

Green Areas: A Source of Healthy Environment for People and Value Addition to Property

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ABSTRACT

A study was conducted to assess the changing requirements and respondents perception about the development of green belts and their socio-environmental and health benefits. The data were collected through field surveys from the people visiting Jaranwala road green belt and the donors who contributed to the development of this belt. Variables like role of greenbelt for the social and economic uplift of local community and adjoining area, nature of plantation and facilities, and other variables which promote healthy living have been explored in the study. For this purpose, an interviewing schedule was prepared. The study revealed that development, care and management of green areas were linked with health, environmental, social and economic benefits. Respondents preferred the presence of evergreen plants and grass lawns and absence of dense shaded and big trees in green areas.

Key Words: Green areas; Health; Environment

INTRODUCTION

Healthy survival of human beings depends on the quality of physical environment. A change in physical environment brings changes in social, cultural and biological environment. Green spaces provide a pleasant atmosphere to the citizen to escape momentarily from machines, noise and drudgery to work. Greenery attracts rains, absorbs the summer heat, adds oxygen to air, prevents pollution and save soil erosion. The importance of green areas is gaining greater importance day by day especially due to the rapid urbanization resulting in environmental degradation. Rapid urbanization in the developing world would increasingly concentrate population and economic growth in cities, intensifying the problems of the urban environment (Patrick, 1996).

Social scientists around the globe, especially the activists working for the improvement of natural and social environment are struggling to raise awareness among people about the dangerous effects of polluting environment. In public and private sector, town planners and city dwellers are now paying greater attention to allocate more space for green areas in cities and towns. Browne (1992) identified the significance of open spaces for protecting environment. He viewed that at least 20% of city area as an open space was needed for the development of green belts, parks, playgrounds etc. Moscow inhabitants were provided with 18 m² of plantation per person, which fell far short of the normative level of 24 m² per person (Ilna, 1998).

Green belts within city and green areas along the countryside yield multiple benefits for all aspects of human life. Man's contact with nature results in many personal social and health benefits (William & Jones, 1990). Plants serve as a filter for reducing pollutants from air, enhance the level of oxygen, reduce magnitude of carbon dioxide, improve the environment and beautify the landscape. Green belts and areas

moderate the temperature, serve as a protective covering against the scorching heating of the sun and also as a barrier to wind storms and floods. Greenery enhances the beauty and attraction and influences the human attitude and behavior. Human mood and quality of their experience were influenced by contact with plants, animals and other elements of nature (Robinson, 1992). Life could be made more bearable through widespread tree plantation which traps dust and effectively reduces atmospheric pollution by absorbing sulfur dioxide and nitrogen dioxide (Wachtel, 1996).

Green belts not only influence human behavior and brush up human intelligence through the provision of beautiful landscape and healthy atmosphere but also add physiological, psychological, and economic benefits for both living and non-living things (Ali, 2000). In the presence of greenbelts the aggregate value for neighborhood property was approximately \$ 24 million higher than it would have been in the absence of greenbelts (Randrup, 1998).

This study was conducted at Jaranwala road, Faisalabad to ascertain all the social, economic and environmental benefits associated with the green belts in the vicinity of that area, and it would be helpful for the future planning and development of the urban areas.

METHODOLOGY

The study was based on primary data, collected through field survey. The universe of the study comprised of 2 km long green space along Jaranwala road in Faisalabad. The respondents comprised of the people visiting the green belt and the investors who contributed to the development of this green area. A pre-designed structural questionnaire was used to elicit required information. Simple random sampling technique was employed to select the respondents. Data were collected twice a day i.e. morning and evening from 112 visitors and 12

investors. Descriptive and inferential statistics were employed for reaching at conclusion.

RESULTS AND DISCUSSION

Socio-economic characteristics. Socio-economic characteristics such as age of the respondents, education and occupation play vital role in framing human attitude towards the realities of life. Perceptions and opinions of young people are quite different from people in other age group and vice versa. Similarly, the role of education and occupation is well accepted in all the spheres of life. Table I presents the socio-economic characteristics of the respondents. The studies revealed that majority (44%) of the respondents were in the age group of 20-30 years while 33% were in the age group of 30 years and more. As regards educational attainments, 71% were with matric and above level of education, 15% under matric and 14% illiterate.

