

Increasing Environmental-Urban Challenges: Social-Anthropological Analysis

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Abstract

The present study sought to discover and reflect the environmental challenges and issues of the urban space. The various urban communities are faced with different types of environmental-urban issues and this is per se in need of common solutions. Issues like water and land are currently being frequently seen especially in the cities of the developing countries. Similarly, the supply of the citizens' financial needs is amongst the challenges increasingly reflected and manifested in the urban communities. The emergence of a set of urban challenges would be followed by novel and newly emerging issues. Considering the increase in the city dwelling population, these spots need new management and adoption of effective plans and policies. Following the increase in the world's population since the second half of the twentieth century and following the change in the population's lifestyle, particularly of the city-dwellers, these citizens have encountered new and unprecedented challenges and any hesitation in responding to their needs would be per se accompanied by new and more problems for them. During the three past centuries, the city's health and comfortability have been largely jeopardized. The qualitative and quantitative changes in the city's population during the era after industrial revolution rendered the cities themselves vulnerable from various respects in such a way that various organizations have to be coherently search for a cure and solution to such problems. While only sixteen cities worldwide had populations above one million people until 1900, the number of cities with multi-million populations has increased since then which has directly influenced the ascending trend of the urban challenges. Although there are numerous urban challenges, environmental problems are more widely observed than the other bottlenecks.

Keywords: Environmental challenges, Land and water, Lifestyle, Industrial revolution, Multi-million populated cities

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Introduction

Multidimensional changes in the urban space that predominantly stem from the population increase, technological changes, electronic advances, communication and others, have contradictorily made the urban spaces important. Each of the aforementioned cases, including population growth, technological changes and others, has activated the urban spots and made them be in situations substantially different from the fixed past status. The emergence of more population that is per se the result of the increase in births and migrations cause the appearance of a lot of new needs in the urban spots. Thus and under such conditions, the urban spots are always in need for multidimensional and poly-dimensional planning; otherwise the population increase in these spots causes many cases of dissatisfaction, insecurity, unemployment and others of the like. The third world countries have generally been looking for increasing their populations during the recent decades and have encountered urbanization expansion. Under the conditions that the population management is dealt with systematically, the citizens' quality of life is also improved meanwhile enhancement of the productivity in the urban spots. This is while the third world countries are currently in a paradoxical situation in such a way that while there are many highly populated cities, their daily increasing needs cannot be easily satisfied and all their needs cannot be entirely met. There is a serious and considerable relationship seen between urbanization originating from population growth and the economic development inside the countries. Following the increase in migration, urbanization and qualitative and quantitative expansion of the urban spots, many of the potentials and affordances are established in the far and close points inside the cities that per se cause a large deal of economic mobility inside these urban spots. Many of the economic transactions, social and cultural interactions, more productions and more motile economy appear inside these cities. In general, the urbanization process is related with the industrialization process and its outcomes seem very much contradictory (Sheikhi, 2015, p.115).

One of the substantial duties of the urban sociology is the study and investigation of the quality and quantity of the cities' growth; meaning that the cities are expanded under certain conditions in physical and quantitative terms. In many of the past civilizations, as well, the cities have witnessed extensive and continuous migrations, meaning that there have always been individuals travelling to such centers. This stream has been existed since ancient Greece, ancient Egypt and archaeological epochs of history. Such a stream, i.e. the various population classes' movement to the urban spots, is still being continued (Sheikhi, 2016, p.23).

Various kinds of social harms are currently observed in larger spots, particularly in urban spots, while the social harms existent in the intended society have not been identified and no cure and corrective solution has been found for them. The society cannot perform its duties in a normal way. Due to the same reason, a sort of stagnation and sedentariness, passivity and/or, in other words, a social paralysis occurs in the society, which itself, causes the emergence of more problems and failures (Sheikhi, 2008, p.15).

An Overview of Urbanization

One of the subjects closely and meaningfully associated with sociology is urbanization. Population causes the objective relationship between urbanization and environment. Any increase or change in the quality and quantity of population per se causes changes in the urbanization and simultaneously influences environment. Nowadays, such a factor as population and subsequently expansion of urbanization has endangered the environment in an unexampled manner hence the governments and their planning systems should take into account preparations so as to keep the environment healthy and clean through controlling the population. Environmental health, itself, has a considerable effect on the population's status, meaning that it is by safeguarding of the environmental health that the children, mothers, old-aged people and others enjoy more security.

