



Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it's the only thing that ever has.

- Margaret Mead

# SHEHRI

SEPTEMBER 1993

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## KARACHI'S MASTER PLAN - A PLAN WITHOUT DIRECTION?

By Arif Hasan

The Master plan of a city basically does three things:

1. It plans for the growth of the city.
2. It develops the institutional mechanisms for city management.
3. It develops the rules, regulations and procedures for making development and management environmentally sound and sustainable.

In planning for growth, the master plan develops broad outlines and directions for housing, water supply, sewage, transportation of people and cargo, roads, energy and social facilities such as health, education and recreation. In addition, the Master Planning works out the scale of this growth and collects the necessary demographic, social and economic data necessary to plan for it.

City management directions are also laid down by the master plan. These include the management of infrastructure and the development of revenues for it; modifications and changes in the existing planning and management structure to make it compatible with new developments in the city; and the development of coordination between various agencies involved in city management.

For making development and management environmentally sound and sustainable, the master plan updates and/or develops bye-laws, zoning regulations and the procedures for having them implemented and overseen.

Since 1951 Karachi has had a number of master plans. None of them have been fully implemented and one can safely say



Like our traffic, Karachi's Masterplan also seems to be chaotic and directionless

**It is unlikely that conditions will improve in Karachi due to the Development Plan 2000. If they do improve it will be because people take over the management of their lanes and neighborhoods and pressurize agencies to improve their functioning on an ad-hoc basis. Hopefully community groups will be strong enough in the year 2000 to develop technical and planning alternatives, with the help of concerned professionals and professional organizations, and lobby with the state to have them implemented.**

that they have failed. There are a number of reasons for this:

1. The Karachi Master Plan is prepared by the Master Plan and Environmental Control Department (PM&ECD) of the

Karachi Development Authority (KDA). However, the KDA only deals with the physical aspects of housing, land development and its physical

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## CITIZENS' REPRESENTATION IN KDA A MUST

KDA, along with other civic agencies, has ravaged the city causing enormous environmental damage. It is high time that the public was given representation in the KDA as well as all the other civic bodies. It is imperative that there be citizens' representation in government departments considering the level of maladministration that exists. Citizens need to see that decisions taken by the administration are in conformity with rules and regulations and that civic policies are for public welfare rather than its cost. As things stand today, civic bodies such as the KDA and others feel they have no responsibilities and are unanswerable to citizens and NGOs. SHEHRI demands that as well as other democratic citizens' organisations working for public welfare, be made members of KDA - Governing Body.

## PROBLEMS OF FUNDING WITH DONORS

Almost any NGO (non-governmental organisation) operating in this country today, be it an environmental, developmental or socially-related organisation, has, at any given time, suffered donor-induced setbacks or problems. Though not serious enough to completely hamper the functioning of these organisations, donor/funding issues do manage to upset the smooth functioning of NGOs, particularly when they are completely reliant on donor agencies for financial support. SHEHRI has had its own experiences with donors in trying to obtain funding for its projects. A case in point is the 'Population Clock' campaign. SHEHRI approached several donor agencies for financial support for this campaign which is basically a 15-30 second T.V. commercial highlighting the population problem and linking it

to diminishing resources and services. The commercial proposes to create awareness about this important issue by focussing on three basic areas - environment, health and education. At first, SHEHRI approached some multinationals most of whom are very reluctant to support a less-publicity-for-them campaign, and perhaps this is understandable. However, some multinationals do support such causes - perhaps for the publicity or maybe because they do not want to be left behind when so many are jumping onto the environmental bandwagon or perhaps because the idea of litigation is catching on which could end up costing them more in the long run. However, as far as the above mentioned campaign is concerned, multinational support was not forthcoming. At present, the 'Population Clock' campaign is in its second year and has still not managed to get off the ground. However, a well-known international agency has agreed to sponsor the production of one of the T.V. spots for the 'Health' commercial. SHEHRI is hopeful that something positive will come of this collaboration. However, producing the commercial is not enough - one still has to try and get it broadcast on a shoestring budget. Here one hopes our T.V. networks will show some support for this. As far as solely-donor agencies are concerned, from the NGO point of view, the following can be seen as the main problems of the donor-NGO relationship:

- i) Bureaucratic procedures/red tapism.
- ii) Donors are unwilling to move away from big-name, well-connected NGOs, most of whom are already well provided for due to this very reason.
- iii) The process of obtaining funding is too involved, time-consuming and requires a lot of paperwork. Ofcourse, no one can dispute that it is very necessary for any donor to closely scrutinise the credentials of any organisation it is considering giving aid to.
- iv) Donors place too many demands/restrictions and try to control the projects of funded organisations which hampers work.
- v) The funder-funded relationship is an insecure one. Support can be stopped anytime. This prevents long-term planning which is a prerequisite for many projects.

the most platonic of relationships, the most selfless service for a beloved whose tresses are the trees and flowers, whose eyes are the sun and moon in the sky above it, whose body is the earth that forms it, whose progeny is the sustenance that it provides us. And, in return, it asks for nothing, absolutely nothing - except a little bit

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## NOBODY LOVES KARACHI

By Syed Zaigham S. Jaffery



Just imagine the traffic load this portion of Feroz Street near Empress Market takes and yet it is being encroached upon by 'pusher' dealers

Karachi embraces the 'effervescence' and the economic effete of all other Pakistani cities and villages with its warmth and its largess. Its problems then are, in a great measure, and in the final analysis, due to this all-embracing but unacknowledged generosity.



Love comes in many colours and in more hues than in the rainbow.

Of the myriad variations of love, the one that is reserved for a place, for a space, for an abode is the most intangible, the most mysterious and perhaps one that inspires the greatest bondage and the fiercest pride. Men have gone to war over it, women have died for it.

This is the type of love that inspires



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## KARACHI'S MASTER PLAN Continued from Page 1

implementation. The maintenance of KDA development is carried out by the Karachi Municipal Corporation (KMC) which is also in charge of running markets, certain aspects of public health and education, recreation and parks. The water and sewage development and management is done by the Karachi Water and Sewerage Board (KWSB); energy is generated and distributed by the Karachi Electric Supply Corporation (KESC) and the Sun Southern Gas Company. In addition, the Cantonment Boards in Karachi perform the functions of the KDA and the KMC in their own areas and the Karachi Port Trust (KPT) is in charge of the development, management, operation and maintenance of the port area and its related activities. Similarly, there are a number of actors in the transport drama. They include the Karachi Transport Corporation (KTC), the Bus Owners' Association and the Pakistan Railways. There is no coordination between all these agencies except on paper although their mandates are inter-dependent. Hence master plans do not work.

2. Even if there was coordination between the different agencies, things would only be marginally better. This is because, apart from a couple of agencies, Karachi's development and management institutions have neither the capacity nor the capability of doing what they are supposed to. Apart from the offices of higher-ups almost nothing exists. Development takes place without maps and plans, engineers do not have basic tools, the contractors employed do not have the required skills and the organizational culture of these institutions promotes a laissez-faire attitude.

3. Given the lack of capacity and



'Katchi Abadis' or urban squatter settlements have mushroomed all over the city.

**In the case of Karachi, its bye-laws have been borrowed out of context from the cities of the First World. They do not seek to regulate and/or support market trends and directions and nor do they relate to a vision of the city. Most of the bye-laws simply cannot be implemented as they will require an honest "thana" in each neighborhood to oversee them. This is an impossibility!**

capability of Karachi's planning and development agencies, there is a big demand-supply gap in all development and management aspects. This is made up by the activities of the informal sector and much of Karachi's development takes place before planning is done. The immense vitality of this sector is not tapped by the formal planning process and nor do the planners take this vital sector into consideration when working out the directions of the Master Plan.

4. The building bye-laws and zoning regulations were developed in 1979. They

have not been updated or modified since then. Bye-laws and zoning regulations are framed to regulate, support or direct existing trends and directions governed by market forces. In addition, they relate to an overall vision of the city that is spelt out by the master plan. Also, the procedures and institutional arrangements for the implementation of bye-laws and zoning regulations have to be compatible with both the socio-economic conditions of the citizens and the capacity and capability of the regulatory bodies. If that does not happen then it leads to administrative helplessness, inefficiency and corruption. In the case of Karachi, its bye-laws have been borrowed out of context from the cities of the First World. They do not seek to regulate and/or support market trends and directions and nor do they relate to a vision of the city. Most of the bye-laws simply cannot be implemented as they will require an honest "thana" in each neighborhood to oversee them. This is an impossibility!

5. Karachi is now a mega-city. Its planning, development and management cannot be done by highly centralized organizations. Whereas the overall

directions should be set by a city government, sector, sub-sector and neighborhood planning, management, revenue collection and maintenance and operation of systems should be done by semi-autonomous agencies operating at the local level. This is how most of the larger cities function today.

The Karachi Development Plan 2000, has been prepared for the city during 1987-89 by the MP&ECD. Water supply, sewage and electricity are being taken care of by their respective agencies and as such they do not form part of the plan itself. In the absence of data for the health and education sectors, especially in the private sector, no scientific planning for social facilities can take place. A mass transit study has been undertaken and proposals for a mass transit system have been developed. However, these proposals do not relate to issues of traffic management, transportation of cargo and the services sector to transportation, and existing bus and train systems, which have an important bearing on the mass transit proposals.

