

## Country Pakistan

### **Impact of E-Government Program on the under privileged in Sindh Province and Karachi City.**

**By**

**M. Yahya Waliullah\* & S. M. Raza\*\***

\*Muhammad Yahya Waliullah is presently working as Secretary, Information Technology Department, Government of Sindh, Karachi-74000, Pakistan.

\*\*S. M. Raza is presently working as Project Director E-Government, Information Technology Department, Government of Sindh, Karachi-74000, Pakistan.

+Disclaimer: Both the authors are working for the Government. However opinion expressed in the paper are their own and do not reflect Government view in any way. All the quoted data/information is obtained from sources available in public domain and may have copyright of their respective authors/organizations.

### **Introduction**

Pakistan witnessed one of the most devastating earthquakes of the recent times in the beginning of October last year resulting in loss of over eighty thousand human lives. Population directly or indirectly effected by the catastrophe is estimated to be over three Million.

The extent of loss of property and assets is incalculable. What is more horrifying is that source of livelihood for majority of population in earthquake areas is badly affected; rehabilitation and resettlement, although in full scale will take time.

The above was an example of natural disaster, disasters caused by man itself are more serious than one described above. Literature abounds on definition and meaning and scope of human security. It is hard to find a precise and acceptable definition of human security. Instead of involving in unending debate of definition, we for the sake of this paper will be content with UNDP Human Development Report 1994 that focused explicitly on the topic of human security. The report argued that “human security is not a concern with the weapons—it is a concern with human life and dignity”

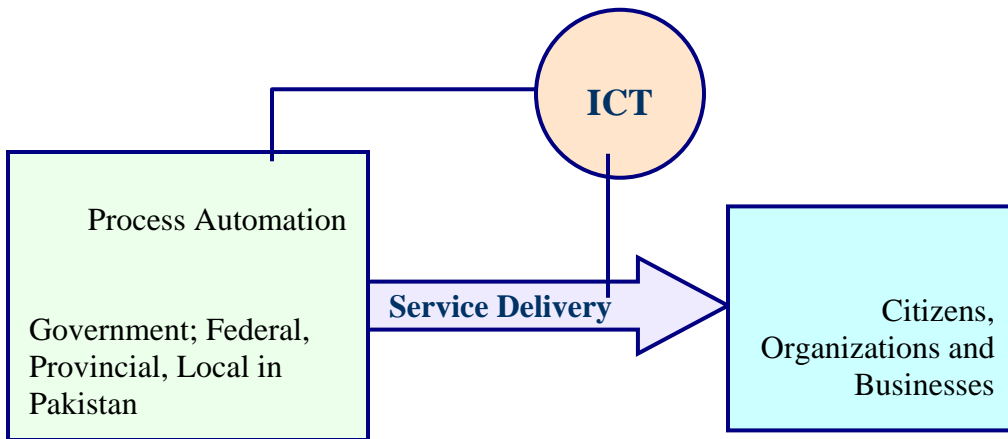
Human security broadly encompasses four essential characteristics: it is universal, its components are interdependent, it is best ensured through prevention and it is people centered. The report argued that threats to human security could be grouped in seven categories: economic, food, health, environment, personal, community and political, obviously these categories are neither exhaustive nor mutually exclusive and they do not completely represent the fundamental or basic aspects of the idea. However UNDP's main goal was to use human security as the organizing concept for the 1995 Copenhagen UN Conference on Social Development. While it was not used as the basis for the social summit, human security as proposed by UNDP has continued as an organizing concept in the development economics, public health and the securing communities.

Human security as argued above has been of paramount concern in Pakistan particularly in view of development that took place in the region in the last two decades. Government is working on many fronts. Beefing up the physical security by mobilizing additional personnel in the vulnerable areas, improving communication and telecommunication facilities enhancing capacity of all those involved in human security areas directly and indirectly. Making all efforts to enhance productivity in agriculture, industries and services sectors for bringing economic and social development for the masses in the country. As deprivation in terms of poverty, hunger and illiteracy is considered to be the root cause of insecurity. Like many other Asian countries Pakistan also has significant proportion of population living below poverty line and is afflicted with low level of literacy.

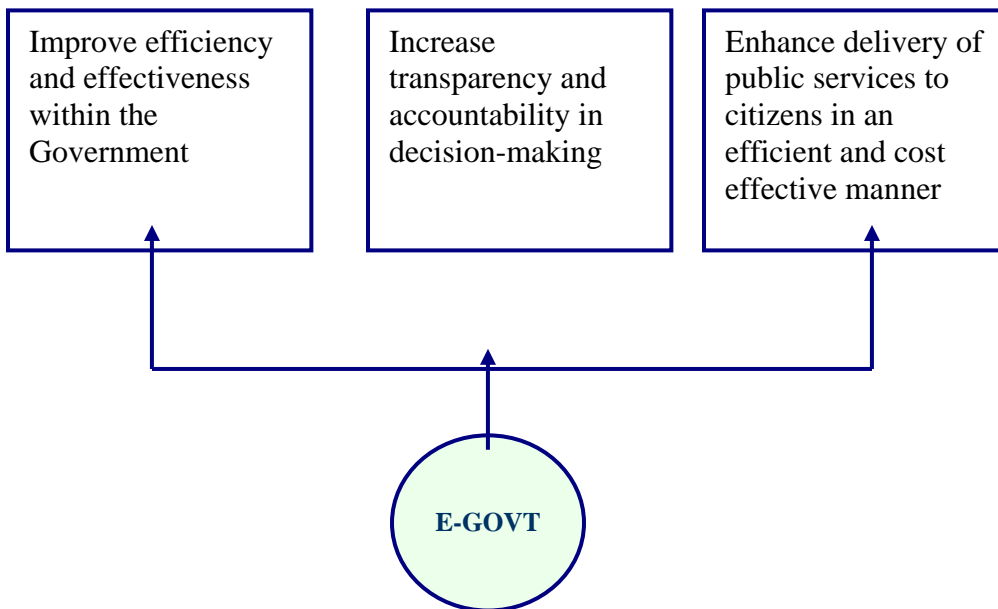
E-Governance empowers vulnerable, marginalized, and under-privileged groups of population as it provides them the information either at no cost or with little affordable cost. It increases their choices and freedom of choosing a particular option. Pakistan is a country where Internet is almost universally available, for the people who cannot afford having computer and Internet connection there are cyber net café's where access to Internet and information is available at very nominal charges.

