

" IRANIAN GARDENS ARE HISTORICALLY RENOWNED. THE IDEA OF A GARDEN AS PARADISE IS CENTRAL TO THE CONCEPTION OF THE PERSIAN GARDEN, AS WELL AS TO GARDENS AND PARKS AROUND THE WORLD. "

## SUSTAINABLE DEVELOPMENT IN TEHRAN

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Iran is comprised of mountainous regions, deserts, and foothills. High mountains surround it on three sides and in the centre of the country there is a vast desert. Many major cities are situated along the margins of this mountainous crescent encompassing a large circular area of desert, the *dashte Kavir*; Tehran is one such city.

Through thousands of years of history, Iran has had to deal with environmental problems resulting from its natural environment, including water shortage, drought, and mountain floods. The significance and value of water is reflected in all the religions that have prevailed in Iran. Water is considered sacred.

Iranians have been very inventive in tapping water resources and have made optimum use of underground waters. An Iranian engineering innovation, the *tar* system, was a means of conducting water, without using any mechanical equipment, via tunnels dug deep underground through which water was conducted by using the force of gravity. *Qanats* brought water from the mountains and foothills tens of kilometres away into waterless regions. The survival of many villages and cities in Iran, including Tehran, depended on these *qanats*. Some have been in use for hundreds of years. One such example is the Dowlat Abad *qanat* in Yazd, which is 64 kilometres long. Historically, Iranians created exclusive orchards and gardens at the source of each *qanat* and spring so that not one drop of water would be wasted.

Iranian gardens are historically renowned. The term *pardons*, or paradise, has an Iranian origin and the idea of a garden as paradise is central to the conception of the Persian garden, as well as to gardens and parks around the world. The present paper will concern itself with Tehran and its problems of green space.

BAGH SANGI JAMSHIDIEH, TEHRAN, IN IRAN, AN EXAMPLE OF A NATURAL MOUNTAINOUS GARDEN, WHICH INCORPORATES CONCERNS FOR SUSTAINABLE DEVELOPMENT.



TEHRAN'S RAPID EXPANSION IS A  
SERIOUS DANGER TO THE ECOLOGICAL  
BALANCE AND NATURAL HERITAGE  
WHICH SURROUND THE CITY.

Tehran is an exceptional case as far as natural conditions are concerned. Situated on the foothills of the Alborz Range, it is bounded by mountains, except to the south where an expansive area of wasteland lies. The volcanic mountain peak of Damavand (5,671 metres high) can be seen from the city, when the pollution index is low, as can the Towchal mountains (4,100 metres) and the Kolakchal (3,200-3,400 metres). A unique characteristic of Tehran are the numerous valleys through which water flows from *qanats* and springs originating in the Alborz. The valleys and mountain ranges located in the northern sector of the city, in the region of Shemiran, have always been part of the natural riches of Tehran. Once a separate town, the *yeylaq*, or summertime resort of the city, the area has now become its northern extension with a very large percentage of the population living there year round.

Today, the population of Tehran, excluding peripheral towns, is estimated to be seven million. If the present trend of development continues, it will become either the fifth or sixth most populous city in the world. Tehran's rapid expansion during the last two to three decades is a serious danger to the ecological balance of the mountains,