

APPROACHES TO CREATING AND MANAGING SUSTAINABLE URBAN GREENSPACE IN THE ARID/SEMI-ARID CITY.

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Iran has a long tradition of creating ‘Paradise Gardens’ which depend heavily on irrigation and free water derive from either water collection in cisterns or supply via qanats. These gardens are in essence an escape from the realities of high summer temperatures and low rainfall. Whilst this design form is potentially very attractive to human beings, it is difficult to use as a design model for the large scale public open space and landscape infrastructure of the arid city, at a time of population explosion and insufficient water. Iranian cities need, in addition to traditional indigenous landscape design genres to embrace a range of different approaches. These range from the relatively familiar, substituting more drought tolerant vegetation for less drought tolerant, or adopting more water efficient approaches to management of existing urban greenspace, through to far more radical approaches. These latter approaches are likely to be seen as culturally challenging as in many cases they involve the use of highly drought tolerant, locally native and non-invasive exotic species, in naturalistic spatial arrangements to create self-sustaining planted communities. This latter process is well advanced in Europe in mesic environments, and is also highly developed in arid climates in Arizona and California. The presentation will review these different approaches with particular emphasis on the underpinning research necessary to develop these new landscape forms and also the cultural and aesthetic challenges posed by these very different looking urban vegetation/landscape types.