Government's policies and liberal reforms in the Information Technology and Telecom sector has seen a tremendous growth curve and rapid development in infrastructure and rich enhancement in the use of ICT specially the wide spread and cheaper access to Internet and Cell phone services not only for the upper class but also the masses in the society are being benefited equally.

Government's E-Government policy has been defined as the usage of Information and Communication Technologies (ICT) to support processes within the government as well as for the delivery of services to citizens, organizations and businesses.



#### Goals of E-Government



### **E-Government Strategy** **Parallelization of Building Blocks**

---

#### Basic Infrastructure:

- *Components: PC's, Inter and Intra Departmental network, office productivity suite, e-mail etc*
- *Strategy: Build and Deploy at all Departments*

### **Common Applications:**

- *Components: Internal Communication, HR Budget, Project Management, Document/File Management, Collaboration*
- *Strategy: Implement and Deploy in IT Department stabilize and then rollout at all Departments.*

### **Agency Specific Applications and E-Services for Citizens:**

- *Components: Core Services of the respective Departments*
- *Strategy: Identify three high-impact processes in each Department vision, Implement and Rollout in parallel with common applications*

### **Standards:**

- *Components: Methodologies, Enterprise Architecture, Policies and Guidelines*
- *Strategy: Integrate best practices in Electronic Government Framework, deploy, ensure compliance through review milestones in projects*

### **Enabling Environment:**

- *Components: Top Leadership, Legislation Rules & Regulations at Federal and Provincial Government, Awareness, Training, Change Management & Monitoring at Agencies, Capacity and Autonomy at EGD*
- *Strategy: Quarterly review by the Committee for necessary changes to rules and regulations, etc, awareness campaign, basic training mandatory for all employees, create focal point for E-Government program at each agency. Outsourcing on turnkey basis and change Electronic Government status to one of attached department.*

Government of Sindh Province in line with the policies enunciated in IT Action Plan adopted the E-Government policy and established Information Technology Department in the year 2003. Over 15000 employees have been trained for basic computer usage, many of the provincial government departments have been provided with computer, printers and allied products whereas most of these computers are integrated and connected through LAN/WAN systems. All users have speedy access to Internet and electronic mail systems at present application software are being developed. In addition to these initiatives government is currently

implementing following large-scale projects addressing to improvement in e-governance of the Province.

- ⇒ *Establishment of Provincial Websites & Portal*
- ⇒ *Establishment of Data Center and province wide LAN/WAN connectivity*
- ⇒ *E-Police System automating and integrating police stations and prisons*
- ⇒ *Computerization of Land Revenue Records*
- ⇒ *Computerization of Excise & Taxation Department*
- ⇒ *Computerization of Civil Hospital*
- ⇒ *Video Conferencing System*
- ⇒ *Computerization of Advocate General's offices*
- ⇒ *Computerization of Enquiries and Anti-Corruption Establishments*
- ⇒ *Establishment of Intranet*
- ⇒ *Establishment of IT awareness centers in under-privileged areas*
- ⇒ *Human Resource MIS*
- ⇒ *IT infrastructure for City district government, Karachi*

#### **Human Security in Karachi ---**

#### **A case study of Public Private Partnership**

---

The city of Karachi has been the hub of economic activities since the independence of country and attracted masses from all parts of the country and a city with few hundred thousand people soon emerged as one of the most densely populated city of current times. At present according to unofficial estimates the population of Karachi is conservatively estimated to be of order of 15 million persons. International events of over last two decades pushed sizeable number of refugees to Pakistan and to Karachi, and being a city with multi ethnic composition it has a complex social and human security problems.

Like any other metropolitan the problems related to human security in the society called for a community based approach. A section of society comprising mostly of entrepreneurs came forward and started working

closely with local police and later emerged as Citizen Police Liaison Committee (CPLC) is being focused as a classic case of efforts put together to uplift the society and specially help the under privileged to fight against crime as their slogan is rightly "Lets Beat Crime Together" and ensure human security.

The material here under has been extracted from a presentation of CPLC in combating crime and addressing the issue of human security particularly for vulnerable and marginalized groups, which were most disadvantaged to directly approach law enforcing and investigation agencies.

## CITIZENS-POLICE LIAISON COMMITTEE

The Citizens-Police Liaison Committee in Karachi commonly known as **CPLC** is a non-political statutory institution established in 1989. It is operationally independent and managed by dedicated and concerned citizens offering their honorary services. It was initially established at 4 Police Stations in Karachi a notification was issued by the Sindh Government amending the Police Rules to institutionalize the C.P.L.C. concept.

