Risks Of A Megacity

(Concept For Developing Sustainable Karachi City)

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Abstract:
The modern sustainable development goals desire for reconsidering metropolis development efficiently to fulfill the needs of present times. As mega cities are primary nodes of investment in any country, causing biggest wave of urban growth. Despite of its dynamic features like offering high share of employment, modern life style and massive contribution to economic growth, due to disorganized urbanization, megacities face certain mega risks like 'scarcity'[1] due to depletion of natural resource, environmental hazards resulting in health problems, lack of town planning nevertheless safety and security risks etc., harnessing the need to focus on the solutions of risks factors involved, in order to gain sustainability goals.
Secondary and primary research tools will be used for conducting research and data gathering. Sample size is restricted to 250 respondents through using convenient sampling.
The aim of this paper is to document mega risks of megacity Karachi in contrast to unprecedented urbanization .This paper builds upon the lesson learnt from existing sustainable megacities. It dwells upon the occasions that had been driven by means of urbanization leading to modern day mega cities and their risks in the course of evolving sustainable structure. This paper observes the traits and challenges of Transitional mega metropolis growth, and highlights concepts which Karachi city can take-up to productively influence as sustainable mega city.

Keywords: Karachi Metropolitan City; resilience, risks; urbanization; sustainable development; environmental hazards.

Hypotheses:
Hypothesis I:
H0: The relationship exists between resilience and risks within the context of Megacity Karachi.
HA: The relationship does not exist between resilience and risks within the context of Megacity Karachi

Hypothesis II:
H0: Mega Cities demands high level of resilience to reduce risks.
HA: Mega Cities do not demand high level of resilience to reduce risks.

1. Introduction:
A megacity is having a complex structure and its development is basically a spontaneous process. It isn't always an entity that may be totally designed, as has been discovered from some of making plans screw ups, exemplified by way of , big apple[2]and several different U.S. towns.
(Future of Urbanization and Megacities)However, megacities could only be designed; through realistic planning .Its planning required a lot of innovation in making it both pleasing and eco-friendly.
(We Build Value, 2020)As It's envisioned that through 2030 there may be 41 "megacities" with more than 10 million inhabitants, twenty years later, by way of 2050, these city populations will need 50 percent more food and 17 percent extra water than they do these days. (Bhutada, 2022)To apprehend the role of the megacities these days, we need to apprehend

[1] (an economic phenomenon which means limited resources and unlimited want)

[2] The Big Apple is a nickname for New York City. It was first popularized in 1920s by John J.Fitz Gerald, a sports writer for New York Morning Telegraph. Its popularity since the 1970s is due to a promotional campaign by the New York tourist authorities.

their dynamics

To derive megacity dynamics, the first phase questions, is could be: Why do megacities appeal to? Why do such big populations drift to them and need to live in them? ,where response to these question is simple that within the growing world, megacities attract those who are looking for a higher living standard ,higher jobs, fewer hardships, and higher training.

The second phase question is: do megacities have what appears to be a powerful set of increasingly intractable problems? So the answer to these questions is the issues of megacities consist of:

- Explosive population growth and unplanned housing menace, creating safety hazards.
- Alarmingly increases in poverty that contradict the reasons why a megacity attract an attention of the poor and jobless takes place each in the developing economies .
- Big infrastructure faces telecommunications services deficit, mass transportation, and the presence of congestion. For an instance, traffic congestion in Bangkok is so horrific that the average travel now takes 3 hours
- Environmental issues, consisting of infected water, air pollutants, unchecked weed increase because of the destruction of authentic plants, and overdrawn aquifers.
- Disease, excessive death prices, drug-resistant traces of infection, and lethal environmental conditions.
- Monetary dependence on federal government that constrains the independence of megacity administrations.

(Barnes, 2002)Capital shortage, the factor that shapes the economy of the megacity and aggravates its other troubles, from infrastructure to environmental deterioration.

Those problems are increasingly more intractable due to the fact megacities are experiencing very fast population increase with which they cannot cope. Coincident with speedy boom, those problems are going on in environments wherein the populations, having flocked to the megacities in hopes of a better existence, have ever higher expectancies which are commonly more than the capability of a megacity to reply to them.

(Montoya, 2021) Megacity issues are exacerbated by severe lacking within the realm of understanding. Lacking include technological know-how, which includes the research vitals to cope with the issues of the megacity, e.g., inside the instructional and institutional systems. Deployment of Uneducated populations at important administrative positions in megacities is another severe administration lacking. (Mark Pelling, 2013)Considering that megacities are the major contributor in economic development , these lackings must be dealt efficiently following International proved development footprints through studies, schooling, and other instruments for the technology, diffusion, and usage of understanding.

(UFZ, 2013)Hazards and remedies of megacity call for the insurance availability too, due to the fact that facilities and life style of megacities like high-rising building, underground railway, and every manufacturing unit equally claim to keep margin of threats, strengthening the insurance concept. Given that the density of insurance within the megacities of developing economies is still far lower than in the developed economies because, the enterprise ability for the insurance industry is a particularly huge there. The dangers that go hand in hand with global urbanization also are huge.

(Latitude Gography, 2020)Due to the high population, and infrastructure in a completely limited location, the loss potentials in megacities are very much higher than in rural areas. Therefore, even small occurrences can cause intense losses. For instance, the failure of a relevant commuter train line all through the morning rush hour in a main metropolis like Karachi, London or any other megacity can very quickly lead to splendid chaos and mass losses and it could even be more worst when megacities are in developing economies. (Marolla, 2018)Nevertheless, in the mega city like Karachi, along with the transportation solutions, excess amount of vehicles on the roads of megacity causes pollution leads to related health problems like flu, allergies etc, in the same wake lack of town planning causes number of accidents, like two years back a PIA airplane crash near Jinnah International airport on the housing scheme caused many casualties and left took many lives away, simply shows lack of town planning, government control and inefficiency. (Megacities Pushing the Boundaries of our industry, Oct,2016)Similarly in Pandemic times where social distancing were supposed to be followed congested megacities contributed a lot in the spread of virus, congested accommodations in Karachi (due to lack of town planning, inappropriate rate of urbanization) ,contributed also to spread the virus. (Brend)Lack of proper urbanization and population influx from rural to urban is causing resources depletion and scarcity, which is not only raging aggression among Karachiites but also becoming a security threat .In the next sections of this paper we will try to explore literature review, dynamics of mega city its risks and solutions to potential risks through resilience.

