

Environmental Vulnerability in Developing World: A Sociological Appraisal

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Abstract

Vulnerability of environment is very likely in most developing countries. Many people join the cities due to various reasons. Droughts in rural areas, rise of literacy and education, modern skills learnt by young generations in rural areas, higher expectations of the ruralites and many more, push these people to cities where they are unexpected, creates problems and damages as far as the environment is concerned. To accommodate the people, many green spaces are vanished to build accommodations. Similarly, to make earnings, work places must be built, and for that many natural environments must be substituted by built environments. In the meantime, a lot of more transportation occupies the streets. Besides that, cities become polluted areas, and the whole life is damaged. Such a situation physically and spiritually affect the people in urban areas. However, managing different classes of people in a metropolitan is really hard to do. In this way, a sort of class gap is created and observed within the urbanites of the developing world.

Keywords: Concept of vulnerability; Socio-economic factors affecting the environment; Consequences of urban development; Environment; Sociology.

1. Introduction

In terms of sociology, environmental vulnerability is observed more than ever before in urban and rural areas. Because of increasing population in urban areas mostly followed by migration, many natural environments have transformed to built environments. Population pressure in cities has widely destroyed a large extent of green areas to build working and housing areas to meet the increasing needs of these people. As far as the rural environment is concerned, many rural people have left rural areas for cities, the remaining green areas have mostly dried out and are dead. So, because of overpopulation in many developing countries, such valuable natural assets have gone with the wind. Environmental damage is currently an apparent feature of the developing world. Such a dangerous phenomenon needs to be prioritised as much as possible. If not, the human population will highly be prone to dangers. However, it is strongly recommended that a tree needs to be planted vs every new born child. Natural environment encompasses the interaction of all living species, climate and weather and natural resources that affect human survival and economic activity (Johnson, 1997). On the other hand, built environment deals with architecture, economic development, environmental planning, health, housing, regeneration, social issues, spatial planning, urban design and transport (Official Architecture and Planning, 2020).

Many urban areas in Africa, Asia, and Latin America are facing many potential environmental damages as their populations grow rapidly, poor environmental management, and deteriorating socioeconomic conditions. Developing societies have experienced widespread migration in recent years as their population has grown. Such interactions have experienced social, economic and cultural effects, destructive effects on the environment, various types of environmental and social pollution, and the like. In other words, these types of societies are exposed to a lot of damage today compared to developed societies. One of the cases of objective damage is the disruption of environmental conditions in its various dimensions in such societies; It is a process that affects different strata. Therefore, prioritizing environmental studies can bring these communities closer to social health. Also, one of the areas that has been less addressed so far is the low and high quality of environmental vulnerability with emphasis on Third World countries. Such countries always face immigrant populations, especially in urban areas, but the necessary facilities and services are not provided in accordance with the needs. This gap between the existing conditions and the desired conditions leads to many environmental-related damages, various types of pollution, deviations and the like. Therefore, as far as sociology is concerned, this field of applied sociology should be given priority in studies and planning; In a way that future generations will have more guarantees.

2. Method of Research

Methodology used in the present article is of qualitative type. In that, various paradigms have been used to find out about the facts regarding pandemics during the history. Qualitative research usually studies people, events or areas in their natural settings. In finding facts for the research, the researcher engaged in careful data collection and thoughtful analysis of what was relevant. In the documentary research applied for the present research, printed and written materials were widely regarded. The research was performed as a qualitative library-type in which the researcher had to refer to the relevant and related sources. In the current research, various documents were thoroughly investigated, and the needful inferences were made. The data fed by the investigator in the present article is hopefully reliable. Though literature on pandemics is very limited, yet the author tried to investigate many different resources in order to elicit the necessary information to build up the text.

