costs.

Twenty Four

The Rehabilitation Of the Karachi Circular Railway: Some Important Considerations

The Karachi Circular Railway (KCR) is in the news again after having been written off by the transport experts in their mass transit proposals for the Karachi Development Plan 2000. Public and professional pressure, however, has led to its importance being recognised. According to press reports, the Karachi Municipal Corporation (KMC) is taking over its management for a year and a technical feasibility is to be prepared for inviting tenders on rehabilitating and running it on a Build, Operate and Transfer (BOT) basis. In this day and age of neo liberal economics and municipal bankruptcy, both of funds and capability, BOT is the only way that the KCR will be able to be revitalised, and an appropriately excellent feasibility study is the best guaranty for an equitable deal with BOT contractors. For the preparation of such a feasibility it is important to understand how the KCR relates to the spatial spread of the city and to its fast expanding corridors of growth which it does not serve at present.

According to the Karachi Development Plan 2000, 45 per cent of the city's working population works in five locations. These are: the Port, Central Business District (CBD), SITE, Landhi Industrial Estate and Saddar. Another fast developing work area is Pipri. The KCR passes through or along side all these work areas except Saddar. However, the heart of Saddar is one and a

quarter kilometres (kms) from the railway line behind Dawn's office and two kms from the Cantonment Railway Station. A walkway from the former location to Saddar and a tram or bus shuttle down Daudpota Road from the later, can get one into the heart of Saddar in 10 minutes. The KCR is also one and a half kms from Shawn Circle in Clifton and less than one km from the Boat Basin. The Pakistan Secretariat, High Courts, KMC Building, City Courts, Passport Office, are all within a 5 to 12 minutes walking distance from it and it runs along I.I. Chundrigar Road, Karachi's main business area. It also runs parallel to Shahrah-e-Faisal which is developing into a major business area. In addition, it is less than one km from Kharadar, half a km from the Fish Harbour and one and a half kms from Lea Market. Pathways to these locations and a shuttle to Lea market is all that is required because a one km walk is no more than 10 minutes and this is universally accepted as appropriate for linking with a transport system.

The KCR also serves important residential areas. These include Masoom Colony, Chanesar Goth, Sindhi Muslim Society, PECHS, Mohammad Ali Society, KDA Scheme 1, Baloch Colony, Mehmoodabad, Shah Faisal Colony, Drigh Colony, Quaidabad, Malir Colony, Landhi, the high density areas of Gulistan-e-Jauhar, Gulshan-e-Iqbal, Federal 'B' Area, Karimabad, Nazimabad, Paposhnagar and Sher Shah. In addition, major katchi abadis lie on either side of the track (see Map - 1). In almost all these cases, pathways from the railway stations to the road system are required. Except in the case of two railway stations, vehicular access is available or can also be provided without any difficulty.

However, the KCR does not serve the areas from where most of the commuting public of Karachi originates and this is its main shortcoming. These areas are Baldia, Orangi, New Karachi and Korangi. Unless these areas can be linked to the KCR, the KCR will not be economically viable and will not successfully overcome Karachi's transport and related environmental

problems. There have been suggestions in the press that bus routes from these areas should be realigned to link up with the KCR. However, this will not result in the majority of the population using the railway as most will prefer to continue their journey in one go by bus rather than break it to take the railway.

The solution to this problem is to extend the KCR into the suburbs. It needs to be extended three kilometers into Baldia along Hub River Road; three kms into Orangi along Shahrah-e-Orangi; five kms into New Karachi along Shahrah-e-Sher Shah; and 4.5 kms across the Malir River from the Drigh Colony Station into Korangi, linking up with the existing main line. There is more than sufficient space on these roads to accommodate the railway. These extensions can be developed in one of three ways. They can be laid on the surface in which case a total of six four lane flyovers will be required to give them an exclusive right of way. Alternatively, they can be built as elevated transit ways, in which case they will probably be more expensive. Another alternative would be to transform the KCR into a light rail system and have the extensions as on-surface-light-rail ones which have an exclusive right of way but mingle with traffic at traffic lights. Advantages and disadvantages for all three alternatives should form part of the feasibility study and so should an incremental approach to building the extensions. It is also important to note that the corridors where the extensions are being proposed are the growth corridors of the city and that in the future the railway can be extended along them.

It is also important to link the inter-city and international commuters to the Karachi mass transit system. For this purpose, the existing Malir Cantonment line can also be extended by two kms to the Super Highway. This will link the Super Highway and commuters on it, to almost all of Karachi. A shuttle from the Airport will also link Karachi visitors to almost every area of the city. These extensions, walkways and shuttles, will capture the vast majority of Karachi's commuting public and make a BOT project feasible for any international bidder. It will also re-

congest M.A. Jinnah Road and open up the railway corridor for development.

Opponents of the KCR have argued that an inner city transport system is what Karachi desperately needs and that M.A. Jinnah Road is the natural corridor to lay it on. However, M.A. Jinnah Road receives commuters from distant areas of the city through a network of major arteries. It generates very little commuters itself. The building of the extensions to the KCR will shift these commuters from the arteries and M.A. Jinnah Road to the railway corridor. The case of the Calcutta, Bangkok and Manila have all taught us that what these large cities desperately require is not an inner city commuter system (though it is important) but a system that can move people comfortably in bulk from the suburbs to the city work areas.

Rehabilitating the railway and building the extensions will require the doing of several things. It will require the re-routing of bus routes to link up with the KCR. The bus routes will become much smaller in length as a result and this will be to the advantage of transporters who always prefer short routes for financial and managerial reasons. It will also require the building of inter-city bus terminals at locations adjacent and easily accessible to the KCR. It will also require the control and monitoring of real estate development that is bound to boom at the KCR railway stations and along its corridors. All these requirements have to be a part of the feasibility report which is to be prepared for the BOT contractors. It is also important that before finalising the feasibility, the plans are published in the newspapers, public hearings are held regarding them, and that they are exhibited in a public space. Since community groups, professionals and concerned citizens have taken so much interest in the circular railway, they should be made a part of the planning and implementing process. The story of Karachi's failed development plans all tell us that without this aspect of participation, projects do not succeed.

