
UNIT 4 OPEN SPACES

Structure

- 4.1 Introduction
- 4.2 Open Spaces: Meaning and Significance
- 4.3 Types of Open Space
- 4.4 Status of Open Spaces in Indian Cities
- 4.5 Causes of Deterioration of Open Spaces
- 4.6 Parameters and approaches for revitalization of Open Spaces
- 4.7 Let us sum up
- 4.8 References and Selected readings
- 4.9 Check Your Progress: Possible Answers

4.1 INTRODUCTION

Open spaces are an aspect of city management that has emerged as one of the most important aspects of maintaining city vitality. The quantity and the quality of open spaces in Indian cities have been deteriorating over the years and there is an urgent need to deal with the same. This unit introduces the meaning, concept of open spaces, how have they been planned traditionally, the status of open spaces in Indian cities. It also outlines the emerging approaches to open spaces across the world and the lessons that they offer.

After studying this unit, you will be able to:

- Explain meaning and significance of open space
- Describe types of open spaces
- Explain the causes of deterioration of open spaces
- Outline parameters for vital open space

4.2 OPEN SPACES: MEANING AND SIGNIFICANCE

4.2.1 Meaning

Open Spaces are lands that are not intensively developed for residential, commercial or institutional use. Over the years, their meaning has been expanded to include not just urban parks and preserves but also non-park and non-natural places such as public squares, outdoor sports complexes, amphitheatres, or even cemeteries, school yards, etc which are available to the use of a full spectrum of city residents. Open space may also be thought of as the undeveloped land which results from our efforts to conserve natural resources and scenic areas, to avoid development in hazard areas and to provide recreational opportunities. According to Nelson and Whitney (2008) open space consists of under developed lands with significant natural, cultural and visual resources that are integral to the country's quality of life.

4.2.2 Significance of Open Space

Open spaces of all these types have an extremely significant role to play in the urban landscape. Some of the important functions that they perform are:

- Open Spaces have important environmental benefits** – A city is an artificial environment. It is created through the intense exploitation of land and thus also impacts other features of the ecosystem such as natural contours – hills, marshes; water bodies such as lakes, rivers and specific components such as forests, trees, bird and animal life etc. It is being realized today that an indiscriminate damage to environment ultimately impacts human life and security. Pollution has thus become a reality of most cities. Several cities in India face issues of water scarcity while also being threatened with floods in the monsoons. Open spaces, if provided adequately, play an important role in managing the environmental landscape of the city. Some clear areas of such benefits are: a) trees and parks in urban settings reduce noise, lower temperatures in the summer; b) forested areas remove carbon dioxide from the atmosphere, thereby mitigating the threat of global warming; c) tidal lands and wetlands absorb polluted water, and buffer developed areas from flooding; d) forests are a primary source of clean water; and e) conserving open spaces and related natural resources allows important biological resources and natural habitats to remain intact and ecologically healthy.
- Open spaces have important social and psychological functions** – Chiesura(2004) maintains that open spaces are critical for the livability of the city and well being of urbanites. In a world, in which everyday's life is often filled with tension and uncertainty, parks and preserves can provide the opportunity for escape and relaxation for every urban citizen. Interesting and diverse recreation areas and scenic open spaces have a special ambiance and attractive qualities. These attributes help to define communities and they lead residents to a strong identification with their neighborhoods. By becoming partners, or “stakeholders,” in making their community attractive, people develop a strong sense of community. A community sports program provides an alternative for at-risk youths by providing places for children to play and for young people to participate in athletics. Community conservation programs can also provide young people with an opportunity to focus their energy in a positive way and build self-esteem. In order to have successful programs for children, communities must plan for well-maintained parks and open spaces for them to use. Finally, open spaces provide a place for recreation and maintenance of physical health as well as a place for spiritual revitalization.
- Open Spaces are spaces to celebrate cultural diversity** – A city is made of diverse ethnicities. Such diversity is core to the nature of a city; however, it makes for extremely tenuous social relations among groups with diverse customs and practices. Open spaces potentially offer a platform for interaction between such diverse groups, paving the way for greater intermingling. It marks the beginning of bonds with a new place and thereby forges communities over the long run. Open spaces, thus, contribute to the quality of life in many ways (Burke and Ewan, 1999).

