

## **URBAN GREEN SPACES: AN APPROACH TOWARDS SUSTAINABLE ENVIRONMENT**

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*Abstract: "Urban green spaces are characterized as open and private open spaces in urban areas, fundamentally secured by vegetation, which are directly or indirectly accessible for the users." Urban green spaces like parks, gardens, green rooftops, streams, and playgrounds, gives basic biological community administrations. Urban Green spaces are of awesome significance both for environmental adjust and for the strength of people. Green Space in urban zone performs multidimensional capacities and gives gigantic advantages to the natives. This paper explains the significance and challenges of urban green spaces based on literature carried out from several research papers, books, and websites.*

**Key Words:** Urban Green Spaces (UGS), Functions, per capita Urban Green Space, Human health, Standards, GIS

### **INTRODUCTION**

**In the current past decades, loss of urban green spaces, especially in the creating nations has turned into a predominant pattern. One of the real concerns is that in spite of different acts and byelaws for assurance, administration and improvement of Urban Green Spaces, decrease is keep on taking spot in all significant urban areas of creating nations. Urban green spaces are one of the most significant elements of any urban ecosystem, both due to its ecosystem dynamics and its essential contribution in well-being of human race.**

**Urban Green spaces as a basic and necessary part of setup of the urban communities assumes an essential part in urban spaces and lack of green spaces can bring about significant issues in urban life. Keeping in mind the end goal to have a sound city regarding economy and the wellbeing of nationals, urban green spaces are viewed as basic. Urban green spaces frame a necessary piece of any urban zone and amount and nature of UGS is of prime sympathy toward organizers and city managers. Green spaces and stops are of extraordinary significance both for biological adjust and for the strength of people. They are very noteworthy in decreasing antagonistic impacts of urbanization and increment physical action of individuals.**

**Urban green spaces are seen as the green lung of the city, and ordinarily perform critical capacities, including retaining water and contaminations, and alleviating urban warmth.**

The aim of this literature study is to examine the importance, benefits and functions of urban green spaces as UGS is a valuable asset to the city as well as the country.

One more significant conclusion is that to be able to perform its functions successfully, UGS needs to be properly positioned. Second objective is to study and classify urban green space. Urban planners need to focus on UGS strategies to make cities ‘just green enough and sustainable development.

**CRITICAL LITERATURE REVIEW**

A literature review is documentation of state of the art. Here the scholarly literature is of articles, books, research papers, reports and other sources like a website which relevant to UGS also combined application of GIS and AHP in the UGS which is critically evaluated.

**Urban Green Spaces**

**Functions of UGS**

- Directs the concoction piece of climate and purging the neighborhood air;
- Controlling the keep running off and flooding
- Directing the hydrological cycles;
- Supporting natural assorted qualities in the city
- Keeping the dirt disintegration and silt;
- Directing the nearby and worldwide atmosphere;
- Monitoring the vitality in the city through controlling the small scale climatic varieties;
- Helping the entertainment and tourism Coordinating the urban man to the nature;
- Reviving the ground water table.

Table 1. Minimum standards for urban green spaces

Functional level	Maximum distance from home (meter)	Minimum surface area (ha.)
Residential green	150	-
Neighborhood green	400	1
Quarter green	800	10(Park: 5 ha.)
District green	1600	30(Park: 10 ha.)
City green	3200	60
Urban forest	5000	>200 (smaller towns) >300 (big cities)

[Source: Herzale and Wiedemann, 2003.]

Table 2. Per capita urban green space

Existing standards	
World health organization standards	9 sq. m /capita
Public health bureau and the ministry of housing of the USA	18 sq. m /capita
European Union standards	26 sq. m /capita
United Nations standards	30 sq. m /capita

[Source: International Journal of Geomatics and Geosciences, 2014.]

**Hadi Alizadeh et al. (2015)** used descriptive analysis method in order to achieve objective of spatial analysis of urban land use access to UGS. Keeping in mind the end goal to assess last dissemination of urban green spaces in connection to urban land utilizes, Fuzzy TOPSIS were connected. Last consequences of spatial investigation of openness to green spaces demonstrated that northern and focal ranges of zone 6 have more appropriate access to the green spaces.

