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Brennan (1999) described in his study that in the case of total population; there will be a significant redistribution for the world urban population between the developing and the developed regions. Between 1950 and 1972, 32 million new urban dwellers were added annually worldwide about two-thirds in the developing countries. Currently, 59 million new urban dwellers are added annually 89% in developing countries. By 2025-2030, 76 million will be added annually 98% in developing countries.

### **2.1 Air Pollution**

World Development Report (1999/2000) explains that Rapid and often unplanned, urban growth is the source for many of the environmental hazards faced by cities within the development world. Substandard housing on marginal land, crowding, increasing levels of air pollution solid waste collection, and motor vehicle traffic and traffic injuries are all associated with rapid growth of urban centers.

Air pollution is one of the most serious environmental threats to urban populations (Cohen 2005) causes of air pollution an estimated 400 deaths from all causes, more than 800 hospital admissions and more than 4,000 emergency department visits among children and adults. Reducing ozone levels by 10% could prevent more than 80 premature deaths, 180 hospital admissions and 950 emergency department visits annually.

Heinrich (2004) described that by rapid urbanization the city's traffic go on a terrible level and that high levels of vehicle emissions has been correlated with the increasing prevalence of respiratory allergies. Bruce et al., (2000) describes that the indoor air pollution in the developing world is most often associated with the use of biomass fuels coal, wood, animal drug, and kerosene, although indoor tobacco smoke is also an increasing contributor. Indoor air pollution affects both urban and rural areas.

World Bank (1997) described that in cities, household use of biomass fuels contributes approximately 30 percent of the outdoor particulate and sulfur dioxide air pollution, with industrial use contributing an additional 50 percent.

Wang (2013) urbanization is the processer of social and environmental change. Fast urbanization in 1990s, air pollution appeared in Beijing. The main energy that Beijing city consumes include: coal, gas, electricity and natural gas. Burning of coal gas could generate thoughtful air pollution.

- End of April 2013, Beijing has eliminated 88,000 old motor vehicles.
- To control the urbanization process.
- The introduced the water transport vehicles.

## **2.2 Water Pollution**

Khan (2013) water pollution is a major problem in the international perspective. Pakistan's current population is growing rapidly. The results obtained illustrated that the drinking water is extremely polluted in terms of microbial, arsenic, nitrates and fluoride. Pakistan has now essentially tired its available water resources and is on the verge of

becoming a water deficit country. Poor drinking water quality and sanitation lead to major occurrences of waterborne diseases.

Yeager (1993) described in their article that most the world population face the environmental problems. The most rapidly source of water pollution is industrial water pollution. Industries totally change the world. They change the social, cultural and environment. The rule of Industrial water pollution manifests its own special characteristics, differ-entailing its processes and outcomes to some degree even from those in other areas of environmental law, such as the efforts to control air and solid waste pollution.

Butt (1996) Pakistan is one of the largest urbanized countries. Its level of urbanization is one of the highest among the Asian and South Asian countries, except for Malaysia. Pakistan urban population grew from 6.9 million in 1950 to 45.3 million in 1993. The ambient urban environment will be seriously degraded through air, water, soil, and noise pollution, and due to extensive suburb in every city. For the reasons of urbanization, water pollution became a major problem.

AD et al. (2007) in Pakistan, the water pollution dilemma is quickly propagating, presently 82% of the people do not have an access to safe water, 30-40% hospitalized patients are due to water borne diseases, and about 80% of the infant death is only because of the polluted water that causes diarrhea, cholera, dysentery, gastro-intestinal problems.

EPD (2007) explains that the clean drinking water is scarce in cities. Most of the population in cities never drinks clean water. Epidemiology Laboratory Institution of Public Health (ELIPH) under the Punjab government took sample from 222 locations and it was found that almost 80% of them are contaminated. The poor quality of water makes people switch bottled water but because of its demand prices goes up and it

reaches to such an extent that milk, water and soft drinks are of almost the same price.

### **2.3 Sanitation and Waste Water treatment**

World Health Organization and UNICEF (2013) end of 2011, there were 2.5 billion people who lacked access to an improved sanitation facility. Of these, 761 million use public or shared sanitation facilities and another 693 million use facilities that do not meet minimum standards of hygiene (unimproved sanitation facilities). The remaining 1 billion (15% of the world population) still practice open defecation. The majority (71%) of those without sanitation live in urban areas, where 90% of all open defecation takes residence.

