

## 265. Dynamics of Karachi as a Megapolis: Issues and Challenges

Amber Afshan\*, Sumbul Mujeeb, Engr.Kamran Akram Gill

Sir Syed University Engineering & Technology, University road Karachi, Pakistan  
Email Address: amberjahan13@gmail.com

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### Abstract

Karachi, the most populated city of Pakistan with a population of 20 million has sufficient worth to be considered as a research area because of two reasons. Firstly, spatial expansion and enormous increase in a short span of time and secondly the bizarre appearance of informal settlement and their amalgamation in the urban areas. The rapid growth of unplanned areas in Karachi has been centres' of industry and commerce and magnets for millions of people. Due to this reasons the population have increased, lacking the most basic needs of shelter, water supply, sanitation, waste collection and disposal. They are also insufficient in food, health and educational facilities etc. Thus they are the cause of diseases, crime, environmental degradation, and poor quality of life. Due to lack of proper maps and information of land use at the micro level in Karachi, planning and implementation is not accurately targeted, causing wastage of valuable funds. Development of urban land use database at the grass roots level is therefore, urgently needed. The study aims at providing a database for this purpose, for the mega polis of Karachi and to focus attention on the sordid infrastructural and its impact on the life styles in the urban areas, as well as impact of these settlements on the mega polis, as well.

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### 1. Introduction

Karachi the leading city of Pakistan with an area of 3600 square kilometer, present in Sindh and also the Capital of the Province Sindh. It is 10<sup>th</sup> largest urban agglomeration in the world. . It is Pakistan's foremost center of banking, industry, economic activity and trade. The urban expansion authorities develop a collection of housing schemes to endow with shelters to their citizens. These consist of small housing schemes (quarters/flats), societies and modern residential areas. But regrettably the needs of poor are not as it should be considered while developing these schemes. At the same time as a result the homeless poor conventional their huts on the banks of rivers and nallahs. They also developed in Government owned proceeds lands and amenity plots. In a metropolis like Karachi we witnessed various types of *Squatter settlement*.

- i. Old villages (Goths) existed on the peripheries or suburbs of the town, closed society during hasty development of the city. These villages were unplanned and afterward on affirmed as Kacchi Abadies.
- ii. The invasion of refugees from India in 1947 formed various infringement on the grounds, parks, vacant land between barracks of lines areas and railway colonies.
- iii. Invasion of affecters due to construction of various dams in upper Indus plain. These people by and large reside on the fringes of town and develop their *Kaccha* Houses illegitimately.

Above and beyond all the job opportunity attracts people from up country to come in the city and acquire refuge on the lands easily available to them on paying a meager quantity to the group of land grabbers. In 1989, according to a report of KDA there were 539 squatter settlements where 40% of city population dwells. Inside the years to come the city population rises at a high growth rate mainly because of invasion of Afghan Muhajreens and rural population. Urban commotion is a function of land use and there is a close interface of cause and effect relationship flanked by land use and services. Multidisciplinary and integrative tools are of particular importance as soon as problems are comprehensive, as is true for the management of third world cities

## 2. Objectives

- i. Location and discriminate areas on of unplanned areas in Karachi.
- ii. Evaluation of area and population of unplanned areas versus urban areas.
- iii. Identification of causes of expansion of unplanned areas.
- iv. To suggest methods of improving settlement patterns in Karachi.

