

# P06 2A Planning Aspect of balancing Sustainability and Green Form for 21<sup>st</sup> Centuries Mega Cities

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*Abstract Open Spaces provides space for the expression of diversity, both personal and cultural. The social and cultural values of open space include attitudes towards nature and the desire for contact with it. Open space is now Inclusive part of statutory and community planning processes. Urban Spaces must be stimulating for all age groups encouraging their activities, events and gatherings via sustainable planning and design. This paper focuses on need, unconventional visions and principles for urban green form in this modern era of planning for 21<sup>st</sup> century Mega cities. The social, cultural and physiological values of open space include attitudes towards nature and the desire for contact with it.*

**Keywords :** *Open Spaces, sustainability, Green Form of Mega City, community planning.*

## I. INTRODUCTION

Urban planners have tremendous opportunity to utilize and safeguard open spaces as green form in urban agglomeration to improve the community spaces, recreation areas, fringe towns, groups and neighborhoods, where urban community lives. Conserving natural places is one of the essential elements of being a green and sustainable community. Protection and foundation of urban parks, scenic routes, trailways, and waterfront help to maintain and improve our quality of urban life. The urban spaces are key feature of the city planning and at most care is necessary while planning for the same.

Open spaces likewise create the fundamental green network inside the city that empowers us to manage environmental change while providing wildlife habitats, sporting facilities or beautiful parks. This paper centers around visualizing broader view of planning, and some of the time unusual, dreams and standards for urban open space in this new era of sustainable planning. Understandings of human nature is important while developing strategic approach of open space planning. As a planner I emphasize the open spaces maximizes its potential to contribute to a more inclusive and sustainable future of urban areas at local, regional and national level.

In short our neighborhood should be somewhere we want

to be and are happy to belong to. The green spaces are key to this, meeting a range of social, environmental and health benefits as well as making areas more attractive. That is why creating, protecting and enhancing these spaces is such a vital part of making neighborhoods more attractive and more joyful places in which to live

## II. OPEN SPACE IN THE PUBLIC ARENA

Today about half of the global populace live in urban settlements. Human mind demands assorted variety in needs, attitudes and expression of their emotions from the City Scape. The City scape with Monuments, Historic parks and green open space designs offer the correct framework for the emotional needs of community. Today, urban community require understanding of process in order to identify, and provide for, the needs and desires of our urban cultures.

Rather than provision of parks as "mixture", we need the "salad bowl", where different cultures can find individual expression. An overview of urban park use indicates that the majority of users want to come by foot and will only do so on a regular basis if the park is within 3–5 minutes' walk of their home or workplace (Kaplan and Kaplan, 1989, Comedia /Demos, 1995; Godbey et al., 1992). The general population who maybe have most requirement for access to open parks and opportunity for sociability in a safe, outdoor setting will always be those who are least freely mobile (through age, economic status, lack of private transport, etc.)—children, older people, disabled people, the unemployed—and so there will always be a demand for good access to appropriate, local open spaces. Just what form these spaces take continues to be the challenge.

Global Cities occupy less than three percent of the global terrestrial surface, but account for 78% percent of carbon emissions, 60% percent of residential water use, and 76% percent of wood used for industrial purposes. To counter this threat as a planner my approach should be to integrate open spaces into the heart of our physical environment, through both partnership working and effective community involvement.

My design and planning policies should seek to create an urban realm that places great importance on leisure and creativity. Creating and maintaining high-quality open green spaces as urban form is central to this idea.

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In context with Indian urban spaces the population density of the cities is so high that Mumbai planners cannot able to provide even 30% of the standard required open green spaces for the urban community. The Real estate prizes are so high that the encroachment of the open spaces is concerned at the moment for the Local governments. The 80% of urban population in India is deprived from the access to the open spaces resulted in emotional and mental health hazard. The urban areas have a need for open space and the importance of it as a land use type cannot be negated. Again, the question that arises here is that how much open space is required for a given unit of urban population. The other need of concern is the spatial pattern of open space within a city

### III. THE URBAN OPEN SPACE ORGANIZE AS SOCIAL SPACE

In today's situation across the globe the significance of good-quality parks and open spaces is highlighted