In the field of housing and land development the Development Plan 2000 has proposed the following:

1. No new land developments are to take place for the next decade as there are over 300,000 developed vacant plots in Karachi. This proposal is already being violated as plots are a major source of political patronage. In addition, in the absence of land development, how is KDA going to finance itself?
2. Vacant plots in KDA and KDA supported schemes have to be occupied. It is not possible to force the occupation of these plots without major legislative support and restructuring of the relevant KDA departments (one might say of the KDA itself). However, no suggestions to this end have been made.
3. High-rise housing is to be developed on vacant land in the city center and through re-development projects. There are no studies to justify this very major decision. On the contrary, studies on the Lines Area Re-development Project carried out by the Department of Architecture & Planning at Dawood College, Karachi, point to the need for preserving and developing open spaces, or for using them for car parking, civic amenities etc, in the inner city. The high point of the Karachi Development Plan 2000 is that it has introduced into the

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biographies of cities in the region. There is controversy about its origins and its antiquity, but there has never been any controversy about the principal function of Karachi: a port for the northern hinterlands of the Indus Valley, the granaries of the Punjab, the Sarhad and even Afghanistan (and now, the Central Asian states).

The features of this city, its growth and urban explosion have thus been linked not only to the socio-economic conditions of the hinterland but also to the political conditions of the sub-continent. The Australian planner Rudduck has listed three milestones in the history of Karachi: Bartle Frere's insistence that Karachi, not Calcutta, should be the port for the Punjab; the US Civil War and the resultant cotton export boom in the area now constituting Pakistan and thirdly, the selection of Karachi as the capital of the newly created state of Pakistan in 1947, enabling the city to step out of the shadow of Bombay which always received more attention from the British.

To these, one might have added a fourth growth factor- the glut of money from the Middle East. No wonder Ahsan Halim, in 1974, called it a "Caesarean-born city: strange, fascinating and unreal, fathered by accident out of expediency and then nurtured by artificial means so that it attained a girth at 180 years that it should have done in a 1,000."

Mr. M. B. Naqvi lamented in the 'Dawn' recently (June 3, 1993) that "Karachi is the strangest metropolis; its requirements are wilfully being neglected. Not merely that- there is a long history of just such an attitude. Certain political and sociological reasons can be cited as having been responsible for it. What is more relevant is the consequences of this neglect." Meanwhile, the city continues to grow: boiling and bubbling. New concrete jungles, newly planned slums replacing humane habitats, bitumen roads tearing grey hills asunder and



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## SEMINAR ON 'KARACHI - TODAY AND TOMORROW'



Seated from left to right are Mr. Arif Hasan, Mr. Zaigham Jaffery, Mr. Qazi Faez Isa, and addressing the audience is Mr. Navaid Husain

August 1, 1993, marked the 41st death anniversary of Jamshed Nusserwanjee, known as the 'Maker of Modern Karachi', and a great urban planner and philanthropist. Jamshed spent his entire life working for the betterment of Karachi and became the first Mayor of the city.

To observe his death anniversary, SHEHRI and Karachi Theosophical Society (KTS) collaborated to organise a seminar on 'Karachi - Today and Tomorrow' on August 6, 1993, at Jamshed Memorial Hall, the Head Office of the KTS. Speakers included Mr. Zaigham S. Jaffery (Director KDA Design Bureau and Chairman Pakistan Council of Architects and Town Planners), Mr. Arif Hasan (Coordinator Orangi Pilot Project and Chairman Urban Resource Centre) and Mr. Qazi Faez Isa (Bar-at-Law and Vice Chairman

SHEHRI) who was acting as moderator.

In his welcome address, Mr. Navaid Husain (Chairman SHEHRI) paid rich tributes to Jamshed Nusserwanjee and gave a comparison between the Karachi of today and that of Jamshed's times. Mr. Zaigham Jaffery, in his speech entitled 'Karachi - City Nobody Loves' lamented the fact that we, as citizens of Karachi, have not developed any love for, or any civic pride in our city. Karachi is home to millions, yet very few of its citizens possess any love for it. Added to this is the fact that the city has immense urban and civic problems which the administrative bodies have not been able to deal with effectively - mainly due to a lack of coordination amongst these agencies. He mentioned that if something was not done soon to check these problems as well as the massive

increase in the urban population, it might be too late to save our Mother City. He appealed to all architects, planners, politicians, developers and administrators to wake up to their duties to save the present system from total collapse.

Mr. Arif Hasan was the next speaker and he gave a detailed talk on 'City Management - Directions for the Future'. He said that massive corruption and chaotic development were the main problems in Karachi's development. He underlined the need for setting up a 'city government' to get rid of redundant civic organisations to overcome civic problems. Commenting on the role of the various administrative agencies, Mr. Hasan said that the KDA, KMC and other related organisations were all highly bureaucratic setups with no proper system of operating. He said that corruption was rampant and that more than a dozen agencies which are supposedly dealing with urban affairs have no coordination amongst them which results in duplication of work, waste of time and money and complete failure to deal with the mighty problems confronting the citizens. He urged all Karachiites to utilise public pressure to get their problems solved.

Mr. Qazi Faez Isa, in his concluding talk, summed up what the other speakers had said and also cited examples, with the help of slides, of the Karachi of today. He showed the audience numerous examples of unauthorised constructions, encroachments, pollution, pressures on urban population and other facets of everyday life in Karachi.

The seminar concluded with a lively question and answer session with members of the audience participating and expressing their own views and opinions. This was followed by a vote of thanks to the KTS and the speakers, after which refreshments were served.

## ENVIRONMENTAL AWARENESS PROGRAMME



At SHEHRI's Environmental Awareness Programme, facing the audience from left to right are Mrs. E.C. Pinto, Mrs. Mehtab Akbar Rashdi and Mrs. Amber Alibhai

SHEHRI conducted a one-day Environmental Awareness Programme on August 21, 1993, to inform participants about the present state of the environment and environmental laws and the steps one could take to seek redressal of their grievances. The programme was conducted by Mrs. E.C. Pinto, Advocate and Incharge Legal Cell, SHEHRI-CBE.

After the welcome address by Mr. Navaid Husain, Chairman SHEHRI, Mrs. Pinto spoke on various aspects of environmental law and explained the various laws that exist to curb the menace of environmental degradation. Mrs. Pinto's detailed lecture was followed by a talk by Qazi Faez Isa, Bar-at-Law and Vice Chairman SHEHRI, on the technical aspects of various laws and ordinances and the lacunae that exist in them. He also explained the methods one could adopt to seek legal redressal. Mr. Zain Sheikh, lawyer, also added his comments to Qazi Faez Isa's points and the Pakistan Environmental Protection Ordinance (EPO) of 1983 was discussed in great detail.

Other speakers included Ms. Marvi Memon of IUCN, Mrs. Amber Alibhai, Legal Advisor SHEHRI, who focussed on the present state of the urban environment with reference to the PECHS area and Mrs. Safina Siddiqui of KAWWS. Mrs. Radia Khatib of PCSIR spoke on Solid Waste Management with the aid of slides. This was followed by a panel discussion in which all participants and panelists took part, along with the Chief Guest for the proceedings who was Mrs. Mehtab Akbar Rashdi, DG EPA Sindh. Mrs. Rashdi gave a brief

outline of the EPA and its functions and spoke about the effluent standards that were passed by the Environmental Protection Council at its first meeting held recently. She emphasized that awareness should be created at every level including the bureaucratic level and in the representatives of the people i.e. MNAs, MPAs etc.

The outcome of the day's proceedings were that several recommendations were made and passed on to Mrs. Rashdi. These included:

i) According to the EPO, a period of 60 days is allowed between the filing of a complaint and the taking of action. It was recommended that this be reduced to 14 or less days.

ii) In Section 21 (d) of the draft of the Environmental Protection Act (1993), the term 'aggrieved person' should be changed to 'any person'.

iii) The present caretaker government should set the emission control standards as soon as possible, before the elections.

iv) Mobile tribunals or 'public interest litigation' camps should be set up.

v) The topic of 'environment' MUST be included in the manifesto of all political parties.

vi) The Urdu and local languages media should be more environmentally-aware and active.

vii) The electronic media should conduct environmental-awareness workshops. Also, other means such as theatre and print media could be used more effectively to campaign for the environment.

viii) The EPAs should publicise their activities more so that people become more aware of them and greater cooperation should exist between EPAs and NGOs.

## DEMONSTRATION AGAINST ILLEGAL COMMERCIALISATION



Demonstration against illegal Commercialisation

Over a period of time, the entire P.E.C.H.S. area has been completely ruined by illegal commercialisation and the encroachments that have followed. It seems the encroachments have reached their zenith which is in the form of acute traffic congestion every morning and evening on numerous roads in the area; even the bye-lanes are used by minibuses.

To protest against car showroom owners, property developers, multistorey builders and encroachers

who are ruining the area, SHEHRI organised a demonstration on the morning of August 19, 1993, at the junction of Khalid bin Waleed Road and Allama Iqbal Road in the P.E.C.H.S. area. SHEHRI members and supporters collected there with banners protesting against the commercialisation of P.E.C.H.S., the new one-way traffic scheme and the tree-cutting campaign launched in the area, car showrooms, multistorey shopping malls and apartment blocks, the breakdown of the basic infrastructure of the area because of

these structures etc. The banners carried statements such as "Hands Off Our Area And Roads", "Give The Pavements Back To The Pedestrians", "PECHS Stands For P-Police Apathy, E-Encroachments, C-Commercialisation, H-Highrises, S-Showrooms".

The smallest drip from a leaking tap can waste over 50 gallons a day.