Possibly, the majority of the environmental issues and challenges of the 21st century stem from the con-

tinuation of the 20th century's issues that have not been sufficiently taken into account in administrative-political terms. The weakness related to policy-making causes a great many of the communities to be faced with many challenges related to urbanization, population and environment at present and in 21st century.

Most of the environmental issues currently originate from the climatic changes, shortages of fresh water, annihilation of the forests, contamination of waters and population growth. Various communities worldwide as well as Iran are faced with aforementioned problems in different forms. Each of the aforementioned cases influences the environment in various forms. Therefore, social and environmental planners should always constantly monitor the aforesaid indices. One of the factors that cause the creation of the abovementioned issues in an extensive manner is the very population growth especially the urban population. During the recent decades, many of the countries have been confronted with this phenomenon to wit increase in urbanization that has led to many social and environmental challenges.

The issue that has to be placed atop of the planning priorities is the use of water and land in such a way that water and food can be supplied and provided in a favorable limit (UNEP, 1999). Urban and environment planners should always make the required predictions thereby to supply the citizens with their essential needs, including water and food. Nowadays, many of the global organizations are seeking to offer instructions and methods by which the underdeveloped countries can be supplied with the aforementioned essential needs (water and food). One of the essential solutions is the very adoption of suitable population policies.

Expanding Urbanization

Questions proposed in this area are as the followings: How has the world population's concentration changed in the urban domiciles during the past 300 years?! Where, when and why urban growth has occurred? How has the cities' distribution come about based on the size? To what extent has urbanization

process resulted in the environmental change? What conditions would be followed by more (expanding) urbanization during the forthcoming years? It is expected that the social, physical or natural sciences can provide answers to these questions. The qualitative and quantitative expansion of the world's cities has substantially occurred during the past three centuries following the propagation of the population. The role of industry, economic exchanges, use of skills and competitiveness of economy cannot be neglected in regard of the question as to why the number of cities has undergone an increase during this period of time. In the meanwhile and in the course of this process, the cities' health, as well, has been jeopardized to a large extent in terms of environment and population growth meaning that this stream has come about during three past centuries with an ever ascending trend. In the present era, environment pollution is currently in an unprecedented situation in the urban spots, especially in the larger cities; it is the phenomenon that per se needs more social studies as well as application of scientific and technical plans and methods and a set of techniques by which the environment can be kept healthy and clean. In other words, it is via the utilization of catalysts and various treatment instruments that the environment conditions can be corrected or controlled in the urban spots to a large extent.

Until the mid-20th century, the urbanization was in a low level. The number of the cities was also very few; this was the condition followed by a relatively healthy environment. Following the economic and industrial development inside the cities, these spots also underwent changes in physical (contextual) terms. The emergence of the industrial installations, the emergence of the motor vehicles, high consumption rates and other similar issues, each, imperiled the urban environment in its right place. In addition, despite the aforesaid cases, tendencies towards the cities and the physical expansion of them during 20th century have always been continuing; this is the phenomenon that currently needs several treatments. In order to remain successful, cities need to be changed.

This means that every successful city should be industrious in its competition and remain stable in its entrepreneurship and that is per se the process that has been recognized during several decades (Harvey, 1989).

Following the expansion of urbanization and environmental reforms, many of the agricultural lands, mines and forests were increasingly demanded and exploited. This way, the exploitation of the resources and forests, meanwhile being accompanied by economic privileges, subsequently was followed by challenges and shortcomings related to environment, destruction of the forests, excessive use of resources, depletion of resources and others of the like; these were the cases that not only made the current generations face environment-related problems but they also made the future generations encounter security breaches to a large extent in terms of natural resources. Thus, the population, social and environment planners should take futuristic measures in a coherent and integrated manner.

Until 1900, there were only 43 countries around the globe with populations above 500 thousand people and only 16 cities with 1-million population has been registered (Berry, 2013). This is while since 1900 on and with the entry into 20th century, a few numbers of the urban spots have been in a constant process of unprecedented qualitative and quantitative changes. The population propagation in a gradual manner, enlargement of the one-million people and larger cities as well as the continuous expansion of the industrial installations and their consequent actions and reactions have each added to the damages and risks stemming from the urban regions. Thus, the planning of the population, city and environment should be always placed atop of the social planning priority otherwise the environmental health would be always remaining in a critical situation.

