



Islamic Republic of Afghanistan

Afghanistan's Fourth National Report to the Convention on Biological Diversity

Submitted by the Ministry of Agriculture,
Irrigation and Livestock (MoAIL)

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ACRONYMS

ACC	Afghan Conservation Corps
AKF	Aga Khan Foundation
ANDS	Afghan National Development Strategy
AUM	Animal Unit Month
AWEC	Afghanistan Wildlife Executive Committee
BAPAC	Band-i-Amir Protected Area Committee
BSP	Biodiversity Support Program, a USAID funded project
CBNRM	Community Based Natural Resource Management
CEC	Council for Environmental Cooperation
CITES	Convention on the International Trade in Endangered Species
DRWR-WG	NCSA/NAPA Desertification, Rangelands and Water Resources Working Group
ECHO	European Commission, Directorate-General for Humanitarian Aid
EIA	Environmental Impact Assessment
EL	Environment Law
ESA	Environmentally Sensitive Area
GAIN	Green Afghanistan Initiative
GEF	Global Environmental Facility
gha	global hectares (a measure used by the Global Footprint Network)
ICARDA	International Center for Agricultural Research in the Dry Areas
IIP	Implementation and Investment Plan
IUCN	World Conservation Union
LDC	Lesser Developed Country
LEWS	Livestock Early Warning System
MDG	Millennium Development Goal
MDGF	Strengthened Approach for the Integration of Sustainable Environmental Management into the ANDS/PRSP
MEA	Multilateral Environmental Agreement
MoAIL	Ministry of Agriculture, Irrigation and Livestock
MoF	Ministry of Finance
MoJ	Ministry of Justice
NAPA	National Adaptation Programme of Action
NBSAP	National Biodiversity Strategy and Action Plan
NCSA	National Capacity Self Assessment
NDVI	Normalized Difference Vegetation Index
NEAC	National Environmental Advisory Council
NEPA	Environmental Protection Agency
NPASP	National Protected Area System Plan
NRM	Natural Resource Management
PAWG	Protected Area Working Group
PEACE	Pastoral Engagement, Adaptation and Capacity Enhancement
PoW	Programme of Work
PoWPA	Programme of Work on Protected Areas
PRSP	Poverty Reduction Strategy Paper
RAF	GEF Resource Allocation Framework
SALEH	Sustainable Agricultural Livelihoods in Eastern Hazarajat
SCAPoWPA	GEF/UNDP Supporting Country Action on the CBD Programme of Work on Protected Areas
SLM	Sustainable Land Management
TBPA	Transboundary Protected Area

UNCCD	United Nations Convention to Combat Desertification
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
WCS	Wildlife Conservation Society
WHC	World Heritage Convention
WWF	World Wide Fund for Nature

Executive Summary

This report comprises Afghanistan's Fourth National Report to the Convention on Biological Diversity (CBD) and is intended to focus primarily on assessing the degree to which Afghanistan is being successful in addressing the CBD's 2010 Target and the Millennium Development Goal (MDG) Target 7(b) of reducing the rate of biodiversity loss by 2010.

The report also documents Afghanistan's current (i.e., 2009) efforts and progress towards meeting the following three CBD planning targets:

- CBD's Strategic Plan;
- Programme of Work on Protected Areas; and
- Global Strategy for Plant Conservation.

Chapter I provides information on status and trends in Afghanistan's biodiversity. Chapter II describes Afghanistan's efforts at biodiversity conservation planning and implementation. Chapter III describes how Afghanistan has been attempting to integrate and mainstream biodiversity concerns into a broad range of legislation, planning and project execution. Chapter IV summarizes Afghanistan's progress towards meeting the various CBD planning targets. A series of four appendices provides additional information.

Overall status and trends in biodiversity, and major threats

The CBD's 2010 Target is to reduce the rate at which biodiversity is being lost, not to halt biodiversity loss completely. Rigorously assessing this target is difficult because it requires a large amount of quantitative data collected over a long time period. Little information exists for the period 1979 – 2002 and information since that time has largely been confined to the relatively secure central and north-eastern parts of the country. Consequently, trend in biodiversity can only be assessed based on opportunistic measurements, remote sensing, published statistics, intuitive interpretations, and anecdotal information.

The fauna and flora of Afghanistan is not exceptionally diverse with most countries in the world having a higher biodiversity index. There are 137 - 150 species of mammals, 428 - 515 birds, 92 – 112 reptiles, only 6 – 8 amphibians, 101 – 139 fish, 245 butterflies, and 3500 – 4000 vascular plant species native to Afghanistan. The range in numbers results from uncertainty in taxonomy and the questionable validity of some records. Only 7 vertebrate species are known to be endemic to Afghanistan, but estimates for endemic plant species range as high as 30%. Much more basic biological survey work and synthesis needs to be done to fully understand the diversity of the country's organisms.

As a broad generalization, biodiversity appears to be declining at an accelerating rate throughout Afghanistan. Satellite image analysis and assessment of commercial wood volumes show that forests, both closed forest and open woodlands, are rapidly disappearing. Overgrazing and shrub collection for fuel is markedly reducing plant biomass and altering plant communities. Diversion of water and increasingly frequent drought is drying wetlands and rivers with unknown effects on aquatic biodiversity. The ubiquity of weapons following years of war is leading to the loss of large mammals throughout much of the country. Ecological footprint analysis shows that Afghanistan's per capita biocapacity is declining. Large scale remote sensing analysis suggests that nearly 8000 km² of land was degraded between 1981 and 2003.

About 38% of Afghanistan's land area is comprised of ecoregions that are Endangered, 61% as Vulnerable, and only 1% as Stable. The ecoregions at highest threat are in an arc around the country's mountain chain and are comprised of open and closed woodlands.

Afghanistan's rapidly increasing human population presents the major underlying challenge to biodiversity conservation and ultimately to the quality of life of Afghans. Despite years of warfare that killed or displaced millions of Afghans, the population has doubled since 1979 to 24.3 - 32.7 million (depending on estimate accepted) in 2008. The latter figure approximates the highest population level for 2008 predicted in 1978 by the World Bank. Currently, Afghanistan's population growth is among the fastest in the world and the low median age of the Afghans ensures that rapid growth will continue for many years. Afghanistan's population can be expected to increase to 61 - 79 million people by 2050.

Proximal threats to Afghanistan's biodiversity are land encroachment, over-hunting, deforestation, over-grazing, shrub collection, dryland farming, water diversion and climate change. All of these threats have worsened in recent years.

The overall conclusion is that despite an expenditure of more than \$70 million in recent years, Afghanistan will not be able to meet the CBD's target of reducing the rate biodiversity loss by 2010 or in the foreseeable future. The major reasons for this failure are many, but three issues are largely responsible. First, the instability that has gripped the country for 30 years has resulted in Afghanistan being amongst the very poorest countries in world. Biodiversity conservation simply is not as high a priority as such issues as security, health care, and education. The continuing conflict limits the ability to undertake conservation efforts throughout most of the country. The second reason is a lack of Governmental implementation of biodiversity policy and programmes at the ground level as a result of lack of administrative and technical capacity and inadequate funding directed to Government. UN institutions and NGOs have stepped in to fill this gap, but by necessity have expended most of their time and resources on developing the conceptual, legal, and policy structure that will provide the foundation for future implementation. A third reason is that the extent of Afghanistan's biodiversity loss and ecological degradation is so profound, so extensive and population pressures so pressing that halting the decline and restoring a level of ecological integrity to Afghanistan natural environment will be a massive and long-term undertaking that cannot be achieved without simultaneous success in ameliorating poverty.

Key actions taken in support of the Convention's three objectives and to achieve the 2010 target and goals and objectives of the Strategic Plan of the Convention

Among the actions taken to further the CBD Objectives, Articles and Programmes of Work include the following:

- Promulgation of the Environment Law (EL) providing umbrella legislation for all environmental issues;
- Development of draft legislation including a Forest Law, Rangeland Law, Medicinal Plants Law, Protected Areas Regulations, Hunting Regulations, Species Trade Regulations;
- Establishment of several formal and informal committees to coordinate environmental initiatives;
- NCSA/NAPA process to determine priority actions under the CBD, UNFCCC, and UNCCD as well as the capacity needs to address them;
- Development of NCSA and NAPA follow up projects;
- Wildlife surveys in the Pamirs, Central Hindu Kush, and Nuristan;

- Establishment of the BAPAC and the Wakhan Pamir Association as environmental co-management committees;
- Establishment of a process for listing species at risk and to determine Harvestable or Protected Status;
- Development of a management plan for the proposed Band-i-Amir National Park and its approval by the BAPAC;
- Initiation of the process of developing an NPASP for Afghanistan;
- Development of an EIA legislation and interim procedures; and
- Initiation of many CBNRM projects.

Areas where national implementation has been most effective or most lacking

Implementation of the Convention has been most effective in development of institutional and legal instruments. In the past two years, Afghanistan has promulgated the Environment Law and the EIA Regulations and has several more laws and regulations in the pipeline (Protected Area Regulations, Fauna Conservation and Hunting Regulation, Rangeland Law, Draft Forest Law). A variety of processes have recently been initiated including interim EIA measures, listing of species at risk, model protected area community-based, co-management committees, wildlife research in a few key areas, development of a National Protected Areas Systems Plan, establishment of a CITES permitting system. A variety of committees have been formed to ensure coordination and mainstreaming of environmental activities.

Implementation has been most lacking in terms of field level protection of biodiversity. While there has been considerable success at developing central government biodiversity policy and planning initiatives, very little of this has been implemented in the countryside. Due to a variety of institutional reasons, the government has not legally designated its first national park nor allocated funding to its management. Afghanistan has not yet received funding to develop a National Biodiversity Strategy and Action Plan (NBSAP) and, consequently, detailed planning and target setting specifically relevant to the CBD have not yet been done.

Major obstacles encountered in implementation

The obstacles to implementing the CBD in Afghanistan are numerous and many are fundamental, systemic issues. Among the most significant are:

- The deteriorating security situation makes it difficult for scientists, NGOs and government staff to safely visit the majority of the country and undertake research, consultation and implementation activities.
- The grinding poverty of most rural Afghans makes implementation of biodiversity conservation impossible unless accompanied by economic benefits. Linking immediate benefits to long-term conservation actions is usually difficult.
- Due to many reasons, prohibitions, decrees and laws are not being effectively enforced.
- Lack of technical and administrative capacity on the part of government staff and institutions hamper execution of planned activities. Developing this capacity will require a decade or more of very significant funding and mentoring by the international community.

Priorities for the Near Future (2009 – 2010)

Priority actions for the next two years include:

- Write a NBSAP for Afghanistan incorporating biodiversity indicators, targets and specific strategies for implementing priority elements of the CBD;
- Complete drafting and passage of key environmental legislation such as the Protected Area Regulations, the Fauna Conservation and Hunting Regulation, the Rangeland Law and the Forest Law;
- Engage the Government more fully in the activities of the CBD and CITES;
- Undertake field studies of selected species and ecosystems to better understand biodiversity status and trends;
- Complete the NPASP for Afghanistan articulating clear targets for the protected area system and methods for implementing it;
- Ensure that Band-i-Amir, Ajar Valley, Big Pamir, and Shah Foladi are legally designated as protected areas and receive adequate funding for effective management;
- Continue to develop the human and institutional capacities of MoAIL and NEPA, as well as other institutions having cross-cutting connections, at the national and sub-national levels;
- Implement projects on a pilot-scale that encourage a community-based approach to NRM, the experiences of which should feed into policy and regulatory activities at the central level; and
- Develop innovative ways to undertake biodiversity conservation in concert with poverty alleviation.