4.3 TYPES OF OPEN SPACE

The open space would be broadly categorized in to two types: (i) Traditional Open Space and (ii) Innovative Open Space. (Mark Frances)

i) Traditional Open Space: Types and Meaning

The meaning and types of traditional open spaces is given in a tabular form below in Table 1.

Table1: Traditional Open Space: Types and Meaning

Type	Meaning
Public Parks	A public open space; developed and managed by Parks Department as part of zoned open-space system of city; often located near center of city; often larger than neighborhood parks.
Neighborhood Parks	Open space developed in residential areas; managed by Parks Department as part of zoned open space of cities; may include playground, sport facilities, and so forth.
Playgrounds	Playground areas are located in neighborhood; frequently includes traditional play equipment such as slides and swings; sometimes include amenities for adults, such as benches, and so forth.
Pedestrian Mails	Street closed to auto traffic; pedestrian amenities provided such as benches, planting; often located on the main street in downtown area.
Plazas	Open space developed as part of new building in down town area; built and managed by building owners; typically privately developed and managed.

ii) Innovative Open Space: Types and Meaning

The meaning and types of innovative open spaces is given in a tabular form below in Table 2.

Table 2: Innovative Open Space: Types and Meaning

Type	Meaning
Community Open Space	Neighborhood spaces designed, developed, owned, and or managed by local residents on vacant land; may include viewing gardens, play areas, and community gardens; often developed on private land; not officially viewed as part of open-space system of cities; highly vulnerable to displacement by other uses such as housing.
Neighborhood Open Space	Space located in neighborhood often near private open space, often heavily used by children and teenagers; important setting for environmental learning and socializing.
Schoolyards	Not normally considered part of open space system of cities; increased awareness as place for environmental learning; some schoolyards redeveloped as environmental centers.

Streets	Much of the publicly accessible open space of cities; increased awareness of importance of street use and traffic impacts on children; changes of streets include pedestrian improvements and sidewalk widening, street tree planting, and so forth.
Transit Malls	Development of improved transit access to downtown areas, may replace a traditional pedestrian mall with a bus and “light rail” mall.
Farmers’ Markets	Open space used for farmers’ markets of flea markets; often temporary or held only during certain times in existing space such as parks, downtown streets, or parking lots.
Town Trails	Connects parts of cities through integrated urban trails: use of street and open spaces as setting for environmental learning.
Vacant/Undeveloped Open Space	Still much of the open space in cities, found in redevelopment areas, where abandonment has occurred, or in undeveloped areas; increased awareness as potential open space; interest in vacant land being used to develop urban forests of natural areas in cities.
Waterfronts	Increased awareness of waterfronts as urban open space many cities working to increase public access to water front areas by developing waterfront parks.
Found Spaces	Informal open spaces of cities where social life takes place; include street corners, sidewalks, paths connecting building, bus stops, steps to public buildings, and so forth.

In the above sections you read about the meaning, importance, and types of open space. Now answer the questions given in *Check Your Progress 1*.

Check Your Progress 1

Note: a) Write your answer in the space given below.

b) Compare your answer with those given at the end of the unit.

1) Write a short note on Open Space.

.....

.....

.....

.....

.....

2) Explain how open spaces contribute to the livability of cities.

.....

.....

.....

.....

4.4 STATUS OF OPEN SPACES IN INDIAN CITIES

The cities in India are facing a very real challenge of deteriorating quality and quantum of open spaces. Rivers, lakes, forests, parks, hills, maidans and play spaces, wet lands, mangroves, beaches and coast lines are all facing the brunt of unchecked urbanization. Environmentalism in urban areas has just made a beginning in the country and its incorporation in planning is still a long way in coming. The current provisioning for open spaces is in the form of a standard percentile of total developed area or as legislations which place restrictions on development. Both these are top down, non participatory processes, where decisions are made without consulting relevant stakeholders. Its potential as a strategic aspect of development or as a value within itself is therefore not being realized.

