

Importance of Vegetation in Urban Environment

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Abstract- As we generally know that plants and vegetations are very useful for variety of way to human life. It is also useful for maintaining the environmental balance. But in modern times when the rate of urbanization is phenomenal mainly in developing countries the adverse effect of city life are clearly noticed. Very few cities are well planned; otherwise most of urban areas are crowded, polluted and compact. Many experts, planners recommend the green belts and green areas in cities. City life is full of tension. It affects mental health through the influence of the increase stressors and factors such as overcrowded and polluted environment, high levels of violence, and reduced social support. Plants, woodland, lawns are reported as the most desired environment for relaxing and recovering from stress and sustain mental efforts.

Present theoretical paper deals with the concept of urbanization, mental disorders dew to urban environment, importance of plants, trees, and forest in urban landscape.

Index Terms- Urbanization, Urban area, mental health, importance of forest

I. INTRODUCTION

UNO defines health as "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."(WHO)¹⁴ now a days the proportion of mental health problems is increasing at an alarming rate in comparison to the physical health problems. Studies made by the World Bank and WHO in 2005, reported that mental health disorders contribute about 10% of global disease burden and that this proportion would increase to 15% in 2020. This is mainly seen in urban areas. An urban area is characterized by higher [population density](#) and vast human features in comparison to areas surrounding it. Urban areas may be [cities](#), [towns](#) or [conurbations](#).(Wikipedia)⁸ The presence of urban trees and forests can make the urban environment a more pleasant place to live, work and spent leisure time.(John F. Dwyer et.al.)⁹ Trees and forests contribute positively to increase the quality of life, especially in urban areas. So in this paper an attempt has been made to discuss why the mental problems arise in urban areas and the role of forest and trees in solving them.

II. MATERIALS AND METHODS

This conceptual research paper is mainly based on the secondary sources of data. Research articles and different web sites were widely used for establishing the facts of growing importance of forests and tree cover in urban areas.

III. AIMS & OBJECTIVES

1. To understand the types of psychological / mental problems in urban areas.
2. To find out the importance of forests and tree cover in promoting the mental health in urban areas.

IV. DISCUSSION

The importance of forests is different in rural areas as compared to the urban areas. In rural areas the major advantages of forests are as follows.....

1. Protecting the crops from wind
2. Controlling soil erosion
3. Creating diverse plant and animal habitat
4. Increasing the ground water level
5. Increasing the humus in the soil.

According to the census of India 2011, the urban area is recognized by the following criteria....

- A. All places with a municipality, corporation, cantonment board or notified town area committee, etc.
- B. All other places which satisfied the following criteria:
 - i. A minimum population of 5,000;
 - ii. At least 75% of the male main working population engaged in non-agricultural pursuits;
 - iii. A density of population of at least 400 persons per sq. km.

The urban life is full of rush, tension, competition, pressure, insecurity, isolation and impure environment. This can lead to many diseases. Disturbance in mental health is the major characteristic of city life. Mental health describes a level of psychological [well-being](#), or an absence of a [mental disorder](#). From the perspective of '[positive psychology](#)' or '[holism](#)', mental health may include an individual's ability to enjoy life, and create a balance between life activities and efforts to achieve [psychological resilience](#).([About.com](#))¹ Whereas The [World Health Organization](#) defines mental health as "a state of [well-being](#) in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." (WHO)¹³

If the mental health disturbs, it can cause diseases like anxiety, depression, schizophrenia etc. In the British daily tabloid news paper, **Daily Mail** (June 23, 2011) David Derbyshire explained how the living in urban areas is stressful and makes people vulnerable to depression. He stated that, "Scientists have confirmed what every urbanite has long suspected – life in the

city is more stressful. Researchers have shown that the parts of the brain dealing with stress and emotion are affected by living among the crowds. The findings help shed light on why those who are born and raised in urban areas are more likely to suffer from anxiety, depression and schizophrenia than those brought up in the countryside. Past studies have shown that exposure to green space reduces stress, boosts health and makes us less vulnerable to depression. The findings come from the brain scans of 32 healthy volunteers from urban and rural areas.”

Dr Jens Pruessner of the Douglas Mental Health University Institute in Quebec, who helped carry out the study, said: ‘Previous findings have shown that the risk for anxiety disorders is 21 per cent higher for people from the city, who also have a 39 per cent increase for mood disorders.

‘In addition, the incidence of schizophrenia is almost doubled for individuals born and brought up in cities. (<http://www.dailymail.co>)⁷

Some other researches showed that, the part of the human brain which is involved in mood and emotion was more active in people living in cities. The researchers are unable to find the answer as to why the city life affects the regions of the brain that handles stress. It may be pollution, toxins, crowding or noise. Few studies also showed that the exposure to greenery or forest environment soothes frayed nerves and improves well-being. Even the access of five minutes to forest area reduces the stress. People living in countryside are less likely to have heart disease or heart attacks. According to psychologists human brain has still not developed to cope with the sudden changes that have taken place in last couple of centuries. Every new or strange thing adds to the stress. Human beings have spent many thousands of years adapting to natural environments, yet have only inhabited urban ones for relatively few generations. ([Glendinning 1995](#); [Roszak et al., 1995](#); ⁵ [Suzuki 1997](#); ¹² [Gullone 2000](#))⁶.

Whilst modern ‘westernization’ has doubled our life expectancy, it has also created disparities between ancient and present ways of living that may have paved the way for the emergence of new serious diseases. ‘As more people survive to older age, and as patterns of living, consuming and environmental exposures change, so non-communicable diseases such as coronary heart disease, diabetes and cancer have come to dominate’ [[McMichael, 2001](#) (p. 2)].¹¹ Further, mental, behavioural and social health problems are seen to be increasing health burden in all parts of the world ([Desjarlais et al., 1995](#)).⁴ In the last few hundred years, there has been an extraordinary disengagement of humans from the natural environment ([Axelrod and Suedfeld, 1995](#);² [Beck and Katcher, 1996](#); ³ [Katcher and Beck, 1987](#))¹⁰. This is mostly due to the enormous shift of people away from rural areas into cities ([Katcher and Beck, 1987](#))¹⁰

V. CONCLUSION

It is found that green patches, plants, trees can have positive effect on wellbeing of urban population. People were psychologically benefited by just viewing water bodies or greenery. Forest and Greenland in urban landscape reduces the negative effects of daily stresses.

VI. RECOMMENDATIONS

1. Establishment of Urban Biosphere Reserves through urban planning and ecosystem management.
2. Contact with nature in an urban park environment may be experienced via various means, including viewing natural scenes, being in natural settings, encountering plants and animals, participating in recreational activities, undertaking environmental conservation work, and participating in nature-based therapy programmes, amongst urban population.
3. Improve the designs of building with more windows, open spaces and more exposure to greenery etc.
4. The surroundings of community places, offices, schools and colleges, hospitals should have more greenery and open spaces.
5. Encouragement to eco tourism, agro tourism etc.
6. Create awareness among urban population about the importance of trees, forests and exposure to green spaces with reference to positive mental health.

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