2. Literature Review:

Psychologists outline resilience as the procedure of adapting properly in the face of adversity, trauma, Tragedy, threats, or large assets of strain which include circle of relatives and relationship problems, severe fitness problems or place of job and financial stressors. (Carsten Butsch, 2009)As a whole lot as resilience involves “bouncing returned” from those difficult stories, it may additionally contain profound Personal boom.

Negativities are simply painful and tough; they don’t need to determine the outcome of your lifestyles. (Marincioni, 2014)There are many elements of your lifestyles you could manipulate, alter, and grow with. That’s the position of resilience. Becoming more resilient no longer most effective allows you get via difficult instances; it additionally empowers you to develop or even improve your life. Life won't come with a map; however every person will revel its twists and turns, from ordinary challenges to worrying events with more lasting impact, a life-changing coincidence, or a serious contamination. Each trade influences people in a different way, bringing a completely unique flood of thoughts, robust emotions and uncertainty but humans typically adapt properly over time to life-changing situations and annoying

conditions—in certain conditions thanks to resilience.

2.1. The road to Resilience

Consider you're going to take a raft ride down a river. In conjunction with sluggish water and shallows, your map shows that you may come across unavoidable rapids turns. How could you ensure that you may properly go the difficult waters and manage any unexpected issues that come from the challenge?

Possibly you will enlist the help of extra experienced rafters as you propose your course or depend upon the companionship of trusted pals along the way. Maybe you would get a jacket or a stronger raft. (Building your resilience, 2012)With the proper tools and supports in area, one element is certain: you will not best make it through the demanding situations of your river journey but you may emerge confident and braver after.

2.2, Risk

There are three major motives in the development of megacities are :First, what takes place inside the megacities of the growing international affect the relaxation of the arena. (Dayal, 2017)The combination of high populace density, poverty, and confined sources makes the developing megacity favourable to the incubation and transmission of sickness, like cholera, tuberculosis etc. (Causevic, 2021)Vulnerability to terrorism, natural hazards, ecological screw ups, war situations, and food scarcity are also exacerbated inside the growing megacities of the world. (Cruz, 2022)Megacities, both within the advanced and the growing economies, are places where in social unrest regularly originates, as tested in Jakarta, traditionally in Paris and St. Petersburg, the megacities in their time that sparked the French and Russian Revolutions. Such unrest impacts the peace of the world, as do different phenomena of megacities, together with the rate at which their residents emigrate to other regions However, the ecological affects of sprawling megacities impact worstly, as seen with the air pollutants generated by using tens of millions of families burning soft coal, or with the disposal of waste. (Bugliarello, 1999)

Similarly, it helps to perceive and analyze the situations of risk emergence that pose a threat to future sustainability. For this motive an appropriate mixture of natural, and social medical hazard must be studied (Dirk Heinrichs (UFZ), 2008)

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2.3. Urbanization:

(Berz)Urbanization is one of the most dramatic procedures in terms of International development . Especially in megacities, it anticipates with both local and international results that aren't but properly understood. Mega-urbanization involves economic boom, excessive population, and a awareness of economic and political development, but also a complicated variety of simultaneous and interacting strategies .As human activities shift to cities, the future of the world community depends more and more on urban sustainability**.** (McGranahan, 2001)The very best growth will arise particularly in the towns of Asia and Africa, which is two-1/3 rural now, and could be 1/2 city by using 2025. By no means before urban population has improved so fast because of the development in agriculture, technology of nutrients and remedy. For Instance Dar us Salam, Tanzania, has a increase rate of 6%, which results in a doubling Of population every thirteen years. (Singh, 2015)A high birthrate mixed with a growing migration from the agricultural regions that is reinforced by the so called "push-elements" (unemployment, low requirements of housing and infrastructure, lack of educational facilities) and "pull-elements"(Cost effective possibilities, attractive jobs, better training, present day way of life) lead to the very dynamic growth procedure. (1st HARSE Conference, 22-27 May 2004)One could imagine the demanding situations to control towns' growth in a sustainable way while their population doubles every 13 years

2.4. Sustainable development:

(DFID, 2002) Sustainable development is derived by sustainability, where Stages of sustainability and ability risks depend significantly on city governance, i.e., how selections on visibly applicable affairs are made in and between the spheres of the nation, the civil society and the non-public sector. (marolla, 2016) Intense air and water pollution, deterioration of infrastructures, the unfold of violence and crime, transport grid locks ,and social and spatial polarization make well-designed governance strategies critical in resolving and overcoming these troubles and their potential risks, making it true for focusing sustainability.

2.5. Environmental Hazards:

(Sohail, 2011)With economic improvement and growth in the urban population in which it used to have one residence with extra quantity of ventilation and sun exposure is now shrinking to have vertically populated buildings with numerous amounts of homes on the same area. The result is increase within the energy consumption in that area, the quantity of electricity that is consumed by way of one house maintain at the same land is now multiply by hundreds.