Healthy weight, healthy lives – across-government strategy for England (Department of Health 2008) highlights the importance of open space in encouraging people to adopt healthier and more active lifestyles. Open green spaces also provide the vital green infrastructure that enables us to deal with floods or mitigate and adapt to climate change while providing wildlife habitats, sporting facilities or beautiful parks. Green infrastructure is a multifunctional network of green spaces and other natural elements such as waterways, lakes and coastline that provide a range of social, environmental and economic benefits. A green infrastructure strategy sets out an integrated approach to the delivery, protection and enhancement of this network. In London, the Mayor produces statutory strategies on other relevant issues, including biodiversity and ambient noise ([www.cabe.org.uk](http://www.cabe.org.uk))

In this century, experts in Germany, Japan and other countries proposed a standard of 40 square meters urban green space in high quality or 140 sq. m. suburb forest area per capita for reaching a balance between carbon dioxide and oxygen, to meet the ecological balance of human well-being. Currently, developed countries have tended to adopt a general standard of green space of 20 sq. m. park area per capita (Wang et al 2009). International minimum standard suggested by World Health Organization (WHO) and adopted by the publications of United Nations Food and Agriculture Organization (FAO) is a minimum availability of 9 sq. m. green open space per city dweller (Kuchelmeister, 1998)

Master Rogers' Urban Task Force report (1999) says "to accomplish urban integration means considering of urban open space not as an isolated unit—be it a road, park or square—but as a energetic part of urban landscape with its own specific set of functions. Open spaces and public parks work best when they build up an immediate connection between the space and the general population who live and work around it"



Fig 1: Salmiya Park Kuwait

The Best examples of such planning is observed in Kuwait. The City Centre Markets are planned near the central park. The People are encouraged to utilize recreational open spaces and footfall is increased by developing 10-15% of central park as hyper market or City Centre. Fig 1 explains the same concept as Above

It is observed that the Parks are being used more often when you increase the footfall by accommodating Hyper markets in same Area. Open space is now firmly part of statutory and community planning processes. Comprehensive planning policies for open space are fundamental to social inclusion, community cohesion, health and well-being. A shared, strategic approach to open space maximizes its potential to contribute to a more inclusive and sustainable future at local, regional and national level.

A network of well-designed and cared-for open spaces adds to the character of places where people want to live, work and visit. Open space is now firmly part of statutory and community planning processes. Comprehensive planning policies for open space are fundamental to social incorporation, community cohesion, health and well-being. It provides densely populated towns and cities maintain green spaces and streetscapes.

Corraliza (2000) has completed research on individuals inclination for "pathways" and "stay places" (parks, squares, and so on.) and found that the non-spatial characteristics of scene are similarly as vital as any spatial characteristics (enthusiastic and individual issues, for example, inspiration, age, and so on., represent 32% of the difference) yet in addition that individuals (at least in Spain) preferred pathways to "stay places". becoming places for special categories of people, e.g. children, old people, etc., and the street is the truly representative public open space, the one which the whole population may feel good in utilizing. The Boulevard open Garden Restaurants alongside pathways is the Example of the Same; Fig 2



Fig : 2 The Boulevard open Garden Restaurants



#### 4. The strategy for contact with "nature" and involve stake holders

The strategy's action plan should chime with the vision set out in the overarching sustainable community strategy (SCS), promoting community involvement, greater use of public open space, and more effective cross-departmental and partnership working with green natural space.

Open Green space is multi-functional so planner's strategy should reflect a widely shared vision. It should not just for the parks and planning departments. Many stakeholders should be consulted and involved in planning process. The basic aim is to understand supply and demand for open spaces, to identify deficiencies, to secure new provision, and to improve quality through better management. The spatial elements of the open space strategy will also feed into the local development planning of open green spaces.

Linear parks and greenways serve an important function in connecting residential areas to the larger urban parks, and to the small neighborhood parks, both of which are highly utilized and valued in our densely populated urban areas. Countryside landscapes and our buildings are focused more with no consideration to culturally appropriate patterns of urban landscape design and use.

The Canal side Parks in the urban area act as buffer zone as well as it serves the need of Linear Park to Connect the neighborhoods with urban Areas . The Old Canal Road From BMCC Road to Prabhat Road is best Example of the Same; Fig 3



Fig 3: Canal Road Garden , Pune

#### 4.1 Stake holders in policy

It is critical that an open green space strategy is the result of a collaboration of many partners, with the planning and open space management staff of a local authority taking the lead. Planner need input from a number of local authorities departments, including planning, housing, highways, education and culture. Collaboration can build better relationships between council departments and raise the profile of open space within a local development plan.

Specialist input from disciplines like ecology and environmental protection is required. Expertise and data is also available from organizations such as the Environment Agency, Sport department, and horticulture Dept, and from biological record centres and regional and local groups The community's needs and expectations must be at the heart of any open green space strategy and it is important to engage with them at each stage to identify and deliver local priorities and involved them in planning process.