With the revitalisation of the KCR and the building of the extensions, the vast majority of Karachiites will be living within two kms of the railway corridor, which is an easy walking and cycling distance. Few cities in the Third World have such a luxury. The implementation of such a plan will go a long way to make Karachi a more liveable and economically more stable city.

Twenty Five

The Vulnerability of Karachi

The wound inflicted on the body politic of Pakistan by the judicial murder of Zulfikar Ali Bhutto has not healed despite the passage of twenty eight long years. Benazir was a balm for that wound. Her assassination has not only removed the balm but has opened a new wound for which there is no balm in sight.

Her assassination and the "law and order" situation it has created has brought into focus a number of issues which a simple resolution of the constitutional crisis will not overcome. These issues have been pointed out by the author many times in the last decade, especially when crisis have happened, but neither the media, the establishment or the politicians have taken them seriously. Two of these issues are important. The first deals with the nature of the "law and order" situation and the other with the vulnerability of Karachi. Both are closely interrelated.

First, the "law and order" situation. The looting, arson and destruction of property that has taken place is not a simple law and order situation. It has to be understood that you cannot create small islands of insensitive and arrogant affluence in a sea of increasing poverty and deprivation on the one hand and a ruthlessly manipulated political and judicial dispensation on the other.

In the eight years of Musharraf's rule, already inadequate public health and education systems have collapsed. Private education is far too expensive for the poor to afford and so is public sector

higher education. This has effectively curtailed social and economic mobility in an era where social values are changing and new aspirations are surfacing. In the last eight years there has been no investment in social housing and so people are now forced to live on the streets which they did not do before. Unemployment has doubled in low income areas and with it organised street crime has increased enormously. Inflation has broken the back of the poor while all around them are symbols of affluence and consumerism promoted by the media, bill boards and aggressive advertising by banks and leasing companies. The world of Pakistan, has in the last few years, been clearly divided between the haves and those who can-never-have as opposed to the have-nots.

Interviews with persons standing in long queues at the utility stores tell us that people wait there for hours just to save Rs 50 per month while above the utility stores are hoardings advertising Toyota cars and luxury items. Other interviews inform us that an increasing number of people who took a bus to work before now walk six to eight kilometres to and from work just to save Rs 15 per day while they are surrounded by an increasing sea of new cars and motorcycles. One news item that the press has not carried is that during the recent disturbances in Karachi, not only cell phones but a number of bicycles were also snatched. This is the situation in Karachi. The situation in the rural areas and small towns of our province is much worse. To put salt on these wounds our President and Prime Minister have informed us on more than one occasion that Pakistani society is rich and affluent since it has purchased more cars, TV sets, motorcycles and cell phones than ever before in its history!

Travelling in different parts of Karachi and from the city to beyond Ghagar Phatak via the National Highway, as I did on 30 December 2007, you see nothing but burnt out cars, trucks and trailers, attacked universities and schools, destroyed

factories and government buildings and banks, petrol pumps and "posh" food outlets - all symbols of exploitation; institutions where the poor cannot afford to study; businesses where they cannot get jobs; government offices where they have to pay bribes and where they are insulted and abused. This is not a law and order situation but an outpouring, not only of grief, but of anger against corruption, injustice and hunger. Many of the food carrying vehicles were looted and around their burnt remains you can still see the remain of atta and sugar they were carrying. It is important to note that along the Highway no khokhas, small eating places and modest shops had been burnt or damaged.

The second issue is the vulnerability of Karachi. It has to be understood that unless issues related to political relationships, poverty, justice and equity are not resolved, this vulnerability will grow. The city depends on its hinterland for everything: water, food and livelihood for a large section of the population who work in the wholesale markets and the services sector. Government institutions, especially federal ones, that control much of the land and employment generating assets of the city have looted these assets for their own benefit. The persons who man these institutions and the politicians that support them have to realise that Karachi is the capital of Sindh and as such its resources are primarily for the people of Sindh, especially for the betterment of the provinces' less developed regions. They have to realise that the city cannot survive a four to five day closure of the highways that supply it with food and the conduits that supply it with water and in the absence of these there will only be looting and anarchy, the beginnings of which we have witnessed in the last few days. Politicians have to realise that in the long run dependence on the army to guarantee the continuation of these supplies is not an option that should be pursued for it damages the democratic process and skews the relationship between the different actors in Sindh's political drama. The only solution lies in striving for a

broad based consensus on how the province is to be governed and developed. This consensus should not be based on political opportunism and so-called pragmatism but on an understanding of history and on moral and ethical values which alone can guarantee development and relationships based on justice and equity. In the absence of such a consensus, Karachi will remain vulnerable and the rest of Sindh will remain alienated from it.

Twenty Six

Billboards

Major social and economic changes have taken place in the world in the last fifteen years. The politics of neo-liberalism has imposed a culture of globalisation and the development of international institutions and covenants, such as the WTO, to ensure its sustainability for the foreseeable future. The soft face of capitalism, as embodied in the concept of the welfare state, has been wiped out by the "market economy" and the freedom of capital and technology to move across national boundaries. As a result, the international corporate sector has become more powerful than many national states. Through the IMF-World Bank promoted structural adjustment, poorer countries have been forced to become a part of this larger global economy and subservient to its institutions and interests.

These immense changes have led to the development of a consumer culture and an elite and middle class of consumers that have no boundaries. Mobile phones, automobiles, international fast food chains, international travel and tourism, insurance companies, banks, house appliances and a whole range of expensive and often foreign manufactured consumer items, such as babies pampers, need to be promoted. For making this promotion possible, many advertising options are used. These forms of advertising are visible to every city dweller but then the consumer items that are being promoted are unaffordable to the lower middle class and the working classes of Pakistan.