(Sarica, 2022)Due to the fact of the increase in the urban population the phenomenon of the urban planning has modified notably for designing, developing and sustaining city cities. City regions eat about 67-76% of total international power and are accountable for 71-76% of fossil gas-associated CO2 emissions (United Nations, 2005) (Güneralp, 2017)The amount of CO2 emit by one household is 72 tons per year , electricity utilization and a carbon emission is about 18,000 kg CO2 consistent with year. And a matured tree absorbs handiest 22 kg CO2 in line with year. Pakistan is having World 6th biggest metropolitan city, Karachi with bigger population size, most affected by worst population and climatic issues where the scenario is getting worst, resource shortage ,worst infrastructure ans heavy and irregular rainfall.

3 Research Methodologies:
Research design, target population, sample size and data collection will be discussed:

3.1. Research design:
Descriptive research design will be used in data collection. This design is preferred because respondent will answer questions like how, what, and how much .This study is designed to gain complete knowledge and acquire unbiased, error free data about situation required. The study is inspired from studies and records generated from the International growth centre, UNDP, ADB surveys and field research through questionnaire on megacity Karachi development. Along with the available Literature reviews, information and Case studies on modern megacities experiencing sustainability, identified through investigations into modern and past developments in developed mega cities . (Hochrainer-Stigler, 2011)Surveys, analysis of the studies and records are collected with the objective of outlining for guidance and hints in the discourse on sustainable urban development.

3.2. Population of study:
Target population is entire groups or individuals to which a research is conducted on, having varying characteristics e.g., different age, gender, etc. Where researcher wants to draw his research conclusion from this group. Target population of this research is working class living in Mega city Karachi.

3.3. Sample Size:
(Hassan, 2021)Convenient and Snowball sampling procedures are used in this study. To arrive at the sample of this study, 250[3]participated in data gathering. Moreover, we tried to collect data from working class above 20 years of age in Karachi.

3.3.Data Collection:
(Lyu, 2020)Primary data was used and it was obtained with the help of questionnaire. Through this method respondents will receive the same set of questions. Questionnaire initially consists of the general information about working class of Karachi, where all respondents are at least up to 20 years of age, who could understand the concept of risks of a Megacity and were willing to respond questionnaire. Where later on questionnaire is having information on factors contributing to megacity related risks and their solutions.

3.4. Data Analysis:
Descriptive statistics contains percentages, frequencies, bar charts and pie charts to establish patterns for easy understanding and interpretation of the findings. Data collected was reported using tables, pie charts.

4. Demographic Characteristics:
This section identifies the demographic characteristics of the respondents. The demographic characteristics were gender, age and job title.

4.1. Gender of Respondents:
The study sought to know gender composition of respondents to define the extent of
Gender response towards risks and solutions of mega city Karachi. The result shows 28 %
Of females and 72 % of males were participated in data gathering. In chart **4.1**,(see Annexure) 72% were male and 28% respondents were females.

4.2. Respondents Age:
The research sought to develop the age of respondents to ensure that the view of different age range was considered as in Chart 4.2 **(**see Annexure)38% were between the age of 20-30 years, 54.8% were in the age slab 31-40years, and 7.1% were between 41-50 years, this indicates that most of respondents were below 41 years.

4.3.Sources of Income: **Table**,
The research sought to develop the source of Income to ensure that the view of different experience range was considered. As mentioned in bar chart 4.3(see Annexure)10% work with government,16.7% work in private firms,3.3% own their business,3.3% employed in other country,3.3% work as daily wagers, where 63% respondents work others.

[3] Karachi population 2018(Social policy and development centre 2017)
1 Urban:14.91 m
2 Rural**:**141.1m
Sample size Sindh urban population24.91 m (avg of total labor and private output 76.5% of
Sindh urban population 19m=0.19m
Karachi offers 75% of total Industrial labor output and 74 % of private sector employment
in Sindh province.

4.4. Uninterrupted Electricity:
As researched in 4.4,pie chart 4.4(see Annexure),sought that 56% of respondents living in most developed societies have access to uninterrupted electricity, where 34.4% did not enjoy uninterrupted electricity and 9.4% responded may be.

4.5. Respondents Main source of water for all purposes: ,
The research sought to develop that source of water for all purposes of respondents .In chart 4.5(see Annexure), are 77.4% from government water supply,6.5% from tanker,12.9% obtain water from well/boring,6.5% buy from water man, which means most of respondent get water from government.

4.6.Are you satisfied with Education system?
The research sought to develop that education system in megacity Karachi, as mentioned in chart **4.6**(see Annexure), 56.3% of respondents are not satisfied with education system, 28.1%
of respondents are satisfied with education system, and 15.6% of responded maybe to the
above question, we could conclude that more number of respondents are not satisfied with
education system.

4.7.Are you satisfied with health facilities in your city?
As mentioned in **chart 4.7**(see Annexure), 59% of respondents are not satisfied with health facilities in megacity Karachi,22% of respondents are satisfied with the health facilities in megacity Karachi, and 19% of responded maybe to the above question, we could conclude that more number of respondents are not satisfied with health facilities in megacity Karachi

4.8.Are you satisfied with the security of your city?
As mentioned in **chart 4.8**(see Annexure),90% of respondents are not satisfied with security facilities in megacity Karachi, 6%of respondents are satisfied with the security facilities in megacity Karachi, and 4% of responded maybe to the above question, we could conclude that more number of respondents are not satisfied with the security facilities in megacity Karachi.

4.9.Does infrastructure of your city supports economic growth?
As mentioned in **chart 4.9**(see Annexure), 56% of respondents don't think that infrastructure of a mega city Karachi support economic growth, 25%of respondents think that infrastructure of a mega city Karachi support economic growth, and 19% of responded maybe to the above question, we could conclude that more number of respondents don't think that infrastructure of a mega city Karachi support economic growth .