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Introduction

In April 2002, the Parties to the Convention on Biological Diversity (CBD) committed themselves to achieve by 2010 a significant reduction in the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth. This target was subsequently endorsed by the World Summit on Sustainable Development and the United Nations General Assembly and was incorporated as a new target (7b) under the Millennium Development Goals.

Biodiversity is a contraction of biological diversity. Biodiversity reflects the number, variety and variability of living organisms.

Afghanistan signed the CBD in 1992 and ratified it in 2002. This report is an attempt to document Afghanistan's current (i.e., 2009) efforts and progress towards meeting several sets of CBD planning targets:

- CBD's 2010 target, which is also MDG 7(b);
- CBD's Strategic Plan;
- Programme of Work on Protected Areas; and
- Global Strategy for Plant Conservation.

More generally, this report also assesses Afghanistan's recent progress in meeting the three objectives of the CBD; i.e., a) the conservation of biological diversity, b) the sustainable use of its components, and c) the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

Finally, an Executive Summary provides a synopsis of documents information and conclusions.

For digital readers, the document is extensively cross-referenced with hyperlinks (control + left click).

Dupree (1980 p. 43) stated "Statistics on Afghanistan abound, but most consist of 'intelligent estimates', i.e., wild guesses based on inadequate data...". This remains largely true today and many figures cited here should be considered with this *caveat* in mind.

Figure 1 is a general map of Afghanistan locating many of the places mentioned in the report.

- Figure 1. *General map of Afghanistan showing provincial boundaries and proposed protected areas. Courtesy of WCS.*

Chapter I - Overview of Biodiversity Status, Trends and Threats

It is not possible to provide a comprehensive overview of the current state of biodiversity. The difficult and deteriorating security situation presenting in the country means that only a few relatively safe areas can be visited and monitored by NGO or government personnel. According to one estimate (ICOS 2008), as much as 72% of the country is now problematic for foreigners and government officials to visit. Consequently, outside of the

relatively secure central and north-eastern parts of the country most biodiversity information predates the onset of hostilities in 1979. Most current information is from the central Hindu Kush and the Pamir Mountains.

1.1. Overall Status of Biodiversity

Afghanistan is not a global biodiversity “hotspot”. Groombridge and Jenkins (1994) calculated a comparative index of biodiversity for all countries over 5000 km² based on the number of mammals, birds, reptiles, amphibians, vascular plants and endemic species. The index is scaled to account for the different sizes of countries. A score of 0 is the median with half the countries having a higher biodiversity index and half a lower one. Afghanistan’s index is -0.296 indicating that its biodiversity index is somewhat lower than the median. Indices of neighbouring Pakistan (-0.121) and Iran (-0.194) are somewhat higher, but still below the median. Indices for Turkmenistan (-0.572), Tajikistan (-0.536), Uzbekistan (-0.413), and Kazakhstan (-0.581) are all lower than Afghanistan’s. Afghanistan’s relatively low score results largely from the lack of vertebrate endemics.

Analysis of species records in UNEP (2009) indicates that there are 137 - 150 species of mammals, 428 - 515 birds, 92 – 112 reptiles, 6 – 8 amphibians, 101 – 139 fish, 245 butterflies, and 3500 – 4000 vascular plant species native to Afghanistan. The range in numbers results from uncertainty in taxonomy and the questionable validity of some records. Only 7 vertebrate species (**Mammals**, none; **Birds**, Afghan Snow Finch [*Montifringilla theresae*]; **Reptiles**, Leviton's Gecko [*Asiocolotes levitoni*], *Cyrtopodion voraginosus*, *Eremias aria*, Point-snouted Racerunner [*Eremias afghanistanica*], **Amphibians**, Paghman Mountain Salamander [*Batrachuperus mustersi*]; **Fish**, *Triplophysa farwelli*) are known to be endemic to Afghanistan, but estimates for endemic plant species range as high as 30% (Breckle 2007). Much more basic biological survey work and synthesis needs to be done to fully understand the country’s biodiversity.

A variety of processes assesses the status of Afghan species and assigns a level of threat. The IUCN Red List assesses risk at the global scale using quantitative criteria. Afghanistan has very recently formed the Afghanistan Wildlife Executive Committee (AWEC) to assess risk of Afghan species at the national scale using World Conservation Union (IUCN) regional criteria. The AWEC also recommends to NEPA whether species should be legally listed as Harvestable or Protected according to Article 47 of the Environment Law (EL). The Convention on the International Trade in Endangered Species (CITES) lists species on Appendices if they are threatened by international trade. The United Nations Environment Programme (UNEP) and World Conservation Monitoring Centre (WCMC) (UNEP-WCMC 2009) provide a list of Afghan species of “conservation concern”, but the list is so broad and the criteria for inclusion so uncertain that it is not particularly valuable for prioritization purposes. Table 1 is a complete list of Afghan species that are listed under one or more of these processes. Table 2 summarizes these data.

- Table 1. List of Afghan species listed by IUCN, CITES or AWEC.
- Table 2. Summary of number of species listed under various categories by IUCN, CITES or AWEC.

1.2. Trends in Biodiversity

The CBD’s 2010 Target is to reduce the rate at which biodiversity is being lost, not the impractical goal of halting biodiversity loss completely. Rigorously assessing this target is very difficult because it requires at least two quantitative measures of status in the past to determine historical rate of biodiversity loss and at least one recent measure to determine if the historical trend has changed. In fact, there are no primary indicators of biodiversity

status in Afghanistan for which we have three independent quantitative measures over a span of time. Assessing trend in Afghanistan's biodiversity can therefore only be intuited from a variety of information sources.

As a broad generalization, biodiversity appears to be declining at an accelerating rate throughout Afghanistan. Satellite image analysis and assessment of commercial wood volumes show that forests, both closed forest and open woodlands, are rapidly disappearing ([Section 1.3.2.](#)). Overgrazing ([Section 1.3.3](#)) and shrub collection ([Section 1.3.4.](#)) for fuel is markedly reducing plant biomass and altering plant communities. Diversion of water and increasingly frequent drought is drying wetlands and rivers with unknown effects on aquatic biodiversity ([Section 1.3.6.](#)). The ubiquity of weapons following years of war is leading to the loss of large mammals throughout much of the country ([Section 1.3.1.](#)). Footprint analysis ([Section 4.1.4.2.](#)) shows that Afghanistan's per capita biocapacity is declining. Large scale remote sensing analysis suggests that Afghanistan nearly 8000 km² of land was degraded between 1981 and 2003 ([Section 4.1.8.1.](#)).

1.3. Threats to Biodiversity

Afghanistan's rapidly increasing human population presents the major underlying challenge to biodiversity conservation and ultimately to the quality of life of Afghans. There has never been a complete census of Afghanistan and population estimates vary broadly. But, it is clear that despite years of warfare that killed perhaps 2.5 million Afghans and displaced millions more, the population of Afghanistan has approximately doubled since 1979 to an estimated 32.7 million in 2008 (CIA 2009) or 27.1 million in 2006 (UN Department of Economic and Social Affairs, Population Division, 2007). However, official Afghan statistics (Statistical Yearbook nd; in Dari) indicate a population of only 24.3 million.

The CIA figure cited above approximates the highest population increase scenario predicted by the World Bank in 1978 (Sayer and Van der Zon 1981; p. 13). Currently the natural growth rate is estimated as 2.625% per year (CIA 2009) and the actual growth rate, incorporating immigration, at 3.85% per year (UN Department of Economic and Social Affairs, Population Division, 2007). The former figure places Afghanistan as the 27th fastest growing country in the world and the latter as the 3rd fastest. The median age of 17.6 years (CIA 2009) is one of the lowest in the world and will ensure that the country's population will continue to rise rapidly. Afghanistan's population can be expected to increase to between 60.7 and 78.7 million people by 2050 (UN Department of Economic and Social Affairs, Population Division. 2007).

Associated with rapid population growth is the major underlying threat to biodiversity in Afghanistan--the abject poverty of most Afghan citizens. Afghanistan is one of the poorest nations on Earth with a Human Development Index ranking it 174th out of 178 countries (Centre for Human Development 2005). Consumption footprints ([Section 4.1.4.2.](#)) are the lowest of 150 countries surveyed and show dramatic decline over the past 40 years. Per capita income estimates vary widely, but one recent citation indicates that 42% of Afghans live on less than \$1 per day (Chatterjee 2009). Faced with such overwhelming poverty, Afghans have no option but to exploit biodiversity unsustainably. Unless this issue is more effectively and more rapidly addressed, biodiversity in Afghanistan faces a bleak future.

More proximal threats to Afghanistan's biodiversity are over-hunting, deforestation, over-grazing, shrub collection, dryland farming, water diversion, climate change and desertification. All of these threats have worsened in recent years.

1.3.1. Hunting, Trapping and Trade

Hunting and trapping are perhaps the greatest threats to many large mammals and birds in Afghanistan. Prior to the war in 1979, firearms were generally rare, primitive or small calibre. Many firearms were single-shot muzzle-loaders. The most common modern firearm was the low-powered .22, widely called a *moosh-koosh* (mouse-killer). But, firearms and ammunition were generally unavailable to the average Afghan. This all changed with the onset of hostilities when firearms and ammunition became ubiquitous.

During the war years, wildlife suffered as heavily armed Afghans were dispersed widely throughout the countryside and depended partially on wild meat for subsistence. Today, waterfowl hunting is widely practiced, especially in the winter months, while large mammals hunting is undertaken for sport by the elite in some places or opportunistically by local people. However, large animals are now so rare now that many once keen hunters have given it up.

There remains a thriving fur trade in Kabul, Mazar-i-Sharif and other centres ([Section 4.1.4.3.](#)). Many of the species represented are not native and clearly imported. It remains unclear what proportion of native species actually originate from Afghanistan. One of the major outlets for furs is the security-controlled markets on military bases. Cooperative efforts by the military, the US State Department and The Wildlife Conservation Society (WCS) have been successful in removing CITES listed species from most of these venues.

Afghans love to keep birds. There are active bird bazaars in Kabul and Mazar-i-Sharif (Ostrowski 2006a and b, Ostrowski et al. 2008) as well as other Afghan centres. These markets trade a wide variety of wild caught native species and captive-bred imports. Falcon-trapping is extensive with most of the desirable species (e.g., Saker Falcons [*Falco cherrug*], Peregrine Falcons [*Falco peregrinus*]) being sold to Pakistani middlemen who in turn sell them to wealthy Arabs. Falconry in Afghanistan is practiced largely with lower value species such as Sparrowhawks (*Accipiter nissus*). Chukar Partridges (*Alectoris chukar*) are extensively trapped and commonly kept for fighting and show. Small birds are trapped or netted for food.