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Gaye And Diallo (1997) describe in their research work how problems of inadequate provision for water, sanitation, drainage and the collection and disposal of garbage were tackled in nine low-income communities in Rufisque, Senegal. The paper emphasizes how the approach taken with local problems addressed by local groups working together with technological they control and with environment goals integrated from the outside is one that is far more appropriate to Africa's urban problems.

### **2.4 Shortage of Housing**

Cook (1987) it has been reported that, even by moderate estimate, one-to two-thirds of a big city's population in Asia must be considered to live in slums areas. The living conditions are also at an unbelievably low level compared with Western standards. In Seoul, for instance, "a ten by ten foot" room, shared by four adults, is used "as a market place during a day and a combination kitchen-dining room-bedroom at other times."

World Development Report (1999/2000) explains that Rapid and often unplanned, urban growth is the source for many of the environment hazards faced by cities within the developing world. Substandard housing on marginal land, crowding, increasing levels of air pollution, water pollution and over usage, inadequate sanitation services, inadequate solid waste collection, and motor vehicles traffic and injuries are all associated with rapid growth of urban centers.

Economic Commission for Africa (1996) describes that the rapid urbanization in African cities has resulted in acute shortage of urban housing due to lack of financial resources to expand housing facilities. Most urban dwellers in Africa live in crowded informal housing units without basic infrastructure and services to ensure good health. Some African cities have more than 70% of their housing supply as rental units and often there is less than 8 m<sup>2</sup> floor area per person revealed that 71% of the poorest and 34% of the wealthiest households in Accra occupied less than 4 m<sup>2</sup> person in the sleeping room.

Pendall (1999) defines sprawl as the change in country population between 1982 and 1992 divided by the change in urbanized acres of land over the same period. This measure is regressed upon a variety of independent variable representing: percentage of land area under formal control, farm characteristics, metropolitan fragmentation, housing values,



local government spending, and transportation infrastructure minority population.

Global report on human settlement (1996) this report estimated that 100 million people have no home and sleep open-air or in public buildings (for instance railway or bus stations) or, where available, night shelters. There are many street-children among this vagrant population. Far more people are homeless in the sense that their accommodation is very insecure or temporary-for instance squatters or those living in impermanent shelters (for instance the 250,000 pavement dwellers in Bombay).

## **2.5 Increase the temperature of Earth**

Vlahov and Galea (2002) describe in their articles that that most the world's population will live in urban areas by 2007. The most rapidly urbanized cities are less wealthy nations, and the pace of growth varies among regions. There are few data linking features of cities to the populations. They suggest a framework to guide inquiry into features of the urban environment that affect health and well-being. They consider two key dimensions: urbanization and urban-city. Urbanization refers to change in size, density, and heterogeneity of cities and the Urban-city refer to the impact of living of living in urban areas at a given time. The development of urban health as a discipline will need to draw on the strengths of diverse academic areas of study (e.g., ecology, epidemiology, sociology). Cross-national research may provide insights about the key features of cities and how urbanization influences population health.



## THEORETICAL FRAMEWORK

### 3.1 Cities have different zones

Park and his fellows give a division of cities into five concentric zones. Each zone is differentiated according to their population size, their social, economic and physical characteristics. The dramatic effects of rapid urbanization are very clear in the cities and peri-urban areas. As the cities expand, the main zone of direct impact is the peri-urban area, and those living in the peri-urban interface face many new challenges and opportunities in meeting their needs and accommodating the by-products of the urban populations (Rees 1992; Rees and Wackernagel 1994). Four regional growth regimes that incorporate the policies those are useful in generalizing the discussion of development alternatives. The first, which can be considered the status quo, is called unlimited low-density growth.

In this regime, local zoning and building codes alone define market provision of housing and job, the dominant residential pattern is owner-occupied, single-family detached homes, transportation is almost exclusively provided by private automobile. Edge cities and the extreme free-market approach listed above would fall under this planning scheme. The next regime, a modern alternative to the status quo, is called limited-spread, mixed density. Local governments have limited cooperation in land-use planning. The third regime, incorporating more aggressive planning initiatives, is called new greenbelts and communities. Here, growth boundaries are designed and enforced, but only for contain corridors, new towns, and metropolitan areas. Residential growth is concentrated in a few planned communities featuring mixed-use, mixed-density development. Regulations and incentives encourage jobs to cluster in new centers and encourage municipalities to plan for growth in a regional framework. The last regime, called bounded high-density growth, incorporates extensive land-use and employment planning to achieve four goals.