Table I. Socio-economic characteristics of the respondents

Characteristics/category	Number of respondents (%)
Age of respondents (years)	
Less than 20	23(26)
20 – 30	44(49)
More than 30	33(37)
Total	100(112)
Education	
Illiterate	14 (16)
Under Matric	15(17)
Matric and above	71(79)
Total	100(112)
Sex	
Male	79.4(89)
Female	20.6(23)
Total	100.0(112)
Occupation	
Unemployed	14(16)
Government employee	13(15)
Business	11(12)
Labour	37(41)
House wife	08(09)
Student	17(19)
Total	100(112)

The distribution of respondents according to sex indicates that 79.4 were males while the remaining were females. Similarly, they belonged to a variety of professions such as government service, business, labour, household and students with representation of 13, 11, 37, 8 and 17%, respectively, while 14% of the total sample was unemployed. This indicates that most of the respondents were young, well educated and employed. This may be due to the good network of public and private schools, presence of Agriculture University and industrial growth in Faisalabad.

Health, environmental, social and economic aspects of greenbelt development. Urbanization destroys natural vegetation and the beautiful landscape. The importance of green areas in improving quality of the urban environment has

been recognized as a key to the ecological, economic and local reconstruction and development of cities. Man contact with nature extends a range of economic, social, environmental and health giving benefits. Table II presents a similar type of respondent's perception about the various beneficial aspects of green spaces on human life. Majority of the respondents viewed that greenbelts extend a range of health related benefits. The results indicate that 69 and 58% of the respondent reported that the green belts promoted healthy activities and improvement in quality of life. Similarly, a vast majority i.e., 81 to 97% viewed a number of benefits of the green belts such as mental relaxation, freshness, early recovery from illness, reduced risk of diseases and extended opportunities for jogging and walking.

Table II. Opinion of the respondents regarding various aspects of greenbelt on healthy living

Aspects improved	Yes	No
	% (No.)	% (No.)
Health Aspects		
Promoting healthy activities	68.8 (77)	31.3 (35)
Improvement in quality of life	58.0 (65)	42.0 (47)
Mental relaxation	81.2 (91)	18.8 (21)
People feel fresh	80.4 (90)	19.6 (22)
Early recovery from illness	94.7 (116)	5.3 (06)
Opportunity for jogging	89.3 (110)	10.7 (12)
Reduce the risk of diseases	97.4 (119)	2.6 (03)
Environmental Aspects		
Minimizing pollution	83.0 (93)	17.0 (19)
Increasing greenery	81.3 (91)	18.8 (21)
Improving shades	59.8 (67)	40.2 (45)
Trap smoke	97.4 (119)	2.6 (03)
Moderate temperature	86.7 (97)	13.3 (15)
Social Aspects		
Increase social interaction	92.0 (113)	8.0 (09)
Children do not wonder in streets	85.8 (106)	14.2 (16)
Place for talk/walk	88.4 (99)	11.6 (13)
Improvement of lighting	50.9 (57)	49.1 (55)
Enhance beauty of the area	95.5 (107)	4.5 (05)
Economic Aspects		
Increasing property value	79.5 (99)	20.5 (23)
Promoting business	89.3 (110)	10.7 (12)
Sale wood	98.3 (119)	1.7 (03)

Regarding environment related benefits of green belts, a significant percentage of respondents (81 to 97%) reported that green belts minimized pollution, increased greenery, trap smoke and moderated temperature. The social benefits of green areas are long lasting especially in modifying abnormal, unnatural and inherently stressful urban life. It really improved the psychological health and emotional wellbeing of the visitors and nearby residents and significantly improved social relationships. A vast majority of the respondents (86 to 96%) perceived many social benefits such as social interaction, a place for talking/walking, improvement of lightening and enhancing beauty of the area. It was found that 80 to 89% of the respondents viewed that the development of green areas could yield economic benefits such as promotion of business and enhancement of property value for the adjoining areas.