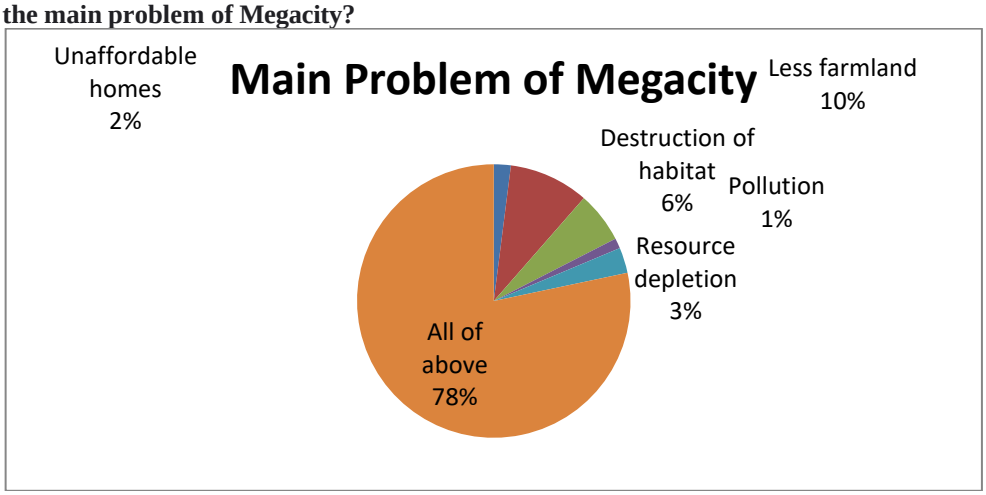
4.10.Town planning in your area is safe?
As **4.10**, chart(see Annexure), 59% of respondents don't think that town planning of a mega city Karachi is safe,22% of respondents think that town planning of a mega city Karachi, is safe, and 19% of responded maybe to the above question, we could conclude that more number of respondents don't think that town planning of a mega city Karachi is safe.

4.11.Migration from rural to urban contributes to crime?
As mentioned in chart **4.11** (see Annexure),25% of respondents don't think that Migration from rural to urban contributes to crime,50% of respondents think that Migration from rural to urban contributes to crime, and 25% of responded maybe to the above question, we could conclude that more number of Migration from rural to urban contributes to crime.

4.12.Migration from Rural to Urban decreases employment opportunities for urban people?
As per research in **4.12**(see Annexure), 28% of respondents don't think that Migration from rural to urban decrease employment,47%of respondents think that Migration from rural to urban decrease employment, and 25% of responded maybe to the above question, we could conclude that more number of Migration from rural to urban decrease employment.

4.13. Pollution in your city affecting health is?
From research question **4.13**(see Annexure), we had concluded 19% respondents think that Pollution in mega city affecting health is 40%,15% respondents think that Pollution in mega city affecting health is 500%,44% respondents think that Pollution in mega city affecting health is 70%,and 22% respondents think that Pollution in mega city affecting health is 60%.

4.14. What is the main problem of Megacity?



From Chart **4.14,** we had concluded 78% respondents think that the main problem of Megacity are unaffordable homes, less farmland ,destruction of habitat, pollution, Resource depletion**.**

4.15. Proper checks by Government and Pressure groups could reduce environmental hazards and resource depletion?

From research learning in **4.15**, we could conclude that in chart 4.15(see Annexure) ,66% of respondents think that Proper checks by Government and Pressure groups could reduce environmental hazards and resource depletion,13%of respondents think that Proper checks by Government and Pressure groups couldn't reduce environmental hazards and resource depletion, 13% of responded maybe .Which could conclude that through government control environmental hazards could be mitigated.

4.16. Economic situation of your household,(Reference time is last one year)

From this chart **4.16**(see Annexure), we could conclude that 44% of people have no saving, 16% are always deficit, 16% are having surplus income,22% are occasionally deficit and 2% are on breakeven.

4.17. Proper town planning can reduce accidents?

From research learning in **4.17** we could conclude that pie chart (see Annexure), shows 87% respondents think that proper town Planning could reduce accidents, 13% respondents think that proper town planning couldn't reduce accidents.

4.18 .Easy insurance facility (Health, Education etc) can reduce personal risks?

From chart **4.18** (see Annexure), we could conclude that**,** 80% of respondents think that easy insurance facility (Health, Education etc) can reduce personal risks and 13% of respondents think that easy insurance facility (Health, Education etc) can't reduce personal risks.

4.19.Government control on law and order and resource division can reduce crime?

From the above research learning in pie chart 4.19 (see Annexure), we could conclude that 87% of respondents think that Government control on law and order and resource division can reduce crime.

4. 2020.How far risks of mega contribute city to Psychological disorders?

From the chart 4.20 (see Annexure), we could conclude that,48% respondents think that megacity contributes to psychological disorders by 50%,32%respondents think that megacity contributes to psychological disorders by 70% respondents think that megacity contributes to psychological disorders by 20%.

4.21Government control and proper city management could reduce psychological problems related to mega city.

From the chart 4.21 (see Annexure),we could conclude that 58% respondents think that Government control and proper city management could reduce psychological problems related to mega city,10% respondents think that Government control and proper city management couldn't reduce psychological problems related to mega city,32% responded maybe

5 .Result Discussion:

This paper recognized the megacities archetypes associates with urban improvement as Mature, Transitional and emerging categories. It diagnosed that the major challenges confronted by megacity Karachi in each individual and collective categories as regards to infrastructural development. Whereas transportation is recognized as the largest venture and most important investment region, safety and security, water and waste control, strength and fitness observe respectively in ranking problems. It also provides the reviews and challenges of metropolitan governance, in addition to lessons learnt from ideas applied in Asian Transitional megacities adoptable inside the case of Karachi urban improvement. (Etzold, 2013)With the assessment of reviews from different economic classes of megacity are considered

because it regards population growth and improvement, mega cities may be defined as keen to prioritize economic competitiveness and employment, by sacrificing the natural blessings. However, development of governance will constantly be crucial towards developing modern towns, as a result holistic answers are essential for development of megacity.