### **RESEARCH METHODOLOGY**

In this research, the data was collect as the basis of quantitative research because the quantitative research uses numerical analysis. The study is conduct in the urban area of Islamabad; areas include F, G and H sectors. The researcher is conduct 150 face to face interviews through close handed questionnaire. The researcher developed a structure (close handed) questionnaire to gather the data on the environmental problems are increasing due to rapid urbanization in the urban areas. Statistical method (SPSS) used for data analysis and hypothesis test through chi-square test. This is commonly used in sociological research.



### Major Findings

1. Distribution of respondent's gender and this contains two different categories. (75.3 %) of the respondents are male and (24.7 %) respondents are female.
2. Migration rural to urban area, (66.0%) of the respondents are migrated and (34.0%) respondents are non-migrants.
3. Response regarding to their satisfaction in urban life, (63.3%) of the respondents are responses in 'Yes' and (36.7%) respondents are response in 'No'.
4. Respondents opinion about the urbanization create problems in the cities. (35.3%) respondents are in the category 'Strongly agree', (36.0%) respondents are in the category 'Agree', (12.7%) respondents are in the category 'Neutral',

- (11.3%) respondents are in the categories 'Disagree' and (4.7%) respondents are in the categories; Strongly disagree'.
5. Rapid urbanization creates slum areas in the cities and the table consists of five different categories. (39.3%) respondents are in the category 'Strongly agree', (45.3%) respondents are in the category 'Agree', (6.7%) respondents are in the category 'Neutral', (5.3%) respondents are in the categories 'Disagree' and (3.3%) respondents are in the categories; Strongly disagree'.
  6. Respondents opinion that the health facilities affected by the urbanization and this table contains two different categories. (74.7%) of the respondents are responses in 'Yes' and (25.3%) respondents are response in 'No'.
  7. Respondents response that they face the problems of drinking water and this table contains two different categories. (74.7%) of the respondents are responses in 'Yes' and (25.3%) respondents are response in 'No'.
  8. Respondents regarding to their response about from where they get drinking water and it consists of three categories. (62.75) respondents are in the category 'Motor pump', (11.3%) respondents are in the category 'WASA', (4.0%) respondents are in the category 'Pond' and (22.0%) respondents are in the category 'Other'.
  9. Respondents regarding to their response that have the facility of pure drinking water and this table contains two different categories. (50.7%) of the respondents are responses in 'Yes' and (49.3%) respondents are response in 'No'.

10. Respondents regarding to their satisfaction with the quality of drinking, 38.7% of the respondents are satisfied and 61.3% are not satisfied.
11. Urbanization effect the quality of drinking water; 76.7% respondents are responses in 'Yes' and (23.3%) respondents are response in 'No'.
12. 78.0 percent said that, they are affected by poor sanitation system and only 22.0 percent said they are not affected.
13. Respondents regarding to their response that health affected by poor sanitation it contains two categories. According to the result (76.0%) respondent's response in 'Yes' and (24.05) response in 'No'.
14. Response regarding to their point of view which type of health issues raised by poor sanitation and contains four categories. (32.7%) respondents answer in the category 'Infections disease', (9.3%) respondents answer in the category 'Parasitic disease', (17.3%) respondents answer in the category 'Vital disease' and (40.7%) respondents answer in the category 'Above all'.
15. Opinion about Govt. pay attention to solve the sanitation problems. 37.3 percent of the respondents are responses in 'Yes' and (62.7 percent respondents are response in 'No'.
16. Respondents opinion about issue of air pollution where they live and this question contains two different categories. The table describe that (70.0%) face the problems of air pollution and (30.0%) respondents have not face this problem.
17. Urbanization have any role in increasing the air pollution, 81.3% percent responses in 'Yes' and 18.7 percent respondents are response in 'No'.