### JOIN SHEHRI TO CREATE A BETTER ENVIRONMENT

If you wish to join SHEHRI please send this card to:

**SHEHRI - Citizens for a Better Environment**  
206-G, Block 2, P.E.C.H.S., Karachi-75400, Pakistan  
Tel: 4417011, 4425701 Fax: 4548226

Name: \_\_\_\_\_ Tel. (Res): \_\_\_\_\_

Address: \_\_\_\_\_

Occupation: \_\_\_\_\_ Tel. (Off): \_\_\_\_\_

#### SHEHRI-CBE's new members are:

161. Major Nayer Faridows
162. Mr. Sajjad Ahmed - Advocate
163. Ms. Denizee Asim Puri - Nutritionist
164. Mr. Behram Sohrab H.J. Rustomji
165. Dr. Thomas J. Chiang
166. Mr. Mohammad Wasir Masood - Environmental Engineer
167. Dr. Akhtar Waqar Ince
168. Mr. Nasir Maqsood - Advocate
169. Mr. S.M. Wajid - Sub-Inspector
170. Engr. Gulzar Ahmad Memon - Superintending Engineer KWSB
171. Ms. Anila Saeed - Student
172. Dr. Farooq Ahmad - Student
173. Mr. Zahoor Ashir - Manager
174. Ms. Nazli Ashir
175. Mr. M. Farooq Sheikh - Student
176. Mr. Haseeb Yousaf - Mechanical Engineer
177. Mr. Waqar Ahmad Siddiqui - Student
178. Mr. Chaudhry Farooq - Student
179. Mr. Sajad - Student
180. Dr. M. Hossain - Dentist
181. Mr. Mansoor Ahmed
182. Mr. Tayyeb Afzal - Banker
183. Mr. Amanullah



(Which require a regional legislature and cooperation to devise and implement adequate solution)

9. Pressure of population on resources, and difficulties of birth control: How many can Earth carry?
10. Transnational pollution of fresh water supplies. Transnational demands on limited fresh water supplies.
11. Ocean pollution which threatens Earth's fish and oxygen supplies. Pollution of oceans from transport, drilling and pumping of oil. How long can this go on before death of the oceans?
12. Worldwide use of pesticides harmful to people, which enter into world trade in food, while pests get more virulent.

- instabilities and dictatorships.
19. Teaching about history and world problems so that people will be prepared to live together peacefully and work out problems for the common good.
20. General lack of well-informed and well-motivated people with humane and global outlook to cope adequately with inter-related problems of living on Earth.
21. Long lasting and slow rising chlorofluorocarbon gases, and spreading ozone holes in the atmosphere.
22. Lack of funding to solve global problems.
23. Terrorism: many forms and many causes.



- i) Sulfur dioxide- causes respiratory problems and also forms acid rain.
- ii) Oxides of nitrogen- causes smog and acid rain.
- iii) Carbon dioxide- a major contributor towards global warming.
- iv) Carbon monoxide- a toxic gas which also contributes towards global warming.
- v) Lead- causes respiratory problems, increases cardiovascular health risks in adults and can also cause mental disorders, particularly in children.

Apart from the health risks posed by

relatively more stringent standards as compared to existing plants. As far as vehicular pollution was concerned, it introduced the tailpipe emission standard system and implements its regulations based on the severity of air pollution levels in urban areas.

### AIR POLLUTION CONTROL STRATEGIES IN PAKISTAN AND THEIR IMPLEMENTATION

Air pollution control strategies may be implemented in Pakistan in the following manner:

Since Pakistan is a developing country with a nascent industrial infrastructure, the imposition of extremely harsh and strict environmental control measures may not be very prudent at this stage. This

Pakistan at present may be less affected by air pollution than by water pollution, but the future may not be that secure. Proper actions and measures taken now can save a lot of inconvenience in the future.

(By Farhan Anwar who is a civil engineer and a member of SHEHRI-CBE's Managing Committee.) ●

**Apart from the health risks posed by the various forms of air pollution, stone monuments and buildings can also be severely damaged. Air pollution also causes damage to trees and the ozone layer. Acid rain, which has been implicated in forest decline in various parts of the world, is also formed as a result of air pollution.**

It has introduced tax incentives on the purchase of low-emission vehicles and has adopted stringent tailpipe emission standards. Japan, along with following similarly strict measures, has also introduced a system of identifying and compensating the victims of air pollution. This system creates both moral and economic pressure on the erring industries to implement stricter controls. Japan is also reducing its dependence on fossil fuels by switching to cleaner fuels such as nuclear-generated electricity and natural gas. The U.S.A. implemented a stationary source program which was less aggressive as it was a phased pollution reduction program. It required that new power plants or those old ones that underwent extensive modification should meet

## TYPES OF AIR POLLUTANTS AND THEIR EFFECTS

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# EDITORIAL

The editorial of our last issue entitled "Taking the Law into Our Own Hands" celebrated the creation of SHEHRI's legal department.

**Tribal justice in PECHS**

**Baanhn Beli condemns maltreatment of SHEHRI chief**

**Manhandling of SHEHRI chief, CPLC dy. chief condemned**

**Lonely crusade In Karachi**

**DAILY NEWS**

September 27, 1993

**An appalling incident**

**Why lonely crusade**

**The new crime, underworld and influential group in Karachi**

**City administration told not to touch Balochistan CM's son and his guards**

**Four SHEHRI staffers resign; receive threats from construction company owners**



**Police neglect case against Balochistan CM's son**

**NGOs deplore attack on SHEHRI chief**

**By our staff reporter**

**Attack on NGO chief condemned**

**By our Staff Reporter**

**KARACHI: The anti-governmental organisations (NGOs) condemned the attack on SHEHRI President, Naved Hussain, and deplored it.**

**An ugly incident**

**Letters to the Editor**

**A common crusade**

**Balochistan CM's son manhandles Shehri chief**

**By our Staff Reporter**

**KARACHI: Sept 24: A Balochistan Minister's son, Naved Hussain, manhandled the son of Balochistan's Chief Minister Nasser Mangoch, and his security guards manhandled the chief of a non-governmental organisation on Thursday.**

**HRCP demands action against attackers**

**By our Staff Reporter**

**KARACHI: Sept 24: The Human Rights Commission of Pakistan has demanded the attack on chairman of HRCP, Naved Hussain.**

The editorial of our last issue entitled "Taking the Law into Our Own Hands" celebrated the creation of SHEHRI's legal department. We at SHEHRI were excited, enthusiastic and confident that with the commencement of Public Interest Litigation under SHEHRI's umbrella, our members (and others) would come forward and seek the legal relief that is their fundamental and environmental right guaranteed by the constitution. Secure in our belief that the legal course of action would never encroach upon the legitimate rights of others, we proceeded to give advice and guidance to all who knocked on our doors. The collage of press cuttings and the narrative that follows proves that those who ruthlessly pursue private profit have not only no regard for public interest, but will in fact stop at nothing to achieve their goals. Unfortunately, in this pursuit, they are aided and abetted by those very institutions that are set up and sustained by tax payers.

This is the story of a group of citizens, the residents of a neighbourhood in PECHS Block-II of the 206 and 207 lanes. Block-II PECHS is an old area of post partition Karachi. The majority of the houses here have been constructed and are still occupied by the original allottees or their families. It has a feeling of "neighbourhoodness" and community that few areas in Karachi can boast of. Of middle income background, most families here have put in their life savings and earnings into their homes. Originally zoned for low density residential useage with small well planned commercial areas, PECHS succumbed to population and developer pressures and both its residential and commercial density began to increase by the early '70s. First Tariq road, then Allama Iqbal road, followed by Khalid Bin Waleed road and Sir Syed road fell prey to

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playgrounds disappear. Many letters to the editor, complaints to area councillors and building control authorities were written and despatched, the Federal Ministry of Housing and Works which absurdly continues to be the governing agency of PECHS was also approached but to no avail. Often people who attempted to take legal action were threatened with kidnapping, arson and rape via phone calls and intimidated into selling out.

construction is totally illegal. The permit is for a double-storeyed single unit bungalow, with generous set backs and enough parking for a single family and not for a commercial building plaza. Armed with this knowledge the residents decided to seek collective legal redress. Even before they could embark on this endeavour the might of private greed struck. SHEHRI offices, chair person of Shehri and staffers were put under siege for a day.

**In spite of the fact that non-bailable offences have been committed and an FIR been lodged no one has been arrested, so far.**

**However, nothing has been done about this illegal construction. It is still continuing at a very fast pace and should be completed in the next few months. Mr Shabbar Siddiqi, Member Technical of KMC and Ahmed Husain, Head of Karachi Building Control Authority and others are secure in their belief that nothing will be done as are the developers and other investors.**

to achieve their goals. Unfortunately, in this pursuit, they are aided and abetted by those very institutions that are set up and sustained by tax payers.

these forces. Initially some of the original residents of these main roads sold out as the original nuclear family had multiplied. Sons and daughters

had set up their own families, some had moved abroad, others to other areas. Later, realizing that the original peace, quiet and privacy of the area was giving way to both civic degradation and high rises in their backyards, still others decided also to sell out and move. As far as the main roads were commercialized most people sat back and accepted the situation with the apathy and fatalism that has become the hall mark of the Pakistani psyche. However, as the commercial plazas crept into the small lanes residents realized that unless they took collective action their area would soon become a middle-income slum. With disbelief they watched parks and

This story is the story of a group of residents that refused to cow down and an NGO that decided to help. The residents and SHEHRI's only "crime" was that we went about our business in a peaceful legal manner. We approached the Karachi Building Control Authority and the PECHS office to allow us as citizens, our right to see the building permit for a multi-storied plaza that was fast coming up in a 20 foot lane. The building is covering 100% of the plot, and has no provision for parking or fire escape. With great difficulty we were allowed a surreptitious peep at the building permit by a sympathetic office worker in return for a promise of total anonymity being testified of his superiors. As suspected, we discovered that the

Armed men with kalashnikovs and payeros barged in and without much beating about the bush demanded that we stop this course of action or face the consequences. The rest is history and has been well reported in the press. However, nothing has been done about this illegal construction. It is still continuing at a very fast pace and should be completed in the next few months. Mr Shabbar Siddiqi, Member Technical of KMC and Ahmed Husain, Head of Karachi Building Control Authority are fully aware of what has happened and is happening. In spite of the fact that non-bailable offences have been committed and an FIR been lodged no one has been arrested, so far.