On 20 March 2005, Afghan President Hamid Karzai issued Presidential Decree No. 53 banning hunting in any form for a period of 5 years ([Section 3.1.3.4.](#)). There is, however, no enforcement and most ordinary Afghans are unaware of the Decree while powerful and influential persons simply ignore it. A Fauna Conservation and Hunting Regulation ([Section 3.1.3.7.](#)) is under development which will regulate hunting, but it may be several years before it is approved by the Cabinet and even longer before it can be effectively implemented.

1.3.2. Deforestation

Afghanistan has two basic forest types: closed forest of oak and conifer in the monsoon-influenced areas of eastern Afghanistan and savannah-like, open pistachio woodlands originally located in an arc around the mountains (Figure 2).

- Figure 2. Afghanistan's major biomes based on the WWF ecoregional classification (Olson et al. 2001) organized by Breckle's (2007) vegetation classification. Data from WWF and figure courtesy of WCS.

Closed forests (not including northern juniper communities) may once have covered about 5% of the country or about 34 000 km². There were about 3 600 km² of closed canopy forest remaining in the late 1970s, i.e., only about 11% of pristine forest cover. Based on a

number of assumptions, as much as half of that has been lost since 1980 leaving some 1 800 km². Although there are many uncertainties, Afghanistan is probably left with roughly 5% of its pristine closed forest vegetation representing about 0.25% of the country's area (UNEP 2009).

Very roughly, open woodlands originally comprised some 38% (ca. 250 000 km²) of the Afghan landscape. In the late 1970s, approximately 32 000 km² remained representing about 13% of the original open woodland and 5% of the Afghan landscape (UNEP 2009). UNEP's (2003a) satellite image analysis could detect no remaining open woodland (> 40 trees per ha) in two provinces suggesting that open woodlands may now be on the verge of extinction as a viable ecosystem throughout much of Afghanistan.

Deforestation appears to continue unabated today. Wingard et al (2008) estimated that firewood harvest for the Kabul market alone results in the destruction of 10 000 ha of oak forest and 15 000 ha of juniper forest each year in Paktiya and Khost Provinces. Illegal export of timber to Pakistan through the lawless tribal areas is significant, but unquantifiable because of security concerns. The Presidential Decree banning forest harvest ([Section 3.1.3.3.](#)) is unfamiliar to most Afghans, or is simply ignored.

1.3.3. Over-grazing

Afghanistan has been grazed for the past 4000 – 5000 years and plant communities have accordingly adapted to heavy grazing pressure. Perennial grasses and herbs exhibit features such as bulbs, rhizomes, rootstocks, dormant seed, awns and barbs. Many forb species are annuals. Shrubs tend to be armed with thorns or have high levels of protective toxic compounds.

A detailed census of Afghanistan's livestock was undertaken in 2002 – 2003 (FAO, 2008). The census showed that there were 3.7 million cattle, 8.8 million sheep, 7.3 million goats, 1.6 million donkeys, 0.2 million camels and 0.1 million horses. One of the report's authors suggests that numbers have not changed substantially since then (W. Pittroff, pers. comm., 2009). Based on these figures, year-round stocking rates for the ca. 300 000 km² of Afghan rangeland are about 0.15 animal unit months (AUMs) per ha. This is a low stocking level relative to similar environments elsewhere in the world and together with the lack of herd increase following the drought, suggests very generally a) that Afghanistan's ranges are near carrying capacity, and b) that millennia of overgrazing has reduced carrying capacity relative to the potential of the land. The apparent conclusion that livestock are taking nearly all available herbage biomass certainly has a profound effect on biodiversity, but the lack of baseline data makes this impact impossible to document.

1.3.4. Shrub Collection

Much of Afghanistan is dominated by thorny cushion-shaped shrubs. This vegetative community itself results from millennia of overgrazing of a landscape that was originally may have been mostly grass - *Artemisia* steppe.

Together with dried dung, shrubs are the major source of fuel in much of rural Afghanistan. Shrubs are dug up by the roots and burned for bread-making, general cooking and heating. With increasing populations, ranges near inhabited areas are becoming denuded of shrub vegetation and shrub collectors are being forced to travel further afield. Little information is available on recovery rates of shrub vegetation. Loss of shrubs is of particular concern because their dense, thorny matrix provides protection from grazing for a vast number of native herbaceous and grass species, many of which are endemic. Shrub loss also increases soil erosion by wind and water. According to some

communities, catastrophic landslides and floods associated with spring rains and snowmelt have become increasingly common in recent years.

1.3.5. Dryland farming

By some estimates, only about 20% of Afghan cropland is currently irrigated with the remainder being dry-land or rain-fed farming. In the arid and semi-arid Afghan environment, dry land farming is usually a risky undertaking and often an act of desperation borne of food insecurity. Rain-fed cropland is most productive when newly plowed and lies fallow for long periods with the result being that ever-increasing amounts of productive grazing land are converted to erosion-prone fields.

1.3.6. Water Diversion and Loss of Wetlands

Afghanistan has few lakes and wetlands relative to neighbouring countries and many of those that do exist are increasingly at threat from a combination of water diversion and drought. Few systematic data are available to determine the extent of this threat, but there is anecdotal evidence from Afghanistan's best known wetlands.

Kol-i-Hashmat Khan is a seasonal wetland located within the city of Kabul. It is an important staging area for waterfowl and was used as a hunting ground for Afghan royalty for nearly 500 years. Water diversions from the Logar River have reduced the amount of water reaching the lake and therefore the area flooded and the time that the lake contains water have both declined (Petocz 2006).

Dams on the Gardez and Ghazni Rivers and tube-wells threaten the viability of Ab-i-Estada, a 290km² saline wetland in Ghazni Province (Khan 2006). Ab-i-Estada was once a staging area for the Critically Endangered Siberian Crane (*Grus leucogeranus*). Although there are no recent data, Ab-i-Estada was once an important breeding area for Greater Flamingos (*Phoenicopterus roseus*).

The Sistan wetlands on the Afghanistan-Iran border are a waterbird area of international importance. The entire system of shallow lakes essentially dried up in the period 2000 - 2004 (UNEP Post-Conflict Branch 2006).

In future, the problem of wetland loss can be expected to worsen as Afghanistan diverts more water for irrigation, hydroelectric and flood control, as wetlands are drained for agriculture and urbanization and as drought becomes more common through climate change ([Section 1.3.7.](#)).

1.3.7. Climate Change and Desertification

Mean annual temperatures in Afghanistan have increased by 0.6°C since 1960 or about 0.13°C per decade. Increased temperatures have been most pronounced during the autumn, with increases of 0.29°C per decade. Mean rainfall has decreased slightly at an average rate of 2% per decade, mainly due to decreases in spring precipitation (Savage et al. 2008).

Afghanistan has historically experienced climate cycles of about 15 years, of which 2 – 3 are generally drought. In recent years, however, there has been a marked tendency for this drought cycle to occur more frequently than the historical model predicts. Since 1960, the country has experienced drought in 1963-64, 1966-67, 1970-72 and 1998-2006. The period 1998 to 2005/6 marked the longest and most severe drought in Afghanistan's known climatic history (ECHO 2006). This increased frequency of drought in recent years

appears to be a consequence of increased temperature coupled with reduced spring precipitation (Savage et al. 2008).

Modeling reported by Savage et al. (2008) indicates that by 2030, mean annual temperatures are likely to rise by about 1.4°C with little change in overall precipitation. By 2090, increases in average temperature are likely to be between 2-6°C higher, dependent upon global emissions scenarios. Conditions will become drier, especially in spring, with reductions in rainfall of between 10-40mm and with drier conditions in the south.

The US Department of Agriculture world map depicting threat of human-induced desertification shows most of Afghanistan to be in the Very High risk category (Figure 3). Most of the remainder of the country is already classified as desert. According to the MoAIL 2006 National Report, desertification in Afghanistan already affects more than 75 percent of the total land area in northern, western and southern regions where widespread grazing and deforestation have reduced vegetation cover and catalyzed accelerated land degradation.

- Figure 3. US Department of Agriculture map showing threat of human induced desertification. From UNEP (2008b).

Savage et al. (2008) predict that Afghanistan will be confronted by a range of increased climatic hazards. These are likely to be primarily drought related, and associated with increased desertification and land degradation. Drought is likely to be regarded as the norm by 2030, rather than as a temporary or cyclical event. They suggest that flood impacts will likely be amplified by more rapid spring snow melt combined with greater run-off associated with land degradation, loss of vegetative cover and land mismanagement.

Increased soil evaporation, reduced river flow from earlier snow melt, and less frequent rain during peak cultivation seasons will all impact upon agricultural productivity and crop choice availability. Crop failures will probably increase in frequency and areas of abandoned, uncultivated land will likely increase. Crop choices will shift to more drought hardy species. By 2060, agricultural will become marginal without significant investment in water management and irrigation (Savage 2008).

Climate change has the capacity to plunge many more Afghans into poverty. Nevertheless, climate change is not a consideration in the national or sectoral plans of the Government of Afghanistan ([Section 2.1.2.3](#)).

1.4. Biome by Biome Assessment

Very broadly, Afghanistan can be divided into four biomes (Figure 2). Ranges of mountains extend from the Wakhan corridor in the extreme northeast through the central part of the country. The western and northern parts of the country are desert and semi-desert. Between the mountains and the desert is an arc of xeric steppe-like savannahs. Some of the eastern part of the country along the Pakistan border receives summer rains from the edge of the monsoon supporting forests of conifers and oaks.

WWF (Olson et al. 2001) classified the Earth into 867 terrestrial ecoregions and assigned a status to each. According to the WWF classification, 38% of Afghanistan's land area is comprised of ecoregions that are globally Endangered, 61% as Vulnerable, and only 1% as Stable (Table 3). Figure 4 shows that the ecoregions at highest threat are in an arc around the country's mountain backbone.

- Table 3. Proportion of each biome listed as Endangered, Vulnerable or Stable by WWF (Olson 2001).
- Figure 4. *Status of WWF ecoregions in Afghanistan. Data courtesy of WWF and mapping from WCS.*

WWF has listed 238 ecoregions worldwide as the *Global 200* (Olson and Dinerstein 2002). This collection of ecoregions is considered to be outstanding in terms of species richness, endemic species, unusual higher taxa, unusual ecological or evolutionary phenomena, and the global rarity of habitats. Effective conservation in this set of ecoregions would help conserve the most outstanding and representative habitats for biodiversity on this planet. The *Global 200* ecoregions actually combine one or more of the WWF terrestrial ecoregions (Olson et al. 2001). There are three *Global 200* ecoregions represented in Afghanistan (Figure 5) all of which are in the mountainous regions of the north-east. Paradoxically, these regions are not considered to be particularly at threat (compare with Figure 4).

- Figure 5. *Status of WWF ecoregions in Afghanistan. Data courtesy of WWF and mapping from WCS.*

1.4.1. Subalpine and Alpine Biome

The Subalpine and Alpine Biome extends from the north-east through the central portion of the country and comprises approximately 106 584 3km² or 17% of Afghanistan's land area. Much of this biome is above 3000m elevation. All of the ecoregions that comprise this biome in Afghanistan are considered by WWF as globally Vulnerable. The Subalpine and Alpine biome is the least threatened of Afghanistan's biomes, although part of this biome is included in WWF's *Middle Asian Montane Steppe and Woodlands Ecoregion*—a Global 200 Ecoregion. Global 200 Ecoregions are considered to be the most biologically distinct ecoregions of the planet.