3. The Concept of Vulnerability

This concept, as used in the social system, is a set of conditions and processes resulting from physical, social, economic and environmental factors that raise the suspicion of a society about the effects of disorder (UN-ISDR, 2002). Vulnerability is a relative concept that refers to different contexts. A process that is not followed properly can lead to damage. In addition to its environmental consequences, migration also leads to identity change and social cohesion issues for various groups, especially young people (Vathi, 2015). For example, if a society does not generate income commensurate with population growth, it will lead to economic losses. Similarly, in a situation where manpower and productive resources are concentrated in a large area in a particular area, the possibility of environmental damage and environmental degradation is very high. Therefore, a set of measures should be used to prevent as much economic, social and environmental damage as possible. Otherwise, in addition to the current generation being affected in various ways and in a negative way, future generations will also be affected by the current situation. Therefore, from a sociological point of view, the environment should always be studied and evaluated. Since today's societies are generally moving towards dynamism, implementing appropriate plans and effective policies is inevitable.

The importance of environmental vulnerability with respect to effective planning has been raised in response to it by Sarwitz and Keykhan (2003). The environment today is at risk under the influence of many industrial, demographic, commercial and other factors. Economic and social planners have a significant role to play in controlling or increasing it. Thus, in the absence of effective and necessary policies, many harms await human societies; For example, if we sacrifice green space and forest areas for industrial space and the creation of new facilities, we have largely destroyed the environment by ourselves; It is a process that leaves many negative effects. Cases of environmental vulnerability related to social conditions should be well identified, and the potential hazards posed should be assessed. This means that effective management must be applied to it. Environmental damage is common today, especially in developing countries. Sociologists in general, and environmental sociologists in particular, have an important role to play in identifying such threats and dangers to the environment. Since countries generally implement new industrial and economic projects, the implementation of such projects generally causes environmental damage. For example, large-scale migration to urban areas and in search of work leads to many problems related to transportation, housing, population density, waste disposal system, etc., which directly affect the environment directly. It is dangerous. On the other hand, newcomers to their urban environments cause many overt and covert social harms; That is, a phenomenon that has many social effects. Therefore, Third World planners, especially in urban areas, must always keep in mind the environmental challenges.

3.1. Socio-Economic Factors Affecting the Environment

Economic and social characteristics, how the family and housing, etc. are among the factors that affect the vulnerability of the environment. The density of industries and economic resources, the increase of workers' housing around such centers, the lack of housing and infrastructure facilities, the shortages related to services and the like, all affect the environment in its place. Similarly, the emergence of marginalization in urban areas, which has its own socio-cultural characteristics, endangers social health and the environment. This is the case today in many urban areas of Bangladesh, India and other parts of the Third World, such as Brazil, South Africa and the like. Marginalization in these areas, in addition to endangering the environment, has also brought many infectious and epidemic diseases. Therefore, social and environmental planners should take measures to prevent uncontrolled migration to urban areas. Such potential environmental hazards exist not only now but also in the years to come.

Socio-economic factors affecting the environment include age structure, literacy status, employment, household size, ownership status of residence, length of stay, location characteristics and so on. Each of these factors has an impact on the quality of the environment. For example, high population growth and, consequently, the young age structure, to a large extent in a given society, affect the environment in various ways. This will cause a lot of damage to the environment, even in the coming years, when the population is already born. Therefore, the modification of the population structure that includes the mentioned variables can be effective in preserving the environment and its sanitation. Many African Third World countries, which generally face inadequate demographic structure, experience more environmental challenges and problems than others.

3.2. Consequences of Urban Development

The expansion of urban areas and the emergence of migrant and marginalized populations themselves lead to many cases of environmental pollution. This phenomenon is seen today in many major cities in third world

countries. For example, cities such as Mumbai and Calcutta in India, Jakarta in Indonesia, and many other immigrant cities in Third World countries have given rise to marginalization; That is, what gradually threatens social health in non-standard living conditions adds to environmental pollution, and the effects of such a phenomenon gradually permeate the rest of a city in a negative way. For example, many cases of infectious diseases, such as AIDS and other diseases caused by marginalized areas, have spread to different parts of Mumbai, India, and in addition to causing individual problems, environmental problems also follow had.