# VEHICULAR POLLUTION: NOISE AND SMOKE

Water supply mixed with sewerage, a poisoned river, disappearing species of birds and animals, terribly polluted air and last but not least, a high degree of noise pollution exists in the city of Karachi. Noise pollution in a large way contributes to environmental degradation. The silencer-less rickshaws, pressure horns and smoke-emitting vehicles without silencers, which are quite old and unable to pass any fitness test, are major sources of noise and air pollution. There are no statistics on the number of Karachiites who suffer from noise-related ailments. But most people have already paid the price of noise pollution by suffering from anxiety, depression, frustration, panic, fatigue, chronic perspiration, disturbed sleep, stomach distress etc. What can they do, they have no idea. But they are almost at breaking point in their dilemma. There is no control or even preventive action to protect people from noise pollution.

A lack of appropriate legislation and enforcement of what little legislation there is are the main factors in the magnification of this problem.



**A lack of appropriate legislation and enforcement of what little legislation there is are the main factors in the magnification of this problem.**



SHEHRI-CBE (Citizens for a Better Environment), a non government organisation working for the protection and improvement of the environment, raised this issue in the courts of law. SHEHRI has already proved that wrongs can be set right if we go about it diligently armed with knowledge of law and some committed citizens. SHEHRI

highlighted the problem of noise pollution and inadequacy of current laws and rules to deal with it. Courts can play a significant role in the protection of our environment in restricting its pollution and degradation. The Supreme Court has initiated action against smoke emitting vehicles at Karachi, Rawalpindi and Islamabad.

**There are no statistics on the number of Karachiites who suffer from noise-related ailments. But most people have already paid the price of noise pollution by suffering from anxiety, depression, frustration, panic, fatigue, chronic perspiration, disturbed sleep, stomach distress etc.**

Legal action has also been initiated by the Supreme Court and certain orders have also been passed against pollution for industrial waste. But there is no rule or law for noise pollution. There are laws which deal with the subject of environment, but the governing bodies fail to enforce them.

Although the Pakistan Environmental Protection Agency has fixed the national environmental quality standards for motor vehicles exhaust and noise, the governmental agencies are not equipped with proper instruments for the measurement of these violations and hence these standards could not be implemented. To put an end to this indiscriminate use of pressure and musical horns and to ensure the prompt and swift implication of the prescribed standards, a human rights case has been filed by SHEHRI-CBE in the Supreme Court. The suggestions, which were given by Navaid Husain, the Chairman of SHEHRI CBE, are as follows:

1. For vehicular emission, the standards approved at the meeting of the EPC (Environmental Protection Council) to be strictly enforced with immediate effect.
2. EPAs to have teams of inspectors to carry out continuous monitoring aided by mobile labs, equipment etc.
3. EPA inspectors/other authorised bodies to have powers to impose heavy, on-the-spot fines.
4. The highest smoke emissions are from public transport i.e. mini buses, buses and rickshaws. A realistic fare structure must be developed that enables the owners not only to keep the transport on road but also enables them to restore their vehicles in good order.

A standing tripartite commission

consisting of the Transporters Association, a Citizens' Body and the Traffic Police should meet periodically to review fares and discuss the condition of the transport plying for citizens safety and comfort.

5. Prior to the time of annual tax renewal it should be mandatory for every vehicle to have obtained a motor vehicle fitness certificate from an approved workshop.

Traffic Police, Gulam Qadir Mehr - D.I.G. Police, Nazim F. Haji - Chief of C.P.L.C. (Citizen Police Liaison Committee), and Navaid Husain Chairperson of SHEHRI, the complainant.

1. In all districts of Karachi, vehicular checking should be carried out twice a week for two and a half hours.

2. Honorary magistrates to be associated

**It is very heartening to mention that the Honourable Justice Saleem Akhter has taken notice of these pronounced traffic irregularities. On 1st of Nov '93 an order was passed by him in which the following directions were given**

6. From a overall and longterm point of view it would be desirable to reduce the number of vehicles on the road.

7. Rickshaws in Karachi as opposed to Lahore are highly polluting and noisy. The reason for this is that the rickshaw drivers deliberately install defective silencers and add oil to their petrol in the erroneous belief that this gives them greater mileage and engine life. This aspect can be dealt with the implementation of the proposed motor fitness certificates.

8. Governmental ban on leaded petrol should be the ultimate aim.

9. Tax incentives on the purchase of low-emission vehicles.

10. Adopt stringent tail-pipe emission standards.

11. A portion of increased taxes on motor cars be diverted to the mass transit and circular railway projects.

12. Car parks should be setup in congested parts of the city with a view to reduce wrong parking which reduces traffic flow and adds to emissions.

It is very heartening to mention that the Honourable Justice Saleem Akhter has taken notice of these pronounced traffic irregularities. On 1st of Nov '93 an order was passed by him in which the following directions were given in the presence of Commissioner of Karachi Muhammad Saleem Khan, Mehtab Akber Rashidi the Director General of Environmental Protection Agency Sindh, Babar Khattak - the D.I.G. of



with checking team and in case of absence of STMs (Senior Traffic Magistrates), Honorary Magistrates to have full power to dispose of cases.

3. Indiscriminate checking of all vehicles including both private and governmental vehicles, which are producing unbearable noise and smoke, should be carried out and owners/drivers who breach the Motor Vehicles Rule 154 of 1969 should be brought to book irrespective of their status.

4. The possibility of supply of lead free petrol should be conducted.

5. Motor cycles and rickshaws are not allowed to ply without silencers. They have been given a month's time after which serious action would be taken.

This matter in fact doesn't end here. By mere legislation the objectives can not be achieved. The law requires concrete measures for implementation of the above facts. And a change in attitude about environmental problems is required from our elected leadership and individuals. It is most important that the need for enforcement of the law among the masses is being felt and honoured.

## READERS' VIEWS

A complaint letter had been sent by the SHEHRI-CBE to Chief Minister in response to an article published in Dawn dated 2nd Nov 93. The article entitled "Free fishing in lakes & River Indus" was based on a report revealing facts about it.

Sub: Free Fishing in Lakes and River Indus

With the reference to the article in Dawn dated 2nd Nov. '93 we would like to bring to your notice the impact of your decision for free fishing in the lakes and river Indus.

Keenjhar Lake which is one of the lakes where permission for free fishing has been granted by the Ministry, is a wildlife sanctuary. The mass movement of fishermen, we fear, would not only wipe out all the fish population but also disturb the migratory birds. Hence the whole ecosystem would be destroyed. Saving the marine life means not only to save our economy but our future as well.

Therefore, we request you that before making any decision on kindly take into confidence the concerned departments otherwise the existence of these departments will be useless.

We would like to suggest that before giving the permission for free fishing the following points should be considered.

1. Spawning season
2. Size of nets
3. Number of fishing licenses issued.

We hope that you will reconsider your decision which has caused great frustration among the concerned departments and concerned citizens.

From Dr. M.S. Habib  
Chairman and Managing Director  
Sub: Sind Club Alteration

The Sind Club is an historical building which is on the historical preservation list of the KDA as well as on the list of the historical foundation and the Shetri Group. These organisations would be extremely upset at any major alteration carried out on the premises.

I understand that the removal of the wooden staircase is about to take place. This is not only a beautiful piece of carpentry work but is made of solid, first class teak and worth a very great deal of money. Hence, this would be not a minor decoration but a major alteration.

The Sind Club building - architectural structure is well known and well loved by every member and as such should not be effected without the approval of the General Body I hope this could be stopped by your interaction until the matter is put to the General Body.



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# EDHI VILLAGE

Situated fifty kilometers out of Karachi, Edhi Village is home to more than eight hundred and fifty male patients. The residents of the village owe their thanks to Abdul Sattar Edhi, the brain behind, and founding father of this operation. The Edhi Foundation was set up in 1952 as an independent, non-profit, non-governmental organisation, to help meet the nation's growing need for welfare assistance. Edhi Foundation maintains the steadfast policy that all individuals will be provided with free medical service, shelter, clothing, and food regardless of religious cultural, racial, or social background.