18. Urbanization decreases the trees and greenery in the cities. 82.0 percent respondents agree that urbanization decreases the tree and greenery in the cities. And 18.0 percent respondents disagree to this statement.
19. Respondents regarding to their opinion that source of air pollution in the cities and this question have four different categories. (49.3%) respondents are answer in the category 'Industries', (39.3%) respondents are answer in the category 'Motor vehicles', (6.7%) respondents are answer in the category 'Smoke' and (4.7%) respondents are answer in the category 'Any other' options.
20. Respondents regarding to their response which types of disease are by air pollution and this table contains three different categories. (16.0%) respondents are answer in the category 'Skin disease', (30.0%) respondents are answer in the category 'Respiratory disease' and (54.0%) respondents are answer in the category 'Both'.
21. Respondents opinion about the house is costly as compare then the rural areas, 50.7 percent 'Strongly agree', 37.3 percent 'Agree', 10.7 percent 'Neutral', 0.7 percent 'Disagree' and 0.7 percent 'Strongly disagree' to this statement.
22. Response about the people face the problems of shortage of houses in this time. So, 66.7 percent respondents face the problems of shortage of houses and 33.3 percent respondents not face this problem.
23. Reason of shortage of houses in cities, 34.0% respondents said that urbanization, 46.7% said that larger population, 18.0% said that poor governance and 1.3% respondent said that any other reason.

24. Respondents opinion about the type of steps should be taken to stop the urbanization. 26.7 percent respondents are in the category 'Health and medical facilities', 22.0 percent respondents are in the category 'Education facilities', 10.0 percent respondents are in the category 'Better employment', 5.3 percent respondents are in the categories 'Modern facilities' and 36.0 percent respondents are in the categories 'Above the all'.
25. Respondents opinion about the which type of facilities should be provide to the rural people to stop the process of urbanization. 26.0 percent respondents said that "Awareness that migration is not the solution of problem", 13.0 percent respondents are in the category 'Health and medical facilities', 18.0 percent respondents are in the category 'Educational facilities', 10.0 percent respondents are in the categories 'Economically empowered them', 30.0 percent respondents are in the categories 'Above all', 1.5 percent respondents are in the category 'Rural development' and 1.5 percent respondents are in the category 'don't know'.

## **Discussion and Conclusion**

### **7.1 Discussion**

The present research presents that there is a critical linkage between urbanization, the environment, population growth and pollution; issues addressed include migration to urban centers, the immediate environment and health impact on the urban population. This research consisted on one hundred's fifty (150) respondents which are selected from the three different sectors of Islamabad using convenient sampling technique. The data will be collected by using self- administrated questionnaire. The hypotheses formulated for the present study were;



- a. Rapid growth of urbanization is causing ecological decay in the cities.
- b. Higher the rate of urbanization greater will be change from joint to nuclear family.
- c. The quality of drinking water affects the opinion of the people towards urbanization.
- d. Urbanization is a major cause of poor sanitation system in the urban areas.
- e. Higher rate of migration from rural to urban greater will be threat of increasing air pollution in cities.

Relationship of variable and statistics analysis was done through Statistical Package for Social Sciences (SPSS). Data was presented in tabular form in the frequency distribution and use Binary logistic regression test to verify the hypothesis. According to my finding the rapid urbanization is creating environmental issues in the urban areas as air pollution, poor water quality, sanitation and waste water treatment, increased the temperature of Earth, increasing slums areas etc. The data was compared the complex linkage among the environment, city size and rates of urban growth.

## **7.2 Conclusion**

Urbanization is a great and important issue in this time all over the world. Urbanization impacts our social, political, economic and family life. Reasons of urbanization our life, our living standard is totally changed. It creates many dangerous diseases and problems. It effects on human health, human behavior and on the social life of the human.

Air pollution is a main environmental health problem disturbing the developed, under developed and un-developed countries equally. The

special impact of air pollution on health is very difficult as there are many different sources and their individual effects vary from one to the other. Water sanitation is the method of cleaning water to make it harmless for drinking, bathing, cooking, and other uses. Clean water is important to people in every country because dangerous materials in water can cause illness and even death. There are, on average, two rooms in every house in major cities of Pakistan. Each housing component, on average, accommodates more than six persons in cities.

This conclusion is timely, stimulated and practical. To coup-up with this situation, it is the role and duty of the government to come forward and take some critical stances relating to the urbanization. Because in this scenario. Government is also required to lead from the front and guide the nation and international organization to perform their duty properly.



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