Urban growth generally leads to environmental degradation, and this has been proven in many cities of developing societies (Chokor, 1986). Urbanization, which is the result of widespread migration to urban areas, has a high density, resulting in the destruction of many natural resources and subsequent conversion into industrial workshops and residential areas. On the other hand, because many new settlements in urban areas with rural backgrounds settle in these areas, there are many instances of cultural conflicts, incompatibility with the environment and the like, which in turn ultimately lead to environmental degradation. Becomes. Many Third World societies today face this phenomenon, and it itself requires basic information and constant monitoring.

Because new citizens do not conform to the new socio-cultural norms and norms, any environmental degradation by them is possible. This means that new immigrants to urban areas cannot easily accept the cultural norms and standards of the new areas, or adapt to the new urban norms in the short term. This causes the environment to be disturbed in such dimensions in different dimensions. At the same time, many developing cities are experiencing the phenomenon of slums and slums; That is, the places where new immigrants settle. Living on the sidelines, in other words, pursuing substandard life, endangers the health of the environment in various forms. This means that social health is also endangered by such citizens. Therefore, city officials and macro-social planners should always monitor urban spaces in a forward-looking manner. In this way, while environmental and social health can be established for the current generation, more guarantees can be created for future generations. Urban development, coupled with inefficient urban planning, is itself seen as a factor influencing the potential vulnerability of urban areas in many cities in developing societies (Chakraborty *et al.*, 2005).

One of the challenges facing developing communities is inefficient planning in such urban areas; That is, a situation that itself has potential damages to such points. Many cities in Asia, Africa and South America today face this phenomenon. At the same time, and because development in Third World countries is not balanced, many disadvantaged citizens migrate to other developed areas; It is a process that itself causes many social and environmental harms.

Therefore, the demographic characteristics of citizens are very effective in destroying the environment of their urban areas. High population density in urban areas, urban sprawl, slums and non-standard residential areas, each play a role in environmental degradation in urban areas. Developing countries and societies, which themselves are facing a constant flow of migration from rural to urban areas, are always faced with a destructive environment. In other words, the lack of income among marginalized people somehow forces them to underestimate ecological standards and criteria and what is related to environmental health. In many Third World countries, forest areas have been degraded in various ways, and consequently forest products are used directly to support the livelihoods and housing of many citizens; That is, what objectively destroys the environment.

The likelihood of urban centers in less developed communities following natural disasters and in conditions of poor infrastructure is much higher than cities in developed communities (World Bank IEG, 2007). A clear example of this claim is the situation in Japan after the 2011 tsunami. Although this phenomenon occurred unintentionally and as a kind of natural disaster, but its destructive effects were largely corrected and controlled in a short time. However, this current, if it happened within the Third World, must have very destructive and incurable consequences. Therefore, less developed countries are more vulnerable to natural disasters than industrialized countries. What is certain is that, as far as environmental protection is concerned, less developed countries should also draw on the experiences of industrialized countries.

Rapid urban growth, uneven and planned urban development, and the changing appearance of cities in developing societies, especially in the cities of the African region, have themselves provided many conditions for environmental degradation within these cities. General poverty in Third World countries has led to such countries unintentionally and unplannedly facing resource constraints and the phenomenon of rapid urbanization. This situation provides the basis for environmental degradation in such countries; It is a phenomenon that confronts not only the present generation, but also future generations with insecurity and many individual and environmental anomalies.

Dilapidated texture, deteriorating quality of buildings, and inadequate infrastructure in such cities increase urban vulnerability (Romero Lankao and Qin, 2011). Urban areas, due to the increase in their population and also following the development of industry and trade in such cities, should always consider their context in terms of construction, housing and observance of safety and environmental health. Many cities in developing societies today face some kind of dilapidated tissue problem; That is, conditions in which urban areas have traditionally been designed and built for half a century ago. Today, however, the population of such cities has more than quadrupled, and the infrastructure facilities do not meet the growing needs of citizens. In this movement, the health of the environment is exposed to destruction and threat in various forms.