One of the wards at Edhi Village which houses physically and mentally disabled people.

consists of a large expanse of ground which houses a charming goose and duck pond, a concrete sports area, and five separate wards. The patients are divided into four major divisions according to their basic medical afflictions. Edhi Village caters to the

various needs of different patients quickly and effectively. Ward One quarters approximately 144 homeless adults, who suffer from a variety of physical and mental disabilities. Inside this ward, patients are divided into two sections within a large open room. The severely retarded patients are kept on the opposite side of the room from the docile ones. The surroundings are sparse and consist of a couple of standing fans, walkers, crutches, an exercise bicycle, and bedding which lies upon raised concrete slabs. A surprising number of patients are extremely well-educated. One patient in Ward One, is suffering from paralysis from the waist down. This pulled him away from his former job as a mechanical engineer. After being picked up off the street and spending two years in the ward, there has been a ninety percent improvement in his condition. Another patient who was brought to the village was almost totally physically disabled. At the village he is given regular physiotherapy. For the mentally handicapped and the physically disabled, the Village provides a home.

The next building, Ward Two, houses children who are either physically disabled or mentally retarded. Those that are mentally capable are given basic education. The majority of these children are moved to Ward 1 after they have reached a certain age. A few, however, move out of Edhi Village, capable of pursuing a job. Parents, friends, and relatives are able to come anytime to visit their children. Housing only mentally handicapped patients, Ward Three is divided into two groups. The mild-tempered patients are given an environment similar to Ward One. Those that are perceived to be dangerous are kept in an enclosed environment, separate from the rest of the patients.

Heroin addicts are housed in Ward Four which is also divided into two sections. Those addicts that suffer from disabilities due to extreme and prolonged heroin abuse are kept in a separate section from the newly-arrived and the recovering addicts.

One patient who came of his own free will is an assistant manager of a governmental organisation. He went to Lahore on his holidays, and became addicted to heroin there. By the time he came back to Karachi, he was smoking two grams of heroin a day. Upon realizing how much the drug was ruining his life, a friend of his told him about Edhi Village. Besides his addiction, the man had minor medical operation prior to his admittance into the Village. Every day a doctor comes around to examine his wound. This individual is extremely grateful for the services of the Edhi Foundation. He considers himself one of the few who could actually afford to pay for the medical services that the Foundation offers for free in the Village. His

method the doctors at the Village can use is to see whether or not the prescribed medication works effectively on the patients. If it does not work, the doctors believe the person could be a possible carrier of the AIDS virus. The doctors at the Village say that so far, they have not had any people who carry the infection. However, conclusive evidence has shown that this method for screening is not particularly effective. One kind of treatment for the addicts in the Village consists of a rigorous, daily exercise programme. The head aids and orderlies who work at the Village feel that one of the main reasons people become addicted to any drug is directly related to the lack of constructive activity in their lives. Therefore, the detoxification programme was devised specifically with this in mind, in order to establish some constructive routine within the patients' schedules. Those who are physically disabled or lack the required energy for physical exertion



All patients are made to exercise every morning.



The younger inhabitants of the Village.

The buildings and their surrounding premises were built and maintained solely on the generous donations of others. Amazingly enough, the entire Foundation is primarily funded in this fashion, and resists the charity services of larger, more prestigious international developmental NGO funding organisations. As with the other Edhi Foundation centres, all clothing, medical and food supplies are donated, as are the time and services given by their completely voluntary staff. Dr Yaseen Abdul, the head doctor at the village, is a retired physician who decided, several years ago, to treat and care for those too poor to normally receive his services. These services do not go unappreciated by the Village's occupants. Javed, a former heroin addict, is now working at the village as an aid, to return the favours that the Village had given him free of charge for over three years. The Village is run by seven or eight voluntary staff. The patients that are physically and mentally capable are given chores, such as cooking, cleaning etc. This allows the patients to work cooperatively and responsibly with their co-residents, invoking a giving and taking atmosphere. This innovative stratagem of the Edhi Foundation could not work so effectively without the noble help of people like these, whose donation of services has helped make the world a little bit better for those who are less fortunate than themselves. The Village ground encompasses a total of sixty-five acres and is surrounded by a twelve foot high barbed wire and brick wall, with two large, iron gates leading inside. The interior of the Village

physically disabled, mentally retarded, abandoned children, and emphasis is given to its effective heroin detoxification programme. These divisions within the grounds enable the limited staff to look after the

grey beard, short stature, kindly demeanour, simply dressed, this profile could typically describe many in the thousands of people who thrive in the streets of Karachi. In fact, if you ran into Abdul Sattar Edhi you could never tell him apart from the common man; he still wears the same clothes he wore 10 years ago. So what's so extraordinary about this ordinary man? One does not usually associate such simplicity with a person who continually renders a great service to humanity.

As a child, Abdul Sattar Edhi was raised by parents who instilled in him the values of charity and love for his fellow men. Every day he was given 2 "pais", one for himself and another to give to a poor child. If he spent both, his parents would scold him. They believed that while both the Quran and "Namaz" laid the foundation, "good qualities" in a person had to be developed.

So far, Edhi thinks that he has never had any difficulties. He feels that a person has to be ready to face anything. Having started off with a practical education - at the grassroots level - is the reason why Edhi is so successful. Printing handbills to publicize the opening of his first dispensary cost a total of Rs.6.00. From this one dispensary, Edhi was able to expand on his services over time to set up an interconnected network of ambulances, hostels and hospitals, which cover 40% of

Pakistan. The charity system which runs the Edhi Foundation is based on the Islamic principle of "Baqoo al-Ithad". Edhi feels that this system is no longer being used the way it should be, because we have rejected it. For example he feels that the corruption in the Social sector system prevents help from reaching the



Abdul Sattar Edhi at his office.

needed. This is the reason that he depends solely on the help of others in both donations and volunteer help. Of the money which is donated, he finds that most comes in from the middle, not the upper class. Having seen corruption in one of his own centres, Edhi has devised a foolproof method consisting of a system of checks and counterchecks.

Each Edhi centre is completely self supporting. The staff at each centre are honest and trustworthy; therefore it is not necessary for Edhi himself to be there to oversee the operation. This gives him time to get out of the office and help others by driving ambulances,

and supervising personnel during major accidents. He says that the other advantage of having each centre being self supportive is that after him, the whole Foundation will not fall apart; he has developed a system that will oversee the welfare of all the other centres. Edhi has hopes that one day the services of the Edhi Foundation will be accessible to all the people of Pakistan, right down to the smallest village.

His system runs itself so well that even the U.N. has approached him for advice in both Somalia and Bosnia. In Somalia, one of the improvements Edhi made was to make the military personnel cook and feed the people. When he went to Bosnia, he went to help whoever he could; he helped Bosnian, Serb or Croat. He never takes sides on the basis of religion.

One improvement he thinks that could be made to change the world order is to change the composition of the U.N. security forces. The forces should consist of people with mixed ethnic and religious backgrounds, so that all can be represented fairly.

There is no denying that Abdul Sattar Edhi is a remarkable human being with qualities that are a rarity in today's world. One cannot imagine what the state of our cities, and Karachi in particular, would be like without the services rendered by this great man and his dedicated team of workers. The world certainly needs several more like him.

have to make do without this programme. However, they do have various other activities to occupy their time which are not physically strenuous, such as mentally stimulating boardgames and simple chores. Addicts are detained in the Village from six months to two years. After the patients are fully recovered, they are free to go out into the world. Most of those who are discharged from the Village are able to work for themselves and carry on with their normal lives. Unfortunately, as with all detoxification programmes, a few become re-addicted and return to the Village repeatedly. In fact, two addicts have come back to the Village over twenty times. For those who do come back, Edhi Village does not refuse them assistance. The last ward, Ward Five is the most recent addition to Edhi Village. This ward is completely devoted to mentally retarded patients on medication, who are under observation. Here, the physicians judge whether or not the medication rendered has any effect. Unlike other wards, the patients are free to roam around the grounds as they wish. For most, there is no real medical treatment that can be administered.

A plot of land in the back of Ward Three, around the exterior of Edhi Village, is used as a cemetery. All bodies are prepared and given a proper burial. This service buries all unclaimed bodies, including free burial for the homeless who are not living in the village and those families that are too poor to bury their own. All unmarked burial sites are recorded. Having been brought to Edhi village, the patients are happy to stay. Ninety percent of the addicts are picked up off the street or brought in by the police. Five to six percent, however, come of their own free will. The physically disabled, the mentally retarded, and the children are also found homeless on the street, or they are brought in by families too poor to care for them. They too, are well looked after, provided with food, shelter, and clothing, and do not have to worry about life in the streets.

In order for the Village to continue to run so efficiently, public donations must be the primary means of income. If you would like to contribute food, old clothing, toys, books, etc. donations can be made directly to one of the Edhi ambulance stations. If monetary contributions are to be made, please send a cheque to the Abdul Sattar Edhi Foundation. (By Caroline Davies and Nalin Davies. Photographs taken by the authors.)

# THE GREENING OF THE MULTINATIONALS

How well global firms understand and address environmental issues will determine their competitive edge

Human influences on the global environment are not in doubt. In fact, they appear significant. It is no longer plausible to defer the inclusion of environmental factors in corporate strategies until scientific consensus is reached. Among environmentalists and policy makers, however, responses to environmental change have emphasized underlying processes such as energy use and population growth, largely ignoring institutions, agents, and markets.

In the context of environmental change, multinational corporations are part of the problem. Since multinationals conduct a large part of the world's economic activity, they are major environmental actors as producers, managers, and distributors. By necessity, these firms engage in a wide range of hazardous and pollution-intensive activities.

Corporations are also central to the solution. Global enterprises traditionally shape both technological change and commercialization worldwide. They are innovators and the transmitters of technology, as well as the source of commercial ideas. Their actions and strategies are crucial in determining the environmental landscape. It will be corporations—their technological capabilities and edge—that shape new modes of economic performance.