Since its inception in 1989, it has made credible strides with envious achievements in Criminal Record Management and assisting the victims of crime by combating /detecting criminal cases successfully with the help of modern scientific techniques, even at the risk of the lives of its members and their families. Its efforts have been appreciated and recognized in and outside the country as a unique institution, a truly citizens effort towards enforcing the Rule of Law equal for all and assisting Victims of Crime, irrespective of their caste, creed, wealth or status.

### CPLC-Central Reporting Cell (CRC)

CPLC set up Central Reporting Cell (CRC) to record and monitor progress of investigation at a central location. The Cell is fully equipped with latest computer equipment IBM AS/400, networked through LAN and also with WAN from all the CPLC-District Reporting Cells (DRC) which are located in District Police Offices for easy access to general public to lodge their complaints. CRC maintains database of Stolen/Snatched Vehicles, First Information Report (FIRs), Criminal Record, Geographic Information System (GIS) for Spatial Crime Analysis, Computerized Identity Kit for developing sketches of criminals, Terminal of Motor Vehicle Registration (M.V.R.) office, to immediately store the files of

stolen vehicles under safe custody, so that they cannot be transferred to other persons. All the CPLC District offices are connected with CRC through modems and are now using the technology of Electronic Mail (E-mail). With the courtesy of TCS all the CPLC offices enjoy free mail dispatch and delivery services through Courier Service all over the country.

The CPLC performs following functions;

#### **NOTIFIED FUNCTIONS**

- To ensure that First Information Report (FIR) are duly registered and no FIR / Complaint is refused.
- To find out if dilatory tactics are being adopted by the Investigating Officers in investigating the cases.
- To find out if the processes are being carried out properly.
- To collect statistics of various kinds of cases registered and disposed off during a specified period.
- To find out if all the Registers required to be maintained at a Police Station are being properly and regularly maintained.
- To find out if any person is unlawfully and unauthorizedly detained at the police stations.
- To assist the police in taking steps for preservation of peace and the prevention or detection of crimes.
- To see that no gambling den or any other unauthorized/illegal business is being carried out in the area.
- To report the acts of misconduct or neglect of duty on part of any police officer.
- To perform such other functions as may be assigned by the Government.

#### **OTHER FUNCTIONS**

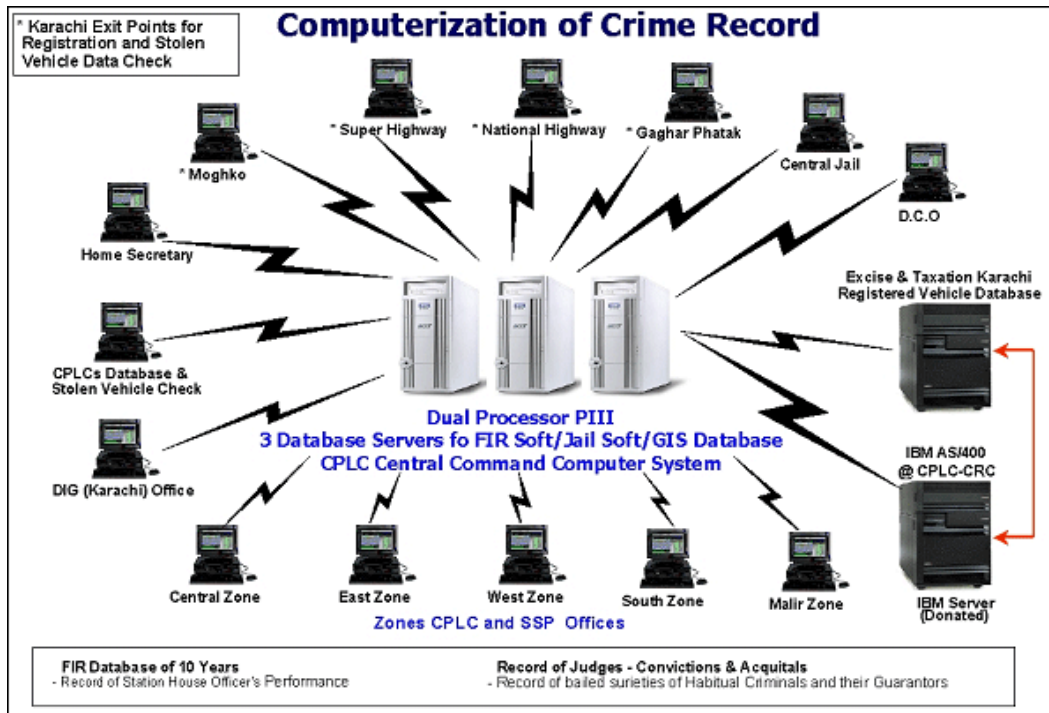
- Citizens Complaints.
- Computerized Recording and Relaying information pertaining to Car Thefts, Dacoity, Kidnappings, Accidents and all other such matters requiring police assistance.

- Monitor the return of recovered stolen vehicles to its legal owners.
- Obtain Final Report Certificate (F.R.Cs.) for insurance claims of stolen property.
- To create confidence, remove misunderstanding and narrow down the credibility gap between the police and members of the public.
- To appraise the SHO of the police station with the genuine grievances of the members of the public / residents of that area, with a view to look into the causes and suggest remedial measures.