This consumer culture is viewed as progress by many economists and social scientists. By others it is viewed as a social evil for it further consolidates the rich-poor divide and promotes conflict and fragmentation of society. Pakistan's Prime Minister certainly sees it as progress for he has cited the increase in the number of cars and mobile phones as a sign of prosperity in Pakistan. However, according to government statistics, poverty in Pakistan has increased over the last fifteen years from 17.32 per cent in 1987-88 to 33.5 per cent in 1999-2000 and reduced to 28 per cent in 2005-2006. In addition, in the last 15 years there have also been major cutbacks on subsidies on education, health and social housing as a result of structural adjustment.

This is in spite of the fact that there has never been greater liquidity in banks and insurance companies in Pakistan's history. Last year's economic growth was 8 per cent against a population growth of 1.9 per cent. Therefore, one is forced to ask as to where the growth benefits were utilised if not in social housing, health and education? According to newspaper reports, it is estimated that over 500 cars per day in Karachi and over 200 cars per day in Islamabad were registered during the last financial year. Thus Rs 153 trillion (US\$ 2.55 trillion) were spent on the purchase of these cars. Reports also indicate that much of the funding for the purchase of these vehicles as loans came from bank and leasing companies. If government policies were aimed at promoting equity and justice, these funds could have been utilised for the development of social sector facilities and programmes.

The most visible form of advertising for the promotion of consumer culture is the erection of billboards. They are everywhere in Karachi, especially on dual carriage ways along the centre of the road; on roundabouts; on top of buildings; on building facades; at cross roads; on bus stops (forcing the roofs of a few to cave in); on open public spaces (parks, playgrounds and chowks) and also on institutional and religious complexes.

They have an adverse effect on the physical and social environment and on traffic safety; and above all they are ugly.

The images on the billboards are un-aesthetic. The compositions are bad. The colours are aggressive and mismatched and the signage and calligraphy could not be worse. The most aggressive billboards are those of multi-national companies. They are usually in the most prominent places as well. All the tall buildings at important T-junctions have them. Many of the buildings on which they are placed are old and decrepit while these huge well-lit billboards (in a city of power failures) promote a way of life which is in sharp contrast to the buildings themselves and to the lives of the commuters that look up to them. They display the power of the multi-nationals over the poverty and squalor of Karachi and as a result promote a sense of unease, social conflict and alienation.

The roundabouts and the cross roads have hundreds of these boards vying with each other for prominence. They are all of different sizes, of different heights, placed at different angles and having different types of supports. Some are technically well-designed aluminium supports. Others are uneven timber supports. Still others are put up on steel trusses. The supports are painted in different colours and some are not painted at all. It is a jungle of unrelated shapes, sizes, colours and messages, a disaster in every sense of the word.

Most of the supports to the billboards encroach on pavements and public space, forcing pedestrians to walk on the road and some billboards on the pavements are so low that people cannot walk under them. The car using public considers these billboards at the junctions ugly but for the pedestrians and commuters who use public transport, they are more than ugly. They are dangerous and a cause of immense inconvenience to their movements. In addition, they dwarf them into insignificance.

This consumer culture is viewed as progress by many economists and social scientists. By others it is viewed as a social evil for it further consolidates the rich-poor divide and promotes conflict and fragmentation of society. Pakistan's Prime Minister certainly sees it as progress for he has cited the increase in the number of cars and mobile phones as a sign of prosperity in Pakistan. However, according to government statistics, poverty in Pakistan has increased over the last fifteen years from 17.32 per cent in 1987-88 to 33.5 per cent in 1999-2000 and reduced to 28 per cent in 2005-2006. In addition, in the last 15 years there have also been major cutbacks on subsidies on education, health and social housing as a result of structural adjustment.

This is in spite of the fact that there has never been greater liquidity in banks and insurance companies in Pakistan's history. Last year's economic growth was 8 per cent against a population growth of 1.9 per cent. Therefore, one is forced to ask as to where the growth benefits were utilised if not in social housing, health and education? According to newspaper reports, it is estimated that over 500 cars per day in Karachi and over 200 cars per day in Islamabad were registered during the last financial year. Thus Rs 153 trillion (US\$ 2.55 trillion) were spent on the purchase of these cars. Reports also indicate that much of the funding for the purchase of these vehicles as loans came from bank and leasing companies. If government policies were aimed at promoting equity and justice, these funds could have been utilised for the development of social sector facilities and programmes.

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motorists see these billboards from the road but the people living in the buildings at the cross roads, roundabouts and T-Junctions see them from behind and it is here that they are at their ugliest. In addition to exposing the residents of the areas in which they are located to this terrible ugliness, they deprive them of light and air and views of the city and its trees and open spaces. As such, they create claustrophobia and promote aggression. In a number of letters in the press residents of apartment blocks have complained about the erection of billboards (erected without consultation with them) and discussed how they have created unbearable environmental conditions for the residents.

The architectural scale of the city has been distorted by the Karachi billboards since they dominate the built-environment to the extent that the built-environment, good or bad, no longer defines the cityscape. Again, articles, letters and reports in the press and electronic media have pointed to these issues and demanded that the city government remove these boards from their areas. It is clear that the megalomania of the promoters of consumerism has triumphed over well-established urban aesthetic and ethical values. This is in spite of the fact that the city has byelaws which govern various aspects related to the erection of billboards. For example, no billboard can be installed on a green belt. The maximum and minimum size of billboards is clearly identified. In addition, the advertiser has to submit an engineer certificate certifying the safety of the billboard and a site plan. Only after these requirements have been fulfilled can a billboard be installed.