Indeed, the multinationals will be in the spotlight. They will be subject to national and international regulation as private groups use evidence of environmental mismanagement to pressure governments to limit corporate behavior.

These factors are transforming the international marketplace. Almost

sentiments that define what is legitimate. As the 1989 Exxon oil spill in Alaska has shown, no company can brush aside outrage. The 1984 Union Carbide chemical accident in Bhopal, India, and its aftermath add a further dimension to the problem: the developing world is learning that even global companies can be held liable for a vague environmental morality. Global firms simply have no easy way around the emerging ethos, since environmental degradation derives

**There is a fundamental tension— even war— between technology and ecosystems. In reality, then, "environmentally benign" means less damaging, rather than not damaging, and good business demands recognition of this fact.**

from diverse and legitimate sources. There is a fundamental tension— even war— between technology and ecosystems. In reality, then, "environmentally benign" means less damaging, rather than not damaging, and good business demands recognition of this fact. Global corporations can at best seek to mitigate the most severe effects of pollution and to channel the



Courtesy: PANOSCOPE  
Cuban cartoonist Carlucho draws attention to Global environmental problems. Industrial pollution is so full of heavy metals, it could be mined.

Thus, the U.S. oil industry is coming under growing scrutiny from both public authorities and private groups. In other countries, the process is much slower— it is difficult to imagine authorities in some oil-producing nations considering the environment relevant to petroleum— but already private and public interest groups are pushing for action. The argument will be made that the numbers speak for themselves. For example, the Persian Gulf states have remarkably high per capita carbon emissions, a fact that can be traced to both the energy-intensive lifestyle and the consequences of hosting large-scale oil operations for the world.

There are business opportunities beyond those of public relations expertise and clean-up technology. These involve creating and shaping markets at the technological frontier in each phase of the oil industry— from exploration to transportation to utilization. Both on-the-shelf and beyond-the-horizon technologies could play a role.

Will such moves reshape the competitive arena? In retrospect, the petroleum industry has generally responded to market signals— for example, by exploring new kinds of contracts when the negotiating power of host countries has grown. In the same manner, voluntary environmental codes and guidelines developed by the industry could preempt the most demanding legislative constraints. A strategy based on preemption may be especially valuable if the industry is to protect itself from the charges of irresponsibility.

Like oil, the chemical industry faces ubiquitous environmental problems, but global chemical companies are positioned more precariously with respect to the environmental: they are already subject to international regulations sanctioned by formal agreements.

One reason is that accidents like that in 1984 at Union Carbide's Bhopal pesticide plant have dramatized the potential environmental consequences of the industry. Chemical companies are also essential to solving environmental problems, and they are by far the most visible multinationals in deliberations to do so. In March 1989, some 93 countries attended negotiations for the final version of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. Such agreements could give multinationals less flexibility in locating their activities, compromising their ability to shift production from regions with high environmental standards to those with low ones.

**Global agreements**  
The Basel Convention is a natural outgrowth of market conditions in some ways. The number of countries

that import or export hazardous waste has grown markedly over the past decade. And while efforts to handle hazardous-waste problems at first focused on reducing exports to developing countries from industrial nations, the transport of wastes among industrial states is also extensive. All of this complicates the simple view that it is always rich nations dumping on poor ones. The chemical industry has faced regulations to control ozone-depleting chlorofluorocarbons (CFCs) as well. While industrial societies are the principal consumers of CFCs, exports to developing countries are coming under scrutiny with or without the participation or consent of the potential "buyers."

The 1987 Montreal Protocol to reduce CFC use is global both in recognizing a class of environmental problems and in establishing the need for worldwide efforts to solve them. In 1990 the protocol was revised and more countries signed it, suggesting an expanded role for international agreements.

The construction industry's dilemma is in many ways even more severe. The problem is this: building physical structures invariably means dislocating natural systems. All facets of the industry clash with nature— from harvesting building materials to site preparation, transportation, actual construction, and the disposal of residual materials. Dislocations cannot be avoided; at best they can be managed. In industrial societies, construction has already changed the environment in major ways. Here the challenge is to repair, upgrade, and expand structures without significantly altering the environment further. Yet for developing countries, the problem is just the beginning, and it is in these markets that the industry envisages its most extensive expansion.

Unlike the oil industry, construction has traditionally been local, tied to local investments. Even so, today's technology and resource needs, managerial skills, and corporate strategies all lead toward globalization. And while global construction corporations have yet to encounter the legislative, political, or moral constraints of the environmental ethos, it is inevitable that they will.

International environmental groups are

in an industry whose purpose is to transform natural systems into built ones. Clearly, the environment must become a salient factor in strategic planning for the construction industry in the very near future. Like the oil industry, construction faces important opportunities for staying ahead of environmental constraints and for shaping the ways in which national and international bodies address these issues. It may well be that pollution prevention would pay for itself through reduced need for waste disposal. At a minimum it could reduce liabilities.

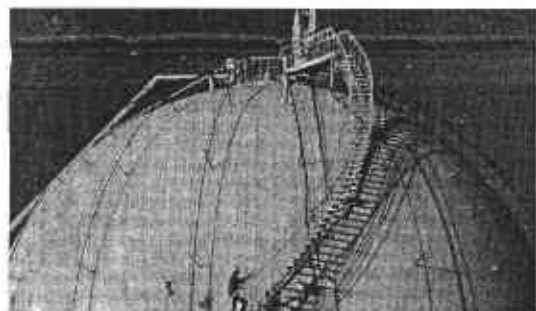
If a firm is to compete, it cannot misread the signals of the global ethos and conduct "business as usual." But while governments, public interest groups, and international organizations are searching for institutional innovation and adaptation in this area, global corporations, with few exceptions, have generally failed to develop environmental strategies.

This must change. The crystallization of moral suasion means that companies must pursue technological opportunities aggressively. Scarcely anyone, anywhere, defends unrestricted growth and development regardless of the consequences. The chemical industry's disposal of hazardous materials is coming under scrutiny. Oil spills are in the spotlight. In construction, attention has focused particularly on hazardous materials and damaging landfill practices.

With the public demanding accountability and greater government intervention in the offing, how will each industry manage potential embarrassments? How can firms minimize, manage, or channel government intervention? And most pressing of all, how will they take advantage of the changing business environment? First, global firms must be environmentally responsible over the long haul; this cannot be viewed as a posture of convenience or as a way to maximize short-run profits. Multinationals will be able to react appropriately only if they have responsible technological strategies. The marketing challenge, once limited to identifying a product, now extends to explaining what a company will do about the environmental consequences of its activities. Managing an inquisitive and possibly hostile public must be part of maintaining a positive image, but public relations without environmental action will surely backfire. So, too, positive action without realistic public relations may be a disadvantage.

**The Case For Cooperation**  
How rapidly a firm understands and addresses the changing environmental norms and values will define in part its competitive edge. Companies must decide whether they will impede or preempt, prevent or participate in international efforts to develop effective global conservation strategies. It is obvious that environmental considerations affect almost all aspects of global enterprises. Retaining a competitive edge under the environmental gun will be a formidable challenge.

The "soft technologies" of management must be improved, updated, and toned. Industry will continue to be on the defensive unless it buttresses environmental management and corporate organizational charts reflect environmental priorities. Risk assessments and contingent responses to possible hazards must be routine. Exxon's appointment of a senior staff member as corporate vice-president for environmental issues is a step in the right direction. With large multinationals uniquely positioned for framing public policy, a good offense may be the best defense. Shaping public policy is good business— if it is done ethically. Unless the multinationals discuss the strategies for influencing policy, they will be reduced to responding directly with outraged citizens. The legal implications are obvious and the precedents for cross-



Chemical storage tank in Louisiana.

overnight, global companies have confronted concerns well beyond the pale of conventional strategic planning— concerns that were certainly not identified in business school. The question is not whether to respond to the new business context but how; not whether such action will reshape competition but how fast and how effectively. This is true across the board, in all sectors, in all facets of global business.

Global firms that recognize the challenges will see important— perhaps unprecedented— opportunities to reorder priorities, take advantage of new possibilities, and reassess potentially obsolete corporate strategies. But to take advantage of opportunities, corporations must adopt strategies for managing all interactions between investments and the environment. To the extent that firms act voluntarily, they will maintain an advantage. To the extent that environmental practices must be regulated, legislated, and controlled, companies will find themselves on the defensive.

## Pressures For Change

The contours of a global environmental consensus have slowly emerged over two decades. Since the first world environment conference, held in Stockholm in 1972, the international community has been stiffening its resistance to industrial practices that threaten the biosphere.

While moral suasion is hardly a serious consideration in business decisions, it can be poor practice to ignore

others in an acceptable direction.

The political facts create the criteria for realistically assessing possibilities for profit. Three types of global corporation— the oil, chemical, and construction industries— exemplify the basic dilemma: almost any action generates environmental effects that can only be reduced, managed, minimized, or contained. These three industries illustrate different aspects of widespread environmental degradation, and all confront the inevitability of major corporate response.

The oil industry was long insulated from any constraint— from governments or the public. The near total absence of environmental codes in overseas exploration and development— let alone transport by ship or land— gave the industry free rein. No one, anywhere, had the power to limit seriously the ecological consequences of petroleum extraction, production, processing, or transportation. Not until the oil price shocks of 1973 did the industry feel any significant limitations.

## A strategy of prevention

That has changed. The public has become concerned about spills, which are inevitable in transporting oil. The 1989 Valdez incident cannot be dismissed as an unfortunate and inadvertent oversight by Exxon. The object here is not to assign responsibility— moral or legal— but to show how ubiquitous environmental degradation is and how salient it has become as a business factor.