#### **CENTRAL COMMAND COMPUTER SYSTEM**

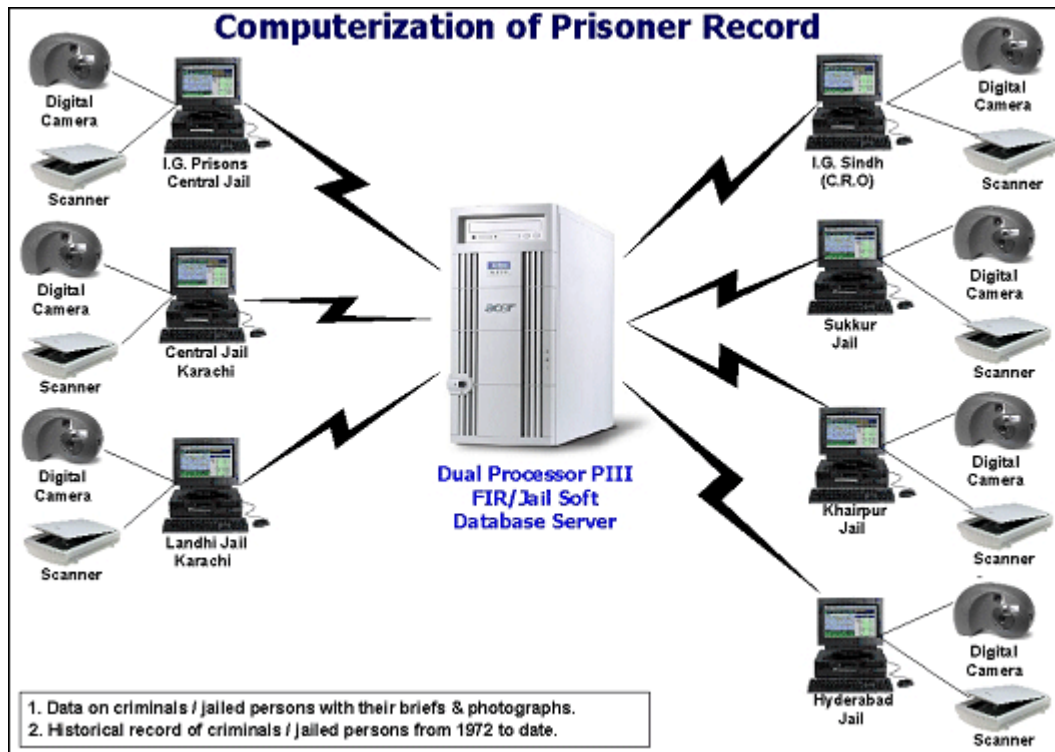
A Central Command Computer System (CCCS) is installed at the CPLC Central Reporting Cell, **for quick and easy access to information by computerizing the record keeping system to assist the Police through CPLC**, for effective pursuit of criminals and curbing terrorist activities.

## Central Command Computer System (C.C.C.S.)



The main features of CPLC, Central Command Computer System are:

- ➔ To **keep** record of terrorist/criminals, their trials, convictions and acquittals along with names of concerned Investigation Officers (IOs), Station House Officers (SHOs), Judges and Magistrates, Record of Bailed Sureties of Habitual Criminals and their Guarantors.
- ➔ To **store** information of all FIRs against habitual criminals registered during the last 10 years at Karachi Police Stations and concerned SHOs/IOs.
- ➔ To **serve** as a data bank at all exit points in the city, all CPLC district offices with dial-up facility to access from anywhere, for effective control over vehicle thefts and criminal activities.
- ➔ To **share** with Law Enforcing Agencies whatever common data is available, including entire record of motor vehicle registration.



**Computerization for the implementation of JAIL - SOFT** will involve installation of a Main Frame IBM-AS/400 computer system at CPLC - CRC with optical imaging (storage and retrieval) facility along with camera, scanner, printer and terminal (PC) of this system at the office of I.G. Sindh (CRO), I.G.(Prisons), interconnected with the five jails i.e. Central and Landhi at Karachi and others at Hyderabad, Khairpur and Sukkur.

These systems would be communicating with each other and form the backbone of prisoner record keeping. The proposed software will be capable of incorporating all data presently kept at the photo section of CRO for the last twenty-three years and of the prisoners at the other Jails.

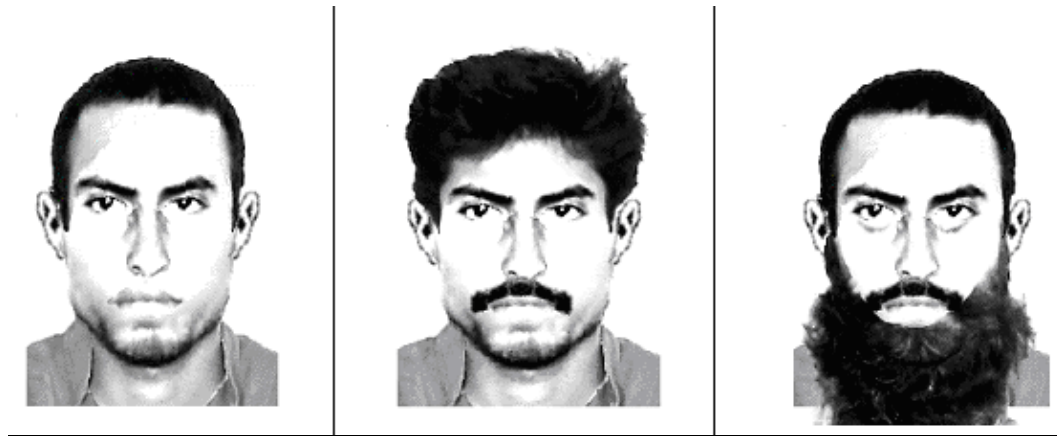
#### **COMPUTER IDENTITY KIT / COMPUTERIZED PHOTOGRAPHY**

Criminal Identification and Sketching System (CISS) through latest computer techniques enables us to develop sketches of criminals so as to easily identify them. This information is of valuable assistance in tracking the wanted persons, or in checking from past police records. This also enables in identifying the groups involved in related crimes of other districts. This is one of the latest technologies and CPLC has the honor of designing the

software of CISS of mainly Eastern facial sketches and procuring western images with expensive hardware to operate the same.