The procedures laid down by these byelaws have not been followed and nor have their provisions related to size and locations been implemented. As a result, there are 4,500 hoardings which include 2,500 billboards and 2,000 pole signs in Karachi which have been erected illegally and whose owners have not deposited the required fee for their erection to the city government. The President of Pakistan, the new City Nazim, the

Pakistan Medical Association and a number of civil society organisations have also expressed their concerns regarding the serious threat that the billboards pose to the life of pedestrians and commuters. Their concerns have been validated since a number of billboards collapsed as a result of strong winds in December last year.

The religious parties in Karachi, as in the rest of Pakistan, have objected to the images of women on the billboards. They consider it as a degradation of women and the promotion of obscenity. However, this has not made much of a difference to the use of female images for the promotion of consumerism except in the case of the NWFP where the religious parties are in government. Here the images of women on the billboards have been blackened or disfigured by the activists of the religious parties or on orders of town nazims. According to press reports and interviews, opinion on this issue in the NWFP is sharply divided.

The new Nazim of Karachi has taken note of the illegal erection of billboards and the violation of byelaws. He has decided that byelaws will be implemented and that those billboards which have been erected in violation of them will be removed. The Governor of Sindh has also declared the most important artery of Karachi to be "billboard free". As a first step, those billboards are being removed which have not paid their dues to the city government. Removal of the legal billboards will take place once their contract period has expired. One will have to wait and see as who is more powerful - the city government or the billboard "mafia" backed by the powerful corporate sector.

Billboards are a major source of revenue to the city. They are an essential part of the culture of globalisation and consumerism. Their promoters are the local and international corporate sector which is increasingly determining the use of physical space and investments in our city. So far they have not shown much signs of social consciousness. They have encroached on the functions

of the city government and have shown little concern for civil society promoted civic and social issues. It is necessary for civil society organisations and the city government to come together to create conditions whereby it is they that determine the shape and form of the city in the larger interests of its citizens and it is they that involve the corporate sector in this process rather than the other way round.

Twenty Seven

The Social and Demographic Change in Karachi

Major changes took place in Karachi between 1947 and 1951. Six hundred thousand inhabitants were added to its population; the Hindu population decreased from 51 to 2 per cent while the Muslim population increased to 96 per cent. Similarly, the Sindhi speaking population decreased from 61.2 to 8.6 per cent while the Urdu-Hindi speaking population increased from 6.3 to 50 per cent. However, these changes did not substantially increase the physical size of the city. From a low density city, divided into ethnic and class quarters, it became a high density multi class city. Its centre, Saddar Bazaar was easily accessible to all its inhabitants. A university, government offices, most major educational, community and religious facilities, and embassies were within walking distance to it and new intellectuals, artists and artisans were added to the old as a result of these demographic changes. All this enriched intellectual and cultural life, especially of the centre, even if it degraded the city physically.

However, all this changed. The MRV Plan of 1952 took the university away in 1958 from the centre and a year later Ayub Khan decided to take the capital away to Islamabad. Doxiades's Greater Karachi Resettlement Plan created satellite cities for the poorer Karachities, far away from the city in Landhi-Korangi and New Karachi, and the better off or more influential were

given plots in the housing societies nearer to the centre. The division between the rich and poor was complete and the transport problems for the poor multiplied since they had to commute from distant homes to the city centre which over the years has degenerated into an unplanned bus terminal, devoid of its former status of a space for multi-class entertainment, intellectual life and community and political activities. One can safely say that the Doxiades Plan led to the fragmentation of the city, the death of its centre, and is to a large measure responsible for the city's social and political turmoil.

However, the physical and social changes that have taken place in Karachi between 1981 and 1998 (the period between the two last census) are far more dramatic than the ones that took place between 1947 and 1951. The population of the city in this period has increased from 5.4 to 10 million. The physical needs of this increase, in the absence of adequate planning, have been met through densification and consolidation of the para-meters developed by the Doxiades Plan; informal development and the helplessness of government agencies leading to corruption and mismanagement. All this has created powerful interest lobbies and community organisations. These developments have been accompanied by the communications' revolution; political turmoil; return of families from the Middle East with new ideas, lifestyles and money; decline in formal sector economic growth; an increase (in real terms) in the aging population; and above all, the coming of age of a second and third generation of Karachi born Karachites who have no other identity and who, because of the factors mentioned above, are completely different from their parents and grandparents. They constitute the vast majority of the population of the city today. We will be able to say a lot more about them in statistical terms, once the 1998 census results are published. All one can say from the data available so far is that the male-female literacy gap has narrowed substantially, the rate of divorce and the age at which one gets married has increased considerably, and so has the male-female sex ratio. In addition the percentage of nuclear families has also increased and natural

growth rate has declined sharply. Observation, press reports and surveys establish that senior citizens now look for jobs as their families, unlike previously, cannot cater to their changed needs. Government agencies recognise this problem and have recently started employing them at pedestrian crossings for helping children to cross the roads. All these trends are indications of urban values and culture.

The enormous spatial expansion of the city has also fragmented it. Time and struggle taken in travelling, the distances involved, law and order problems and large scale environmental degradation, have made the neighbourhood and its environment more important and helped in the death of the city centre. Thus neighbourhoods are increasingly developing the facilities required for urban life and the physical, and hence social and ethnic divisions are increasing, even while a large Karachi identity is asserting itself.