Therefore, many cities in Africa and Asia need to be redesigned and rebuilt according to their current conditions; To be more safe against natural disasters such as storms, floods, earthquakes and the like. Therefore, such communities need more capital, sufficient skills and the transformation of old tissue into advanced and new tissue, so that individual and environmental health is ensured as much as possible. Therefore, the regions of Asia and Africa in the coming years need to invest more and more in these areas. Providing the required material capital is

possible through the production of wealth and industrialization. Unfavorable environmental conditions, along with increasing social vulnerability, themselves cause many natural disasters in different parts of the world (Parry, 2007). Therefore, less developed countries and societies are not only at risk of endangering their environment, but also many social harms await such societies. For example, the mismatch between manpower and employment status leads to widespread unemployment in such societies, which results in many social deviations and harms.

Therefore, urban environments need location-based research to be able to gain a proper understanding of the factors and processes that affect vulnerability (Simon, 2010). Urban spaces in such communities should always be studied in its various dimensions. Therefore, achieving healthy urban spaces or healthy cities requires location-based research.

This simply means that the size, characteristics, effects, and changes of the city are vastly changing from place to place, and over time, even in one place. Therefore, less developed countries should distribute their development, economic and industrial facilities fairly in all cities. In this way, from many pressures; That is, pressures from industry, transportation, pollutants, and the like can be prevented. This causes the capacities and resources to be used to the desired extent in these urban areas.

Following the growth of urbanization and climate change, the interaction between urban planning and disaster risks has become increasingly important. What is certain is that the roots of urbanization have always been growing in recent years, especially in developing countries. This has led to many social hazards such as storms, floods, tsunamis and sometimes tsunamis and earthquakes, exposing such areas of cities more than other places to various threats and dangers. While natural disasters are unpredictable and almost uncontrollable, poor urban planning has objectively made cities in developing countries vulnerable to various forms. Injuries such as environmental pollution, many social harms, injuries caused by transportation and the like, which itself puts deep psychological pressure on citizens. Each of these cases in the present industrial-urban age requires special planning and case investment; Otherwise, future generations will always face challenges and problems. One of the ways to prevent this type of problem is to make policies, proper population planning and prevent irregular migration, and in return to encourage migration from village to village.

3.3. Environment

The environment, or in other words, the sociology of the environment, studies human interactions and their relationship with the environment. As geographical spaces have been constantly changing and expanding during the second half of the twentieth century, this has led to extensive communication and interaction. Transportation, more industrial products, establishment of industrial workshops and centers, transfers of manufactured products, etc., each in its own way has an impact on natural resources and the environment. Therefore, studying the environment from a sociological point of view and adopting appropriate policies can help preserve the environment and the optimal use of resources; Otherwise, societies, especially developing countries, which generally face increasing population, changing patterns and lifestyles, will face more problems and shortcomings. Using the plans and experiences of other countries in the field of environmental protection, themselves create more guarantees even for future generations.

The human dimension of environmental issues, the social effects of such issues and the effort to solve them are themselves on the agenda of the environment. The changing and dynamic societies of the present age leave behind many environmental complexities and social effects that themselves require appropriate solutions, effective plans and sufficient investment. Therefore, achieving more income, as well as sufficient financial strength to protect the environment and natural resources, is of considerable importance. Therefore, the optimal use of human resources, material resources and natural resources, as well as the establishment of a link between the various productive and economic sectors, itself helps to solve environmental problems, as well as the preservation of natural resources.

Environmental sociology deals with the multiple analysis of the environment from global to local and individual. Therefore, while the health of the environment affects each individual in a society, at the same time and at higher levels, it can affect different regions and ultimately in a global environment. For example, economic poverty in an area, while affecting people, leads to large-scale migration; In such a way that the target points are also affected in terms of environment and population density.