While the above is true as a general scenario, the status of open spaces also varies across cities. Delhi with an open space of above 3 acres per 1000 persons ranks the highest, while Mumbai with 0.03 acres per 1000 persons ranks the lowest. The international norm for open spaces is about 4 acres per 1000 persons. These quantitative indicators are however not adequate by themselves to indicate how the open spaces in the city contribute to the quality of life in the cities.

The following extracts of a report on the status of open spaces in Mumbai by a NGO called Urban Design Research Institute (UDRI) are extremely revealing.

Mumbai has the lowest ratio of open space per person ie 0.03 acres per 1000 persons as compared to other cities. This means an area of barely 3+3 ft per person. In a city bereft of public space, the Corporation of Mumbai even terms counts the traffic islands as public spaces.

Further, the quality of these available spaces is even more appalling. 18% of the open space available is partially or fully occupied. The city's rich bio-reserves- the 37.5 sq km of mangroves, 10.68 sq km of salt pan land, 13.35 sq km of marshy land and 46.5 sq km of the Sanjay Gandhi National Park are depleting fast. The lack of geographically mapped and surveyed data accompanied by the control of real estate and developer lobby over land use and development planning has meant that several public spaces are making way for developments- legal and illegal.

The maintenance of those open spaces and parks that exist is another vexed issue. Thus Dyaneshwar Udyan, in Dadar has been closed to the public for years now. Veer Kotwal Udyan also in Dadar, has become a shelter for drug addicts, through day and night. 'Our children can no longer play there', say local residents. Same is the case with many others. "Maintenance of municipal gardens is zero", claim some of the local residents. This is in spite of the fact that the Municipal Corporation of Greater Mumbai provides for a budget of Rs 150-200 crore for the maintenance of municipal gardens.

The tale of Mumbai is repeated in several cities. Each of the metros in the country has been subjected to the deterioration of open spaces. Natural features such as water bodies, coasts and hills have taken the worst hit. To cite a few examples, the lakes and tanks in Bangalore, the Yamuna and the ridge in Delhi, the Musi River in Hyderabad, the hills in Pune are all stories of rapid deterioration. Chennai

has a green cover of a meagre 4.2% (last estimation by FSI in 2005). While the Chennai corporation states that it maintains 230 parks, residents estimate that the number of parks large enough for morning walks is only around 50. Further, these stories are not limited to large cities. Thus even a medium sized city like Udaipur which was called a lake city and which was water reliant till the 60s has now been forced to not only depend on external water resources but also to undertake programmes for lake rejuvenation.

It is obvious from these stories that there is a need to drastically alter the approach towards recognition of issues as well as action.

4.5 CAUSES OF DETERIORATION OF OPEN SPACES

The various reasons for the deterioration of urban open spaces are described below:

- i) **Techno legal Planning Approach:** The solution to conservation, creation and maintenance of open spaces has been conventionally sought through the urban planning framework. Urban planning itself has multiple goals – balancing the goals of efficiency, equity and sustainability. Often these goals present themselves as conflictual objectives and the priority inevitably goes to efficiency with sustainability of which open spaces are seen to be a part of an inevitable cost of economic growth.

Further, the planning approach is an intrinsically anthropocentric approach (keeps human beings at the centre) and thus, gives a secondary importance to considerations of nature. It sees open spaces in terms of their functionality to human beings and thus, norms such as ‘x’ acres of open space per person are drawn up. There is thus a disjunctive between natural features of the city landscape and the open spaces that is created by this techno legal approach.

Another drawback of the techno legal approach is that decisions on spaces to be developed as open spaces are made without the involvement of relevant stakeholders and they are alienated from the creation, maintenance and development of such spaces. They thus become a prime example of a common tragedy where the space is ‘public’ enough for use by everyone and maintenance by no one. Many a times, the area earmarked for parks is misused for another purpose of commercial value. Open spaces that are left undeveloped due to lack of funds or attention by concerned authorities end up being illegally encroached or being used as parking lots.