Open green space strategies work best when they are championed by elected members. Strong elected member support helps secure resources, maintain momentum and ensure the strategy's adoption. One or more councilors, for example the cabinet member with responsibility for parks or planning (or both), should be closely involved and they should work with officers to gain the support of other portfolio holders who could assist with the development and delivery of the strategy. Open space strategies require political decisions, and early support from elected members will avoid later delays and indecision.

Take an inclusive approach to understanding demand and need People experience public open space differently according to who they are and their social, cultural and economic background. Some may even feel unable to use open space because they do not feel welcome or safe, or the space does not have important facilities such as accessible public toilets. Others may feel that they are only able to use spaces at certain times or when other types of user are not present.

Consider existing demographic and similar information Ensure that the demographic profile includes information on the different strands of equality including age, gender, race and ethnicity, religion, sexuality and disability. Other aspects of deprivation and exclusion come into it too, such as homelessness, unemployment, or being travelers.

Identify all open spaces within the local authority area regardless of ownership and the extent of public access, except private gardens. In some areas it may be appropriate to set minimum size thresholds for different typologies of open space. However, particularly in dense urban areas, small sites may be valuable locally and should be included in the assessment.

#### 4.2 Accessibility standards

Your accessibility standards will help identify areas with open space deficiencies. Standards should be set for the provision of public open space and for access to specific typologies of public open space.

One methodology is to identify catchment areas from user surveys, taking the distance that 75 per cent or 80 per cent of users have travelled to reach the sites. Rationalize the results into a limited number of walking, cycling distances, and for larger open spaces, the public transport and/or driving distances. The simplest approach is to adopt five, 10, 15 or 20-minute travel times and convert them into distances using typical walking, cycling, and public transport or driving speeds.

We recommend a more detailed assessment where possible to identify significant barriers that could reduce the effective accessibility of a public space. These could be railway lines or major highways or particular local street patterns and their relationship with entrance gates. The most accurate approach would include an assessment of actual walking distances if time and resources permit.

### 5. Green urban forms as "sustainable entertaining open" places

Key stakeholders interested in open space are likely to include sports clubs, friends' groups, local wildlife groups, community groups and parish councils. Engagement should also attempt to reach people left out of standard consultation approaches or who may not use open spaces at all or may use them only in limited ways.

There are significant benefits to having a planned, ongoing, inclusive approach to community engagement. Approaches, methods and marketing messages must be realistic and timed appropriately. Your engagement plan and timetable will need to take into account other council processes and policies such as the statement of community involvement

The key to entertaining open spaces is the means by which they are utilized and designed to be used to uplift the mood of user, therefore the illusion that open, empty space is not constrained is incorrect— Osho Nala Park,Pune, is the example of conversion of dirty stagnant water body into stimulating open space.It is very important for planners to identify , semi-wild or neglected spaces and convert them into Stimulating Open spaces which is the answer to balance urban ecological networks.

#### Osho Nala Park

Punes Osho Nala Park one of the most beautiful garden built in 1994 on a nullah ( Rivulate) known as Nala Park. The park is so beautiful and magnificent that you will never come to know that it was once a nullah until you read it somewhere. In fact, it is very difficult to believe so. It allows you to get closer with inner self and nature. The beauty and the picturesque view of the garden will captivate you from the word go. The holding ponds along with selected plants and stones were used to purify the polluted water.



Fig 4 OSHO Teerth Park

In fact, it is very difficult to believe so. The very beauty lies in the environment that it provides, which is very natural, calming, and soothing. It allows you to get closer with inner self and nature. The beauty and the picturesque view of the garden will captivate you from the word go. The Upliftment of area from dirty water body to beautiful stimulating Park enhance the vibes of Area.

### 6. Sustainable green spaces Planning Approach for Mega Cities:

In the present urban scenario the sustainability of the open spaces is important aspect of Planning. The wildlife or forest area conservation inside the city limits can boost the

sustainability of Open spaces . The community participation in increasing the vegetation cover on Hilltops and Hill slopes in the city will boost the reduction of Co2 emission in the City. The conservation of Hilltops and Hillslopes will maintain the ecological balance of urban scape.

The draft strategy should be succinct, have a robust evidence base and be well argued and provide clear policies for planning and managing open spaces. Concise, well-written and well-presented strategies are the foundation of effective marketing, making the case for investment in open spaces and raising awareness. The most important information should be made available on the council's website.