The sketches drawn with the assistance of victims and their families can be used as evidence in courts.

## WANTED



### GEOGRAPHIC INFORMATION SYSTEM FOR CRIME ANALYSIS

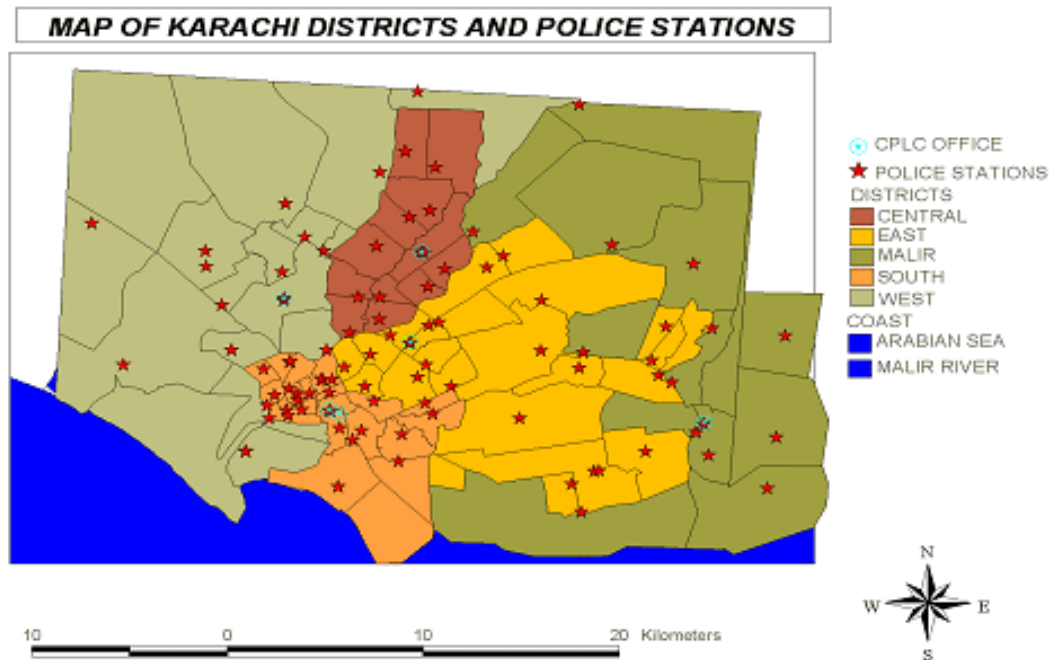
**Geographic Information System (GIS)** is an integrated information management environment, comprised of hardware, software, communications, data, personnel and procedures that can use geography as a common location organizing framework. A GIS stores diverse information in a database and spatially links the information to Geographic Features in the real world.

## KARACHI CITY MAP



Geo-information management techniques are being applied worldwide to many complex development problems including crime, water, pollution, business, education, bio-diversity, land use, natural resources and urban management. GIS offers multi-disciplinary data management tools to address problems.

The early stages of GIS implementation required the creation of an accurate and contemporary digital base map for Karachi. This involved the capturing of all the police jurisdiction boundaries, police stations, major landmarks, major roads, railways, rivers and other geographic features. Initially, many of these features were derived from the "Karachi Guide Book" published by the Survey of Pakistan in the year 1990. However, since many aspects of the city structure have changed in recent years, base map development also demands continuous updates and field data verification. This will be an ongoing process for the CPLC. Unfortunately, citywide updated maps showing new developments in the city have not been initiated by any development agency or Town Planning Department in Karachi.



CPLC is proud to be the first organization to be permitted by the Surveyor General of Pakistan to develop a digitized street map of Karachi. Which was successfully completed by February '98. This cooperative effort further vindicated the commitment of the citizens towards the development and betterment of their country.