**Green Edmund et al. (2015)** indicated how a GIS-based system investigation in conjunction with measurable examination of financial information can be utilized to dissect the value of access to group merchandise and ventures. The outcomes can be utilized to educate the nearby arranging process and the GIS approach can be ventured into other neighborhood expert spaces. The approach introduced in this paper offers a nonexclusive strategy for evaluating the distinctions in the arrangement of group products and for a scope of various societal gatherings.

**Yousef Ali Ziyari et al. (2015)** examined as per issue, at first the principals and methodologies of green space and site choice rules were spoken to and after that the way toward performing site determination and organizing urban stop in District 22 of Tehran Municipality was depicted.

**Sara Mirrazavi et al. (2015)** concluded urban green spaces have social and biological effectiveness and the most imperative impact of green spaces in urban communities are natural capacity, or the environmental productivity that make urban communities more ideal and decline the unfriendly impacts of improvement of industry and transportation. The urban green spaces are urban ranges secured with man-house keeper vegetation which meet both "social effectiveness" and "environmental proficiency". Since the green spaces are the vitalize some portion of the physical development of urban communities, in respect of ecological preservation there ought to be a harmony between the lifeless and enliven parts of physical development as mass and space, or to fill and purge.

**Ali- Akbar Anabestani et al. (2014)** examined the distribution of green space in rural area of khaf using GIS.

Objective of this examination is to play out a spatial investigation, utilizing GIS innovation and expository chain of importance model to decide the variables influencing the area of parks and green spaces, parks and wide open, and furthermore to locate a model for situating of the review region in a provincial scene. Auxiliary goal of this review was to look at the aftereffects of the progressive examination in GIS yield on green spaces in rustic territories and country pilot ventures.

**Ragab Khalil et al. (2014)** introduced an assessment of spatial value in circulation of green spaces in Jeddah city utilizing Geographic Information System (GIS). GIS examination is utilized to concentrate the spatial circulation of necessities and openness. The aftereffects of this review demonstrate that the normal green space per capita is 0.9 m<sup>2</sup> and progressively that 70% of populace need to walk separate surpass 500 m to achieve green space.

**Prashanti Rao et al. (2014)** examined the advantages and elements of Urban Green Space at different spatial levels perform in an unexpected way. To look at this theory and to assess degree of the green space advantages and capacities at different spatial level.

**Mobina Jalali et al. (2014)** reviewed went for ideal site determination of urban parks at nearby level in the City of Shahrood. The main choice on the table to do as such included

coordinating GIS with Overlaying. In the following stride, the determinant criteria were weighted in AHP, and match astute correlation was directed keeping in mind the end goal to find the ideal other option to fabricate a neighborhood scale stop. The outcomes uncover that Site 2 in Area 4 is the best option.

**Johanne Dueholm et al. (2014)** clarified the advantages and difficulties of urban green spaces in light of the basic dialog of study results from various reviews in coordinated approach in regards to the arranging, checking, outlining and keeping up of urban green spaces is required for enhancing the natural manageability in urban communities in distinctive nations. various urban communities. The imperative parts played by green spaces are social, financial, social and ecological parts of reasonable advancement. To do this, an incorporated approach with respect to the arranging, observing, planning and keeping up of urban green spaces is required for enhancing the natural supportability in urban communities in distinctive nations.

**Jennifer R. Wolch et al. (2014)** surveyed the Anglo-American writing on urban green space, particularly stops, and analyzes endeavors to green US and Chinese cities. Access to green space is along these lines progressively perceived as a natural equity issue. Urban organizers, creators, and environmentalists, accordingly, need to concentrate on urban green space techniques that are 'sufficiently green' and that unequivocally secure social and additionally biological maintainability.

**Irene Lestari et al. (2013)** reviewed enhance GOS quality that joined the GOS work, GOS model, and area appropriateness of GOS with any nearby vegetation into the ideal area of GOS. Comes about demonstrate that need area for GOS improvement in view of the natural capacities are the Frans Seda Street, Oebobo Kupang-Indonesia locale, which comprises of a shading tree and any fancy species.

**Molaei Qeilichi et al. (2012)** determined the optimum locations and choose the best place to create parks and green space in the region Six in Tehran city. For this purpose is used TOPSIS model in Arc Gis software. For this purpose is used TOPSIS model in Arc Gis software. Method of research is descriptive-analytical. Results of research show that south of case study area is the best location for parks and green space.

