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### Improving Sustainability Concept in Developing Countries

## Measures and attributes for sustainability of parks

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#### Abstract

While the scale of recreation facilities ranges greatly so does the scale of the park itself, the services it provide, and the service radius planned for it. Addressing how successful a park is assessed through a number of attributes categorized into six measures for assessing a park system to be successful and sustainable. Still, with the difference in park types exists a difference in how important is a measure. The paper provides a matrix defining these six measures priority for each park type as well as the quantity value of attributes driven within each measure that each park type requires.

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#### 1. Introduction

Defining a space started by distinction between a boundless and a bounded space [1] as between a space that should be kept safe and park like while the other can be wild, risky, and natural. Unbounded space can take its physical character from the natural environment such as landform, ecology, hydrology, and climate while reasons for bounding space can be classified as human, rather than natural. Modern parks can have a variety of human-oriented themes, under municipal ownership, paved, gardened, and managed strictly.

Parks and open space improve physical and psychological health, strengthen communities, and make cities and neighborhoods more attractive places to live and work in. When people have access to parks, contact with the natural world improves physical and psychological health [2]. Also, it increases the value of neighboring residential property.

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Trees reduce air pollution and water pollution, they help keep cities cooler, and they are a more effective and less expensive way to manage storm water runoff. Access to public parks and recreational facilities has been strongly linked to reductions in crime, and in particular to reduced juvenile delinquency. Gathering the people outdoor increase residents' sense of community ownership and stewardship [3], provide a focus for neighborhood activities, expose inner-city youth to nature, and connect people from diverse cultures and backgrounds [3].

#### 2. Literature review

#### 2.1. Park typology

Parks as green open spaces require defined properties for each type. This helps guide planners when distributing parkland with a community's context in order to satisfy society needs and interests. A community's population, land formation, and demographics outline the types of leisure and recreational activities needed for its society. Standards for parks [4] defined it by its area, the service radius, and standards for area by population ratio. The researcher gathered standards data for parks types as green open spaces classification, table 1. (all refs )

Table 1. Par	c types	as g	reen o	pen sp	paces	classification.
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park type	ark type Min Area		residence	acers / 1000 pop.	activities
Pocket park	1/4 acer	1/4 mile	houses on small lots with few places for people to gather, relax, or to enjoy the outdoors	0.25	benches, play area
Mini Park	1 acre of less	1/4 mile	Serve as a recreational and beautification space where acquisition of larger parks is not possible	0.5	Play area, Benches and small picnic facilities
Linear Park	100 ft. min width	link parks	mainly hikers, bikers, and adjacent residents		parking, rest rooms, benches and trails
Neighborhood Park	5-10 acers	1 mile radius	neighborhood residence	2 acers	Physical capability for both passive and active recreation (50%/50% split)
Community Park	30-50 acers	5 mile radius	2 or more neighborhoods	5.0-8.0	Informal and programmed active recreation facilities, passive recreation facilities.
School Park		community if merging activities	Determined by location of school district property		an activity served by a school is taken in consideration by community park planners
District Park	min 24 acres	district wide	serve multiple communities and, where possible, situated along an arterial street with a major transit route	5	Multi-use, passive & active recreation, major sports facilities /tournament level fields
Urban Park	50-80 acers	city wide	serve multiple communities situated along an arterial street with a major transit route	4.0 - 10	natural resource - based. Focus is on meeting community recreational needs as well as preserving unique landscapes
Special - use Park	Variable- dependent on specific use	0.5	oriented single-purpose use		
Conservancy	Availability and opportunity	1000-5000	Lands set aside to preserve significant natural resources		

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