Types of plant and vegetation. The presence of plants in public parks, green spaces or on the road side green belts enhances the beauty of the urban landscape, absorbs carbon dioxide, enhances freshness, provides aesthetic gratification, attracts birds, traps dust, and absorbs noise. However, selection of plant variety should be according to the available length and breadth of green areas. Small green belts or parks cannot afford big and dense shade trees. Table III shows that 74 and 79% of the respondents did not like big and dense shady trees, respectively. This may be due to the fact that they cover a large proportion of the open area and suppress the growth of small plants and flowery shrubs. Falling leaves during autumn create multiple problems. Majority of the respondents (87 & 74%) also disliked the cultivation of flowering and fruit plants in green belt respectively. They thought that visitors especially the children destroyed the flower beds and broke flower plants presented an unpleasant scene. Similarly, the fruit plants in such areas presented problems like injuries to children and health related problems due to falling rotten fruit. However, a vast majority (91, 79, 72 & 83%) of the respondents liked to grow evergreen, seasonal plants, shrubs and development of grass lawns respectively. They felt that these plants did not change the attractive features of landscape and enhanced its beauty and aesthetic value.

Table III. Opinion of the respondents about different types of plantation in greenbelt

Aspects	Yes	No
	% (No.)	% (No.)
Presence of big trees	25.9 (29)	74.1 (83)
Dense shade trees	21.4 (24)	78.6 (88)
Evergreen plants	91.1 (102)	8.9 (10)
Flowering plants	13.4 (15)	86.6 (97)
Seasonal plants	78.6 (88)	21.4 (24)
Fruit plants	25.9 (29)	74.1 (83)
Shrubs	72.3 (81)	27.7 (31)
Grass lawns	83.0 (93)	17.0 (19)
More vegetation	41.0 (46)	59.0 (66)

Table IV indicates types of different features/facilities as the respondents wish to see in green belts. A vast majority i.e. 94, 87, 83 and 79% suggested that dustbins, fountains, child play area, and water tank should be available in green belts. Dustbins are essential to keep the area clean, fountains add attraction and thrills. The presence of child play area adds life in green belt and saves small plants and vegetation. Similarly, water tank meets the water requirements of the visitors. These facilities are not only necessary to keep the atmosphere clean but also adds element of sustainability to green belts. Patients and old people usually need proper sitting place to have some rest. Some times even the young people need to sit after a short or long distance walk. May be it is because of the above reasons that 90% of the respondents demanded the availability of proper sitting arrangements. The demand for presence of jogging tracks also justifies as jogging is becoming a popular morning exercise in cities and even in some cases it is essential

from the medical point of view. Another important facility which 77% of the respondents identified is the arrangement for appropriate security system. The growing law and order situations in the urban areas really demand security system at public places. This will ensure security and protection of the visitors, especially of the women and children.

Table IV. Percentage distribution of respondents according to different features/facilities they wish to see in green belt

Features	Yes	No
	% (No.)	% (No.)
Dustbins	83.9 (94)	16.1 (18)
Fountains	77.7(87)	22.3 (25)
Child play area	74.1 (83)	25.9 (29)
Sitting place	80.4 (90)	19.7 (22)
Water tank	70.5 (79)	29.5 (33)
Jogging tracks	65.2 (73)	34.8 (39)
Security system	68.8 (77)	31.3 (35)
More vegetation	58.9 (66)	41.1 (46)
Other	20.5 (23)	79.4 (89)
Total	100.0(112)	100.0(112)

KEY FINDINGS AND RECOMMENDATIONS

A large majority i.e. 80, 81, 89, 95 and 97% of the respondents observed that green belts yielded health benefits such as feeling of freshness, mental relaxation, opportunity for jogging, early recovery from illness and reduced the risk of diseases respectively. A vast majority of the respondents also visualized the environment related benefits like increased greenery, minimizing pollution, moderating temperature and trapping smoke.

Social benefits of a well developed and well maintained greenbelts acknowledged by the respondent included increased social interaction, children do not wonder in streets, place for walking/talking and enhancement in the beauty of the area the number of children wandering in the streets was also reduced. They also viewed the economic benefits such as increase in property value and promotion of business due to green belts.

It is concluded that green belts make the quality of human life better by improving health, through environmental, social and economic impacts. The development and proper care of greenbelts and public parks promoted tourism, trade and resulted in many other economic and health benefits to the local community.

The municipal, tehsil and district governments should give due priority to the development of green spaces, public parks and greenbelts in their development plans. This will not only improve human life and environmental sustainability but also lead towards greater social integration and also increase the local governments revenue through property tax.

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