

Environmental degradation: causes and effects



Introduction

Thesis statement and Purpose statement

Nowadays, the development of urbanization, which causes concentrated human population and habitat in small areas, has occurred at a very quick pace. Urban standard of living has risen roughly on the basis of technical innovations and changes in social structure. However, at the same time, there is a widespread concern about unsustainable city development and infrastructure due to the inequality between the progress and the environmental threat (Boyce, 1994, 18). The economic development brings both prosperity for people and damage to the environment, which includes air, water and soil pollution. Lovejoy (1993, p. 125) argued this common occurrence is rampantly increasing all over the world, particular in developing countries. With limited time and resources, this paper will explore some common features of urban environmental degradation based on the author's experiences and geographical perspectives of Vietnam.

The aim of this paper is to identify what urban environmental degradation is, and then understand the reasons and effects of this issue. From this basis, the research will refer to some assumptions and implications of other authors' work and examples before suggesting some possible solutions to ensure the sustainability for new urban developments as well as the environment.

Definition of urban environmental degradation

Recognition of an environmental degradation is essential for the management of urban environment. Hackett (1993, pg. 116) writes that <https://assignbuster.com/environmental-degradation-causes-and-effects/>

urban degradation is a result of the rapid growth in urban population and industrialization which causes many negative impacts on the urban landscapes and living quality of cities, such as poor quality housing, inadequate infrastructure and industrial pollution. Simultaneously, some factors seriously affect the environment as well as the balance of nature.

According to Bolay et al. (1997, p. 185), urban environmental problems such as air and water pollution and solid wastes are becoming more serious in developing countries, and Vietnam in particular. Most cities in Vietnam have a high level of population density compared to other countries in the world. There are, for example, more than 23, 000 inhabitants per square kilometers in Ho Chi Minh City (HCMC). The shortage of infrastructure and urban services in those cities has become alarming, which has led to the city amenities not being able to meet the enormous population demand (Bolay et al. (1997, p. 189)). Therefore, pollution of surface and underground water, soil and air by households and production has increased roughly these days. It is expected that the Government would take immediate measures in this issue by identifying and suggesting possible solutions to reduce these effects in order to improve the quality of the urban environmental.

As can be seen in the Figure 1, urbanized area in HCMC has been expanding rapidly in the past five years. The population has roughly increased in the fringe areas of HCMC, while decreased in the city center (particular in District 1, 3 – the centre Business district (CBD)) from 1999. This partly reflects the changes in the land prices. Higher land prices in the city center are affecting population decrease in that area and population increase in suburban areas. Besides, we can predict that the housing development of HCMC would

increase in the West and Northwest directions and start occurring in East and South directions in the next ten years.

Problem analysis

Urbanization causes an overload on infrastructure, particularly in road network, water supply systems and drainage. As Lovejoy (1993, p. 126) referred, the sudden increase in population puts the city under pressure of basic infrastructure demand. There are many requirements for the expanding urban areas, rising food, water and infrastructure quality as well as offering more jobs. To cater for these demands, industrial companies have to increase products and exploit resources as fully as possible. This creates many environmental problems because the natural resources and urban amenities are limited (Satterthwaite, 2009, p. 546).

The major problem of urban degradation is air and water pollution. In urbanized cities, air and water pollution is mainly emitted through industrial activities, especially from the production of electricity generated by fossil fuels. Transportation, households, hospitals, laboratories and pesticide used for crops are also responsible for the release of these pollutants into the environment (Satterthwaite, 2009, p. 546-547). Consequently, this dumping of dangerous waste on open sites produces poisoned air and water probably makes people living around the site suffer from diseases simultaneously increasing the incidence of allergies and other symptoms.

In HCMC, due to the progress of urbanization, the quality of air and water gradually decrease these years. It can be seen from Figure 2, since 2003, the index of air pollutions has dropped dramatically and the water quality has

been below the standard of Vietnam (TCVN). Especially, because the city residents are accustomed to using motorbike, the emissions from motor vehicles contribute high concentrations of air pollutants and smoke.

Therefore, pollutions from traffic congestion are becoming one of the most serious environmental issues in HCMC.

In addition, urbanization causes population density and increases the demands on urban amenities. Lovejoy (1993, p. 124) states most new dwelling places have no civic facilities, such as water supply, drainage, roads ... People living in these places discharge rubbish and dirty water directly to channels and rivers as they used to in rural areas. This condition leads to establish the new slums with many environmental and social problems.

There are two basic reasons for the disordered urbanization for the past few years which involve the roles of local Government and residents. The first reason is the lack of specific urban planning. The urban planning management is rather passive and mainly depends on experiences (Lovejoy, 1993, p. 124). In many countries, local governments do not know exactly what the function of a specific land will be and how to control this issue effectively. Investor demands hardly meet government approval, and even worse, several projects have not been able to persuade local residents to accept and be carried out (Satterthwaite, 2009, p. 559). The other factor is the awareness of community about environment problems. Majority of residents are just aware of the visual environmental problems in short-term such as noise pollutions and smoke while the solid wastes and underground water pollutions are actually the elements destroying the natural systems in long-term. As a result, it is necessary to establish more and more education

programs for citizens in attempt to rise the understanding of community in the quality of urban environment (Bolay et al. (1997, p. 192).

Solutions:

In my point of view, to improve the living quality and solve the environmental degradation, the government should establish a comprehensive planning system which includes socio-economic development plan, urban construction plan and land use plan. Planning should regulate where it is appropriate to have certain functions located, where it is necessary to have waste disposal sites or green areas and where is suitable to build industrial zones ... Besides, urban planning should take into account many other factors such as infrastructure and relevant works, making it favorable for development of an area where urbanization is taking place. As an illustration, Figure 3 shows an example of land use plan which respects the natural principles and probably leads to a sustainable development area.

An establishment of laws, regulations and guidelines is also necessary in implementation of the Urban Master plans in each level, such as General plans and Detailed plans. For example, policy makers should establish specific socio-economic characteristics in each local area in order to make new and specific policies for urbanizing areas, which should be different from policies for districts already urbanized. Besides, apply indirect tools such as economic measures, including penalties that a production or company have to pay whenever it causes pollution, is also useful in avoiding the increase of urban environmental degradation.

Conclusions

Urbanization has clearly caused impacts on the city economic structure, especially in urbanized areas. There are positive changes in many social aspects. There is also environmental deterioration and pollution. If people are not noticed and properly solved, this issue will result in extremely consequences and cause negative impacts on the city's urban sustainable development.

References

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