Since 1950 on, the numbers of the cities have been constantly growing around the globe in such a way that there are currently more than 400 cities with one-million people and more populations. This means that the expansion in the industry and tech-

nology as well as following the economic expansion in the urban spots, a large number of population has always migrated from the non-urban spots to the urban spots. This way, the number of highly populated cities has undergone a constant increase during the recent decades. Such cities are more in need of transformation than retrogression and resilience (Pellig, 2011). The result of such a situation would be environmental pollution and its consequent outcomes in such cities; for instance, in the Middle East region, countries like Saudi Arabia, Egypt, Dubai and Iran are currently enumerated amongst the countries faced with the environmental crisis and the pollution resulting thereof due to the vast migrations to the urban spots. Thus, the proportion between the urban population and urban space should be always taken into consideration by the planners from the environment sociology perspectives.

Renovation and Expansion of Cities

Climatic outcomes and increase in the number and density of the cities have followed the renovation and expansion of the large cities and this has per se jeopardized the environment. Since many of the cities have currently made and are implementing the development and renewal plans, many of the regions have been destroyed following such a move and this has been accompanied by the problems related to the pollution resulting from the shortage of the green space. In the same way, following the population growth, the constraints related to water plus air have appeared in the urban spaces. Dangers and risks of this type cause the social planners to be faced with limitations and dead-ends in many of the countries as a result of which reverse migration plans have been posited in these spots, i.e. creation of motivation in the population and their return to their birthplaces. In the meanwhile and under the conditions of cities' expansion, the required infrastructures should be provided of the following types: piped water networks, sewage systems, roads, electricity, public transportation services, healthcare, emergency services and others of the like. For progress and regular movement of the aforementioned networks, the national

and technical capacities should be always taken into account (Tylor, 2012).

Developing countries that are currently in the renovation process, have urbanization expanding in them with environment destruction being increasing in them in various forms and dimensions. Since industrial and economic investment does not occur in all of the cities of the developing countries, many citizens migrate to the larger cities having more facilities in search of jobs. Such an expansion in urbanization per se leads to many of the social and environmental disorders, crimes and others of the like. Disregarding the other social and cultural outcomes that occur in this movement, environment destruction, as well, is also extensively in progress in these spots at present; this is the phenomenon influencing the lifestyle and health of the upcoming generations in a negative manner.

Therefore, environment destruction in such a third world urban communities is even more than the developed countries. Nowadays, the increase in the population, on the one hand, and shortage of the resources responding to the needs of the foresaid population, on the other hand, makes a large group choose the larger urban spots for the supply of their own needs. The foresaid process leaves irreparable effects on the environment in such a way that this impact and destruction has been estimated to be worse than the pollution and destruction in the industrial countries. The examples of such conditions can be found in countries like Egypt in Africa, UAE in Middle East, China in Asia and others of the like. While the density and concentration of population are expanding in such spots, the environmental changes are also appearing. From the anthropological perspectives, as well, there should always be brought about a sort of balance between the population and environmental facilities so that many of the natural resources can remain for the future generations.

Urban Ecology

Urban ecology includes the study of the ecosystems including the human beings' living in the cities and urban spaces. Following the high density of the pop-

ulation in urban landscape in the current era, many of the natural and ecological resources have been endangered and there are still more perils threatening them. As a result, from sociological and demographic perspectives, the balanced proportion between the human resources and environmental resources should be brought about so that the future generations could enjoy adequate health in the environments they live. By urban ecology, an interdisciplinary subject is intended, the objective of which is the recognition indicating the way that the human and ecological processes can have symbiosis in the systems dominated by the human beings. The human beings' symbiosis with the nature has currently become the hot topic in many of the scientific and academic schools. Since the various age groups have migrated within the various formats into the urban spots during the recent decades, this process has largely imbalanced the urban ecology. This is while the environment proponents substantially underline that the enjoyment of the resources should take place in a balanced and stable format; for instance, migration should not solely take place towards certain spots as a result of which irrational pressure is imposed on the resources and environment. These conditions (balance between the population and environment) per se causes resources to remain for a longer period of time for the future generations.

Urban ecology is associated with many of the scientific branches including sociology, geography, urban planning, economy, anthropology, public hygiene and others of the like. As it was mentioned before, urban ecology is an interdisciplinary subject meaning that it benefits from various scientific fields of study and depends on them. Therefore, the creation of such a communication can be followed by more accomplishments for the urban ecology. As an example, the sociological perspectives and sociological predictions as well as the studies related to urban planning and economic capacities in the intended society each contributes its share to the urban ecology or, in other words, to the standardization thereof.