In order to give more certainty to resource availability, we suggest that your action plan covers a period of five years but is reviewed and updated annually.

An action plan should be SMART (specific, measurable, achievable, realistic and time-specific). Agree with your partners who will implement each action, whether these are different services within the local authority or external partners. It is also important to agree who is to lead on each project and take responsibility for delivery.

There are unlikely to be enough resources to do everything right away so the action plan should include a limited number of priorities for the first year or so. As you make progress, new priorities will emerge and may be added as the action plan is reviewed.

If anything is likely to need cross-service understanding and collaboration, it is local government's response to climate change adaptation and mitigation. Bournemouth's experience demonstrates just how important an ambitious open space strategy can be in ensuring improved inter-departmental working and visibility to members in this important area.

My (green space strategy) GSS articulates deliberately high aspirations in a number of specific areas, including nature conservation and global warming. It is a forward-thinking approach that places the GSS pivotally, covering a wide range of environmental topics. Its five-year work programme makes a point of identifying links with other departments' plans and strategies.

Global warming and sustainability is one of action areas set out in the GSS. Authority services staff have been able to influence their colleagues elsewhere who are tasked with global warming and sustainability policies. This goes well beyond the funding, planning and management of open space and is setting the agenda for the core documents of the local development Plan and the climate change community action plan.

The Example of Pune city or Mumbai city in context to



conservation of natural wild life and hill tops and Hill slopes should be followed. In pune more than five Hills are conserved by Local governments and this lush green spaces of Taljai Hill, Baner Hill, Chaturshrungi Hill, Vetil Hill, Ram Hill Hadapsar naturally poised the ecological balance of Urban Community.



Fig : 5 Vetil Hill Pune

The Rajiv Gandhi National Park in western suburbs of Mumbai , Goregaon to Borivali is another best example of sustainable Open space maintaining the ecological balance of city of Mumbai. The protection of such sustainable green spaces is duty of Urban communities of modern era.

Apart from Stringent legislature community awareness for protection of the sustainable green spaces is more relevant. The Urban community should come forward on their own to conserve and protect the sustainable green spaces. The Community training and capacity Building programmes will make this possible in near future. The Fig : 6 & 7 shows how wild life island is conserved inside the high density metropolitan region of Mumbai



Fig 6: Dense Forest of Borivali National Park



Fig7: Island of National park surrounded by most dense Urban Population in the world

### 6.1 Indicators of Open Spaces Utility and satisfaction:

Indicators to measure inputs (for example, how much is spent on a project), outputs (for example, measured improvement in quality or the number of additional children’s play areas) and outcomes (what has made a difference on the ground to stakeholders, how that difference is perceived and whether the impact has been sustained). While harder to measure, outcomes are increasingly favoured as a more meaningful method of assessing achievement.

Participation of local people is another indicator should be supplemented by targeted consultations and surveys to gauge the level of use or user satisfaction with open spaces or specified projects. Surveys can take place at the start and finish of projects, with the results collected, analysed and fed back to community groups and residents. As one way of collecting data to monitor the national indicators, local authorities undertake place surveys. It may be possible to supplement this with user satisfaction questions on open space in the area.

## IV. CONCLUSION

In the present trend of urbanization the pressure on urban planners is mounting enormously to identify and allocate enough place for recreation and open spaces. In past planners use to say Open spaces act as a lungs of the cities but in the present world open spaces are rejuvenating spa’s for the mental and emotional health of Urban communities. Urban Communities can produce a symbiotic connection between the natural many-sided quality of the landscape, open spaces and the social and functional relevance of human infrastructure. Urban open space must provide a public place for the meeting of strangers and a place where one can transcend the crowd and be anonymous or alone. And in all of this, the urban park will continue to serve a central function in society’s self definition.

Ultimately, open space in cities as places to celebrate cultural diversity, to engage with natural processes and to conserve memories.

Longer time-frame for engaging effectively with the natural networks which structure our towns and cities, some free-fit spaces may move around over time within our urban fabric. They reflect the dynamic, mixed, sometimes ambiguous landscapes which are likely to develop as expansive networks of infrastructure slice through and re-knit the existing fabric

Set a minimum number of headline indicators necessary to judge the success of a strategy and whether the strategy requires review. Make use of relevant indicators already monitored by a local authority. It is helpful to link indicators to the national indicators for local authorities and local authority partnerships, the SCS and LDF annual monitoring report indicators. Importantly, indicators will also help in



understanding how the open space strategy can contribute to the wider agenda.

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