Marco Polo sheep (*Ovis ammon polii*), a subspecies of argali sheep, lives in the Small and Big Pamirs in north-eastern Afghanistan as well as adjoining areas of Tajikistan, China and Pakistan. Conservation of Marco Polo sheep is the key motivation behind efforts to develop a transboundary protected area (Appendix III, [1.3.3](#), [3.1.11](#)).

Marco Polo sheep are the best studied Afghan species. In the 1970s, Petocz et al. (1978) estimated the number of Marco Polo sheep in the Afghan Pamir to be around 1,260 individuals. Based on surveys in 2004, Schaller (2004) estimated about 1 000 Argali in the same area suggesting there may have been a small decline in numbers.

Sheep counts in specific areas provide more detail:

- In the Small Pamir (excluding the Waghjir Valley), Petocz et al. (1978) counted 760 individuals in the 1970s while Schaller (2004) counted 549 individuals in 2004 in the same area.
- In 2007 – 2008, Winnie (in Johnson 2008d) counted 160 sheep in the Waghjir Valley. He considered this to be the best sheep range in the Afghan Pamirs.
- Winnie (in Johnson 2008d) estimated 600 – 800 sheep in the entire Small Pamir. Not counting the Waghjir population, this suggests a stable or slightly

declining population for the area of the Small Pamir previously censused by Petocz and Schaller.

- In the Big Pamir, Petocz et al (1978) estimated 500 sheep, significantly more than the 244 documented in 2007 by Winnie and Harris (2008). The Big Pamir is overgrazed and Marco Polo sheep are declining at a rate of about 5% per year. The greatest threats in the Big Pamir are competition with livestock, over-hunting, habitat degradation and fragmentation and displacement by livestock herders (Johnson 2008d).

Ibex (*Capra sibirica*) numbers in the Pamirs and in northern Badakhshan are reported to be large and stable—the only known case of apparently healthy large mammal populations in Afghanistan. Winnie (in Johnson 2008a) reported herds of 20 – 60 ibex in several valleys of the Big Pamir. Based on various assumptions, Johnson (2008a) estimated ibex numbers in northern Badakhshan at 9 000 – 36 000. No trend data are available. In 2008, AWEC listed the Badakhshan population of ibex as IUCN Red List *Least Concern* and as Harvestable.

Snow leopards (*Uncia uncia*) have been reported throughout Afghanistan's high mountains, but reliable records are limited to Wakhan and Nuristan. Johnson (2008f) accepts an estimate of 50 - 100 snow leopards for Afghanistan and a rate of decline of at least 20% over two generations. The major threats to snow leopards are considered to be human disturbance and hunting, decline in prey species, and livestock conflict. Snow leopard skins still appear in the Kabul fur markets. In 2008, AWEC listed the Afghanistan population of snow leopard as IUCN Red List *Endangered* and as a Protected Species in Afghanistan.

Data from the central Hindu Kush are limited. Shank et al. (1977) estimated about 5000 ibex in the Ajar Valley during the 1970s. Recent surveys suggest fewer than 250 remain (Johnson 2008a). AWEC has listed the Bamiyan population of ibex as IUCN Red List *Critically Endangered* and as a Protected species.

Local people report that urial (*Ovis orientalis*) populations are much reduced throughout Bamiyan Province, although no quantitative data are available. A few urial were observed by WCS in the area between Band-i-Amir and Ajar in 2008 (C. Shank pers. comm. 2009). AWEC listed the Afghanistan population of urial as *Data Deficient*, but reflected recognition that populations are declining by providing Protected status (Johnson 2008e).

The only three areas currently under development as protected areas in Afghanistan (Band-i-Amir, Ajar Valley, and Big Pamir) are in the Alpine and Subalpine Biome.

1.4.2. Desert and Semidesert Biome

The Desert and Semidesert Biome comprises 252,044 km² or about 39% of the country's land area. WWF classifies 73% of the Desert and Semi-Desert biome in Afghanistan as globally Vulnerable and 27% as globally Endangered.

Virtually no information is available on Afghanistan's biodiversity in this biome. However, it is clear that biodiversity in the Badghyz and Karabil semi-desert is much reduced in both Afghanistan and Turkmenistan with the loss of the tiger (*Panthera tigris virgata*), cheetah (*Acinonyx jubatus venaticus*) and wild goat (*Capra aegagrus*) (WWF 2001).

1.4.3. Open Woodlands Biome

The Open Woodlands Biome comprises 240,745 km² or 37% of Afghanistan. WWF classifies 60% of this biome as Endangered in Afghanistan, 38% as Vulnerable and 2% as

Stable. Next to the closed forest biome, this is the most threatened of Afghanistan's four major biomes.

This biome was originally an open meadow woodland of pistachio, almond and junipers trees depending upon elevation. Today, it is primarily dry shrubland as a result of a variety of human pressures.

Satellite-image analyses by UNEP (2003) showed that in 1977 woodlands with densities of 40 – 100 trees per ha were detected on 55 per cent of the land base in Badghis Province and on 37 per cent in Takhar Province. In 2002 the density of woodlands had decreased in both provinces to the point where they could no longer be detected by satellite instruments indicating reduction in density to <40 trees per ha. Field visits suggested complete deforestation in many areas. Much of the loss was reported to have been during the war years when residents reportedly stockpiled fuelwood because of uncertain future access. Military forces also cut trees to reduce hiding and ambush opportunities for opposing forces. Since the war, fuelwood demand has increased with the increasing population.

ACC initiated a pistachio rehabilitation project in 2005 cooperating with community Forest Management Committees to undertake labour intensive, direct seeding of *Pistacia vera* ([Section 2.2.1.3.](#)). Between 2005 – 2008, MoAIL implemented a pistachio rehabilitation and protection programme in 9 provinces involving seeding, irrigation, terracing and protection of trees.

Juniper woodlands occur on the northern slopes of the Hindu Kush at higher elevations than pistachio. UNEP (2003) estimated that 50 – 80% of juniper had been lost in areas of Herat and Badghis Provinces during the 1980s and 1990s.

1.4.4. Evergreen Forest and Woodland Biome

The Evergreen Forest and Woodland Biome comprises approximately 49,124 km² or 8% of Afghanistan. WWF classifies 70% of this biome as globally Endangered, 26% as Vulnerable, and 4% as Stable. This is the most threatened of Afghanistan's biomes.

The Evergreen Forest and Woodland Biome is influenced by the rains of the monsoon. Annual precipitation is not much more than in sparsely vegetated areas in central Afghanistan, but rain in the monsoon belt falls during the growing season whereas elsewhere in Afghanistan, virtually no rain falls in the late spring and summer. Summer rain allows development of plant communities dominated by evergreen oaks at lower elevation and pines, cedars and spruce at higher elevations with juniper occurring in drier microclimates.

UNEP (2003) undertook comparison of satellite imagery from 1977 and 2002 for Nuristan, Nagarhar and Kunar Provinces. This analysis showed a 71% decrease in forest cover for Nagarhar, 53% for Nuristan and 29% for Kunar during this 25 year period. Loss may be similar for Paktiya, Khost and Paktika. WCS is currently working to update this analysis, but results are still pending.

Wingard et al (2008) surveyed the Kabul timber markets and found wood was coming primarily from only two eastern forest provinces (Paktiya 48% and Khost 29%). Surprisingly, almost no wood was reported as originating from Nuristan or Kunar and the very valuable cedar (*Cedrus deodara*) was almost entirely absent from the Kabul markets. Because of security constraints, it is currently not possible to determine the current situation in Nuristan and Kunar, but there is some evidence that all the high value *Cedrus* timber is being exported directly to Pakistan.

The oak forests of Paktiya and Khost are being heavily utilized for firewood in the cities. Wingard et al (2008) estimated the annual trade volume of firewood in Kabul at 585 000 m³ of which 57% is oak and 43% juniper, primarily from Paktiya and Khost Provinces. Wingard et al (2008) estimate that this results in the destruction of 10 000 ha of oak forest and 15 000 ha of juniper forest each year.

Between 2006 and 2008, WCS undertook a study to determine presence of mammals in Nuristan. Because of security constraints, WCS and government personnel were unable to visit Nuristan, so local people were trained to collect data by direct observation, interviews with knowledgeable people, camera trapping, and DNA analysis of scat (Karlstetter 2008). This is the first study of Nuristan wildlife since the late 1970s at which time ecosystems were largely intact and wildlife was still abundant (Petocz and Larrison 1977).

Direct evidence was found for presence of leopard cat (*Prionailurus bengalensis*), grey wolf (*Canis lupus*), golden jackal (*Canis aureus*), red fox (*Vulpes vulpes*), Asiatic black bear (*Ursus thibetanus*), markhor (*Capra falconeri*), rhesus macaque (*Macaca mulatta*), crested porcupine (*Hystrix indica*), yellow-throated marten (*Martes flavigula*) and perhaps the first Afghan sighting of the common palm civet (*Paradoxurus hermaphroditus*). Local people suggested that common leopard (*Panthera pardus*), snow leopard (*Uncia uncia*), lynx (*Lynx lynx*), brown bear (*Ursus arctos*), and musk deer (*Moschus cupreus*) still occur in Nuristan. No reliable information was obtained about the occurrence of Pallas' cat (*Otocolobus manul*), jungle cat (*Felis chaus*), wild cat (*Felis silvestris*), ibex (*Capra siberica*), or urial (*Ovis orientalis*). Because of constraints in the data, no estimate of abundance could be made, but the study does show that considerable mammalian diversity still exists in Nuristan.

Chapter II – Biodiversity Conservation Planning and Implementation

Article 6(a) of the CBD states that parties shall develop or adapt national strategies, plans or programmes for the conservation and sustainable use of biological diversity. This chapter provides an overview of Afghanistan's efforts to plan for biodiversity conservation and of the implementation projects that have been undertaken to protect biodiversity.

As well, a series of decisions at COP8 in 2006 (CBD 2006) requests parties to submit information on particular strategic approaches through the national reporting. This chapter also provides an overview of the actions taken to implement the CBD in Afghanistan with special reference to these COP8 decisions.

2.1 Biodiversity Conservation Planning

Since 2002, Afghanistan has undertaken considerable environmental planning much of which has implications of biodiversity conservation. However, to date, there has only been one planning exercise undertaken specifically to address the provisions of the CBD. Broader, mainstreamed environmental planning initiatives are described in [Chapter III](#).

2.1.1 National Biodiversity Strategy and Action Plan

Article 36(1) of Afghanistan's EL ([Section 3.1.3.2.](#)) states that NEPA shall prepare a National Biodiversity Strategy and Action Plan (NBSAP), that addresses both *in-situ* and *ex-situ* conservation, within two years of the Act's entry into force; i.e., by 25 January 2009.

On 13 April 2006, NEPA and MoAIL, with the assistance of UNEP, submitted a proposal for Global Environment Facility (GEF) Biodiversity Enabling Activity assistance for development of the NBSAP, as well as the First and Second National Reports. To meet the requirements of the recently instituted Resource Allocation Framework (RAF) system, the Director General of NEPA sent a re-endorsement letter on 7 July 2006, but it appears that GEF declined to reconsider the proposal at that time. Recent correspondence (late 2008) indicates that the proposal will need to be resubmitted in 2009.