## 3. Study Area

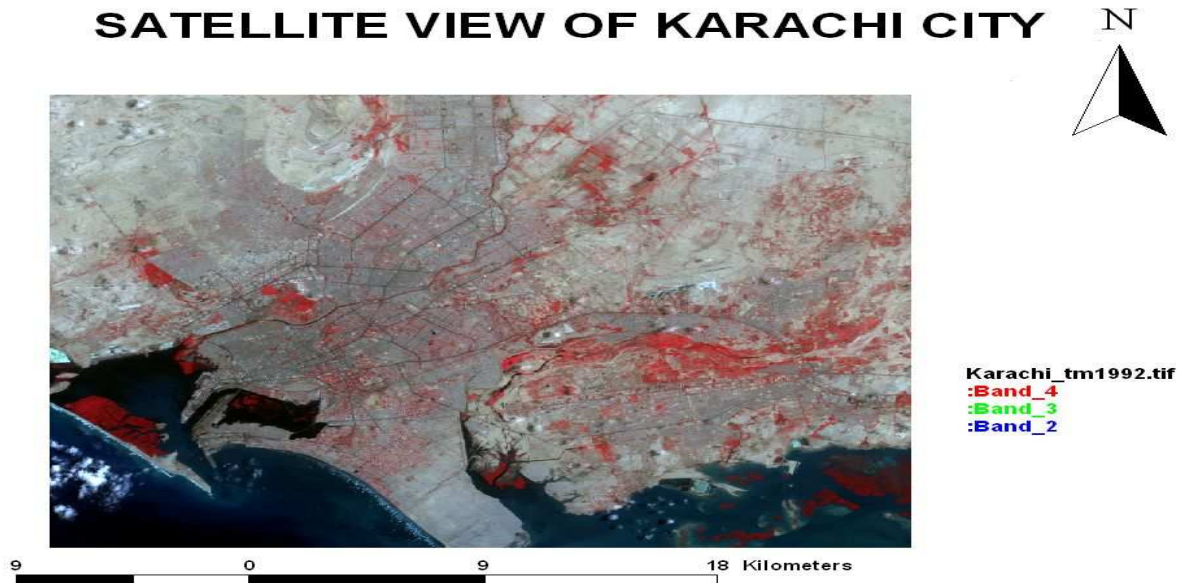


Fig. 1. Satellite view of Karachi

Our study area is Karachi, present in Sindh and also the Capital of the Province Sindh. It consists of total 25 million population of metropolitan area. It is located at the south between  $24^{\circ} 42' N$  to  $25^{\circ} 42' N$  latitudes and  $66^{\circ} 30' E$  to  $67^{\circ} 30' E$ , longitude which is a sub-tropical location in character, along the coastal line meeting the Arabian sea (Gadiwala, 2006).

Between 1981 and 1991 the number of urban settlements amplified from 374 to 496. Due to this growth urban population increased and exerted massive pressure on the inadequate resources. The accelerating desires of services like health, education, hospitals etc. also has been the cause of the aggression in urban areas and every one of these factors has a unenthusiastic effect on urbanization, foremost to the development of Squatter settlements; there are 1,150 Kacchi Abadis in Karachi. The development of infrastructure is illegitimate.

Migration is the basic factor for the development of these types of unplanned growth. An insight into the factors responsible for the development of Squatter settlements has revealed that low income groups find it easy to adjust in unplanned areas, as they cannot afford to settle in the formal settlements, Cost of land and rent rates being beyond their reach.

## 4. Methodology

The data and information for the intact research area (comprising of the Squatter settlements and the associated developed urbanized area) necessary would be:

- Area of development of both types of legal and illegal settlements.
- Land use (residential, commercial, industrial)

- Infrastructural development i.e Road network
- Services and utilities (maps and quantitative data)
- Amenities (schools, religious places, open green spaces, hospitals, clinics, community centers etc.)

Interviews of residents of Squatter settlement will be conducted to collect data on socio-economic conditions pertaining to aspects on

- Migration
- Occupation
- Education
- Health
- Standard of living, etc.

- I. Government publications.
- II. Data pertaining to various aspects will be extracted from Government publications Census, KDA, KMC etc and integrated with GIS database.

Formerly all the essential data is collected and data base is prepared, the next step will be preparation of the proportional data sheet of the two types of development i.e. unplanned and formal urban settlement. The study is intended to highlight the salient features of the two contrasting types of development of settlements, therefore bring to the fore the key factors which are critical and responsible for the differences. This comprehensive exercise will not only prove to be supportive in the integration of Squatter settlement into the mainstream planning, but may prove tremendously facilitative in achieving the goal of making Karachi a World Class City.

## 5. Issues and Challenges

### 5.1. Informal Settlements

The population of Karachi is predictable to be around 20 million, growing at an annual rate of five percent. On the other hand, this mega city lacks appropriate housing schemes as more than 80 percent of people are without an address. Be deficient in of proper planning and shortage of houses is paving way for slums and Katchi Abadis. In the analysis of the past records one can effortlessly observe that from 1729 to 2008 the population of the city of Karachi has undergone disparity stages, a quantity of customary and serenely inactive and some irregular and speedy. There are two types of Informal settlements in Pakistan:

1-A squatter settlement is defined as a “residential area which has developed without officially authorized claims to the land or authorization from the concerned authorities to build; as a result of their illegitimate or semi legal status, infrastructure and services are usually not enough. The urban Squatter has 30-70% of most at the housing accumulation in many developing countries. The foreign aid’s major aspire is to improve the health status, property habitation rights etc

2- Informal Sub-divisions have been created by agriculture land, ecological unsafe areas on the city periphery.

