

Afghanistan

Last updated: 31-01-2004

Location and area

Afghanistan is a republic in southwestern Asia, bordered on the north by Turkmenistan, Uzbekistan, and Tajikistan, on the east by China, Jammu and Kashmir, and Pakistan, on the south by Pakistan, and on the west by Iran. Afghanistan has a maximum length, from northeast to southwest, of about 1,450 km and a width of about 725 km. It has an area of 652,225 km². (Microsoft Encarta Encyclopedia 2002).

Topography

Afghanistan consists for about three quarters of its surface of uplands. The principal mountain system is the Hindu Kush with an average altitude of about 4,300 m with some peaks over 7,500 m high. The main lowlands are a series of river valleys in the north and various desert regions in the south and southwest. (Microsoft Encarta Encyclopedia 2002).

Water

The chief rivers are the Amu Darya on the border of Tajikistan; the Kabul, which flows into the River Indus; the Helmand in the south; and the Harirud in the west. All these rivers except the Kabul empty into lakes or **swamps**. (Microsoft Encarta Encyclopedia 2002).

Climate

Temperatures in Afghanistan exhibit great daily and seasonal variations, the annual rainfall averaging about 300 mm. Most of the rainfall occurs between October and April. Sandstorms occur frequently in the deserts and arid plains (Microsoft Encarta Encyclopedia 2002)

Wetlands

As a consequence of its mountainous and extremely arid character, Afghanistan possesses few wetlands other than the major river systems (Scott 1995, Spiers 1999).

Peatlands

Bortenschlager & Patzelt (1978) describe a shallow peatland with 1 m of Cyperaceae peat intertwined with some sand and loam layers from the lakeside of Ptukh Lake in the Wakhan-Pamir (3272 m a.s.l.).

Markov et al. (1988) estimate the area of „peat resources“ in Afghanistan as being 120 km², elsewhere they mention 100 – 120 km² of peatlands with a peat thickness of 1 – 1.5 m. Also Lappalainen & Žurek (1996b) use this figure of 120 km² **for xxx**

According to the interpreted World Soil Map (Van Engelen & Huting 2002) no histosols nor gley soils exist in Afghanistan.

An overview of possible peatland occurrences in recent wetlands is presented in Table 1.

Table 1: Possible peatland occurrences in recent wetlands in Afghanistan, derived from Scott 1995.

Name	character	former area	present area
Amu Darya	Braided river channels with vast tracts of <i>Phragmites</i>	> 400 km ²	Much of the area probably already drained and under cultivation
Kole Hashmat Khan	Brackish lake and marshes, half covered with <i>Phragmites</i>	2 km ²	largely drained and converted into agricultural land
Lake Duronta	Reed beds along western shore	20 km ²	
Hamun-I-Puzak	Freshwater lake largely covered by <i>Phragmites</i>	350 km ²	

Mire and peatland losses

Wetlands in Afghanistan have been seriously affected by drainage for agriculture and urban development, and by diversion of water supplies for irrigation purposes (Scott 1995, Spiers 1999).