**Exxon's appointment of a senior staff member as corporate vice-president for environmental issues is a step in the right direction.**

already braced for encounters with global construction. In the

confrontation between those who desire to build and those who oppose it, the governments of developing nations will be in an anomalous position: they must develop their infrastructures but cannot be viewed as declaring war on nature.

These governments are already beginning to see some way out by exploring the bargaining possibilities inherent in environmental protection. For example, debt-for-nature swaps in which hard currency debts are converted into local investments in conservation are reducing the burden of past financial commitments and may free resources for meeting more immediate social needs. Similarly, nature-for-technology swaps may be negotiated to facilitate access to less polluting technologies. This is especially important in energy, where the potential for conservation and more efficient technology is extensive. In developing countries, such efforts may target reducing both carbon emissions and the rate of deforestation.

## Innovative Approaches

Still, the construction industry has yet to think seriously about the environment, remarkable as that may



# THE SOIL UNDER ATTACK

The soil is under attack in many ways- by pollution, degradation and erosion. Soil takes thousands or millions of years to form and a year or two to destroy. Land is degraded by overgrazing, deforestation and over exploitation. Forests prevent soil erosion but when trees are removed, torrents of water are allowed to run unchecked down steep hillsides- causing avalanches, floods and washing away the valuable soil.

## How does the soil become polluted?

Industry and vehicle exhausts are a common cause of air pollution and dangerous air-borne elements such as lead can then be deposited on the ground. Industrial or mining activities often produce poisonous wastes. If these wastes are not stored carefully or disposed of correctly, soil pollution may occur. Fertilisers and pesticides used on crops may build up over the years and substances such as cadmium accumulate in the soil. Most of our garbage is disposed of in landfills. These take up huge areas of land which then become unsafe to build on and cannot support healthy crops.

Substances from the chemical part of the rubbish- mercury, cadmium and nickel from batteries, waste solvents such as paint thinner, turpentine, varnish and products such as fertilisers and pesticides- form a noxious liquid mixture called leachate. Leachate pollutes the soil and gradually seeps into the ground water, causing further pollution.

Illegal dumping of liquid waste from industry or sewage pollutes the ground. Many hazardous substances such as acid from car batteries, lube oil, transmission fluid, brake fluid are all too often just poured into the ground instead of being disposed of properly.

## Lead

Lead is commonly introduced into the environment by industries and through exhaust fumes from leaded petrol used in vehicles. It is also found in batteries, solder, dyes and insecticides.

## Cadmium

Cadmium finds its way into the soil from industrial emissions, and fertilisers.

## Mercury

Mercury is used in thermometers, batteries, fluorescent lights and in many industrial processes including the production of fungicides and paints.

## Organochlorine pesticides

In the early 1970s, organochlorine pesticides were identified as one of the major environmental pollutants. Their use has been banned or reduced in developed countries but they are still used in some developing countries. These pesticides persist in the environment after they are used; one example is DDT which persists in plants and soil and can thus be passed into the food chain.

## What can be done?

Governments have the most important part to play in reducing soil pollution. Rigid standards have to be set and forced to regulate industrial waste and emissions, to ensure that landfills are correctly lined and hazardous waste disposed of correctly.

## But what about the individual?

There are plenty of ways in which we can all contribute to reducing soil pollution. Here are a few suggestions:

1. Hazardous household wastes include insect sprays, pharmaceuticals, batteries, bleach, brake fluid, fuels, solvents, paint, swimming pool chemicals, weed killer and rat poison. Don't put hazardous household wastes down the drains.

2. If you have a garden, make a compost heap- you will recycle your organic waste and won't need to buy artificial fertiliser.

3. Use natural pesticides.

4. Check that the garage you are using is disposing of old lube oil, brake fluid etc. correctly.

5. Use low lead, and where possible, unleaded petrol.

6. If you see anyone dumping waste illegally, report them to the Environmental Protection Agency.

## Composting

Making your own compost heap is simple- and rewarding! Not only are you recycling your own organic waste but you are also producing a highly nourishing and chemical-free fertiliser for your garden. If you are limited by space in a small yard, try using a compost bin which you can make yourself:

- Buy a large plastic garbage bin with a lid.
- Drill holes in the bottom and sides.
- Layer waste into the bin for the compost heap and water regularly. Don't put meat or fish into your compost heap or you will attract rats.

## Beating pests without pollution

● Handpicking: It is time-consuming but unbeatable. Wear gloves and remove all visible pests.

● Hot peppers: Blend two or three very hot peppers, half an onion and one clove of garlic in water, boil, steep for two days and strain. Can be used on indoor and outdoor plants and frozen for future use.

● Soap: Use only pure soap as detergents will damage your plants. Liquid soap: 30 ml per litre of water, dry soap: 50 gms per litre of water.

● Tobacco water: Place a handful of tobacco in four litres of warm water, let it stand for 24 hours, then dilute and apply with a spray bottle. But handle with caution as tobacco water is poisonous to humans.

Courtesy: Gulf News Tabloid

## NOBODY LOVES KARACHI

Continued from Page 2

creating almost a new macro-climate on their own.

The city nourishes and warms not only a "crucible of cultures" but also embraces benignly mother-like, even those who, like unrestrained vultures, snap at its flesh and blood.

Today, every two minutes a new person is added to Karachi; 5 in 10; and each day 720 new mouths need to be fed, clothed, housed, educated and transported- each year around 300,000 or almost a new town is added- and this number continues to increase.

## What does this mean?

It means that by 1995, the population will have crossed the 12 to 15 million mark and by 2,000 A.D. there will be over 20-25 million of us. It means that where about 3,900 people lived per square mile in 1980, around 5,000 lived in 1985, and approximately 10,000 will crowd by 2,000 A.D.

What will be the socio-political and psychological implications of such a concentrated growth of population? Will it be able to give this mass of humanity adequate shelters or lock them in multi-storeyed "planned" horizontal slums? Or will they continue to be pushed into 'katchi abadis' - into spaces devoid of dignity and humanness...

Will we be able to provide more than a cupful of water to this mass of humanity?

Will the health, educational, and transportation needs be met? Will the environment be suitable for the Islamic society we want to mould?

Will the rules, regulations and plans we make be implemented or will they be unceremoniously, and as always in the past, sacrificed at the altar of defined and undefined motives of official or unofficial whims, of materialistic lust or of economic-engineering short-term-gain-long-term-foolhardiness? The human element is fast eroding in Karachi and if we do not arrest such tendencies, the "crucible of cultures"

will never mix completely.

It must be ensured that this city responds adequately to the challenges of the urban crises facing it. Otherwise we will be forced soon into a boiling cauldron of urban unrest, physical and social breakdown and a complete collapse of all urban systems. We have seen glimpses of that in the recent past. But all of that, even its worst moments, would seem like a joke, when, to that growing, gnawing frustration, you add the consequences of an urban system's failure and total collapse.

Even those who do not love this city, even those who do not call themselves her sons and daughters, will have to change their attitude, or else all of us, whether we love this city or not, will be discarded by the forces of urbanism and be thrust into an oblivion from which there will be no return- we must all begin to love Karachi the way Karachi wants us to love it, or else we must leave it- the bounds of wrath of a city unrequited in love are not unknown. Look at Mohenjodaro.

In Karachi, today, we are already standing at the edge of a precipice- and it is five minutes to midnight.

(Note: The above was read out by Zaigham Jaffery at a recent seminar entitled 'Karachi- Today and Tomorrow' organised jointly by SHEHR and the Karachi Theosophical Society. A version of this paper was printed in KDA's 'LANDMARK' in 1982, and the subsequent events of recent history in Karachi have already proven much of what was predicted here, albeit on a scale which was controllable. Will we be able to control that cataclysm again?.. and at what cost?)

Zaigham Jaffery is an architect as well as Director KDA Design Bureau and Chairman PCATP- Pakistan Council of Architects and Town Planners. ●

# ECO LOGICAL TECHNOLOGY

## Refrigerators With A Difference:

i. Whirlpool Corp. won a competition to produce a super-efficient refrigerator that is designed to save energy and is friendlier to the environment. The winning refrigerator will exceed 1993 federal energy standards by 25% and will contain no ozone depleting chlorofluorocarbons (CFCs). Whirlpool will deliver its first model during the first quarter of 1994. (Business Recorder)

ii. Steven Garrett, a physics professor, has developed a revolutionary system of refrigeration that does not contain the harmful chemicals used in most refrigeration equipment. This unique refrigeration device has grown out of the science of thermodynamics, which utilizes sound to transfer heat and thus produce refrigeration. A prototype has already been tested on board the space shuttle 'Discovery' with good results. (National Geographic)

## Computer Companies Team Up To Protect The Environment:

Digital, Hewlett-Packard and IBM are setting stringent standards for the materials they will use in the production of software, including packaging and documentation. Beginning with the selection of raw materials, such as paper, right through to the disposal of products, the three companies will ensure environmental friendliness without sacrificing quality. The companies will reduce the amount of paper used, use only paper that comes from farmed forests (rather than natural woodlands), use less bleach and

continue to investigate the use of recycled paper.