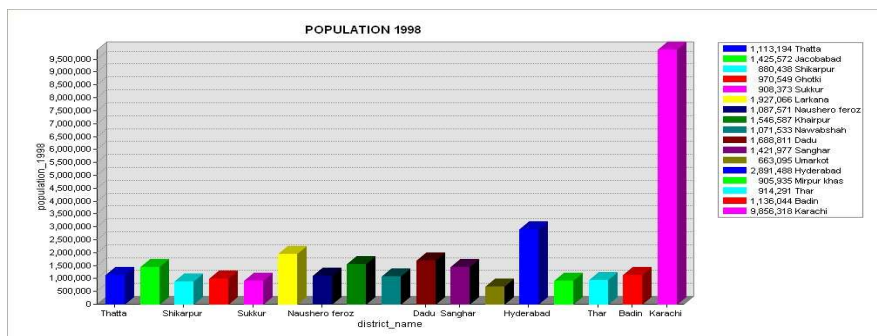


Fig. 2. Population Graph of Sindh

#### Action points

1-Low incomes housing projects are requisite to low income communities are capable to contact these possessions.

2- Government are ensured and implicated in these types of housing projects, which are evidently implemented and give the impression of being subsequent to by government concerned department.

### 5.2. Migration

Sideways from natural amplify, the additional factor that contributes to population revolutionize is migration. Migration generally implies faction of people from one place to another for the intention of a new or semi permanent residence. It be able to take the form of individuals or the whole family or an entire community moving from one place to another in the same country or from one country to another. Along with productiveness and mortality, migration too is a component of population change.

Thus migration is of two types:

- a. Internal Migration
- b. International Migration

#### A. Internal Migration

Internal migration taking place between areas within a country can take the form lf:

- Village to village migration
- City to city migration
- Village to city migration

#### B. International Migration

International migration refers to migration between two countries. For example migration of population took place between India and Pakistan at the time of independence in 1947.

#### 5.2.1. Cause of Migration

Push and pull forces

Migration of population both internal and international usually takes place under push or pulls forces. It is a frequent observation that rural urban migration in the developed countries takes place under pull forces, whereas in the developing countries of the world; it is the push forces which are accountable for both internal and international migration. Such a migration which results due to push forces, gives rise to a number of unpleasant phenomena such as Squatter Settlement or Katchi Abadis, congestion, encroachments, social evils, increase in crime and corruption types, well thought-out to be the irritation of urban life.

#### Action points

Regularization of informal settlements by the government which capable to documents and restricted these illegal migrant. Also accomplish the proper registration.

### 5.3. Housing

Present is a dreadful need to build up affordable modern housing societies in Karachi as 55 percent of the city's entirety population lives in Squatter settlements. There is a insist of 2,000 housing units per day. According in the direction of the 1987 satellite image mentioned in excess of, 37 per cent of the residents of Karachi lives in squatter settlements; 34 per cent in semi-permanent high forethought housing; 7 per cent in semi-permanent houses on small plots in intended areas; 13 per cent in eternal houses on standard size plots in premeditated areas; 6 per cent in hefty

bungalows and 3 per cent in apartments. Supervision and neighborhood revise give the intuition to place onward that these figures have contaminated in the last decade. Squatter settlements would now encompass regarding 50 per cent of the residents and the numeral of inhabitants living in apartments would be former to 6 per cent of the present inhabitants. In surplus of the continued existence, the government has initiated a quantity of imaginative housing policies and Projects for Karachi. On the other hand, the last fraction development has by no resources reached the poor whose have need of constitutes in excess of 60 per cent of the housing necessitate. The reasons why this be adamant has not been meet is that the make accessible was far-away too miniature as compared to the necessitate; the conclusion result was ridiculous to the poor and there were no go into raptures over schemes to buy land but only to construct a house; the actions for acquiring land and commend for house construction were widespread and uncomfortable and engaged life form viewed by officialdom with doubt and hostility, and cuisine to inducement. This demand-supply split is in use apprehension of by the densification of easy to get to settlements in the metropolis centre, the arrangement of unplanned areas in peri-urban areas, and the rescheduling of building or substitute of accretion.