Due to its interdisciplinary nature and for its specific

concentration on the human beings and natural systems, urban ecology has been frequently applied in various forms to explore the human-nature interrelationships. Meanwhile contributing to urban ecology and the human-nature interrelationships, various sciences can each make use of this relationship to strengthen its own field. Therefore, the various perspectives of the other related grounds have per se largely contributed to the stability of urban ecology. Under such conditions, the relationship between urbanization and environment can be more increasingly preserved. In order to conserve the environment, social ecologists believe in a non-centralized society wherein the citizens regulate their production and industry processes in proportion to their local resources in various urban and regional levels (Bookchin, 1990). This way, environment can be more increasingly preserved. The concentration of the industries on a region and the pressurization of the production resources in their centralized format in one or some of the spots causes more pressure to the environment, hence its more devastating destruction. Due to the same reason, many of the social ecologists believe in the non-centralized production styles, industrial exploitation, industrialization and other processes of the type with the objective being the balanced utilization of the natural resources and environment. The previously industrialized countries have commenced their movement and established their relationship with the geographical and environmental resources in this way whereas the non-industrial countries have made use of the natural resources, environment and some of their geographical spaces in a centralized manner for industrial purposes.

The theory of ecological renovation underlines environment destruction and it can be reduced or omitted through using proper technologies and limiting of the use of the other resources (Spaargarten, 1992 and Mol, 1997). Application of instruments and intermediate technologies like air refinement tools, facilities for preventing various kinds of pollutions and others of the like can play an effective role in rendering the environment healthier. Additionally, limiting of the

resource exploitation and, in a way, resource conservation in such a way that the future generations can also take advantage of them can play an effective role in rendering the environment more safe and sound. They are of the belief that the evolving institutions cause the production processes to leave lesser negative environmental outcomes through the application of advanced technologies. It is by the rational use of the required technologies as well as application of the resources within an effective and favorable format that many of the environment destruction cases and their outcomes can be prevented. The sure thing is that the production process and resource exploitation process should happen in such a way that the future generations' enjoyment of more resources can be also guaranteed.

Population and Production

To better and more understand and perceive the role of population growth, attentions should be directed at the southern (developing) countries. During the recent decades, the southern countries have been faced with high population increase rates; this is a stream in the course of which the required products, services and employment facilities have not been proportionately produced. This has resulted in many social and economic challenges including immethodical migrations, which is the phenomenon that has extensively influenced the environment. Many of the Middle East and eastern Asia's countries have encountered the aforesaid phenomenon that is in need of essential and practical solutions. During the 20th century and, particularly, since WWII on, the southern communities have experienced the largest population growth for solely two reasons, namely the food stability and improvement in the public health that has led to the reduction in mortalities. It is worth mentioning that many of these types of communities did not have food (nutrition) security before 1950. Additionally, the shortage of the healthcare and treatment services caused an ascending trend of mortality; these conditions altogether caused the population growth to remain in trivial rates. The aforementioned status had also kept the general volume of population below a

certain low limit. During the second half of the 20th century and following the infiltration of industry and technology from the industrial communities into the non-industrial countries, many of the processes related to the food security and attainment of the health-care and treatment services came about and this resulted in the unexampled population growth in these communities. The aforesaid situation has currently led to a great many of the economic, social and environmental disorders.

Urban Challenges

These challenges can be reflected in the following order:

- Cities' financial issues
- Urban cleaning
- Urban density and crowdedness
- Urban health
- Racial and ethnic urban inequalities
- Homeless urban children
- Urban homelessness
- Transportation and urban pollution
- Urban psychological health challenges
- Ascending rates of urban crimes
- Urban garbage dumping problems
- Acoustic pollution in the urban spaces

Conclusion

Such conditions have caused these communities to be transformed into young communities that are capable of growing more population in future. It means that the children generally and eventually become parents. This is while not all the children had the chance to become future parents in the past. Since more population needs more production; this inevitable phenomenon would be accompanied by full-scale environmental threats; it is also followed by the increase in population as well as the food, service and communication needs and an array of the other needs. The supply of such needs per se causes the resort to the urban spots in many of the cases leading to the population denseness in the urban spots, urban environment destruction, desertion of the villages and others of the like with each of them being in itself a threat of a type. This means that the

population increase eventually endangers the environmental health in various forms. The aforementioned phenomenon can be currently seen in many of the regions in Asia and other developing zones worldwide. Therefore, the creation of a balance between population and the resources, production or service ones, causes achievement and conservation of healthy environment.