The rich now live in ghettos, surrounded by armed guards and security systems. They are developing their entertainment, recreational, educational and commercial facilities in their own areas. Old Karachi food, books and other retail outlets have relocated to these posh neighbourhoods, and boutiques selling first world designer goods and international food chains have sprung up. Their children do not visit the national museum or the Karachi Zoo and are more at home in London's Hyde Park than at the Safari Park in Gulshan-i-Iqbal. Their textbooks too teach them nothing of their city, its history, its problems or its culture. The sprawling lower middle income settlements of District Central, the katchi abadis of District West, or the chaos of the inner city simply do not exist for them. Thus, Karachi has lost, what is perhaps a city's greatest asset, an interested, informed and enlightened elite and in the absence of such an elite, a decline in civic services and institutions is bound to happen. The old katchi abadis, which were once on the city fringe have also consolidated since 1981. They have acquired social and physical infrastructure. Private schools and clinics set up by

their entrepreneurs or through community effort take care of their education and health needs. Previously, they were totally working class areas, but a sizeable number of the new generation, both men and women, work in white-collar jobs in the city. In these settlements, there are bank managers, college teachers, telephone operators, receptionists, doctors, engineers, information technology professionals and technicians and para-professionals of all descriptions. They are all young. Working women are increasingly becoming a factor in the economy and sociology of these settlements. The small informal artisanal workshops that were set up here three or four decades ago when the settlements began, have also expanded to become formal business enterprises. They are run by a younger generation which is better educated and quite comfortable with dealing with officialdom, banks and export agencies. This is the new leadership which is replacing the old pioneers. The aspirations of the residents of these abadis are middle class and in most cases there is little difference between them and the planned lower middle income areas of the city in social, cultural and economic terms. The majority of Karachites live in these settlements and in the lower middle income planned areas of District Central and the Landhi-Korangi areas. The vocabulary of the young people of these settlements and also of the older university residential areas that still survive, different from their parents. Janab, hazoor, sain, sahib is out; uncle, aunty and bhai are in. There is no more niazmandi, sharf hasil hona or tabaydari and no more mai-bap; it is thaik-thak hai, tik-tika and chaloo pan.

The new katchi abadis, however, are different. They have yet to consolidate and acquire facilities. Their leadership still consists of land grabbers and middlemen, income levels are low and social cohesion is missing. Most of the population here is first generation migrant and the female population is very small as compared to the male. In many of the inner city settlements too, conditions have changed in the inter-census years. Wholesale markets have expanded along with the services sector to cargo

transport activities, families have moved out, day-wage labour has moved in. Much of this labour is also seasonal. As a result of these changes, large areas have become slums in sociological terms, societies without structure and cohesion. It is here that most of Karachi's rapidly expanding underclass lives, an underclass whose aspirations are to become like the older katchi abadis but the means, except for a small few are simply not there.

All these conflicting fragments of Karachi come together in Gulshan-i-Iqbal and as such its lifestyle is imitated in other settlements (except of the elite) and its young men and women are role models for others. Here khokas co-exist with foreign food chain outlets, katchi abadis with planned apartment complexes; real estate agencies and car showrooms with supposedly clandestine betting shops and drug outlets; a fast expanding flat culture with old goths struggling for survival and succeeding. And all these elements share a common space and vocabulary.

The middle and lower middle income areas of Karachi and the older katchi abadis have a number of things in common which are trickling through to other settlements and becoming the most important parts of Karachi culture. One is cable television. It is now universal in these areas. It is in people's homes, in barbershops, in eating places catering to all classes, even in the waiting rooms of private clinics. Indian films and western pop is now a part of family life except for the religious and conservation minority. This minority is also increasing in number though not in percentage terms. It is perhaps because of the cable and all that goes with it, that beauty parlours, run by women for women, have cropped up in a big way all over these middle and lower middle income settlements. The beautification items on the menu sometimes contain the names of Indian film actresses. In an increasing number of parlours, a waiting room for men is being provided! The cable TV is also changing lifestyles. Cooking classes have opened up

where the preparation of Chinese and Thai dishes is taught to women and also small schools for interior and flower decoration for women are increasing. Eating out, especially non-Pakistani food, is something to look forward to and restaurants are full to capacity, many with young couples and families, especially in the first week of the month after salaries have been paid. The number of women managed and operated retail outlets are also increasing. All this is a major social revolution and what its effects on family life and values, and hence on society are, and are going to be, needs to be studied, analysed and catered to by the planning agencies in the city. The other most important change is related to information technology. All the lower middle income settlements and older katchi abadis have a large number of computer training centres in them, many dealing with programming as well. Karachites have understood the economic and job potential of information technology and as such these centres are full of young men and women students. Another important factor is the mushrooming of private schools and tuition centres advertising the teaching of English and the fact that almost all of them are co-educational.

The above directions point to the fact that the new Karachites are fiercely upwardly mobile and are anxious to become a part of the international global culture. Their dress patterns and bearing have changed over the last decade and a half to reflect these new aspirations and they have also become addicted to FM 100 which represents their culture. However, their incomes are low as compared to their aspirations and that is because they live in an economy plagued with recession and inflation. To overcome this problem, it has become necessary for women to work and hence the need for their education and acquisition of skills. Families now look for educated and or skilled women as wives for their sons and it is not a coincidence that the Karachi university today contains more female than male students. Then most lower middle income employed males, and also working class ones, do an extra job or a business of some sort. After office hours, they work in an estate agency, as life insurance salesmen,

give tuitions, run a small business or a taxi. In the lower income areas, homes are being turned into workshops and businesses. Garment stitching, flower making, fruit packaging, cardboard box making, gas kit manufacturing, are some of the things that families do collectively to beat inflation and recession, educate their children, and acquire the new electronic gadgets that have become a necessity for their lives.

In spite of this extra work and family businesses, the economic and lifestyle aspirations of the young Karachites cannot be met. This is because of a clash between their aspirations and the conservative and puritanical aspects of our state culture. The other is corruption and nepotism. This upwardly mobile population of young people has to pay a bribe or have connections to get a job, a commission, or contract. They have no access to the corridors of power and no capital. Thus, the city is full of young people trying desperately to go abroad (at any cost) or to attach themselves to "progressive" political groups that can give them access to the means for fulfilling their aspirations. Unfortunately, these are perhaps the brightest of the younger generation and definitely with the most initiative. Under different circumstances, they would be an asset to their society, role models for promoting progress and social justice.