Significant literature exists about the government efforts for development of modern city-surroundings initiatives in Karachi. A clearer instance is the case where development projects are drawn almost every year however that is goes without implementation. (urban resilience:How Asia's Cities Bounce Back, 2022)In city planning, the highest development dynamics of any city take place within the internal town and concrete fringe areas. Urban fringe or outskirts regions of fast growing agglomerations are considered to be the various hotspots of urban transformation as they're areas which might be nevertheless not completely urbanized however will be so in the foreseeable time. This paper acknowledges the gain of the youthfulness of Karachi city, acknowledges that the development trajectories of future urban areas rely upon decisions made at a very early times with the aid of distinctive actors and stakeholders. This paper also provides the reports of megacities and challenges faced with the concept of providing rectifying measures taken by different developed nations as footstool in their sustainable urbanization. It's far obvious that processes leading to massive land use can come to be irreversible and might cause unsustainable development, therefore political choice making techniques inside the Karachi require huge attention at an early level. Ultimately, for an emerging financial hub like Karachi to attain the heights of the SDGs expectations which require specially mega-city regions to be accountable as engines and trendsetters for the improvement of rural regions. Vertical and horizontal integration and cooperation must be followed as prerequisites for effective improvement. Through development cooperation and instructions learnt, systematic-based methods for accomplishing SDGs could be achieved. Cluster-towns to megacity, Anchor-city concept megacity initiatives are thoughts that aid structures of improvement. In this situation, emerging towns can take a cue from Mega-cities around the World, like in China's Pearl River Delta and the USA East coast that grew through the introduction of clusters of cities . If those standards and systems worked in other areas, then why no longer the evolution of Karachi-megacity through the traditional shape of center and suburbs will form from the dimension of multi-centered megacity. These systems of urban regions from developed economies will help Karachi-city , in developing both a strong internal and international spatial-financial relationship.

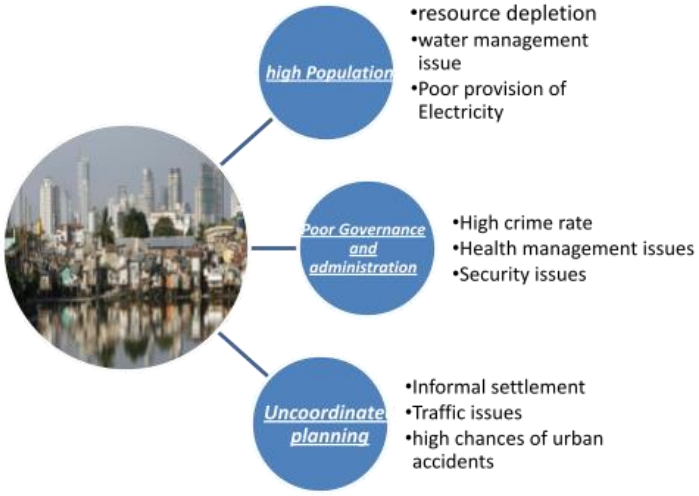
5.1 .Promoting trendy answers for Megacity Karachi in planning and improvement Following Pending SDG calls for a Re-thinking of city development

By the evaluation of the reports stated above, much deficiency may be found within the case of the Karachi megacity. Where it is classified among the rising megacities' category, majority of its development problems could be attributed to the unsustainable projects and paucity of revolutionary solutions in making plans and improvement. (Hall, 1998)However, to efficaciously join up with the demanding situations of now days' megacity challenges, it's very important for megacity to develop businesses conducive environment without compromising sustainable development goals.

Emphasizing the role of openness to cultural plurality, freedom and opportunities for participation in development activities. (Leautier, 2006)It's far noteworthy that an international level megacity performs better than a local megacity by way of governance. As the fundamental thing for achievement may lie consequently, within the abilities of the municipality in governance or control in their cities.

5. 2.As a Result:

The result of uncoordinated urban planning in mega city leads to high risk of resource depletion, crime rate, health management issues, security issues, Pollution, Natural hazards, High Unemployment and Urban accidents**.**



Though we could conclude from above discussion that;

Hypothesis I:

H0: The relationship exists between resilience and risks within the context of Megacity Karachi.

Hypothesis II:

H0: Mega Cities demands high level of resilience to reduce risks.

6. Recommendations and lessons learnt from research on Sustainable solutions to Megacity risks

a) Structural Adjustment in Urban Development

(Philippi, 2017) In Asian megacities (that are on the whole labeled as Transitional metropolis class), it's far quite evident that the increase of the urbanization may be very dependent on radical spatial, social and political structural modifications and these are associated with the financial upward push. These adjustments are connected with: Accelerating migration approaches

- Developing proportions of secondary and tertiary sectors as well as good sized development of shipping and communications must takes place .Infrastructure connected with developing international interdependence, up gradation in health care and schooling, expanding economic middle classes which could mitigate socio-economic disparities in addition to growing poverty and crime rate.
- Spatial expansion, bring-an end to initiative in connection with the emergence of informal settlements and slums,
- Governability and checks, leading to regulated processes taking place .

b) **Urbanization advancement*:***

By the year 2025, it's far predicted that China may have eight mega consist of Beijing, Shanghai, Chengdu, Chongqing , Guangzhou, Shenzhen, Tianjin and Wuhan with the population of extra than 10 million every, as per international management consultants. (Company, 2009)This explosion anticipated in China, could bring a massive urbanization trend with the intention to facilitate more than 325 million people, residing in megacities .

(Bank, 2010)Handling such an explosion could become future challenges for China. Keeping in view Wu Changhua, the greater China director (former) of the climate group, an international environmental organization, stated that it become viable to supply strength and vital services even more effectively to focused urban regions. She feels that Urbanization may be seemed as one of the answers to energy and weather issues than the cities can achieve a far more efficient use of power today. In her view, planners in China have the opportunity to plan new cities in a way to be successfully carbon safe, utilizing state of the art technology to secure China's development, which will nevertheless make it difficult for urban planners to comprise the environmental dangers, however nevertheless enjoys the possibilities of developing safe environment.

c) Automobile-Free sustainable town Initiative

(Jacque, 2009)Predicts that China will overtake the United States as the biggest economy of the World by 2050.

