

The Natural Environment

Take Aways

- Afghanistan is **deeply vulnerable to environmental shocks** caused by natural disasters such as droughts and earthquakes. Most critically, the health of the predominantly agricultural economy is dependent on a balanced and clean natural environment.
- Afghanistan is a country of great natural resources and endogenous fertility. **Sound environmental management** is paramount to ensure that resources are exploited in the most productive and sustainable manner.
- **Improving security in Afghanistan** is dependent in part on its reducing population instability by restoring and maintaining Afghanistan's natural environment in both urban and rural areas.

Key Facts

Socioeconomic Dependency

- Up to 80% of Afghans are dependent on natural resources for directly income and sustenance.
- Only 12% of land in Afghanistan is arable and 4-5% irrigated.

Natural Disasters

- Since 1998, more than 6.7 million Afghans have been affected by the impacts of disasters such as earthquakes and flooding.

Water and Drought

- Approximately 75% of Afghanistan is vulnerable to desertification.
- More than 2.5 million people in Afghanistan are affected by drought or water shortages.

Urbanization

- It is estimated that current groundwater resources feeding the Kabul water supply can only cope with increasing demand until 2012.
- Kabul, built for a population of half a million, is now home for more than 5 million people.
- Kabul's roads can support 75,000 vehicles, but is crowded with estimates of 900,000.

Deforestation

- It is estimated that more than half of Afghanistan's most prolific forests such as conifer, juniper and pistachio have been lost in the last 30 years.
- Kabul residents with no electricity rely on firewood for their heating and cooking, and consume over 200 truckloads of wood each day.
- If deforestation continues at its present rate, all forest will have disappeared within three decades.

Key Issues

Water

- More than 80% of Afghanistan's water resources originate in the Hindu Kush Mountains. In the past 50 years, drought and rising air temperatures have shrunk the larger glaciers in the Hindu Kush and also Pamir mountain range by 30%, while some smaller ones have vanished altogether.
- Throughout the past decade Afghanistan has been plagued by a series of drought years that have lowered water tables and dried up rivers and wetlands.
- Virtually the entire supply of water for irrigation and drinking is carried by rivers fed by rainfall and snowmelt. Intermittent supply is leaving Afghans in a perpetual state of water insecurity.

Rangelands and Forests

- The rangelands of Afghanistan occupy about 45% of Afghanistan's territory, of which an estimated 70-85% is under permanent pasture. It provides habitat and forage for nearly 35 million livestock as well as wild animals that contribute to the Afghan economy through meat, carpets, wool and plant extracts.
- Significant changes in vegetation cover and productivity have forced farmers into greater competition for the most productive areas of grazing, and pushed them from traditional to higher ranges where ecosystems are more vulnerable. Overgrazing has turned once highly-productive grasslands into shrublands and increased desertification.
- Pressure on the land, combined with poor and mismanaged water supply, has led to increased soil degradation and erosion, weakened ecosystems have multiplied, and forest regeneration has been slowed or prevented altogether.
- The majority of the country's deforestation has occurred as a result of conflict and fuel use. Deforestation has increased the risk of natural disasters such as flooding, landslides and avalanches.

Urbanization

- The explosive growth of urban populations is straining already broken infrastructures. Solid waste disposal facilities are weak or non-existent; vehicle traffic and industrial development increase pollution of both water and air.
- Kabul has not had a comprehensive plan to assimilate its millions of new residents, and increasingly is a growing sprawl of open sewers, over-populated, garbage-strewn streets and traffic jams.
- There are no proper landfills in many cities, and none of the dumpsites are designed to prevent groundwater contamination or toxic air pollution from burning waste. Many dumpsites are located upstream of the cities.
- Water resources are polluted by industrial poisons and hazardous chemicals due to poor storage and disposal.

Key Actors and Initiatives

- The Afghan National Development Strategy (ANDS) recognizes that failure to address environmental challenges will negatively affect long-term growth.
- Afghanistan's government institutions directly engaged in the issue are the National Environment Protection Agency (NEPA), Ministry of Agriculture, Irrigation and Livestock (MAIL) and Ministry of Rural Rehabilitation and Development (MRRD).
- The UNDP's Energy and Environment (E&E) portfolio focuses on the institutional and capacity development of these government agencies, and works at the local level with community-based energy and environmental projects.
- The United Nations Environment Programme (UNEP) is leading efforts to increase indigenous technical and management capacity through the NEPA, and developed Afghanistan's first Environment Law passed in 2007.