Entertainment and recreation are an essential part of the nature of urban society described in the preceding paragraphs. At the city and larger suburban level, cinemas catered to this requirement for entire families. However, the age of the cinema in Karachi is dead and most of them have ceased to exist. What is more important today is recreation at the neighbourhood level. In the lower and lower middle income settlements, people play drafts and cards on the cross roads under street lights and often pay the police bhatta so that they are not harassed. There are carom and snooker clubs and illegal video halls that people frequent, and social welfare organisations that exist in almost every Karachi neighbourhood (and are always run by younger people), often operate reading rooms and lending libraries.

Sports clubs also exist at the neighbourhood level and cricket and football matches between different teams and neighbourhoods, is a common thing. However, most of this activity is for men only. Women do participate sometime as spectators in sports and also as participants, in mushairas, religious functions and in rare cases where society permits (this is increasing) in musical performances. Many youth organisations have tried to initiate theatre and music groups but this has met with limited success in the absence of state support, difficulties in being permitted by the establishment to perform at a public place, and due to being frowned upon by the elders in the neighbourhood. But what will happen in the next 10 years when part of this generation becomes the elders and the state?

However, one thing that Karachi families and young groups do do, is to go out. On Sundays, the beaches in and around the city, as far as Gadani, are full of families and groups from the lower and lower middle income areas of the city. They get to these beaches and to other picturesque locations such as Kalri and Haleji Lakes, by hiring Suzukis. They picnic and listen to loud Indian film songs, (many dance as well) and enjoy themselves (they also leave behind an enormous amount of solid waste!). They invade the parks and in certain locations, such as the Hill Park in PECHS, the Pakhtoons perform the Khattak every Sunday and have wrestling competitions. On occasions such as Eid, Bakra Eid, and long weekends whenever they happen, places like Allauddin Park and Clifton Funland are full to capacity. Large number of families, men and women, also get together to visit Mazars in Karachi and the Sindh interior for the Urs of Pirs. This is both a religious event and an outing.

The importance of the neighbourhood, inadequate planning and facilities, and land grabbing have led to the formation of neighbourhood groups that struggle to protect parks and playgrounds from encroachment, lobby for and even finance and build infrastructure, and invest in the development of social facilities. These groups are becoming an important factor in the

development of the city and their leadership consists entries of young men and in a few cases of young women as well.

The younger generation (15 to 24 years) of the middle and lower middle income class Karachite and those that imitate them constitute the single largest group in the city, apart from those below 15. This generation is suave, worldly, upwardly mobile and quick to seize any opportunity. They are in love with anything new and contemporary and not burdened with the ethical values of their parents. These qualities are both their strengths and weakness. What is important for the future of the city is not so much the present social profile of this group but the trends within it. What handicaps this generation (and as such Karachi as a whole) is a retrogressive state culture, difficulties in fulfilling their desires because of nepotism and corruption, and the terrible physical and administrative state of urban services and civic agencies. If the state could address these issues and be supportive of the trends, this generation would make Karachi blossom, with or without an interested elite.

Twenty Eight

Karachi: Changes in Values and Lifestyles

Changes in the social values and lifestyles of the elite and middle classes in Karachi are all too visible; new cars, designer boutiques, fast food outlets, malls, expensive cafes, posh schools and universities in the private sector and advertisements promoting consumerism. However, the changes in the social values and lifestyles of the lower and lower middle classes are hidden from view. The most visible expression of the change that has taken place in these classes is the emergence of young couples sitting with their arms around each other on the benches of parks in the city - sometimes even lying in each other's laps. This behaviour is surprisingly tolerated by the other visitors (even bearded ones) to the parks and has led in some cases to the segregation of spaces between families, male visitors and couples. As one waiter at Hill Park put it, "there is nothing you can do about this. You cannot quarrel with the *zamana*."

In an attempt to understand this phenomena, I have over the last five years interviewed or had a questionnaire filled by 100 young couples in parks and at Sea View. They all belong to the lower and lower middle classes. Of these 28 couples were married. Of the 100 women 32 wore the hijab and 68 wore a black or grey aba. Only 18 couples were interested in politics and/or read political news in the newspapers. Eighty three were interested in migrating to another country of and for which seven married couples and 16 unmarried men have taken some steps. The reasons for wanting to migrate were in order of

importance; one, there was no justice in Pakistan; two, they would never be able to own a place to live or to rent a proper home; three, married couples were afraid that they would not be able to educate their children properly; four, there was no affordable entertainment and recreation; five, there were too many family disputes often related to behaviour patterns of the young which they considered hypocritical; and six, they lived, worked and travelled in terrible environmental conditions. The parents of five unmarried couples knew of their relationship but due to social considerations they could not meet each other in the mohallas or the building complexes in which they lived. In 14 couples the male and female were of different ethnic backgrounds. These couples certainly do not constitute the majority of young people in lower and lower middle income settlements in Karachi but they are definitely trend setters as their numbers are rapidly increasing.

What has brought about this very visible change apart from TV and the "trickle down" of the lifestyles of the more affluent sections of society? I feel that the most important reason is that for the first time in our history we have a very large number of unmarried female adolescents. In the 1981 Census 37.54 per cent women and 13.14 per cent men in the age group of 15 to 24 were married. If we project the 1998 Census figures to 2007 then less than 20 per cent of women and 6 per cent of men in this age group are married today. Also, the low income settlements that I knew in the 70's and 80's have changed. Then they were purely working class settlements and women did not work. Today, there are doctors, engineers, formal sector entrepreneurs, persons employed in the corporate and IT sectors, bank managers, college and school teachers (majority of them women), living in these settlements. This is a sea-change.