The Limoni bag is a plot reserved for a municipal garden in the middle of a slum called by the same name in Mumbai. In the congested environment of the slum, the garden would have been a much needed space to interact and play. However, the residents of Limoni Bag used the plot as a garbage dump and as a site for defecation.

The roots for this indifference and apathy lay in the fact that the Municipality had evicted a few households to create the garden. It was thus the Corporations’ garden – owned and therefore to be maintained by them too. It had nothing to do with the residents of the community.

- ii) **Fragmented approach:** Fragmentation occurs when a large habitat is transformed into a number of smaller patches of smaller total area. Isolation is the typical outcome of habitat fragmentation. The more isolated the system, the lower the ecological value and higher the loss of its structure and function (Esbah and Cook). In many urban landscapes, the degree of fragmentation is so high and land is transformed so much that the open spaces no longer possess natural attributes. The ability of nature to reinvigorate itself is thus lost. The conventional planned approach to open spaces is one that fragments open spaces and creates patches deficient in ecological value. Such spaces need continual maintenance and upkeep. Any default in the same results in a deterioration of these spaces.

The Pichola Lake is the centre piece of tourist interest in Udaipur. Currently the lake is in an extremely bad shape with filth strewn all around. A special Lake Development Authority has been formed in the city to rejuvenate the lake.

Analysts however point out that the causes of the deterioration of the lake lie in the destruction of the lake eco system of which Pichola is a part. There were about 100 lakes in this eco system, most of them up stream which fed Pichola with fresh water and two lakes downstream that drained excess water. Today almost all of the upstream lakes have been filled up to create developable land while the ones downstream have been polluted with industrial waste and sewage. Isolated from its ecosystem, pichola is bound to deteriorate.

- iii) **Non Strategic Planning:** The discussion above reveals that the planning of open spaces is not based on environmental values. However, it is often non strategic too. The open space plan can play an important role in overall community development. Its implementation can ensure community access to specific open space uses, as well as provide a framework for more intensive use of other parcels of land for residential, commercial, industrial, transportation and community facility purposes. A case in point would be how recent real estate developments have been able to capture the value of open spaces in the built up areas.

The lack of such planning pushes open spaces to the earlier discussed category of neglected commons and creates disincentives for investment in such spaces. This is how the case like Mumbai where there is 'zero maintenance' of municipal parks can emerge.

- iv) **Alienation of Public:** Human societies have evolved in close relationship with nature. In India, nature is celebrated and revered through rituals. Recent developments have sought to reduce the public access to nature and seen it as the primary cause of deterioration of the environment. However, experience shows that reduction in public access results in furthering the distance from nature, absolving one from the sense of responsibility towards it and thereby encouraging practices and behaviours that pollute it. It also often generates exclusive 'access' for certain groups who further undermine natural attributes. Blocking river fronts, beaches, lakes and forests does not improve the quality of these natural resources but further undermines it.

- v) **Lack of Data:** The understanding that urban planning with nature is an imperative has only recently begun to emerge. Consequently, there is a generalized absence of data with respect to several aspects of open spaces and annual features. The exact boundaries of forests, fold lines of rivers and tidal lines of coasts, number and slopes of hills, the mangrove lines, the biodiversity of the city region, the nature, quantum and parameters of fringe spaces are not known.

Lack of such data makes all of these features vulnerable to manipulation and greed. Thus, the lack of adequate data is a key cause for the deterioration of open spaces.

- vi) **Lack of Good Governance:** Governance structures of cities shape the status of open spaces in many ways. A lack of decentralization delays decision making processes which are crucial for timely inputs and investments in open spaces. Further they also result in dimming of prospects of citizen action in terms of bringing problems to the notice of the administration. It creates an atmosphere where open spaces are misused. The irresponsible attitude of respective civic authorities has been brought to light by a recent case (March 2009) where the high court pulled up DDA for violating the zonal plan by converting a park into a commercial complex at Loha Mandi of Naraina area. The plot was marked as 'P' but the plan did not clarify whether 'P' denoted plot, park or parking.