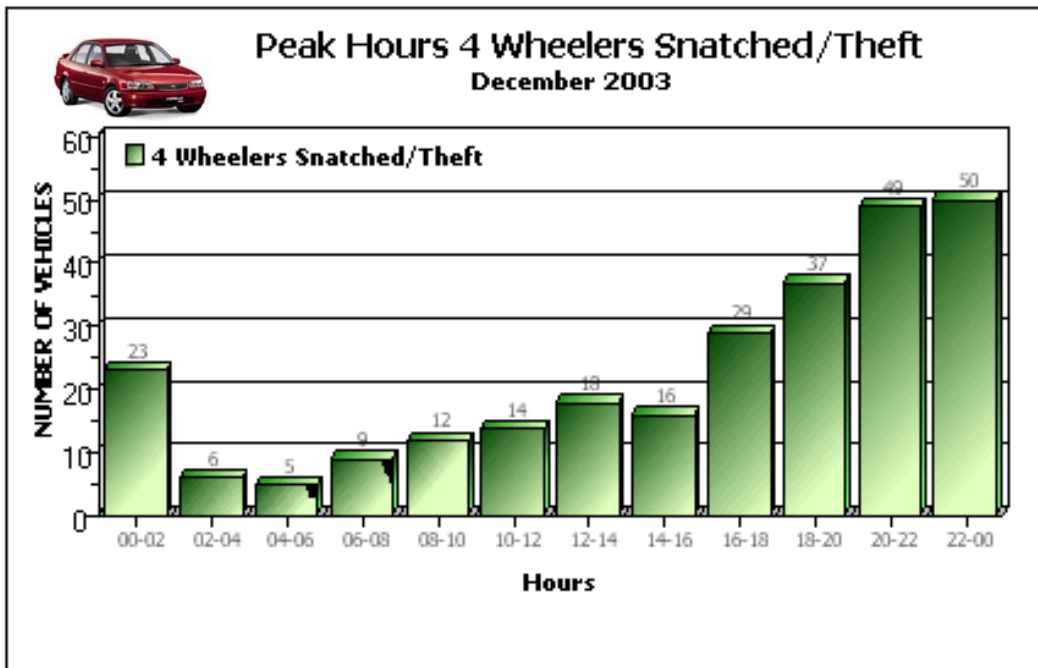
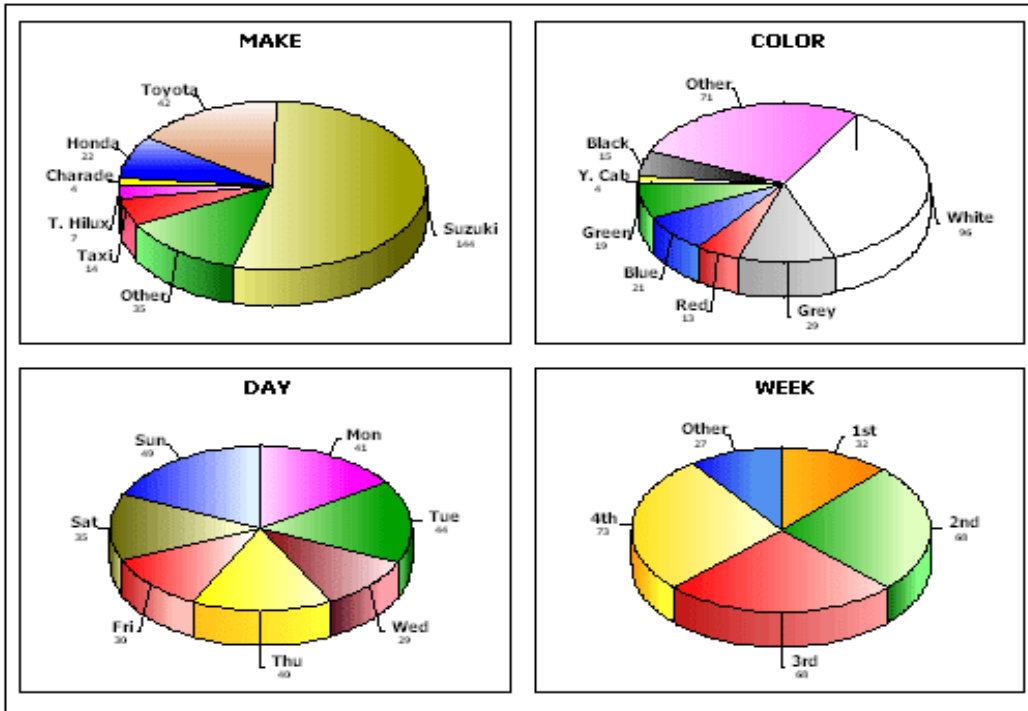
**RECORD OF VEHICLE SNATCH / THEFT / RECOVERY:**

The Computers installed at C.P.L.C. – C.R.C. are maintaining daily records of vehicles snatched/stolen and their recoveries, while some data of the other 3 Provinces is also available. In-fact, backdated records prior to 1990 are also available, because of citizen's response to our advertisements. Standard policy is adopted for the intimation and **return of recovered stolen vehicles to their legal owners** in the shortest possible time with the co-operation of the Judiciary and the Police.

**Pattern of 4 Wheelers Snatched & Theft**

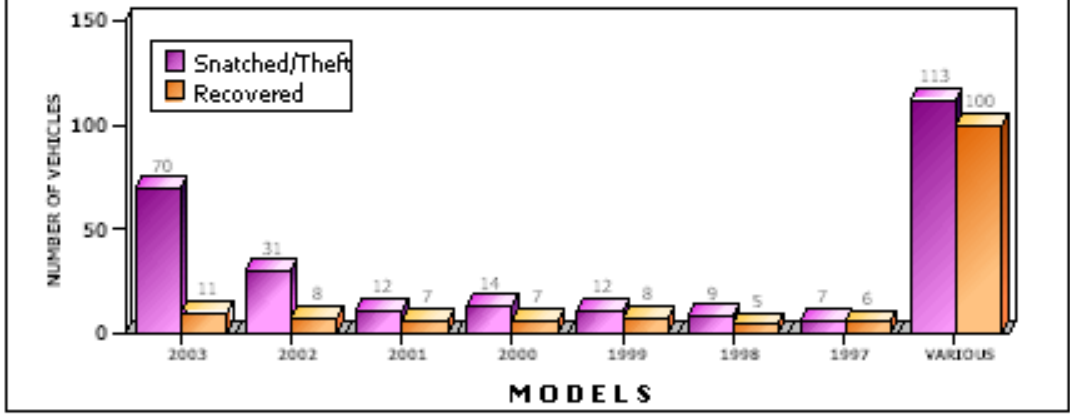
**Favorite Makes, Colors, Days & Weeks**

