

SUMMERY

Over half the world's population lives in cities, and this is expected to climb by 2050. This urbanization tendency causes health-threatening environmental challenges. Urban planners and architects must balance these issues with city health.

Urban green spaces are vital to environmental and human health, yet their impacts remain unknown. While beneficial, urban green spaces, especially in inner cities, are limited. These include parks, sports fields, and public and private green areas. Public green spaces are open to anyone, while developer regulations limit access to private ones.

Effective urban green space design demands multifunctional ecological system knowledge. Research shows that green areas boost urban physical and mental health by improving air quality, stress, and exercise. They boost community, city beauty, and social connections. Urban green space design concepts and aspects have been researched due to these benefits.

This research recommends canalside green areas in northern Iran's Gorgan city to improve its structure and well-being. Social, economic, architectural, and urban aspects affect canal green space design, according to studies. Study topics include how social and psychological factors, architectural elements, and urban aspects impact green space design.

The hypothesis claims that Gorgan city's green areas will boost mental health, urban attractiveness, and social and economic infrastructures. Social preferences, plant covering type, accessibility, and aesthetic enhancement will shape green space design. Design possibilities for canal water control, urban regeneration, aesthetic enhancement, and long-term sustainability are examined.

Gorgan city's location, climate, and urban form characterize the research emphasis. Two study area areas strengthen connectivity, provide recreational amenities, and allow leisure and social contact. The research aims to build active, attractive urban green spaces that improve Gorgan residents' lives.