NEPA has requested funding from the Ministry of Finance for the Afghan year 1388 (March 2009 - March 2010) to develop an interim biodiversity strategy which would allow reporting to Parliament on actions being undertaken to comply with the EL. The USAID-funded ECODIT Biodiversity Support Program (BSP), in cooperation with UNEP and WCS, will be supporting NEPA in this process by hiring a short-term international technical advisor.

The longer-term intention remains to secure GEF Biodiversity Enabling Activity assistance to support development of the NBSAP to the standards of CBD.

2.1.2. National Capacity Needs Self Assessment for Global Environmental Management (NCSA)/ National Adaptation Programme of Action for Climate Change (NAPA) projects

The NCSA and NAPA projects have been the only planning initiatives undertaken specifically to address the CBD. The implementation of these GEF-funded enabling activity projects, which were finalized in late 2008, was undertaken by NEPA with strong technical and operational support from UNEP.

The NCSA objective was to assess Afghanistan's capacities and capacity needs to meet the obligation of three conventions: Framework Convention on Climate Change (UNFCCC), Convention on Biological Diversity (CBD) and Convention to Combat Desertification (UNCCD). The objective of the NAPA was to develop a programme of action to adapt to climate change through assessing vulnerability and identifying priority adaptation measures. The two projects were designed in such a way that their implementation was conducted jointly. Afghanistan was the first country in which this new approach was attempted.

2.1.2.1. NCSA Assessment of Capacity Needs to Implement the CBD

A Biodiversity and Wetlands Working Group was organized by UNEP and carefully considered Afghanistan's approach to the CBD. The Final Thematic Report of the Biodiversity and Wetlands Working Group (UNEP 2008a) is the only attempt to develop a comprehensive Afghan approach to implementing the CBD. The process also produced a national biodiversity assessment describing Afghanistan's biodiversity (UNEP 2009). These two reports provide lists of priority actions to implement the CBD. These lists are largely overlapping and supportive.

The Final Thematic Report (UNEP 2008a) suggests 8 priority actions:

1. Participate fully in activities of the CBD;
2. Develop a Biodiversity Strategy and Action Plan for Afghanistan;
3. Determine the status of Afghanistan's biodiversity;
4. Establish a system of protected areas;
5. Establish a CITES permitting system;
6. Enhance public awareness about biodiversity and sustainable use;

7. Establish community-based management of forests, rangelands and wetlands; and
8. Understand and utilize traditional practice and knowledge of conservation and sustainable use.

The biodiversity assessment (UNEP 2009) identifies 11 priority actions:

1. Establish priority and feasible protected areas as legally recognized and effectively managed entities;
2. Develop a protected areas system plan for Afghanistan designed to protect representative areas of high biodiversity in all major ecoregions;
3. Survey all wetlands and potential protected areas listed in this document to determine current status and suitability for inclusion into the protected areas system plan;
4. Initiate a national Red-Listing process for Afghan mammals with the technical assistance of IUCN, incorporating targeted surveys to establish current status of priority species;
5. Encourage national and international scholars to develop a comprehensive flora of Afghanistan;
6. Develop effective plans to intervene in the destruction of the remaining monsoon-dependent forests of eastern Afghanistan;
7. Develop effective plans for preserving and recovering remnant pistachio and juniper forests in northern Afghanistan;
8. Develop programs to preserve native Afghan landraces of crop plants and livestock;
9. Improve the capacity of government institutions to effectively manage biodiversity;
10. Increase public awareness of biodiversity and its value to the Afghan people; and
11. Develop a National Biodiversity Strategy and Action Plan for Afghanistan.

2.1.2.2. NCSA Assessment of Capacity Needs to Implement the UNCCD

A Desertification, Rangeland and Water Resources Working Group was organized to review activities undertaken by Afghanistan to comply with the UNCCD and identify related priority capacity needs and opportunities for capacity development at individual, organizational and systemic levels.

The Final Report for the Desertification, Rangeland and Water Resources Working Group (UNEP 2008c) identified eight areas as being priority for the implementation of UNCCD in Afghanistan:

1. Participate in UNCCD and creation and enhancement of enabling environment;
2. Establish drought early warning systems that include long-term monitoring and assessment of desertification;
3. Develop local, drought and salt resistant crops;
4. Strengthen food security systems and rural livelihoods through improved natural resource use and management;
5. Develop and implement rangeland management systems;
6. Efficient use of energy resources and development alternatives to wood-based energy resources;
7. Raise levels of education and public awareness about desertification, drought and sustainable land management; and
8. Strengthen existing relevant legislation and ensure that desertification is an issue considered by national level policy makers.

2.1.2.3. NCSA Assessment of Capacity Needs to Implement the UNFCCC and NAPA Programme of Action to Adapt to Climate Change

A Climate Change and Disaster Preparedness Working Group was convened to address both the NCSA objective of reviewing Afghanistan's approach to the UNFCCC and to meet the NAPA objective of identifying adaptation needs of Afghanistan to the effects of climate change.

The Final Report of the Working Group (UNEP 2008b) identified seven areas as being priority for the implementation of UNFCCC in Afghanistan:

1. Participate in UNFCCC and creation and enhancement of enabling environment;
2. Prepare the Initial National Communication;
3. Ratify the Kyoto Protocol;
4. Promote understanding of the impacts of, and vulnerability to, climate change, current and future climate variability and extreme events, and the implications for sustainable development;
5. Ensure informed decision-making and increased public awareness about climate change through educational and public awareness programmes and improved public access to information on climate change and its effects; and
6. Develop and implement integrated plans for water resources and agriculture;
7. Develop and implement plans for the protection and rehabilitation of areas affected by drought, desertification and floods.

The Final Report also identified 51 potential activity options for adapting to climate change. Through a series of evaluation exercises, two adaptation options were short listed and developed into summary project proposals: *Improved Water Management and Use Efficiency* and *Land and Water Management at the Watershed Level*. The first proposal is being considered for funding by the GEF ([Section 2.2.1.2.](#)). A prospective funder has not yet been found for the second.

Savage et al. (2008) reviewed existing national development strategies to assess the extent to which future climate change has been internalised into the strategic planning process. They concluded:

“At present, climate change is not a consideration in the national or sectoral plans of the Government of Afghanistan (GoA), despite it presenting a significant threat to cross-sectoral development. The phrase ‘climate change’ is not mentioned in the 2008 version of the ANDS. There are a number of measures contained within the strategies that might be classified as adaptive, but without clear assessments of climate thresholds, they may not be sufficient for the increased severity and frequency of impacts. Nowhere are these impacts analysed in the context of a larger process.”

2.2. Biodiversity Projects Implemented by International Organizations

2.2.1. United Nations

2.2.1.1. Capacity Building and Institutional Development Programme for Environmental Management (UNEP)

UNEP's *Capacity Building and Institutional Development Programme for Environmental Management* has undertaken a phased approach for providing assistance to Afghanistan with regard to environmental management. Phase 1, running from 2002-2003, assessed the environmental situation, and developed an action plan for addressing the key environmental problems. Phase 2, running from 2003-2007 focused on building the basic

institutional, legal and human capacity for effective environmental management at the national level. Finally, Phase 3, running from 2008-2011 will provide assistance to the national environmental authorities to implement the environmental management framework across the country, and to manage the process of environmental restoration and community-based management.

2.2.1.2. Improved Water Management and Use Efficiency (UNEP/NEPA)

UNEP and NEPA have applied for funding from GEF Lesser Developed Country Fund to implement the *Improved Water Management and Use Efficiency* proposal as a follow-up to the NAPA programme. The objective of this proposed project is to reduce the vulnerability of rural livelihoods in drought affected communities of Northern Afghanistan through improved water management and use efficiency.

2.2.1.3. Afghan Conservation Corps (UNOPS)

United Nations Office for Project Services (UNOPS) is implementing the *Afghan Conservation Corps (ACC)* project funded by the US Department of Agriculture through a Participating Agency Service Agreement (PASA) with USAID. The project began in October 2004 and is intended to provide local employment through conservation-related activities. These include support to three forest management committees to protect the pistachio woodland in Samangan, collaborating with the Ministry of Education to incorporate conservation education into the curricula, providing conservation education materials and activities to students in numerous provinces, and working with women to conserve horticultural diversity by planting seedlings and native flowers on public and government lands. At Kol-i-Hashmat wetland in Kabul, garbage and silt were cleared, trees were planted and a bridge reconstructed. Accomplishments at Band-i-Amir include providing conservation education, establishing and improving existing walking paths, and clearing garbage from around the lakes and dams.

2.2.1.4. Biodiversity Project (FAO)

The FAO *Biodiversity Project* is comprised of two interlinked projects dealing with wild medicinal and food plants. The first is a component of the UK funded *Alternative Agricultural Livelihoods Programme* intended to contribute to national policy by identifying viable alternative livelihood options and an institutional framework for income generation opportunities. The second is the German funded *Managing Biodiversity for Sustainable Food Security and Nutrition in Afghanistan* project intended to promote sustainable management of medicinal plant and wild food species, increased consumption of wild foods and income generation from wild natural resources.

2.2.1.5. Sustainable Agricultural Livelihoods in Eastern Hazarajat Project (FAO)

FAO implemented the UK funded *Sustainable Agricultural Livelihoods in Eastern Hazarajat Project (SALEH)* project from 2003 – 2008. A major component of the project dealt with community based pasture management in Bamiyan. The overall intent of the component was to provide a workable route through which communities and Government may resolve longstanding conflicts and confusion as to pasture ownership, considered to be a significant underlying cause of land degradation in Afghanistan. Approximately 157 000 ha of pasture land were brought under community based pasture management.

2.2.1.6. Strengthened Approach for the Integration of Sustainable Environmental Management in Afghanistan (UNDP/FAO/UNEP)

UNDP, FAO and UNEP are jointly implementing the *Strengthened Approach for the Integration of Sustainable Environmental Management in Afghanistan* (MDG-F) project. The project aims to promote a strengthened approach for the integration of sustainable environmental management into Afghanistan National Development Strategy (ANDS) and the MDGs to result in environmentally sustainable growth. As such it directly contributes to the achievement of Environment and Natural Resource goals included in the UNDAF ([Section 3.2.5.](#)) and to the environment and natural resources benchmarks as articulated in the ANDS. The Programme will promote formulation of suitable policy frameworks, ensure institutional capacity building, directly mainstream environmental considerations in national and sub-national planning and development frameworks, and pilot community-based natural resources management interventions. It is intended to run from January 2008 – December 2010.

2.2.1.7. Green Afghanistan Initiative (UNCT)

The United Nations Coordination Team (UNCT) created the *Green Afghanistan Initiative* (GAIN) in recognition that the magnitude of environmental degradation in Afghanistan far exceeds the capacity of individual Government Ministries and agencies to resolve single-handedly. GAIN is a joint programme of six United Nations Organisations (WFP, UNAMA, UNDP, UNOPS, FAO, UNEP). The objectives of GAIN are to increase natural vegetation and forest cover, provide alternative sustainable livelihoods, increase environmental awareness through education and build capacity at institutional and community levels.