In order to know more I discussed the changes that I have noticed with older residents and the more upwardly mobile community members of low income settlements and with the staff of the Urban Resource Centre. There was general

agreement that the major change that has taken place is the breakup of the extended or joint family and this has played a major role in a change of values and behaviour patterns. Among the reasons given for the breakup of the joint family is that previously there was one earning member and others were dependents. Today there are many earning members and hence the patriarchal structure can not survive. Money from abroad was also sighted as a reason for the break-up of the family since it created jealousy in the extended family and the nuclear family of the person sending it broke away from the rest. In addition, working women have also adversely affected the joint family system for it has led to quarrels and disputes around family honour and traditional values. My friend Mansoor Raza's survey of peoples sleeping in the streets revealed that the majority of them consisted of young men who had run away from home and old men who had been abandoned by their families.

During one of the discussions it was also mentioned that people were not conscious of the changes that have taken place and as a result are a bit confused. For instance, one person reported how after much heart burning and violence, he agreed to let his daughter marry out of his caste and how he was terrified of what the reaction of his clan would be. However, there was no reaction except for a few elders being sarcastic - his peers did not particularly care. "The traditions are gone but we do not know it for out of fear we do not discuss these things" was his conclusion.

Older residents agreed that an increasing number of youth are "undisciplined" and violent gangs are emerging in their localities. One of the reasons given for this is that parents have become more liberal because of a "change in the times". Other reasons given are unemployment and the terrible state of public education and its uselessness. An increasing number of young people are doing their matric and intermediate and after that they are not willing to do manual labour. Meanwhile, jobs that are available in the market require technical skills and more and

more of them require formal "sanads" and not just experience with an Ustad. These jobs are mostly in the textile, medical and construction industry. However, there are no educational centres where one can be trained for these jobs and those that are are too few and far too expensive. For example, there is a great demand for male nurses but there are only five institutions that one can apply to. Admission fee to these institutions is between Rs 30 to 40,000 and a monthly fee is between Rs 2 to 3,000.

In all the discussions there was general agreement that the rising gap between poverty and wealth is a major factor in the social and political alienation of the young in the lower and lower middle income groups as aspirations increase but resources and opportunities do not. There is also an agreement that the solution lies in the development of good public sector educational institutions equal to those of the elite and in the teaching of English. For example, it was mentioned in one of the discussions that at a private school a normal women teacher gets about Rs 1,500 to 3,000 a month whereas someone who is good in English can get upto Rs 8 to 10,000 a month.

There was general consensus that private schools are expensive and often a family has to choose which of its children it will send to them. In the absence of an affordable and useful public school education system more and more students are being sent to a madrassa. "At least they learn how to read and write there and without reading and writing there is no future today". "In a government school they learn nothing but corruption from their teachers". "These are not schools, they resemble aasar-e-qadeema. No water, no toilets, no furniture, broken floors and collapsing roofs". These were some of the comments that were made during the discussions.

The above discussion points to the fact that we will have a very different society in Karachi in the next decade. It also points to the need for a major reform in the education and social sectors and in state culture along with corresponding changes in city

planning priorities. If that does not happen, political and social alienation will increase and so will the chances of conflict and further fragmentation.

Twenty Nine

The Governance Related Repercussions of Constitutional Deviation

The present political crisis has been discussed to death in the press, and before it was curbed, in the electronic media. However, its governance related repercussions still need to be analysed. The process of trying to legitimise "constitutional deviation" is more destructive of the institutions of governance that affect the lives of common citizens, than "constitutional deviation" itself. This is because the only tools available for legitimising the usurpation of power are lies, deceit, coercion, buying and selling of loyalties and the support of turncoats, opportunists and sycophants, in short all those who have no interest in the well-being of society. So how can anything vaguely ethical or beneficial for society emerge from or survive such an onslaught?

The search for legitimacy also leads to manipulating existing governance institutions, ostensibly for getting rid of corruption. However, the real reason is to curtail their autonomy and make them subservient to the illegitimate power structure. As a result, they become ineffective. For the same reasons new governance systems are created which have nothing to do with the real needs of society or with existing social and political relationships. These institutions are not created through a normal process of

rules and regulations and so their only loyalty is to those who have usurped power. As such, these institutions do not take root, their continuity is always questioned, and by their very nurture, seeped in their origins, they promote corruption and nepotism. This has been the story of Ayub's basic democracy, Zia's Majlis-e-Shoora and education and legal "reforms", and more recently of Musharraf devolution plan.

The search for legitimacy is also sought through the development of high profile projects unrelated to the needs of the people and to building grand monuments that serve no purpose. All the previous generals who have usurped power have indulged in promoting grandeur as an alternative to genuine progress. False propaganda, which even becomes farcical at times, is promoted and if one reads between the lines, it is not even believed by the sycophants to those in power. The present ruling elite's thesis that Pakistan is rich and prosperous because of the number of cars and mobile phones that have been purchased, is a case in point. That education and health systems have collapsed and people have no access to housing does not seem to matter. This tendency to fabricate increases as the failure to legitimise usurpation increases with time, and ultimately it is only the ruler and his court who believe in it. The ineffectiveness and corruption of the institutions of governance on the one hand and the disbelief of people in what the state says on the other, promotes opportunism, cynicism and/or alienation at all levels in society.

The greatest damage of "constitutional deviation" however, is that it suspends all consensus making mechanisms and reduces all political activity to a one-point agenda for the restoration of democracy in which there is no place for discussion on development and progress. This has a fourfold effect. One, it fragments society to the extent that centrifugal forces set in and keep increasing in geometric progression with the passage of time; two, that by suspending the political process, a new political leadership does not emerge and people have to turn to

their clan, tribal or ethnic organisations for support to the extent of solving their personal and property disputes and intervening in their dealings with state organisations; three, in the absence of a dialogue between different points of view inappropriate and often disastrous policy decisions are taken; and four, since maintaining power through illegitimate means becomes a priority, a ruthless game of divide and rule takes precedence over all other things. We have seen all this happen in our last eight year period of "deviation".