**December '2003**





**4 WHEELERS HOT MODELS SNTH/TFT/RECV.**  
FROM 1st December 2003 TO 31st December 2003



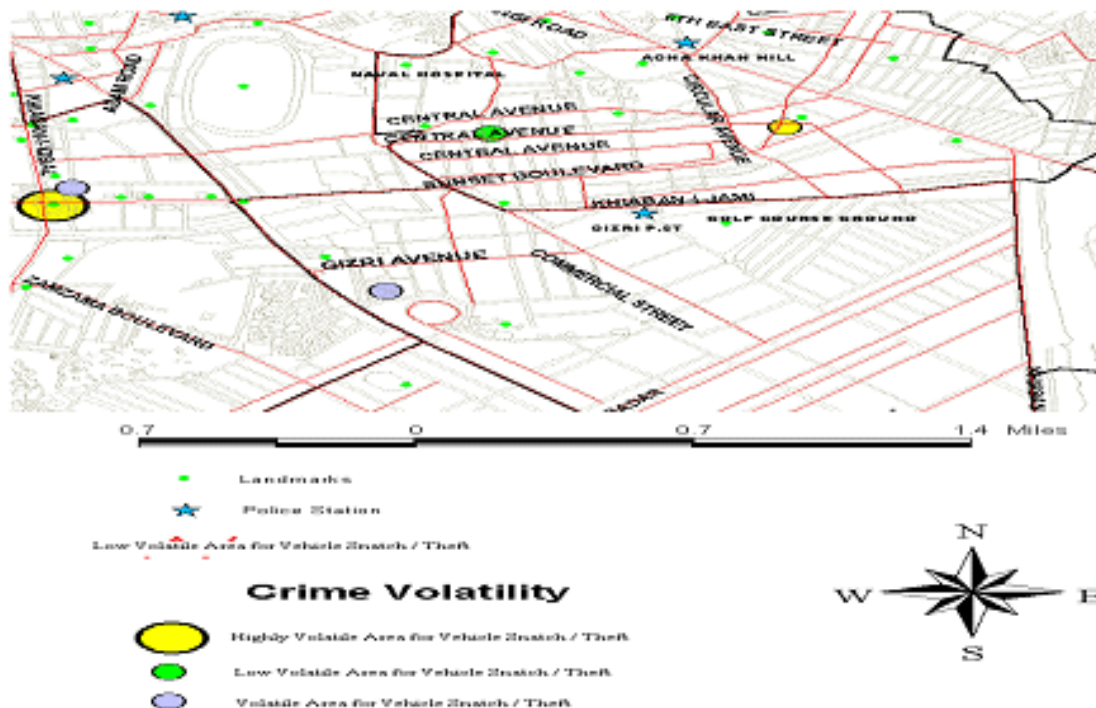
TOTAL SNATCHED / THEFT = 268

TOTAL RECOVERED = 152 or = 56.71%

## SPATIAL CRIME ANALYSIS SYSTEM

CPLC has grown in its functions and mandate, so have the demands on its data management capabilities. The CPLC has established an advanced distributed information management (computing) infrastructure, with competent technical personnel. While its databases are extensive and populated with descriptive (attribute) and temporal (time-series) data, the spatial component has until now, been missing.

After a visit to CPLC-CRC on the recommendation of the Honorable Governor Sindh, co-operation of the Secretary, Planning and Development Department, Government of Sindh and Secretary, Economic Affairs Division, Government of Pakistan, the UNDP initiated a project to support the CPLC in crime management. This project is designed to rapidly enhance existing information management capabilities through the development of a *Spatial Crime Analysis System*. This will substantially improve the analytical and investigative capabilities of CPLC. Ultimately it will support law enforcement agencies and community action groups by enhancing public safety and the protection of life in Karachi.



Crime is an inherently spatial phenomenon; specific areas of a city are predisposed to certain types of crime. Furthermore, factors such as demographics, socio-economic profiles, poverty levels, over-crowding, etc., conspire to influence this process. Consequently, if crime events can be geo-located on a base map,

they can be spatially analyzed to reveal important trends, patterns and relationships. Predictive modeling is also possible by isolating specific cause and effect relationships. Police departments worldwide are using spatial crime analysis systems to better understand the geography of crime with more proactive planning and resource allocation.

## **Implementation Phases**

The implementation of the Spatial Crime Analysis System at the CPLC involves the following activities:

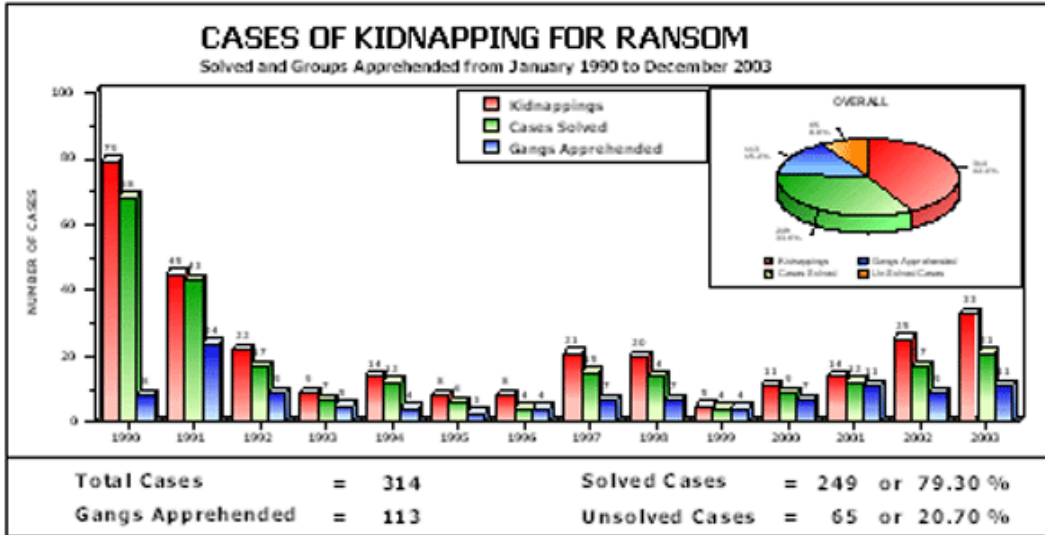
- ⇒ ***Linking crime databases to the GIS***: This involves the mapping of existing incidents from the crime databases on to the digital base map. Methodologies and procedures will have to be implemented to geo-locate (map) future crimes as they occur.
- ⇒ ***Crime Analysis and Statistics***: Powerful queries and visual analytic tools within the "Crime View" application software will be used to analyze crime data to generate trends and statistics in the form of maps, charts and integrated reports.
- ⇒ ***Provide Enhanced Analytical capabilities of the spatial patterns of crime***. This includes the ability to analyze priority incidents for example rape, violence against women, abduction and molestation of children etc.
- ⇒ ***Identification and Targeting of "Hot-Spots"*** to support crime prevention and reduction in high crime areas.
- ⇒ ***Provide Visual Aids*** for crime investigations by law enforcement agencies.
- ⇒ ***Prompt Community Awareness*** by identifying criminal activities in focus areas.
- ⇒ ***Improve Community Relations*** and involvement with the police by providing a visual perspective on crime and the responsiveness of law enforcement.