2.2.1.8. Capacity Building for Sustainable Land Management in Afghanistan (UNDP)

UNDP is executing the three-year, \$1.052M *Capacity Building for Sustainable Land Management in Afghanistan* project. This project seeks to reverse the land degradation process through better understanding of the causes of land degradation and by removing the barriers to sustainable land management (SLM). The long-term goal of the project is to ensure that the agricultural, forest and other terrestrial land uses of Afghanistan are sustainable, productive systems that maintain ecosystem productivity and ecological functions while contributing directly to the environmental, economic and social well-being of the country. The objective of the project is to build capacities for SLM in appropriate government and civil society institutions and user groups and mainstream SLM into government planning and strategy development. The project has five outcomes, namely, (a) SLM is mainstreamed into national and sectoral policies and investment planning (b) Human resources and institutional capacities needed for SLM are developed, (c) Capacities for knowledge management in SLM are developed, (d) National Action Programme (NAP) on land degradation is completed; and (e) Resources are mobilized for implementing SLM projects. The first Steering Committee meeting was held in February 2009.

2.2.2. Asia Development Bank (ADB)

In 2005, ADB initiated the *Natural Resources Management and Poverty Reduction Project* with an objective to conserve biodiversity in Afghanistan's protected areas and address the basic needs of communities in the buffer zones. This project was terminated in 2007 amidst suggestions of mismanagement (Morarjee and Fidler 2007).

2.2.3. Wildlife Conservation Society (WCS)

WCS is implementing the USAID-funded *Afghanistan Biodiversity Conservation Program*. The activities under this program have the primary objective of conserving biological diversity in natural and managed terrestrial ecosystems in Afghanistan. The program has four major components:

- Baseline surveys and data analyses of wildlife and wildlands in Afghanistan's three most biologically significant areas (Wakhan, Hazarajat, and Eastern Forests);
- Strengthening laws, policies, and institutions to develop effective institutions, protected areas, and policies that will mitigate existing threats and increase opportunities for biodiversity conservation;
- Community-based initiatives to better understand local threats to biodiversity, and design strategies for mitigating those threats;
- Training and capacity-building to assist Afghanistan's ability to manage its biodiversity.

WCS has put particular emphasis on establishing protected areas in Hazarajat and Wakhan.

2.2.4. ECODIT

ECODIT is implementing the *Biodiversity Support Programme for NEPA (BSP/NEPA)*, an activity being implemented under an agreement between the Islamic Republic of Afghanistan and the United States Agency for International Development (USAID). BSP/NEPA's purpose is to strengthen the National Environmental Protection Agency (NEPA) and its ability to implement its mandate under the Environment Law. BSP/NEPA works with NEPA, relevant ministries, and other partners to improve environmental management capability and effectiveness in Afghanistan, including coordination and monitoring of activities affecting the environment, public awareness of environmental issues as they relate to national development, regulation of activities affecting the environment, sustainable financing of NEPA operations, and monitoring of community-based management of natural resources.

2.2.5. The International Centre for Integrated Mountain Development (ICIMOD)

ICIMOD is implementing the USAID-funded *Afghanistan Biodiversity and Community Forestry Programme: Strengthening natural resource management through regional innovations in policy development and capacity building in Afghanistan*. The objectives of this programme are:

- to promote institutional and policy development in natural resource management through regional innovations and peer networks;
- to strengthen capacity for policy research, analysis and monitoring by making available best practices and international quality training from the region; and
- to establish policy and practices linkages by setting up a demonstration site.

Funding for the project ends in 2009 but there are plans to develop a new multiyear programme in the coming months.

2.2.6. University of California- Davis

The USAID funded *Pastoral Engagement, Adaptation and Capacity Enhancement* (PEACE) Project is being implemented by the University of California at Davis. It applies forage and animal monitoring technology of the Livestock Early Warning System (LEWS) technology developed in East Africa and Mongolia. LEWS uses a satellite-based weather and vegetation greenness technology coupled with biophysical models to predict forage conditions across the landscape. LEWS, along with animal nutrition monitoring technologies and information technology for markets, allows pastoralists and development decision-makers to be proactive in implementing appropriate range-livestock management practices. Implementing these practices protects the natural resource base and improves the livelihoods of pastoralists using the rangelands.

2.2.7. Catholic Relief Services (CRS)

In recognition of the need to address both poverty and resource overuse, CRS has initiated a sustainable land management programme that aims at combining bio-physical watershed restoration activities with support for income generation and the provision of agricultural services. Interventions range from the construction of water harvesting schemes to community-based re-vegetation programs in support of agro-enterprise activities. CRS also works with communities and government agencies to encourage and support Community Based Resource Management initiatives that include biodiversity protection components in selected micro-watersheds of western and central Afghanistan, in accordance with new national laws being developed.

2.3. Specific Reporting Requested in COP 8 Decisions

2.3.1. Decision VIII/5 (Article 8j)

Decision VII/5, adopted by the COP in March 2006, calls upon members to submit reports on progress in achieving national participation of indigenous and local communities in biodiversity conservation and to submit information on implementation of the Program of Work on Article 8(j).

Article 8(j) requires each party to the CBD to respect traditional conservation and sustainable use practices of local people and ensure that they benefit from their traditional knowledge and practices (see Box 1).

The CBD has developed a Program of Work on Article 8(j) (<http://www.cbd.int/traditional/pow.shtml>). Unlike the PoWPA, no funding is made available for Lesser Developed Countries (LDCs) to implement this PoW, but there is a "Voluntary Trust Fund" intended to facilitate the participation of indigenous and local communities in the meetings related to the PoW. No Afghan group has yet accessed this fund.

During the NCSA process (Shank 2006), the Biodiversity Working Group identified Article 8(j) as a high priority issue and indicated two general actions to address it:

- *Undertake a broad campaign of public awareness and education for biodiversity and sustainable use. Dialogue should be two-way ensuring that traditional practices are documented. Ensure that local*

Article 8(j) states :

Each contracting Party shall, as far as possible and as appropriate:

Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge innovations and practices.

- people understand the benefits of preserving genetic diversity.*
(Considered as High Impact/High Cost and of secondary priority)

 - Inventory traditional practice and knowledge of conservation and sustainable use used by rural people.* (Considered High Impact and Low Cost and of primary priority)

However, awareness of 8(j) as an obligation of the CBD is not high in Afghanistan and there have been no formal steps taken to specifically address it.

Regardless, the general principle that local people should be engaged in conservation is reflected in many initiatives. For example, Article 38(3) of the EL states that one of the three objectives of the national protected area system is to “ensure sustainable use of natural resources by involving local communities in all activities related to protected areas, including designating and delimiting areas, developing integrated management plans, and managing protected areas.” The draft Protected Area Regulations require that management of each protected area be overseen by a Protected Area Committee comprised of a majority of community representatives. The Band-i-Amir Protected Area Committee (BAPAC) has been established in accordance with the draft Regulations and is functioning effectively. WCS has facilitated formation of the Wakhan Pamir Association comprised of 42 villages in the Wakhan and intended to address conservation issues, particularly formation of the Big Pamir Wildlife Reserve. The FAO *Biodiversity Project* ([Section 2.2.1.4.](#)) is extensively documenting traditional knowledge and use of Afghan medicinal and aromatic plants.

2.3.2. Decision VIII/24 (Protected Areas)

Decision VIII/24, adopted at the COP in March 2006, urges Parties to review implementation of the Programme of Work on Protected Areas (PoWPA) in national reports. Afghanistan’s approach to implementation has been two-pronged.

The first is an *ad hoc* approach towards meeting the targets by simply establishing a protected areas system in accordance with opportunities and constraints.

The second is the much more targeted approach entailed in applying for and receiving GEF/UNDP funding to implement portions of the PoWPA . In 2008, NEPA was successful in its application for a GEF/UNDP *Supporting Country Action on the CBD Programme of Work on Protected Areas* (SCAPoWPA) grant. The grant was for \$200 000 over three years with an additional \$391,700 in matching funding. Implementation is being organized by WCS.

The Initial Programme Analysis showed that Afghanistan’s level of protected area development is in the initial phase only. To date, no protected areas have been formally established and formal steps toward recognition have so far been limited to one area, the Band-i-Amir Lakes region. The primary focus of the proposed work is therefore focused on those activities and outcomes that will provide the most stable framework and platform for moving forward.

The project envisions four major outcomes. The first is a National Protected Area Gap Analysis. The current status of protected area proposals in Afghanistan remains primarily a function of past proposals (dating back to the 1970s) revisited with some additions and changes resulting from recent survey work. However, to date, no systematic gap analysis has been conducted to analyze these proposals and determine their ability to represent and protect Afghanistan’s biological diversity.

The gap analysis work will feed directly into the second major outcome – the NPASP, a product required by Article 16 of the draft Protected Areas Regulations and which is designed to identify national and regional protected area targets as well as provide direction for the monitoring and evaluation of the system as a whole.

The third major outcome, the creation of a benefit sharing policy, was identified as the single greatest policy need for protected area development. Present government financing requirements make it impossible to ensure that the funds generated by protected areas will accrue to the local communities or responsible management authorities. Overcoming this obstacle will require a concerted effort to analyze the present structure and craft a range of options that will be accepted by the government and the Ministry of Justice.

The fourth outcome, protected area capacity building, is recognized as a high priority. This will entail a capacity needs assessment for selected priority areas, development of training curricula, and initiation of training in selected, high priority areas. The primary focus of this project is the national needs assessment and identification of training needs.

More detailed reporting on relevant activities of the PoWPA is to be found in Appendix III.

2.3.3. Decision VIII/28 (Impact Assessment)

Decision VIII/28, adopted by the COP in March 2006, urges Parties to apply the *Voluntary Guidelines on Biodiversity-Inclusive Environmental Impact Assessment* within the context of Article 14(1a) of the CBD and Target 5.1 of the *Provisional Framework of Goals, Targets and Indicators to Assess Progress Towards the 2010 Biodiversity Target*.

The *Voluntary Guidelines on Biodiversity-Inclusive Environmental Impact Assessment* (appended to Decision VIII/28) lay out a mainstream EIA structural approach (i.e., screening, scoping, assessment, reporting, review and decision-making) with specific emphasis on concepts, issues and questions that should be addressed to ensure that EIAs adequately address biodiversity issues. In attached appendices, the guidelines indicate EIA screening criteria that should be mandatory to address biodiversity concerns.

Article 14(1a) of the CBD states that Parties shall:

Introduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate, allow for public participation in such procedures;

Target 5.1 of *Provisional Framework of Goals, Targets and Indicators to Assess Progress Towards the 2010 Biodiversity Target* reads *rate of loss and degradation of natural habitats is decreased* with relevant indicators being trends in aerial extent biomes, ecosystems or habitats and trends in abundance and distribution of selected species.

Chapter 3 of the Environment Law, gazetted January 2007, provides comprehensive umbrella EIA legislation and names NEPA as the competent environmental authority responsible for EIA in Afghanistan. The *Environmental Impact Assessment Regulations* (Gazette No. 939, 10 March 2008) provide more detail on the EIA process. NEPA's *National Environmental Impact Assessment Policy: An Integrated Approach To Environmental Impact Assessment In Afghanistan* (November 2007) provides policy vision, principles, strategy and process, as well as practical next steps necessary to implement an EIA regime in Afghanistan. In June 2008, NEPA issued *Administrative Guidelines for the Preparation of Environmental Impact Assessments* as public information intended assist those undertaking development projects that may have a potential impact on the environment, and to guide proponents on how to deal with the NEPA on EIA issues. UNEP has supported NEPA throughout the process of EIA policy development.