Humans have caused changes in the atmosphere (space), rivers, lakes, oceans, and even grasses, the earth (soil). With the expansion of industry and technology, as well as the concentration of humans in urban areas, coastal areas and the like, many natural spaces have been threatened. In Africa, for example, many citizens of different countries travel to coastal cities to enjoy greater food security; It means relying on marine products and resources. In contrast, they have caused widespread pollution of coastal areas, which itself requires effective monitoring and investment.

Many living species are also extinct or endangered because they cannot adapt quickly to the conditions. Plant species and the like have been destroyed by environmental, chemical, various types of noise pollution, etc., or have lost a significant portion of their vital capacity. Therefore, in order to protect the environment, different organizations and devices should be trained in a coordinated manner, and ultimately prevent the spread of environmental degradation. Environmental change is important because it affects living things. In other words, saving the environment does not simply mean that man must abandon new technologies, but that man must learn how to live within the cycles of nature. Adequate training, supervision, investment, and overall proper planning can, while providing industry and technology advancement, also preserve the environment. Governments and planning systems have begun to adopt ways to keep the industrial, economic, and technological cycles up-to-date and active while preserving the environment. In this way, environmental vulnerability can be prevented, especially in third world countries. At the same time, while many farmers, especially in Third World societies, have to spend a large

portion of their income on pesticides and the like, this trend has led many such small-scale farmers to suffer losses. On them to lose their lands (Bell, 1998).

4. Conclusion

It is to be kept in mind that currently environment is very vulnerable due to different reasons in developing world. Many developing countries are facing high child birth rate, and increasing young population in rural areas. Such people migrate to cities including environmental ones. Many green environments are destroyed to settle these people in new places. Housing and work places for such people need lands to build up accommodations and work sites. Such a process destroys lots of green environments. Similarly, the crowded cities create air pollution, traffic jams, shortage of water and many more. Socio-economically, the created atmosphere destroys the environment in different forms including class differences, increasing prices/ inflation, etc. However, many more unpredicted issues and damages arise out of the created situation.

References

- Bell, M. M. (1998). *An invitation to environmental sociology*. Pine Forge: Thousand Oak, CA.
- Chakraborty, J., Tobin, G. A. and Montz, B. E. (2005). population evacuation: assessing spatial variability to natural hazards. *Natural Hazards Review*, 6(1): 23-33.
- Chokor, B. A. (1986). *City profile*. Ibadan. 3: 106-16.
- Johnson, D. L. (1997). Meaning of environmental terms. *Journal of Environmental Quality*, 26(3): 581-89.
- Official Architecture and Planning (2020). Jstor. Org.
- Parry, M. L. (2007). *Climate change impacts, adaptation and vulnerability. Contribution of working group ii to the fourth assessment report of the intergovernmental panel on climate change*. Cambridge University Press: Cambridge.
- Romero Lankao, P. and Qin, H. (2011). Conceptualizing urban vulnerability to global climate change. *Current Environmental Sustainability*, 3(3): 142-49.
- Sarwitz, D. R. P. and Keykhan, M. (2003). Vulnerability and risk: Some thoughts from a political and policy perspective. *Risk Analysis*, 23(4): 805-10.
- Simon, D. (2010). The challenges of global environmental change for Urban Africa. *Urban Forum*, 21: 235-48. Available: <https://link.springer.com/article/10.1007/s12132-010-9093-6>
- UN-ISDR (2002). Disaster reduction and sustainable development: Understanding the links between vulnerability and risk related to development and environment, background document for the world summit on sustainable development.
- Vathi, Z. (2015). *Migrating and settling in a mobile world*. Springer: Dordrecht.
- World Bank IEG (2007). Disasters, climate change and economic development in sub-saharan Africa: Lessons and future direction. *Environmental Studies*, 66(5): 643-58.