**Cold Desert Environment**



Regions with cold desert climates

A cold desert environment is typically found in[temperate](http://en.wikipedia.org/wiki/Temperate) zones, almost always in the rain shadow of high mountains which restrict precipitation from the westerly winds, or in the case of Central Asia, from the [monsoon](http://en.wikipedia.org/wiki/Monsoon). The [Gobi desert](http://en.wikipedia.org/wiki/Gobi_desert) in Mongolia is a classic example of a region with a cold desert climate. Though hot in summer, it shares the very cold winters of the rest of Central Asia. The [Kyzyl Kum](http://en.wikipedia.org/wiki/Kyzyl_Kum%22%20%5Co%20%22Kyzyl%20Kum) and [Taklamakan](http://en.wikipedia.org/wiki/Taklamakan_Desert%22%20%5Co%20%22Taklamakan%20Desert) deserts of [Central Asia](http://en.wikipedia.org/wiki/Central_Asia) and the drier portions of the[Great Basin Desert](http://en.wikipedia.org/wiki/Great_Basin_Desert) of the western [United States](http://en.wikipedia.org/wiki/United_States) are other major examples of BWk climates. The [Ladakh](http://en.wikipedia.org/wiki/Ladakh%22%20%5Co%20%22Ladakh)region, lying in the [Great Himalayas](http://en.wikipedia.org/wiki/Great_Himalayas) in [India](http://en.wikipedia.org/wiki/India) also has a cold desert climate. Cold desert climates can feature hot (sometimes exceptionally hot) and dry summers, though summers typically are not quite as hot as summers in hot desert climates. Unlike hot desert climates, cold desert climates usually feature cold, sometimes brutally cold, dry winters with temperatures far below the freezing point. Cold deserts are typically found at higher altitudes than hot desert climates, and are usually drier than hot desert climates.

Arctic and Antarctic regions also receive very little precipitation during the year, owing to the exceptionally cold dry air, but they are generally classified as having [polar climates](http://en.wikipedia.org/wiki/Polar_climate).

# Sustainable Land Management in Cold Desert Environments of Asia

 Cold deserts span over large areas of the continent of Asia. They include the Gobi desert, Takla Makan, and the Iranian, Turkestani and Trans-Himalayan deserts, which have long been a subject of interest and exploration. Traditional studies have most often focused on individual geo-morphological, climatic, bio-physical or anthropological aspects of cold desert environments. Knowledge of how social and ecological elements interact to establish the fragile balance that maintains life in cold deserts is scarce yet increasingly needed.
 Fast-growing population numbers and economic inter-connectedness, evolving social norms, political transformations and a changing climate, are bringing about multiple changes even in traditionally remote and marginal regions such as the cold deserts. Loss of traditional values, lifestyles and knowledge, as well as coping strategies focused on immediate survival are arguably straining the carrying capacities of fragile cold desert ecosystems. At the same time, changes are bringing opportunities for improving human livelihoods, which could enable long-term adaptation.
 The workshop will explore how those complex processes are affecting ecosystem health and human security by looking at changes in land use and management systems across cold desert regions of Asia. Land, and the vegetation and life it supports, is often the primary livelihood asset of the inhabitants of cold desert regions. It is also a basic element of mountain ecosystems, which determines their health and the level of goods and services they can provide to current and future populations. The scope for sustainable land management in cold desert environments and the policy and institutional mechanism that could enable and support will thus be given central place in the discussions.
 The workshop is co-organized by the Committee on Environment Conservation in Tajikistan and two institutes of the United Nations University (UNU), namely the Institute for Environment and Human Security (EHS) and the Institute for Sustainability and Peace (ISP). It draws upon experiences from the GEF/UNEP/UNU project on Sustainable Land Management (SLM) in the High Pamir and Pamir-Alai Mountains (PALM), which works towards addressing the inter-linked problems of poverty and land degradation at one of the least explored high mountain cold desert regions of Asia.
 The meeting is the second in a series of international workshops initiated by a network of scientists working on cold desert areas in Asia under the leadership of the United Nations University. The first workshop was held in India in October 2008.