The policies are addressing how chapters 3 and 4 of the Environment Law will be implemented by the Government of Afghanistan and form the basis of regulatory development - administrative and technical procedures - to be completed by NEPA supported by UNEP in component 4. In 2007 draft EIA regulations were developed as well as a set of administrative guidelines, which will act as an application and interpretation guide to the EIA regulations and the EIA policy.

Recognizing that the burden of administering full EIAs is beyond the current capacity of NEPA, the interim EIA Regulations that are currently in force outline an interim process intended to provide some assessment while not hindering development vitally necessary to Afghanistan's economy. In this regard, the obligation to meet international best practice lies with the proponent, and NEPA's role is largely limited to ensuring that the process outlined in the regulations is followed. In due course, when the technical capacity of NEPA is improved, new regulations will be developed giving NEPA a stronger review and assessment role in the process. In the meantime, UNEP will support NEPA in the development of sector guidelines to guide proponents.

Chapter III - Sectoral and cross-sectoral integration and mainstreaming of biodiversity

In light of the many daunting problems facing Afghanistan today, biodiversity does not figure prominently in Afghanistan's planning, policies or programs. However, broader environmental issues are reflected in a wide spectrum of documents with biodiversity being reflected implicitly. This chapter provides a general overview of how biodiversity has been, and is being, integrated into Afghanistan's laws, policies, strategies, and actions.

3.1. Afghanistan's Biodiversity Legislation

Afghanistan is an Islamic republic, governed by Shari'a law. For the most part, Shari'a complements the modern principles of environmental management. For example, the notion of sustainable development is consistent with the principle of *khilafah* (environmental stewardship) contained in the *Qur'an*.

Afghanistan's current hierarchy of secular laws, which as a body of law is subordinate to Shari'a, sees the Constitution at the apex, subordinate to which is primary legislation (for example, the EL), under which falls subordinate legislation (for example, the Protected Areas Regulations). Customary law, which is often applied in regard to access to and use of biological resources, is found at the bottom of the hierarchy. In other words, its application is lawful only in so far as it does not conflict with Shari'a or secular statutory law.

Although a few fragmented and outdated laws existed, until recently there was no overall regulatory framework for biodiversity.

3.1.1. Pre-2001 Laws Relevant to Biodiversity

Legislation relevant to biodiversity drafted prior to the fall of the Taliban in 2001 is generally outdated and inconsistent, and fails to reflect modern principles of environmental management. The relevant laws that may remain in force include:

- Forestry Law of the Islamic Emirate of Afghanistan, 2000;
- Islamic Emirate of Afghanistan Law for Land Ownership, 2000;

- Hunting and Wildlife Protection Law, 2000; and
- Range Management Law, 1970/ 2000.

The legality of these laws is uncertain. The Bonn Agreement of 2001 stated that existing laws and regulations would remain enforceable provided they were not inconsistent with the Bonn Agreement itself, the 1964 Constitution or the international legal treaties to which Afghanistan is a partner. Many of the Taliban era laws have been held to be unenforceable, but the specific laws noted above have not been tested by the courts.

3.1.2. Post-conflict Laws Relevant to Biodiversity

3.1.3.1. Constitution of the Islamic Republic of Afghanistan

The Constitution evolved out of the Afghan Constitution Commission mandated by the Bonn Agreement and was adopted by the *Loya Jirga* on January 4, 2004. The Constitution does not grant citizens an environmental right *per se*, but rather imposes a corollary duty on the State to adopt necessary measures for safeguarding the environment.

Article 15 says “The state is obliged to adopt necessary measures for safeguarding archaeological artefacts, proper exploitation of natural resources, and improvement of ecological conditions”. This is the only specific reference to the environment in the Constitution.

3.1.3.2. Environment Law

One of the measures adopted by the State in fulfillment of Constitutional obligations was the development and promulgation of the EL, which came into force on 18 December 2005. The EL contains a chapter on biodiversity management and generally reflects the tenets of modern environmental management. The EL repeals the Nature Protection Act of 1986/2000. The 2005 version of the Environment Law was then reconsidered and amended by the newly-formed National Assembly and the current version of the law was gazetted in January 2007 ([Section 3.1.3.6.](#)).

Chapter 6, titled *Biodiversity and Natural Resource Conservation and Management* addresses biodiversity, protected areas, ecological restoration, rangeland management, harvest, sustainable use, alien species and living modified organisms. A brief summary of the relevant articles is outlined below.

- Article 36 states that NEPA shall prepare an NBSAP;
- Article 37 states that natural resources both inside and outside protected areas shall be managed to ensure sustainable use, that NEPA shall develop rehabilitation plans for degraded ecosystems and that unsustainable activities shall be undertaken without prior authorization;
- Article 38 states that the objectives for the protected area system are to conserve natural and cultural heritage, conserving and restoring representative ecosystems, habitats and cultural features, and involving communities in all activities related to protected areas;
- Article 39 states that NEPA shall prepare an NPASP and management plans for each protected area. It states that NEPA shall be responsible for funding the protected area system;
- Article 40 states that protected areas shall be categorized according to the IUCN system;

- Article 41 states that the habitats of species listed as “Protected” under Article 50 shall be designated as species management areas, that management plans will be developed for those areas and destruction of them is prohibited;
- Article 42 sets out a process for designating protected areas;
- Article 43 sets out a process for declassifying protected areas;
- Article 44 states that degraded vegetation will be restored;
- Article 45 sets out measures to minimize impact on vegetation by grazing;
- Article 46 states that species management shall be an integral part of other planning processes;
- Article 47 sets out a process for listing “Harvestable” and “Protected” species;
- Article 48 states that management plans will be developed for harvestable species and that take shall be allowed on the basis of permits;
- Article 49 prohibits the take of protected species, except under prescribed circumstances;
- Article 50 states the recovery plans will be prepared for protected species;
- Article 51 sets out conditions for import of alien species and living modified organisms;
- Article 52 states that reintroduction of indigenous species shall be by permit;
- Article 53 states that ex situ conservation measures will be undertaken under conditions set out in the NBSAP;
- Article 54 states that all trade in CITES specimens shall be in accordance with the Convention;
- Article 55 states that no listed species may be imported without a permit;
- Article 56 states that no species listed under Article 47 may be exported without a permit;
- Article 57 states that no species listed under Article 47 may be possessed, transported or traded without a permit; and
- Articles 58 – 63 address access to genetic resources including access permits and consent to access.

3.1.3.3. Decree on the prohibition of forest harvesting

Decree No. 405 banning the cutting of forests was issued on 24 January 2002 by the Interim Government of Afghanistan. This was reiterated by Decree of the Interim President # 736 dated 7 August 2002 in which it is stated “In order to preserve and maintain forests as a national asset, the cutting of natural and artificial forest is strictly prohibited.” The Decree goes on to task the Ministry of Agriculture with responsibility to implement the ban and provide quarterly reports to the President’s office.

3.1.3.4. Decree on the prohibition of hunting

Presidential Decree, #53, issued March 19 2005 bans all hunting and trapping in the country for a period of five years. This decree is not enforced, is unknown to the vast majority of Afghan citizens, and is ignored by those that are aware of it.

3.1.3.5. Draft Water Law

The Water Law is intended to afford protection to water resources, ensure fair distribution of water, see that water is used effectively and sustainably, and to fulfill the rights of water users. Article 32 states that large water resource development projects are subject to EIAs, that users must not utilize water in a manner that detrimentally affects ecological systems and that downstream needs of aquatic ecosystems must be met.

The Water Law has now been passed by the Lower House of Parliament but approval by the Upper House is still outstanding.

3.1.3.6. Draft Protected Area Regulations

Protected Area Regulations were prepared several years ago, but have not yet been approved for submission to Parliament by the MoJ. The Protected Area Regulations were drafted to correspond to the EL passed in 2005 in which authority for managing protected areas was delegated by NEPA to MoAIL. The draft regulations describe in detail how MoAIL is to manage protected areas. However, the EL was amended in 2007 to remove delegation of authority by NEPA. A stalemate has resulted because NEPA does not have the capacity to manage protected areas and MoAIL has always considered protected areas to be its mandate. Efforts are currently underway to provide an interim procedure (*tarzulema*) allowing MoAIL to manage protected areas while the EL is amended to allow delegation of authority.

A further issue is that the draft Protected Area Regulations provide NEPA with the authority to establish Provisional Protected Areas. Band-i-Amir is ready to be legally recognized as a Provisional Protected Area, but this cannot take place until the Regulations have been brought into force.

3.1.3.7. Draft Fauna Conservation and Hunting Regulation

The Fauna Conservation and Hunting Regulation is currently under development. It is intended to ensure the continued survival of Afghanistan's native fauna populations, protect against the unauthorized pursuit and killing of fauna, provide a foundation for science-based hunting management and promote community management of fauna resources.

3.1.3.8. Draft Rangeland Law

The Rangeland Law is currently under development. Its purpose is to create a framework for community custodianship and management of rangeland resources to provide for sustainable use and management of the rangeland resources, to maximize productivity of rangeland resources and to maintain ecological functions and evolutionary processes of Afghan rangelands, conserve soil and water resources, maintain biological diversity, combat desertification, and secure the needs and interests of future generations. The thrust of the draft law is to provide for community-based rangeland management.

3.1.3.9. Draft Forest Law

Like the draft Rangeland Law, the draft Forest Law reflects the principles of community based natural resource management enshrined in the Cabinet-endorsed National Strategy for Forests and Rangeland. The draft is currently with the Ministry of Justice for processing.

As has been stated above ([Section 1.3.2](#)), Afghanistan's forest resources are in a severely degraded state. Yet many of Afghanistan's people are still reliant on these resources in order to survive and develop. With this background in mind, the law strikes a delicate balance between conservation of forest resources on the one hand, and maximising their productivity on the other, the latter in accordance with the principle of sustainable management. Another important function of the law is to formally introduce the principles of community-based forest management into Afghanistan's legislative and governance frameworks. Although in practice many forest resources are managed independently by the communities that depend on them, such customary practices have no force of law, nor are they approved by the Government. The purpose of the law is to create a legal mechanism whereby the Government – by granting specific forest resource rights – can

recognize the role of communities in the management of the forest resources on which they have a direct stake, and grant those communities long-term legal rights to manage the resources themselves, within a framework of sustainable management.

3.1.3.10. Other Draft Legislation

Other legislation currently under development include a Medicinal Plant Law and Species Trade Regulations.

3.1.4. Draft Land Policy

Land and resource property rights and tenure in Afghanistan are not clear. Successive Governments have overlain new land policies and legislation over previous, blurring the lines between private, common and state land and giving rise to the possibility of multiple and conflicting entitlements. These frequent legislative changes, together with partial implementation, intermittent conflict, displacement and drought have all exacerbated the land rights situation. The ineffectiveness of land administration mechanisms means that there has been no comprehensive record of land ownership or even an overarching inventory of all lands, public and private. Acting as multipliers in this confused situation are rapid population growth and associated dynamics of land fragmentation, opium poppy cultivation, and chronic instability and insecurity in many parts of the country. The implications of this situation for sustainable natural resource management are not positive. Common property natural resources such as rangelands and forests are frequently subjected to a 'Tragedy of the Commons' type situation. Unclear ownership and use rights generate incentives that stimulate unsustainable exploitation, leading to degradation of the resource and associated biodiversity.