Further, the environmental response is highly fragmented in Indian cities. To cite an example, in the Mumbai Municipal Corporation there are nine different departments which have an interface with open spaces – a gardens department, a tree authority, water supply department, sewage department, etc. In this institutionalised fragmentation, concern for open spaces is devalued and never synchronized. As a result, both the quality of open spaces and their maintenance takes a toll.

4.6 PARAMETERS AND APPROACHES FOR REVITALIZATION OF OPEN SPACES

4.6.1 Parameters of Vitalization of Open Spaces

The above discussions on the deterioration of open spaces in Indian cities and the causes for the same bring us to a consideration of those parameters which create vital and dynamic open spaces. Some of these key parameters are –

i) **Functional**

- 1) Accessibility – visual and physical for all age groups and gender
- 2) Connectivity to the other areas of the city and to the other open spaces
- 3) Proximity to improve access and visibility
- 4) Safety as an essential precondition for use
- 5) Climatic comfort to encourage access
- 6) Flexibility of use across age groups and gender
- 7) Need and aspiration based evolution of the place
- 8) Flexibility to evolve with time- open ended character

ii) Ecological

- 1) Availability of fresh air, water, land and vegetation
- 2) Opportunity to experience nature in cities
- 3) Awareness of the natural landscape parameters of land, water and vegetation
- 4) Connected and Networked for better ecological values

iii) Cultural

- 1) Presence of cultural association
- 2) Sense of place to give a distinct character
- 3) Sense of belonging
- 4) Opportunity for social interaction
- 5) Opportunity for participation in the making and maintaining the space
- 6) Readable vocabulary of the spaces

The new approaches to management of open spaces thus try to base themselves on the above parameters.

4.6.2 Approaches to Retaining Vitality of Open Spaces

Some of the approaches to retaining for vitalization of open spaces are:

- i) Synthesis of GIS based Data:** It has been discussed earlier how the lack of data adds to the vulnerability of open spaces to manipulation. Therefore, creation of comprehensive data systems can go a long way in conservation of such spaces. GIS based data can add in new dimensions to the understanding of attributes of open spaces. Esbah and Cook have demonstrated in their study of open spaces in Phoenix, U.S.A and Aydin, Turkey that the utilisation of GIS based systems can vastly improve the understanding of intricate details of open spaces and thereby help to create a variety of open spaces that enhance livability of cities.
- ii) Holistic and Networked Approach:** The overall transformation of land uses in urban areas basically results in a loss of ecological values. However, an emphasis on diversity in the kinds of open spaces provided and the establishment of connectivity among them can counter the isolation trend in open spaces, give the cities some layer of environmental resilience and enhance livability of cities. Esbah and Cook illustrate the wide variety of spaces that have a potential for being conserved as open spaces as opposed to the conventional notion that open space is equivalent to a neighbourhood park. Some typology of the patches that they list in Phoenix are -Agriculture ,Airport ,Commercial ,Natural Drainage , Golf ,Military ,Natural Preserves, Open patches, Park ,Public spaces, School yards, Sport grounds, Transportation and Vacant lots. This illustrates that open spaces include a variety of uses, non uses, reserve for future uses, access and governance structures. Such diversity greatly enhances the adequacy of open space besides introducing a functional diversity, thereby reducing the pressure on development too. In Chennai, for example, a lot of large open spaces, which were earlier wasteland, and are now being developed, into Parks. Open space near Napier bridges, along the Marina Beach adjacent to the foot paths;

open space near the Turnbolls road junction; open space in Chitra Nagar, Kotturpuram; and Open space in Gandhimandapam are examples of such conversion.

iii) Strategic Planning: An open space plan is the flip side of a development plan. After identifying important open spaces, it will be much more apparent where development should occur. It is essential, therefore, that open space planning be fully coordinated and integrated with physical, social and economic planning for the community. Local authorities should undertake audits of existing open space, sports and recreational facilities, the use of existing facilities, access in terms of location and costs and opportunities for new open space and facilities. Such assessments and audits will allow local authorities to identify specific needs and quantitative or qualitative deficits or surpluses of open space, sports and recreational facilities in their areas. They form the starting point for establishing an effective strategy for open space, sport and recreation at the local level and for effective planning. A research was undertaken by Heriot Watt University with funding from the RICS Education Trust to explore the effects that urban parks and open spaces have on residential property values within the UK. Using Aberdeen as a case study area, the effect on residential property values of proximity to the city's urban parks and amenity green spaces was measured. The Aberdeen case study provides evidence that its residents attach a marginal value to open green spaces - this is reflected in the premium they are prepared to pay to secure a dwelling that has this advantage.