**Abdullah Jamali et al. (2012)** examined the successful quality calculates Location of the urban green spaces and their prioritization by utilizing Fuzzy AHP strategy. This investigation may give an indisputable approach in area of basic leadership procedure to urban scene planners. It gives an expanded ability to distinguishing the components and needs that prompt to the choice of a reasonable site among numerous alternatives.

**Isami Kinoshita et al. (2012)** Urban Green Spaces (UGS) are fundamental constituents of the urban structure that upgrade inhabitants' personal satisfaction and conduct. This review presents a procedure of dissecting UGS utilizing scene measurements and recognizable proof of potential extension territories through reasonableness agenda and closeness buffering done in a GIS situation. Focal Nairobi was chosen as the delegate examine region, whose UGS were observed to be unevenly disseminated, ailing in size, character and most out of free. A last composite potential guide was figured, that if its recognized high potential regions are received for extension of UGS, the above inadequacies could be redressed.

**Soheil Sabri et al. (2011)** Larkana city of Pakistan is chosen as the review region where the land reasonableness model was connected to decide appropriate land for open

Parks. This review was completed inside the structure of an Analytic Hierarchy Process (AHP) as a multi-criteria assessment approach by incorporating it with the Geographic Information System (GIS).

**Xian Mingrui et al. (2011)** studied based on the high determination remote detecting pictures and other assistant information, we directed a reasonableness examination for the city of Changzhou under the support of Geographic Information Framework (GIS) innovation. What's more, scene file were additionally included in the quantitative evaluation of green scene with high suitability. For the low appropriate territories, consideration ought to be paid to build the arbor scope rate, diminish the fracture degree and the format of fix.

**Kshama Gupta et al. (2011)** The review endeavors to survey usefulness of open green spaces in four wards of East Delhi area of Delhi NCT, named Krishna nagar, Jagaturi, Preetvihar and Vishwas nagar. For appraisal of usefulness, cradle and system examination was completed in Arc GIS and ground information for different parameters were gathered from ground. GIS is a capable apparatus for examining the field information particularly for urban studies.

**Pradeep Chaudhry et al. (2011)** the majority of the Indian urban areas are a long ways behind in quality and amount of urban woodlands than their partner in Europe and America. High populace thickness is one reason for underdevelopment of urban greenery segment. India can take in a great deal from Chinese model of urban ranger service advancement as those two are the highest populated nations of the world. As of late, a portion of the Indian urban communities like Chandigarh, Gandhinagar and Delhi have appeared some change in this field.

**Xu Yannan, Jia deping et al. (2009)** presented the Analytical Hierarchy Process (AHP) and Geographic data frameworks (GIS) into the customary green space framework arranging. A disseminating guide of the environmentally delicate range and green space conveyance of Changzhou city, which gave us a logical premise of green space arranging framework for Changzhou city.

**Ulrika A. Stigsdotter et al. (2003)** This means to portray, create and think about the exploration comes about that analyst at the Swedish University of Agricultural Sciences have gotten concerning the relationship between individuals' accomplished wellbeing and access to open green spaces in urban communities. This presents outline hypotheses in light of the exploration comes about. These speculations address how urban green spaces can be outlined and arranged as city arranging components of significance to general wellbeing. Along these lines, they might be utilized by specialists as devices to advance wellbeing through outline and urban arranging, i.e. prove based outline and arranging.

**William Miller et al. (1998)** The reason for this paper is to exhibit a way to deal with scenic route investigation that coordinates reasonableness examination with geographic data framework (GIS) innovation to recognize appropriate locales for scenic route advancement in the town of Prescott Valley, AZ, USA. These approach identified five real strides required in the scenic route examination, these include: identification of land-utilize capacities, spatial information accumulation, advancement of weighting qualities, information coordination and examination utilizing GIS, and yield assessment.

## CONCLUSION

Urban green spaces could constitute a component of city arranging of significance to open health. To recognize reasonable green spaces in the country territories, one of the best models is AHP. This model alongside different models and utilizing Arc GIS assume an imperative part in settling on choices and directing future advancement. Circular segment GIS programming has been widely utilized from begin to end for making database, creating yields and for different GIS analysis. GIS-based AHP as MCDA in the land appropriateness investigation approach can be valuable to decide reasonable land in urban improvement. Arranging principles of ideal areas are by all account not the only essential thought in the arranging procedure, additionally feasible separations from offices to individuals ought to likewise be considered. This review additionally presumes that GIS is a capable instrument to delineate, coordinate and doing multivariate examination.

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