## Oil From Plastic:

Yoghurt containers, bags, pots for facial creams and other refuse made from plastic can be processed and made into crude oil. This was demonstrated by experts in a large-scale experiment conducted in Germany in which 60 tons of plastic waste were retransformed into crude oil. The waste material used in the experiment corresponded - in composition and contamination - to all the forms of plastic to be expected in future packaging. The chemical industry says that 40,000 tons of waste plastic will be treated in this way. That amounts to around 2% of the total amount of plastic thrown away.

(News and Views from the Federal Republic of Germany)

## POPULATION WINNERS AND LOSERS

Indonesia, Bangladesh, Iran, Peru and Zimbabwe stand out as five countries making impressive, recent progress in expanding access to family planning services. Russia, Pakistan, Poland, Iraq and Ireland are the five countries described as having a noteworthy lack of progress. The doubling of contraceptive use in Bangladesh - from less than 20% of couples in 1981 to 40% in 1991 - is a

remarkable achievement given the country's extreme poverty, high levels of illiteracy and the low status of women. In contrast, contraceptive use is estimated at just 12% of couples in Pakistan.

(Population Action International) ●

## KARACHI'S MASTER PLAN

Continued from Page 2

KDA a computerized "urban management tool" that is supposed to "monitor performance and re-direct "investments". However, effective monitoring can only be done by those who re-direct investments. The KDA does not re-direct investments or even have a say in re-directing them for almost all of the items covered by the "models" of the "urban management tool". The reasons for the problems that are being and will be faced by the Karachi Development Plan 2000 are:

1. No studies of the causes for the successes and failures of the previous plan were undertaken nor of how development takes place in the city (mostly it takes place before planning) nor of the actors and lobbies involved in the process. Regional and national linkages were not established either. A "pre-fashionability" study should have been undertaken to determine these and many other related aspects before UNDP decided on providing assistance.
2. Before the planning process began detailed discussion should have been carried out with the representatives of various organizations in Karachi and review and advisory committees formed in association with them. There is no dearth of organizations in Karachi who are all legal persons. They include transporters, industrialists, traders, professionals, area

shopkeepers associations, trade unions, community organizations (the UNICEF has a list of over 2,500), NGOs, etc. With the insight of these groups a whole new world would have opened up and numerous constraints identified.

3. Detailed studies of other on-going projects in Karachi should have been carried out and a regular system of interaction with them during the planning process should have been established.

4. In the absence of the above mentioned studies/understanding and involvement of interested groups, it is not possible to develop relevant scenarios. This is one of the reasons for the unrealistic assumptions of the Master Plan.

5. The studies that the Master Plan did carry out did not deal with the environment, the inner city, the effect of the port on the development of the city, the question of the relevance of by-laws (as they are constantly violated with impunity), and on the informal sector which provides 70 percent of the jobs in Karachi. These issues are of primary importance to the city of Karachi and the manner in which it is developing. Given the grim picture painted above it is unlikely that conditions will improve in Karachi due to the Development Plan 2000. If they do improve it will be because people take over the management of their lanes and neighborhoods and pressure agencies to improve their functioning on an ad-hoc basis. Hopefully community groups will be strong enough in the year 2000 to develop technical and planning alternatives, with the help of concerned professionals and professional organizations, and lobby with the state to have them implemented.

(Mr. Arif Hasan is a leading urban planner as well as Chairman Urban Resource Centre and Coordinator Orangi Pilot Project) ●

## THE GREENING OF THE MULTATIONALS

Continued from Page 6

jurisdictional litigation numerous. Developing networks for access to specialized services in environmental products and processes may reduce both the risk and the pain for all firms. New alliances may also force governments to make regulation rational. Under these circumstances, the case for establishing a corporate consortium on the environment seems powerful. While no two companies are identical, none is unique. A consortium for exchanging information, streamlining the costs of responsible environmental action, and establishing a forum for policy deliberation would help corporations develop the best strategies. The goal of consortium would be to help level the environmental playing field and keep competition where it should be: on technology, management skills, and creating and shaping markets. In the case of environmental concerns, the shared predicaments outweigh by far the individual risks. The rules of global investments are changing, and it is in the joint interest of global rules to make sure the new rules to provide the best markets. Because markets function efficiently and serve social objectives only given stable and well-understood norms, corporations must strive to help steer global deliberations towards clarity and consistency.

In essence, multinational corporations must enter into a partnership with nature. The world needs corporations to help arrest environmental deterioration; the corporations need to address environmental factors to compete effectively. Preserving the planet's natural assets could become sound business practice as surely as it is already excellent public relations.

Courtesy: Technology Review

## SIMPLE THINGS YOU CAN DO TO SAVE THE ENVIRONMENT

THINK ABOUT THIS BEFORE YOU DRIVE!



**AUTOMOBILES:** Our automobiles/vehicles have a serious impact on the environment. If you drive everyday, there is something you can do to help save the environment. Driving your car is probably the single most damaging contribution you make to the environment.

**Remember:**

- The amount of carbon dioxide a car emits is directly related to the amount of fuel it uses.
- Vehicles cause acid rain by emitting nitrogen oxide.
- Just 2 pints of motor oil can pollute over 20,000 gallons of drinking water.

**Actions to take:**

- Keep your car tuned up. It is the easiest way to make your car fuel-efficient.
- Keep the fuel filter clean. Clogged filters use more petrol.
- If you get your oil changed, store it in a container with a tight lid and send it to be recycled. Don't pour it into a drain or dump it in the ground.
- Use lead-free or low lead fuel or install a catalytic converter to reduce air pollution.
- Try to share your car with friends or neighbours.
- Recycled motor oil can be used as fuel for ships and industrial boilers and the rest can be processed into lubricating and industrial oils.

The Smith-Hechler Ordinance 1980, Section 4, provides that sewerage and industrial wastes be treated and made harmless to fish and other aquatic life before being discharged into water bodies.

The Pakistan Environmental Protection Ordinance 1983 calls for an Environmental Impact Statement (EIS) which every proponent of an industrial or development activity is mandated to file.

## MAKE IT A ROYAL FLUSH!

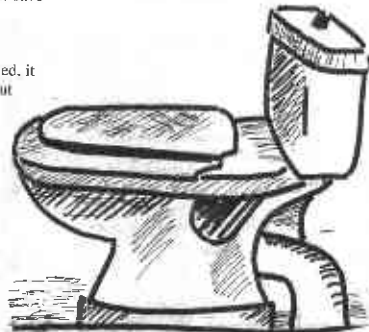
Forty per cent of the pure water you use in your house is flushed down the toilet.

**Background:**

Your toilet probably uses more water than necessary. But with a one-time, ten-minute investment, you can save water every time you flush.

**Toilet Talk:**

- Each time your toilet is flushed, it uses 5 to 7 gallons of water. But if you've got a toilet tank, you can easily cut that amount by 15% to 40%.
- The cheapest and simplest way: install a "displacement device", which reduces the amount of water your tank will hold.
- A displacement can cut your annual water use by thousands of gallons - and you'll never notice it's there.



**Simple things to do:**

- Put a plastic bottle in your toilet tank.
- Small juice bottles, dishwashing soap bottles or laundry soap bottles work well.
- Soak off the label, fill the bottle with water, put on the cap and place it in the tank. To weigh it down, you can put a few stones in the bottom of the bottle.
- Be careful that the bottom doesn't interfere with the flushing mechanism.
- You may need to experiment with bottle sizes. Different toilets need different amounts of water to maintain proper pressure for an effective flush.
- Savings: 1-2 gallons per flush.

(Gulf News Tabloid)

## 'GUTTER BAGICHA'



Gutter Bagicha, the only open space of approx. 1,100 acres in the areas surrounding Lyari, SITE, Sher Shah etc. is being threatened by the KMC (Karachi Municipal Corporation) who plan to carve out residential plots and sell them initially to its officers, but which eventually will end up with commercial developers. SHEHRI feels strongly about the potential of the Bagicha as a lung of the area and feels it ought to be saved. Keeping this in mind, SHEHRI has filed a petition which has been admitted in the Supreme Court of Pakistan.

## ENCROACHMENTS EVERYWHERE...

1. and 2. The two pictures (the first taken at the junction of Khalid bin Waleed Road and Allama Iqbal Road in P.E.C.H.S. and the second on main Shaheed-e-Millat Road) show how the poultry sellers are setting up shop any and everywhere - presenting an ugly and upsetting sight for all. Shouldn't these shops be confined to the commercial areas? Isn't there any place left in this city that has not been encroached upon?

3. What used to be a shady, but unoccupied, patch of land on main Shaheed-e-Millat Road has been encroached upon by minibus owners who have set up a bus stand with the accompanying 'charpoys', tea stalls etc. How long before the whole area is taken over with concrete encroachments which no one will be able to move?

4. Yet another example of the countless violations of Townplanning bye-laws that are taking place everyday - this time on M.A. Jinnah Road. The structure on the right of Jamshed Memorial Hall which is the Head Office of the Karachi Theosophical Society, is being constructed without leaving Compulsory Open Space as well as exceeding the number of storeys allowed, both of which are clearly evident in the photograph. Appeals have been made to the KDA and KMC to stop this illegal construction, but they seem powerless to act. Is there no authority who can take a stand against these unscrupulous builders?



The rainforests are a huge medicine chest. Many drugs are made from natural substances found in rainforest plants.

The rainforests are also home to over half of all types of plants and animals in the world.

CFCs stay in the ozone layer for over 100 years before they break up and become harmless.

Acid rain is eating away at the Taj Mahal in India and the Notre Dame in Paris.

About 4,000 lakes in Sweden have no fish. They have all been killed by acid rain.

There are now fewer than 1,000 giant pandas left in the wild.