

ECOLOGY AND URBAN PLANNING

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Summary. *The importance of the urban planner is growing fast in the 21st century, as modern society begins to face issues of increased population growth, climate change and unsustainable development. An urban planner could be considered a green collar professional. The purpose of a professional in the field of urban planning is to optimize the effectiveness of a community's land use and infrastructure. They formulate plans for the development and management of urban and suburban areas on the base of sustainable development trends. The ecological problem associated with urbanization is polluted environment. Over 150 big cities in the world with population from 1 to 15 million suffer from polluted environment. The basic threats are poor air and water quality, insufficient water availability, waste-disposal problems, and high energy consumption which are exacerbated by the increasing population density. The most used methods to avoid threats are promotion of sustainable development, efficient utilization of raw materials, production and conservation of renewable fuel and clean energy (as solar, wind and geothermal energies).*

Key words: *Urban planner; Technical aspects of urban planning; Ecological problems; Urban Climate; Threats; Sustainable development; Solutions.*

Introduction

Urban planning is a technical and political process concerned with the development and design of land use and the built environment. It is influenced by the newly disciplines of architecture and civil engineering, approaches to solving city problems through physical design. Urban planning is considered an interdisciplinary field that includes social, engineering and design sciences. It is closely related to the field of urban design and some urban planners provide designs for streets, parks, buildings and other urban areas.

An urban planner is a professional who works in the field of urban planning for the purpose of optimizing the effectiveness of a community's land use and infrastructure. They formulate plans for the development and management of urban and suburban areas, typically analyzing land use compatibility as well as economic, environmental and social trends. In developing any plan for a community (whether commercial, residential, agricultural, natural or recreational), urban planners must consider a wide array of issues including sustainability, existing and potential pollution, transport, crime, land values, economic development, social equity, zoning codes, and other legislation.

Urban planners work with the cognate fields of architecture, landscape architecture, civil engineering, and public administration to achieve strategic, policy and sustainability goals.

Urban planning is a separate, independent professional discipline. Technical aspects of urban planning involve the applying scientific, technical processes, considerations and features that are involved in planning for land use, urban design, natural resources, transportation, and infrastructure. Urban planning includes techniques such as: predicting population growth, zoning, geographic mapping and analysis, analyzing space, surveying the water supply, identifying transportation patterns, recognizing food supply demands, allocating healthcare and social services, and analyzing the impact of land use.

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Threats

The ecological problem associated with urbanization is polluted environment. Over 150 big cities in the world with population from 1 to 15 million suffer from polluted environment. The basic threats are poor air and water quality, insufficient water availability, waste-disposal problems, and high energy consumption which are exacerbated by the increasing population density.

Air Pollution developed because of automobile exhaust and suspended particulates from motor vehicle fuel combustion. Soot, dust, lead and smoke make up the particulates. The lead alone can cause brain damage, learning disabilities and premature death. The World Health Organization stated suspended particulate concentration should add up to less than 90 micrograms per cubic meter.

Another relevant problem is threatened biodiversity. City growth destroys natural areas flowing with new and endangered animal and plant life. No matter how small, each species plays an important role in how the Earth works. Biodiversity protects water and soil from contamination, stores and recycles nutrients, breaks down, absorbs pollutants and helps areas to recover faster from disasters. Biodiversity also provides people with medicine, food and clean air. Uncontrolled urbanization limits our access to these resources.

As a result of poor air and water quality humans suffer, come out more and more new disease. Technological progress has led to reduced physical activity and healthy nutrition, which are the reasons of heart diseases. And the radiation received from the use of a huge number of gadgets and devices became a trigger for the cancer. Another urbanization-related threat is infections. Air distributes carries bacteria and viruses from one country to another. Therefore, people relocating from rural areas are not immune to the same diseases as long-time city residents.

Solutions

Nowadays urban planners stop threats using a lot of solutions plant trees and incorporate the care of city green spaces. For reducing air pollution by upgrading energy is necessary to use and alternative transport systems like electrically powered cars. Encourage public transport such as trams and tubes. Another way is to encourage cycling by setting up integrated cycle paths throughout an urban area so everything is easily accessible by bike. Also setting up bike racks outside places such as shopping centers and bus stations as well as allowing bikes to be carried on buses for free. These measures have been introduced in Glasgow very successfully.

One of the most effectual way to increase urbanization rate in rural areas is to make the economy fully viable. Economies must be revitalized if government undertakes huge rural development program. It is suggested that surplus manpower must be absorbed in village in order to migrate to urban areas. It is necessary to implement resilient clean-up and ecological education campaign. The dwellers should be briefed about zero waste lifestyle, composting, permaculture and waste segregation.

Also there are a number of ways to reduce the amount of litter in urban areas. Create private-public partnerships to provide services such as waste disposal and housing, which collect litter more frequently. There should be plenty of bins around an urban area so that no one has an excuse to litter. An alternative to deter people from littering is introducing high littering charges which will make people think twice about casually littering.

Conclusion

The goal of urban planning is to fulfill all the human demands sustainable, to develop cities ensuring basic amenities for healthy living and financial growth of country, to leave our planet unharmed.

An innovation in urban construction is green building, the aim of which is to create environmentally responsible and resource-efficient structures to reduce their carbon footprint.

But the most used methods to avoid threats are promotion of sustainable development, efficient utilization of raw materials, production and conservation of renewable fuel and clean energy (as solar, wind and geothermal energies).

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