(Chellaney, 2016)It is also anticipated that the emergence of megacities which will create demand influx, which demands the evolution of novel solutions to these new challenges by implementing automobile free town initiative.

d) Cluster cities to Megacity Transition

(Xiaohe, 2016) Envisages megacities emerging with small and medium sized towns in small clusters. (more than tw third of wrld's megacities will be located in Asia by 2025, 2019)With this improvement, the bigger cities (megacities) can share resources with the small and medium sized cities creating logistical blessings and a big labor pool with a view to result in lowering overall cost in the management of these megacities. Within the light of these ideas, many cities in China are already developing progressive solutions to most of its megacity challenges. As an example, via a technical cooperation with the METRASYS projects geared toward developing and implementing a sustainable mobility strategy for mega towns and cities, some of China's traffic and transportation based demanding situations are becoming innovative interest with such ideas as:

- Explicit lines, inner metropolis and local express railways in addition to high speed railways
- Intelligent Transportation systems (ITS) initiatives.
- And the encouragement of more zero carbon based traffic structures.

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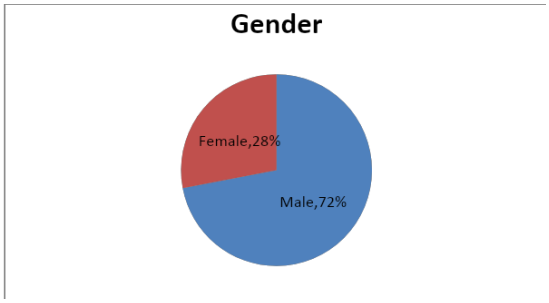
ANNEX *1:.Containing Charts and Graphs*

4.1 Pie Chart : Gender

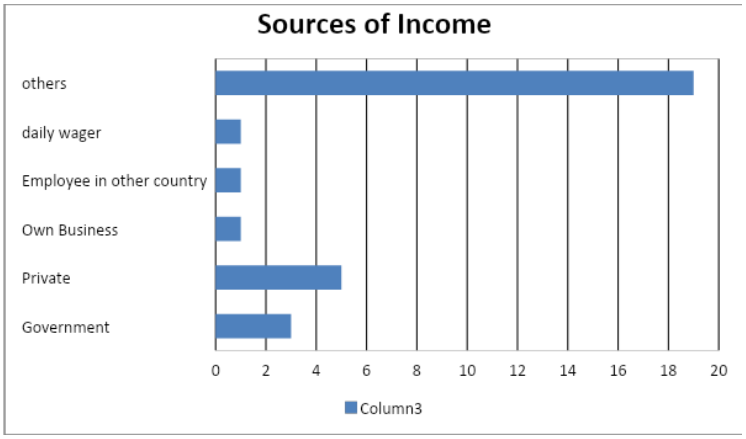


Respondents Age:

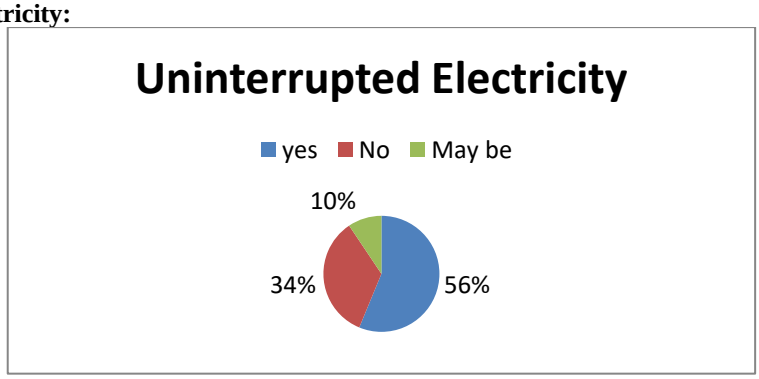
Table 4.2

Age(Years)	Frequency	Percentage%
20 -30	95	38
31-40	137	54.8
41-50	18	7.2
51 -60		0.0
61 and above		0.0
Total	250	100

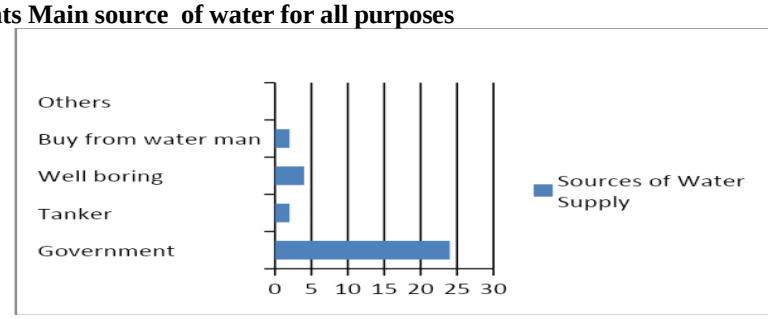
Sources of Income: 4.3



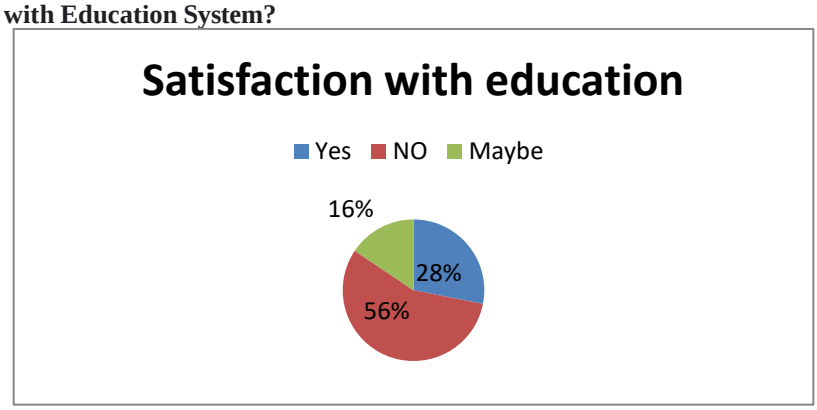
4.4 Uninterrupted Electricity:



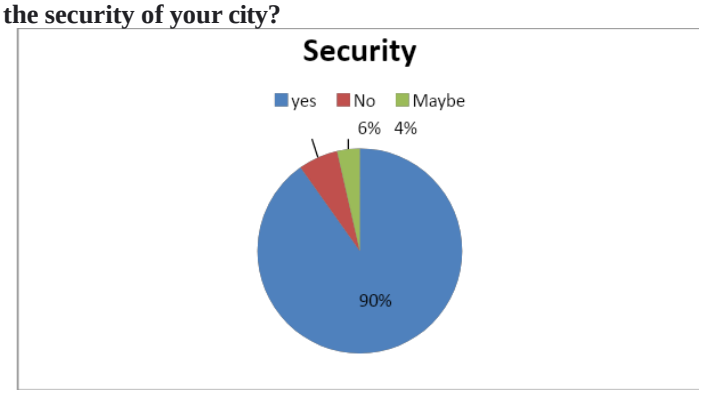
4.5: Chart: Respondents Main source of water for all purposes



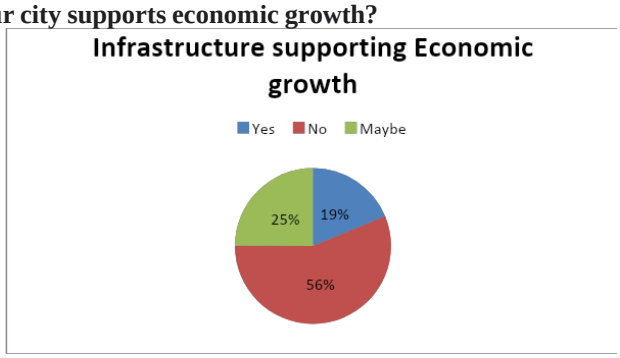
4.6 Are you satisfied with Education System?



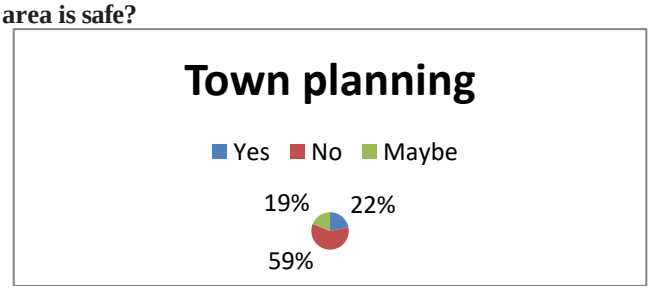
4.8 Are you satisfied with the security of your city?



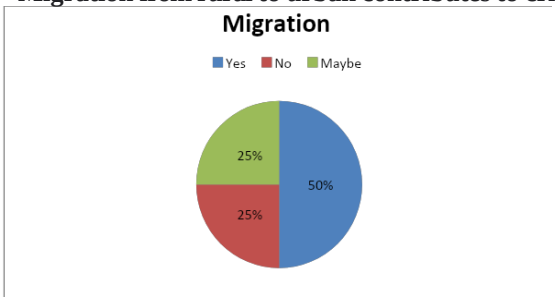
4.9 Does infrastructure of your city supports economic growth?



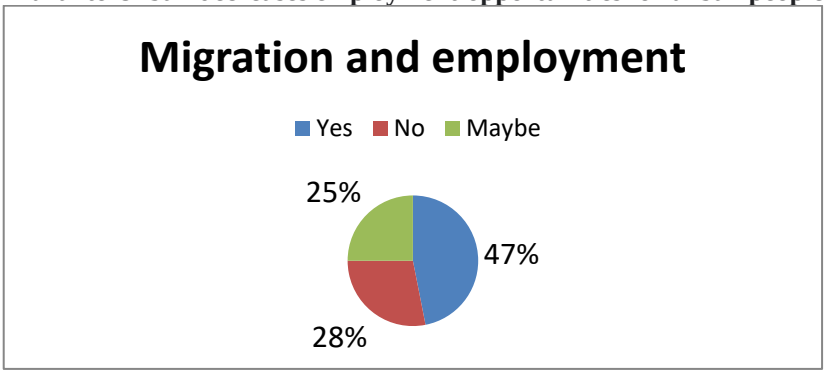
4.10 Town planning in your area is safe?



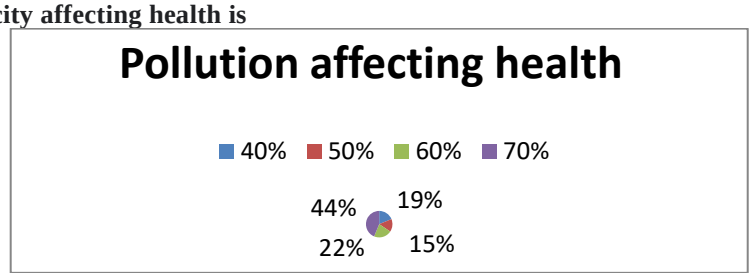
4.11 Migration from rural to urban contributes to crime?



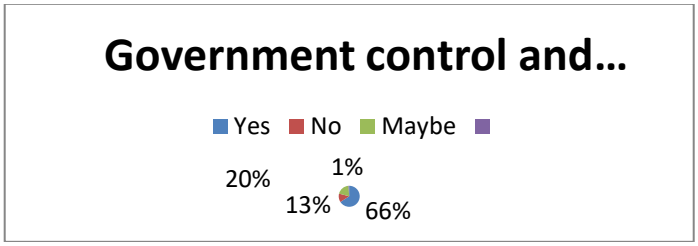
4.12 Migration from Rural to Urban decreases employment opportunities for urban people?