In the case of Pakistan, the propaganda justifying "constitutional deviation" has in the last sixty years, constantly used the excuse of "Pakistan is in danger". There is no other country in the world, except Israel, where this excuse is offered for unconstitutional, immoral or unethical policies and laws. The major repercussion of this process is the disconnect between the rulers and the ruled and the depoliticisation of the elite, who for their own vested interests see no option but to side with the rulers. It also leads in our case to a questioning, often irrationally, of the viability of our state and its origins, especially by the better educated of our younger generation.

Given the serious repercussions of "constitutional deviation" on the institutions of governance, among other issues, it is necessary that it should never happen again. The proposed elections in the present circumstances in Pakistan, are in themselves a constitutional deviation. As many commentators have said, they will not solve Pakistan's constitutional crisis and will not bring about stability, legitimacy or reform. They will only make the crisis fester longer and lead subsequently to further fragmentation of society. The main victims of this will be the people of Pakistan who will increasingly have to seek illegal means or the support of self-servicing patronage to solve their problems and the problems of the settlements in which they live. Therefore, it is in the larger interests of the political parties, to not only boycott these elections but to come together to promote and struggle for a future election process that guarantees a

proper election and hence a future legitimate set-up. The million dollar question is, why are they not doing this? Perhaps in the answer to this question lies the real political crisis in Pakistan.

Thirty

Reconstruction of Earthquake Effected Areas

According to the 1998 Housing Census, there were 807,605 housing units in the twelve earthquake effected districts of Azad Kashmir and the NWFP. It is estimated that fifty per cent of this housing stock has collapsed and another twenty per cent has been badly damaged. This means that over 500,000 housing units will have to be rebuilt or repaired in a manner that can withstand future earthquakes. It is also estimated that about 12,000 formal and/or informal schools have collapsed or have been irreparably damaged. The scale of this disaster is far too large to be dealt with by the building of model villages, pre-fabricated houses and contractor delivered construction mechanisms that are being proposed by some quarters in officialdom. In addition, the corn crop in many areas will not be harvested this year and nor will the wheat crop be sown. Livestock has also perished and pasture land fodder for livestock that have survived will not be available once winter sets in. In this situation, rehabilitation can only be done by supporting village communities to rehabilitate themselves. Such a process will also be a rehabilitation therapy for individuals and families and they will also own a development in which they have been the main actors.

The areas affected by the earthquake consist for the most part of small villages. The communities in these villages usually consist of an extended family or belong to the same clan. They have a long tradition of collective work and of helping

each other. Almost all villages have masons, carpenters, electricians and other related building skills who have built the existing housing stock without any external help or assistance. Village communities have also participated actively with local government in the building of their water supply schemes which are perhaps the most successful examples of participatory development in Pakistan. It is this enormous community potential backed by a substantial remittance economy that has to be galvanized and supported if the earthquake affected areas are to be rehabilitated.

A proper re-building of homes is not possible before winter ends. It is not possible either before the rubble of the collapsed buildings and houses is remarked. This is because people understandably wish to build on their old sites. Buried in this rubble are the future building materials such as GI sheets, timber beams, doors and windows, millions of cubic feet of hammer dressed or chizzled stone and mud mixed with straw. The removal of this rubble can take place during the winter months. It is suggested that a rubble-removing cash-for-work programme should be introduced and tools such as sledge hammers, pick axes, wheel barrows, gloves and dynamite should be provided to house owners and hired labour from within the community.

Rubble removal has to be followed by a programme that provides technical, financial and managerial guidance to communities for the building of their homes. Earthquakes cause fissures in the earth and destabilise building sites. To advice on the suitability of sites for rebuilding or for carrying out earth works to stabilise sites, mobile teams of structural engineers will have to be formed. Communities working with these engineers will learn the principles for assessing building sites and for consolidating them. NGOs can turn this knowledge into posters, handbills and/or manuals. Thus, this knowledge can become a part of the community rebuilding process. This work can also be carried out during the winter months in areas where winter is not

too severe.

The next step is to popularise earthquake resistant technology, using local materials. This technology is well-known. It is simple and economical. It has been used extensively in Yemen, Iran, and in Maharashtra in India. It has also been used by the Self-help School Building Programme of the Aga Khan Foundation in the Northern Areas. For use in the affected areas, it needs to be further simplified and manuals that local communities can use need to be prepared. The Orangi Pilot Project-Research and Training Institute and the Urban Resource Centre Karachi are currently working with senior structural engineers to prepare such a manual. Initially, NGOs will have to supervise a few houses using the new technologies. Masons who build these houses can then be turned into mobile teams and become the trainers of other masons. This technology can also be used for future health and education buildings once the passion for high tech solutions subsides - and it will. If properly managed, a new community based culture of building will develop in the affected areas. However, the state will have to provide the communities with tin sheets, industrially manufactured insulation materials (to be placed under tin sheets) and wire mesh and mild steel rods which are important materials for earthquake resistant technologies. In addition, loans for the rehabilitation of agricultural and pastoral activity will have to be provided so that the devastated subsistence economy can be revived. These loans can be provided through the Pakistan Poverty Alleviation Fund, the National Rural Support Programme, the Orangi Pilot Project and other micro credit organisations who know how to assess needs and to manage and monitor these loans.

Making a plan is easy. Organising its elements centrally is also not too complex a task. The question is how a cash for work programme can be implemented at the grass root level and how can materials and building knowledge can be transferred to the local population? For this it is suggested that at each union

council level (average population 35,000) a civilian administrator should be appointed and supported by a committee of local people and NGOs who are active in the area. They should collectively help in organising communities, negotiate with a central authority and manage the programme locally.

The architects and engineers of Pakistan can learn a lot from the earthquake devastated buildings. There are concrete houses that have collapsed. There are mud houses that have survived. There are timber columns, beams and roofs that are standing while the rubble walls around them have collapsed. The poultry houses and palaces are intact in many areas for some strange reasons. Analysis of these damaged structures can lead us to develop cheap and new earthquake resistance building technologies rather than relying on imported literature.