iv) Participatory Approach: Open spaces are an expression of the prevalent social relations and knowledge and as such constitute a territory of contestation. Such contestations begin with establishing the legitimacy of the area as an open space but also extend to establishing modes of access, and control. Conventional approach attempts to negate conflict by lending the planning process, the sanctity of law. However, experience shows that this is not adequate. It is therefore necessary to recognize the conflicts at the core of creation and management of open spaces. Such recognition then paves way for creating forums where such conflicts are brought to the fore by involving relevant stakeholders in the planning as well as in decisions pertaining to access and management of open spaces. A participatory approach creates more dynamic open spaces that have an organic relationship with the communities that they are embedded in. With the incorporation of such an approach, Resident Welfare Associations(RWAs) have been forthcoming to take ownership of maintaining their local open spaces. Over the recent past, Municipal Corporation of Delhi has signed MoUs with RWAs and transferred maintenance of 173 parks (as last reported). Another 212 redeveloped parks were ready to be given out, upon interest from RWA or private firm. The Haryana Urban Development Authority (HUDA) has also recently announced handing over the maintenance of parks, green belts and open spaces to the respective RWAs. Under this deal, HUDA will pay Re 1 per square meter per month for the area maintained by RWAs. In a similar arrangement, struggling with manpower shortage, the Municipal Corporation of Chandigarh has handed over many parks and green belts (with less than 1 acre of area) to residents' welfare associations for development and further maintenance for which the corporation would pay a onetime development cost and monthly maintenance cost.

v) **Appropriate Governance:** Centralized governance systems perpetuate apathy towards open spaces. Their requirement is however often of systems where an involved and close management is essential. Hence, the creation of institutional structures that are integrated, have an understanding of natural systems and are empowered to take decisions and are located in proximate distance to the spaces in question is a clear necessity. Institution of appropriate governance structures can result in not only better maintained open spaces but also ones that have been literally created from waste lands. Delhi *Haat* is an example where an abandoned sewerage drain was filled over and reincarnated into a vibrant public domain. In his design Pradeep Sachadev integrated modern hygiene and space standards with footpath vending, window shopping, browsing, traditional fast foods, and places to just hang out. A similar example is that of Maharashtra Nature Park in Mumbai. Conceived by the WWF-India in the late 1970s, an area of about 37 acres in the “H” Block of Bandra-Kurla Complex, which was earlier a garbage dump or land fill, was decided to be ecologically restored and developed as a Nature Park by MMRDA. It is located on Bandra-Sion Link Road at the Southern bank of Mithi River. Managed by the Maharashtra Nature Park Society, the park is home to diverse tree species, birds but has also emerged as a centre for environmental education and conservation.

In the above sections you read about the causes of deterioration of open space and measures for revitalization. Now answer the questions given in *Check Your Progress 2*.

Check Your Progress 2

Note: a) Write your answer in the space given below.

b) Compare your answer with those given at the end of the unit.

1) What are the key factors behind deterioration of open spaces in the cities in India?

.....
.....
.....
.....
.....

2) Discuss briefly the Importance of Involving Stakeholders in planning of Open Spaces.

.....
.....
.....
.....
.....
.....

4.7 LET US SUM UP

Open Spaces are lands that are not intensively developed for residential, commercial or institutional use. Over the years, their meaning has been expanded to include not just urban parks and preserves but also non-park and non-natural places such as public squares, outdoor sports complexes, amphitheatres, or even cemeteries, school yards etc which are available to the use of a full spectrum of city residents. Open spaces of all these types have an extremely significant role to play in the urban landscape. They have important environmental benefits. They also enhance the physical, social and psychological well being of the city residents. They also provide forums for interface and thus build communities. The status of open spaces in almost all Indian cities is poor; moreover the ecological features of these cities are fast depleting too.