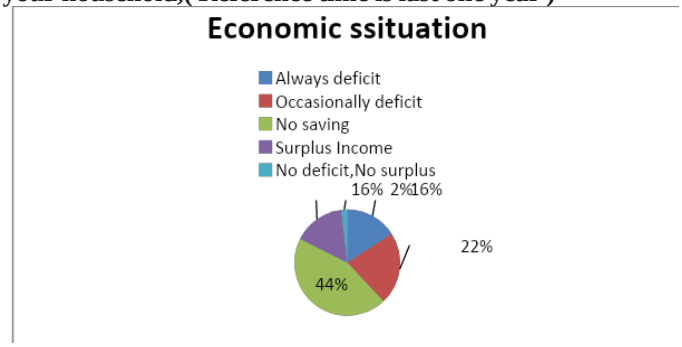
4.13 Pollution in your city affecting health is



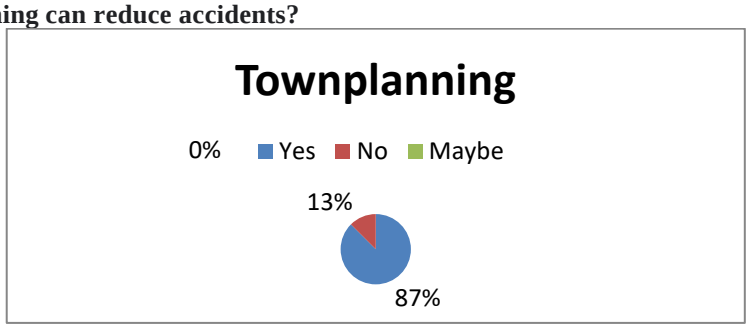
4.15 Proper checks by Government and Pressure groups could reduce environmental hazards and resource depletion?



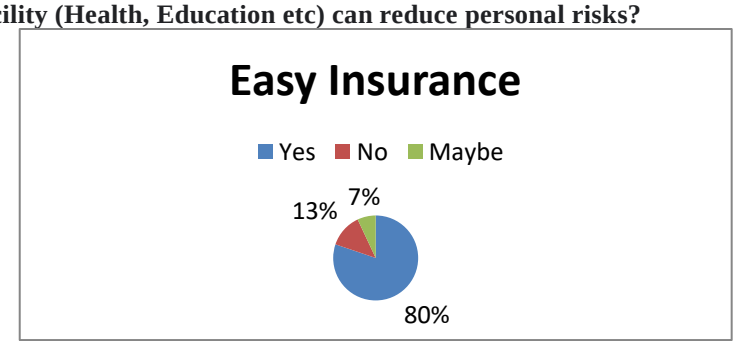
4.16 Economic situation of your household,(Reference time is last one year)



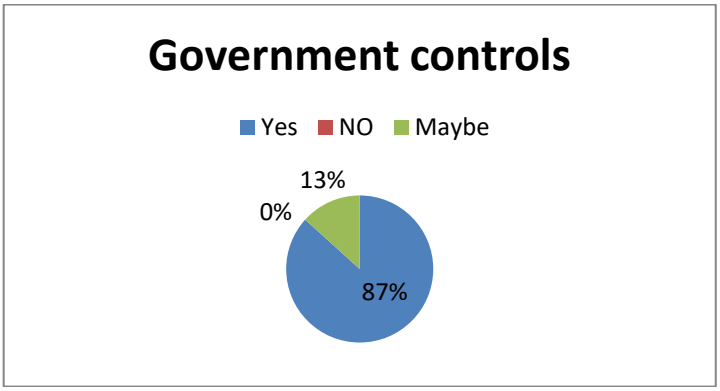
4.17 Proper town planning can reduce accidents?



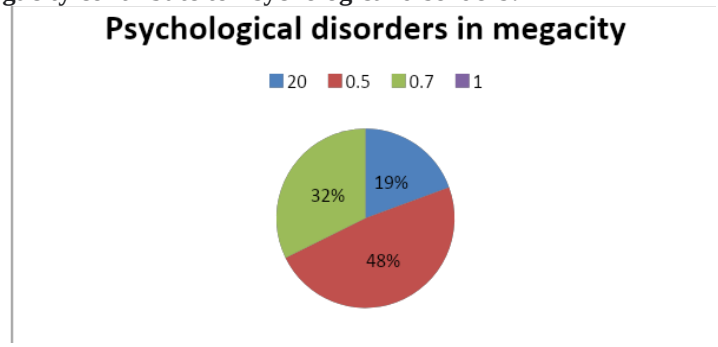
4.18 Easy insurance facility (Health, Education etc) can reduce personal risks?



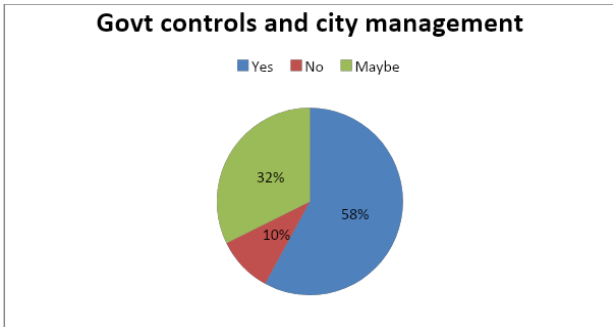
4.19 Government control on law and order and resource division can reduce crime?



4.20 How far risks of megacity contribute to Psychological disorders?



4.21. Government control and proper city management could reduce psychological problems related to mega city.



Glossary:
ADB: ASIAN DEVELOPMENT BANK
UNDP: UNITED NATION DEVELOPMENT PRORAM