Fig. 3. Housing pattern of Squatter Settlement.

#### Action point

1-The government needs to make the first move steps to sustain the supply of reasonably priced housing by on condition that state lands with infrastructure on unproblematic terms and Conditions and at subsidized rates. This will concentrate on the accumulation and overcome the housing scarcity.

2- There is an immense probable for developing small townships in rural area and town. The government is supposed to partner with private sector for the development of these areas on modern lines. The government is able to create five marla, or 120-square yard, scheme by giving 25 to 30 percent plots to a private contractor for development in a predetermined time period.

#### 5.4. Water Sanitation

Water is one of the essential needs for survive. Karachi has contemporary sanitation, with flush latrines in the homes and underground sewers. But most of the poor living in the Squatter settlements had merely bucket latrines and open sewers. The water is used for household and people are obsessive to drink that type of water which is extremely unhygienic, unhealthy for drinking cooking washing, bathing & other regular work. The water creates a lot of health disease problems for the people of that area.

The enhancement of water is not regular it is depending on time. Peoples acquire water from other areas for drinking. Most governments and communities contain placed a higher priority on safe water, but that in itself is not a cure-all for all ills. Devoid of a stronger commitment to sanitation, it resolve be difficult to trim down the incidence of diarrhea, a leading child killer, and other diseases that flourish in unsanitary conditions. The enhancement of water is very inequitably distributed. For safe water people dig wells in their houses.



### 5.5. Solid waste disposal and Management

The word solid waste to mean garbage, refuse, and other solid material resulting from any agricultural, commercial, consumer, or industrial operation or activity, solid waste is moreover used material or residual material any material that has been used up to that time as an agricultural, commercial, consumer, or industrial product or as a component of any such product. Solid waste is able to result from governmental operations or activities. Solid waste also includes animal waste. The people throw garbage that creating environment unhealthy .Solitary of the biggest issues in the unplanned areas that was not here unresolved was the huge amounts of trash gene rated and left unattended every day. There was no standard hold up from the local municipal services to handle the waste for these areas. The lack of possessions available to the local government made it impossible to distribute these critical services.

Subsequent to doing surveys, it was resolute that while most residents were unsatisfied with the existing waste disposal services. Additional community development challenges comprise mobilizing people regarding the storage of waste within homes and waste separation at the household level. Special focus will be school aged children and colony women residents, both of whom can give training to their peers. Water contamination and wrong disposal of solid waste from factories and cottage industries were some of the sources seriously intimidating life in the city.



Fig. 4. Waste disposal condition.

#### Action plan

- 1- The government planned a team consist of sweepers (who collect and manage the compost), volunteers, and a general compost manager, to dumped these solid waste management and relief to the residents of these areas.
- 2- Prepared mapping of sanitations, documentations and different administrated programs are to get better the issues in the prearranged way.

### 6. Conclusion

As an outcome, land is acquired and developed, and land use desecrated, through a authoritative nexus between private land developers, politicians and bureaucrats. Two exacting aspects of urban growth have contributed most in terms of straining infrastructure, fouling city aesthetics and causative to improved environmental stresses; the first is the propagation of squatter settlements and the subsequent is the ill-planned densification of the city. Unplanned areas in Karachi are not a current observable fact and illegal sub-division of land took place as near the beginning as 1950. On the other hand, it was during the 1970s that by means of regularization and advancement of informal settlement became politicized. At nearby, out of the one million houses in the squatter settlement of Pakistan, 680,000 – or 68% – are in Karachi.

At the same time as for densification, in the 70s, high-rise buildings were promoted and plots given to developer sat subsidized prices and bridge financing provided from side to side banks for building apartments. Building bye-laws were amended to augment building heights and diminish necessities for obligatory open spaces. The internal city was ‘densified’, straining the previously stressed civic infrastructure with the conception of upright slums. It was also at with the intention of time that mass scale migration of Pakistani laborers and professionals to the Gulf States was captivating place. This greater than before cash flow gave increase to a consumer class and necessitate for wholesale and retail markets for consumer goods arose. These were developed in an unplanned manner more

often than not in the inner city, consequently adding to the confusion and more changing the land use of the area. At this instant it is up to the pertinent government agencies, professional bodies, private and business sectors and citizen legislative body to sit mutually and improve the city's vertical growth from side to side a two-way and sustainable process.

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