The conventional approach to management of open spaces has been techno-legal, using master plans as a tool for planning of open spaces. Experience shows that such an approach lacks ecological as well as strategic and social values. This is identified as the key cause of deterioration of open spaces in the cities. There is therefore a need to adopt a new approach to planning of open spaces based on GIS mapped data, participatory and strategic planning and use of a diversity of spaces that are connected. The management of open spaces needs to also follow the principles of good governance. Such an approach would lead to dynamic and vital open spaces that enhance the livability of cities.

4.8 REFERENCE AND SELECTED READINGS

- Arabindoo ,P (2011): City of Sand,Stately Reimagination of Marina Beach in Chennai, *International Journal of Urban and Regional Research*,Vol 35,Issue 2,pp 379-401,March 2011
- Burke,J. and Ewan, J., (1999): Sonoran Preserve Master Plan for the Phoenix Sonoran Desert, City of Phoenix Parks, Recreation and Library Department,U.S.A
- Burte,H(2003): “The Space of Challenge- public Spaces and the Role of Conflict in Contemporary Mumbai, Conference lectured at the symposium” *(In)visible Cities Spaces of Hope, Spaces of Citizenship*, Centre de Cultura Contemporània de Barcelona, 25-27 July 2003
- Chiesura, A., (2004): The role of Urban Parks for the Sustainable City in Landscape and Urban Planning. 68, pp. 129-138
- Esbah,H, Deniz,B and Cook ,E.A (2005): Isolation trends of Open Spaces in 3rd International Symposium on Remote Sensing Tempe, AZ, USA, March 14 - 16 2005
- New York State Department of environmental Conservation (2007): *Local Open Space Planning Guide*, New York
- UDRI (2010): Audit of Open Spaces in Mumbai, Urban Design Research Institute, Mumbai
- Thompson, C,W(2002): “Urban open Space in the 21st Century” *Landscape and Urban Planning*, Volume 60, Issue 2, 30 July 2002, Pages 59-72.

4.9 CHECK YOUR PROGRESS: POSSIBLE ANSWERS

Check Your Progress 1

- 1) Write a short note on Open Space.

Open spaces are defined as lands that are not intensively developed for residential, commercial or institutional use. Over the years, their meaning has been expanded to include not just urban parks and preserves but also non-park and non-natural places such as public squares, outdoor sports complexes, amphitheatres, or even cemeteries, school yards etc which are available to the use of a full spectrum of city residents. Open space may also be thought of as the undeveloped land which results from our efforts to conserve natural resources and scenic areas, to avoid development in hazard areas and to provide recreational opportunities.

- 2) Explain how open spaces contribute to the livability of cities.

Cities are starved of natural features over the years. This causes a burden on city infrastructure that faces impact of environmental deterioration. City life is stressful for its residents, though it offers economic opportunities. Open spaces offer buffers to all the above aspects of urban landscape. a) They provide important environmental benefits b) They offer important physical, social and psychological benefits too c) Open spaces facilitate social interaction and build communities.

Check Your Progress -2

- 1) What are the key factors behind deterioration of open spaces in the cities in India?

The open spaces in Indian cities are still planned and managed in a conventional manner. This conventional manner is characterized by a techno legal approach that undermines both ecological values as well as social values. Open spaces are then planned in an isolated manner, without involving relevant stakeholders and governed in a fragmented and centralized manner. The lack of strategy makes open space an ongoing investment for local bodies. All of these factors cumulatively result in the deterioration in quantity and quality of open spaces in Indian cities.

- 2) Discuss briefly the Importance of Involving Stakeholders in planning of Open Spaces.

Open spaces are an expression of societal culture and social relations. The existence of open spaces that have been planned and managed through the active involvement of relevant stakeholders indicates a vibrant society in active interface with a governance system. Involving stakeholders in planning of open spaces helps to make decisions of location, nature, size of open spaces closer to the lives of people who are potential users and makes them more accessible and functional. It also contributes to enhancement of the strategic value of the open space which further strengthens the prospects for sustainability.