Generally, the countries that have experienced the highest rates of economic growth during the 20th century have had the lowest rate of population growth and, accordingly, conserved and maintained their environment in various forms. The conditions that have come about for the developing countries also emerged during the first half of the 20th century in many of the developed communities. Following the balancing of the population and resources as well as the population and economic growth, the today's developed countries could largely conserve their urban spaces. As a specimen and in an objective manner, the stabilization of the population growth rate in those countries has caused the volume of the natural resources and forests to be reduced to a lesser degree and, contrarily, the residential places and production resources to be created; this is the process that per se preserves the healthiness of the urban spaces to the maximum possible extent. On the contrary and under the growing population conditions, many of the limitations related to the agricultural lands, fuels and water appear and these are, themselves, accompanied by the adverse effects pertinent to malnutrition, disease and mortality in many of the communities. Countries with high population growth rates, especially the underdeveloped communities, are faced with such cases of disproportion between the population and production resources; this is the course that finally leads to more migration, resorting to the urban spots, malnutrition of the children and more mortality, particularly in children. Many of the African countries are presently under such conditions. The aforementioned situation has brought about an even nearly four-percent urbanization growth in some of the cases on a yearly basis in some of the

African countries, which is the result of the disproportion between the population growth and agricultural resources' facilities of the land and water types. The entire foresaid stream has been accompanied by environment destruction in various forms. The testimony to this claim is many of the developing countries, including China and some other countries like Egypt, Saudi Arabia and others of the like, wherein the migration of rural and non-urban population to the urban spots have made them encounter extensive environment destruction.

Under the conditions that rapid population growth has been recognized as the substantial reason for the majority of the environmental issues and challenges, there are yet 90 million children being born around the globe annually and this mostly happens in the developing countries. This means that the large volume of the present era's born children would cause more destruction of the urban spaces in various forms in the forthcoming years. Therefore, the planning system of the countries should be always providing and recommending logical proportion between the population growth and other environmental, agricultural, occupational and other facilities.

Considering the current population growth rate, the world's population would reach a number close to 10 billion persons until 2050. On the other hand, the world's developing communities would account for 90% of the growth in the world's current population and this per se needs more attention, more investment and other considerations of the like. The large volume of the world's population till 2050 would be per se accompanied by problems related to food supply, urban population density, environment disorders, employment problems for all, more international migrations and others issues of the like. Thus, the social-economic planners in the various countries should be always paying attention to the grounds of more production, more exchanges, more purchase power, more social prosperity in macro-level as well as supply of more food in their far-sighted considerations. Otherwise, the aforesaid communities would face more contingent challenges and complexities

during the next half a century.

Moreover, based on the estimations, about 84% of the world's population would belong to the developing regions of the world until 2025 (Encarta, 2001). Thus, based on the aforementioned prediction, the developing countries should grant a faster pace to their economic development in such a way that they can remain accountable to the daily increasing needs of their citizens from various age groups and different birthplaces. On the other hand, the urbanization growth means more consumption and more demands for the various goods. Thus, the aforementioned countries should be always creating more purchase power inside their communities for their citizens. In other words, in case that the economic growth occurs disproportionately with the population growth and social-cultural changes, the society would be faced with daily increasing disorders and challenges.

The production of the highly demanded goods is per se in need of more water resulting in the production of more pollutants. Following the change in the lifestyle of the society members from various social classes, the need for consumption is increased. Any production, plant-based and others, is in need of more water. Under such circumstances, the communities, in general, and the urban communities, in specific, are faced with more water constraints. In the meanwhile, the production of the new or more products would be followed by more pollution. Therefore, the economic sector, i.e. production, distribution and consumption, should be always assessed in respect to the environment otherwise more increasingly higher pollution should be expected, particularly in the densely populated spots.

Considering their rapid urbanization growth, the developing countries are deprived of sufficient technology that can shoulder clean and fresh water production's management. Under such conditions and due to the cheap wages in the developing countries, on the one hand, and the (more) flexible environmental regulations, on the other hand, many of the western countries are currently producing their goods in the developing countries, i.e. the communities

that should tolerate more environmental pressures (Vakkilainen, 1999). This way, a large deal of the environmental pollution pertaining to the industrial communities would be transferred to the developing communities. On the other hand, the developing communities currently more inclined towards the renewal of their communities would be always seeking to change their own lifestyles; to do so, they pursue more production, manufacturing and consumption or, in other words, aim at accomplishing such goals; these constitute a set of conditions followed by the problems related to water shortage, environmental pollution, emergence of various pollutants and the subsequent loss of social and individual health.

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HOW TO CITE THIS ARTICLE

M. Taghi Sheykhi. (2019). *Increasing Environmental-Urban Challenges: Social-Anthropological Analysis*, 3(6): 21-29

DOI: <https://dx.doi.org/10.22034/SOC.2019.93873>

URL: http://soc.gpmsh.ac.ir/article_93873.html