## **KIDNAPPING FOR RANSOM**

Due to lack of confidence between the citizens and the police, kidnapping for ransom in Karachi had created a reign of terror during the year 1990. It was with the coordinated efforts of Citizens - Police Liaison Committee and Army Investigation Team (A.I.T.) consisting of Military Intelligence (M), Rangers, I.B,

Police and S.S.G. Commandos that this heinous crime has been contained and Karachiites can now heave a sigh of relief.

The C.P.L.C. Handled 314 cases of Kidnapping for Ransom by application of modern techniques and scientific methods, which was instrumental in rounding up 100 groups of kidnappers consisting of over 350 criminals.



In addition to all the modern Anti-Kidnapping equipment, CPLC has also procured Cellular Phones and Pagers for Law Enforcing Agencies, Police and CIA for liaisons during operations against kidnappers and terrorists in Karachi and for effective communication in general.

**ENCOURAGE THE KIDNAPPED VICTIMS TO IDENTIFY / WITNESS**

The campaign against crime does not end with the arrest of the criminals, they have to be prosecuted and convicted. No court will convict a person without evidence against him and the most effective evidence is a witness. Due to the sad state of affairs the witnesses are very reluctant to come forward and give evidence because of frequent delay in hearings and personal security, many criminals are acquitted and all the efforts of the law enforcing agencies become futile. CPLC stepped in and has played a significant role in encouraging witnesses to come forward and testify. The courts have been assisted by modern methods of evidence, such as Covert Photography, Voice Matching and Facial Identity Sketches.

### WITNESS PROTECTION PROGRAM (WPP)

It is for the first time that Witness Protection Program liaised with the Police and Court proceedings with the Judiciary, for security and speedy recording of witness's statements have led to many convictions. Emergency telephone lines were installed at kidnapers residences through the courtesy of Home Department and co-operation of General Manager, Karachi Telecommunication Region, which has been highly appreciated by the concerned families. This has given a good image to the Home Department Government of Sindh, as it joins the families in showing compassion and concern.

### FINANCE

C.P.L.C. – C.R.C. has been established with the financial and physical co-operation of citizens, who have donated all the capital equipment purchased for the operation of the cell.

Only part of the monthly administrative expenditure was provided by the Provincial Government. Initially it started with 30,000/- per month and gradually due to expansion and inflation during the last 6 years increased to Rs. 70,000/- per month, to meet some of the basic expenditures under the following heads: Part of Staff Salaries, Printing & Stationery, Postage & Telegram Expenses, and for monthly rental of DC Pagers.

Presently the average Operational expenditure of CPLC is nearly Rs.650,000/- (Six hundred and fifty thousand) per month or Rs. 6.5 Million per annum. Interestingly the Government contribution towards CPLC over the/ years averages only 30%. The entire capital expenditure viz Computer Hardware, Networking internally and with District Offices, Furniture & Fixtures, Fax machine, Photocopier, Electronic Surveillance Equipment, Software etc. Construction of Building and Furnishing the CPLC Central Reporting Cell at Sindh Governor's Secretariat and the District offices has been through public donations.

In a recent meeting with the chief of CPLC it has been stressed that in order to further strengthen the role of this perfect case of public private partnership for uplifting the under privileged there is a strong need of capacity building both in the areas of human resource training and technological advancement, It is also strongly recommended that foreign missions visit the CPLC offices

and directly study and witness their working to better identify the areas where capacity building is required.

Karachi is a perfect case for the people and organizations involved in the efforts for uplifting human security cause for under privileged communities as majority of its population belong to under privileged class, Karachi is also said to be mini Pakistan therefore it is possible that any effort like CPLC or initiative by NGO's for the same can be easily replicated anywhere in Pakistan.

It is also evident that the root cause of many problems like social injustice and human security issues lies in lack of awareness regarding human rights and social responsibilities therefore it is highly recommended that literacy level in general and public awareness in particular should be elevated in such societies, In the wake of war against terrorism where Pakistan has been a frontline state there is a very strong need to educate masses about the importance of social values and tolerance as it will help create world a better place to live, it is not just the responsibility of people of Karachi but also the stake holders including international community to come forward and contribute in this noble cause of human security as un doubtfully 21<sup>st</sup> century has to be more focused on uplifting the under privileged societies, what could be a better place to work on it, Karachi ?...