A draft land policy is currently under discussion at the national level. It envisions the maximization of social and economic benefits to the whole of Afghan society based upon the orderly and sustainable use of land resources. The policy intends to guide the legal drafting and enactment of new or amended land laws. Of particular importance to the CBD, and addressed by the draft land policy, are issues of insecurity of tenure in rural areas, distribution and acquisition of land, duality of land tenure and land management, regulation of pasture land, land use, and environmental sustainability.

Several projects such as SALEH ([Section 2.2.1.5.](#)) and laws such as the draft Rangeland ([Section 3.1.3.8.](#)) and draft Forestry Laws ([Section 3.1.3.9.](#)) are addressing the issue of land tenure.

3.2. National Strategies

Afghanistan's national environmental strategies are contained within a fabric of four interlocking national-level planning documents; the *Millennium Development Goals: Vision 2020*, the *Afghanistan Compact*, the *Afghanistan National Development Strategy* (ANDS) and the *National Environment Strategy*.

3.2.1. Afghanistan Millennium Development Goals Country Report 2005 – Vision 2020

The eight global Millennium Development Goals (MDGs) and their targets were adopted by the UN in 2001 following recommendations from the Millennium Summit held in 2000. In March 2004, Afghan President Hamid Karzai sent a letter to the United Nations Secretary-General indicating that Afghanistan would develop its own "Afghanized"

approach to meeting the global MDGs as the basis for the country's development planning.

Millennium Development Goals: Vision 2020 (Islamic Republic of Afghanistan and UNDP 2005) was completed in 2005. Target 9 under MDG 7 (Ensure Environmental Sustainability) indicates that Afghanistan will attempt to "Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources". There was considered to be insufficient data to determine whether the goal could be met by 2020 and the necessary policy environment was assessed as "weak but improving".

While global MDG 7(b) (i.e., reduce the rate of biodiversity loss) is not reflected in the Afghanized MDGs, considerable emphasis is placed on maintaining vegetative cover. Major recommendations were to better protect forest in the face of resistance from powerful timber mafias, to increase area under forest and vegetation cover, and to replace current fuel sources by increasing access to cheap non-solid fuels and by actively developing rural electrification.

3.2.2. Afghanistan Compact

The *Afghanistan Compact* is an agreement, signed in February 2006, between the government of Afghanistan and the international community committing both to cooperate in creating conditions allowing the people of Afghanistan to live in peace and security under the rule of law, with a strong government which protects human rights and supports economic and social development in the country.

The Afghanistan Compact confirmed the government's overarching goals as being those articulated in *Afghanistan Millennium Development Goals Country Report 2005 – Vision 2020* ([Section 3.2.1.](#)). Consistent with those goals, this Compact identifies three interdependent pillars of activity for the following five years: (i) Security; (ii) Governance, Rule of Law and Human Rights; and (iii) Economic and Social Development.

In terms of the environment, the *Afghanistan Compact* indicates that environmental regulatory frameworks and management services will be established for the protection of air and water quality, waste management and pollution control, and natural resource policies will be developed and implementation started at all levels of government, as well as the community level, by end-2007. There is no specific mention of biodiversity.

3.2.3. Afghan National Development Strategy (ANDS)

The *Afghanistan National Development Strategy* (ANDS) is a MDG-based plan that serves as Afghanistan's *Poverty Reduction Strategy Paper* (PRSP). It is underpinned by the principles, pillars and benchmarks of the *Afghanistan Compact*. It was released in December 2008 and represents an attempt to comprehensively address the major challenges that face Afghanistan. The ANDS reflects the government's vision, principles and goals for Afghanistan, which are organized under three pillars: (i) Security; (ii) Governance, Rule of Law and Human Rights; and (iii) Economic and Social Development. Environment falls under the third pillar. The ANDS focuses mainly on the next five years, but it also reflects Afghanistan's long-term goals.

The ANDS is very large planning compendium comprised of a main document supplemented by 22 sector strategies, 37 institutional strategies, and 35 Provincial strategies as appendices.

3.2.4. National Environment Strategy

The *National Environment Strategy* is one of the 22 sector strategies of the ANDS. The three goals of the Environment Strategy are:

- Secure a clean and healthy environment for the people of Afghanistan;
- Attain sustainable economic and social development while protecting the natural resource base and the environment of the country; and
- Ensure effective management of the country's environment through participation of all stakeholders.

There are two Priority Objectives (i.e., Environmental Governance and Environmental Management) which are to be met through the following 6 thematic strategies:

- Forestry and Rangeland;
- Protected Areas and Biodiversity;
- Water and Wetlands;
- Air Quality Urban and Industrial;
- Environmental Management; and
- Environmental Education and Awareness.

Among the desired outcomes identified in the Forestry and Rangeland, Protected Area and Biodiversity, and Water and Wetlands thematic strategies are:

- Establishment of regimes for proper and effective utilization of forest and rangelands;
- Achieving balance between production and productivity in agricultural land uses and effective maintenance and enhancement of the natural and wildlife resource base;
- Targeting and geographical coverage for community-based resource management;
- Clarity on the legal status and boundaries of protected areas;
- Enabling legislation on establishing and managing protected areas;
- Assessment of impact of human settlements, war, drought, tourism and landmines on protected areas;
- Hydrological and biodiversity assessment of protected areas;
- Regulation of hunting and other human activities in protected areas;
- Clearance of land mines from protected areas;
- Accession to Ramsar Convention;
- Hydrological studies and biodiversity assessment of major wetlands; and
- Remedial measures for containing impacts of desiccation of wetlands on human and natural environment

The National Environment Strategy recognizes that environmental management is a new concept in Afghanistan. Therefore it focuses on developing NEPA's capacity and ability to perform its regulatory, coordination and policy-making duties. It sees strong environmental management by NEPA as the platform necessary to mainstream environmental issues, including the ANDS benchmarks and MDG goals for environment.

3.2.5. United Nations Development Assistance Framework (UNDAF)

The *United Nations Development Assistance Framework* (UNDAF) (UN System 2005) provides a common operational framework for United Nations organizations to formulate their actions towards achievement of MDGs in Afghanistan. Environment and Natural Resources is one of four inter-related Areas of Cooperation that emerged as particularly critical for the United Nations System's support to the people and Government of Afghanistan. UNDAF Objective 4 reads "By 2008, development and implementation of environment and natural resource policies strengthened at all levels of Government, including the community level, to ensure proper management of, and appropriate education on, rare and important natural resources."

3.3. National Level Government Framework

3.3.1. Relationship of Line Ministries: MoAIL and NEPA

Until fairly recently, there was no specific biodiversity mandate within the Government of Afghanistan, although elements of it were implemented primarily by the Ministry of Agriculture, Irrigation and Livestock (MoAIL). This institution has traditionally held the mandate for forestry, rangeland management, wildlife and protected areas. It is also the national focal point for the CBD and the key institution for the management of natural resources in Afghanistan.

Until 2003, the environment itself was not independently recognized as a government mandate. It was only after the Constitutional *Loya Jirga*, or Grand Council, that environment was added to the portfolio of the former Ministry of Irrigation and Water Resources, and the institution renamed the Ministry of Irrigation, Water Resources and Environment.

In late 2004, after the Presidential elections, the Cabinet was reshuffled and the environment mandate was carved off from its previous institutional home. Known during the interim period as the Independent Department of Environment, in May 2005 the fledgling institution was renamed the National Environmental Protection Agency (NEPA), and established by presidential Decree #13. The EL ([Section 3.1.3.2.](#)) clarified the mandates, powers, responsibilities and functions of NEPA.

The original intent was for NEPA to be responsible for the more overarching policy and regulatory aspects, while delegating authority to MoAIL for field-level management. This division of authority is, in fact, not reflected in the version of the EL re-gazetted in January 2007 ([Section 3.1.3.2.](#)) in which references to delegation of authority were removed. It is widely recognized that the technical capacity for management of natural resources lies in MoAIL while NEPA possesses the policy-setting and regulatory expertise. This disconnect between legal authority on the one hand and tradition and expertise on the other is a current source of uncertainty and paralysis. The Parliamentary Committee on the Environment ([Section 3.4.3.](#)) has instructed NEPA to submit an amended version of the EL to Parliament that has been agreed by MoAIL.

The current official contacts for MEAs to which Afghanistan is a Party are as follows:

- | | | |
|---|----------------------------|-------|
| • | GEF OFF | NEPA |
| • | CITES Management Authority | MoAIL |
| • | CITES Scientific Authority | MoAIL |
| • | CBD Focal Point | MoAIL |
| • | CCD Focal Point | MoAIL |

- UNFCCC Focal Point NEPA
- Ozone treaties NEPA

3.3.2. Strategic direction of MoAIL

The organizational structure of MoAIL includes a General Directorate of Natural Resource Management under which fall Directorate of Forestry and Directorate of Land Management. A Wildlife and Protected Areas Section falls under the Forestry Directorate.

In 2006, the Council of Ministers approved the *Policy And Strategy For The Forestry And Range Management Sub-Sectors* as Cabinet Decision #26. The level of approval gives this policy the force of law. The vision reflected in the document is to maintain a balance between maximization of production and maintenance of natural and wildlife resources. The strategy explicitly adopts a community-based approach and aims to establish land user rights contracts.

More recently, MoAIL has developed a Ten-Year Master Plan and an associated Five-Year Implementation and Investment Program (IIP) intended to provide direction for donors and Ministry staff to work towards coherent and strategic implementation of the MoAIL mandate. The objective of the natural resources section of the IIP was adopted directly from the 2006 forest and rangeland policy. It reiterates that communities and institutions throughout Afghanistan should utilize natural resources in such a way as to achieve a balance between maximization of production and productivity and the effective maintenance and enhancement of natural resources.

The six different components of the natural resources section of the IIP relate closely to the implementation of the CDB. Component 1 of the IIP, stresses the need to establish an appropriate legal and institutional framework that is conducive to sustainable natural resource management. Component 2 addresses implementation of community-based integrated natural resource management plans supported by Community Natural Resource Management Committees. Component 3 addresses awareness-raising. Component 4 involves monitoring and evaluation of the status of natural resources. Component 5 addresses the need to support authorities from the local to the national levels provision of infrastructure, capacity building and other opportunities. Finally, Component 6 addresses issues relating to the generation of income from the sustainable harvest and commercialization of natural resource products.

A concept paper for the MoAIL Natural Resource Management Programme (MoAIL 2009) is intended to supplement the IIP by providing more detail on allocation of Ministerial NRM resources during Afghan year 1388 (March 2009 - March 2010). The concept proposes 3 subprogrammes (National Natural Resources Surveillance Planning and Regulation, Protection and Conservation, and Community Management of Natural Resources) and provides a logical framework analysis of objectives, indicators, verification and assumptions for each of the subprogrammes.

3.3.3. Strategic Direction of NEPA

NEPA is guided by two strategic documents. The officially sanctioned strategy is the *National Environment Strategy* described in [Section 3.2.4.](#)

The second is the *National Environmental Protection Agency Strategy for Afghanistan: National Development Strategy (With Focus on Prioritization)* (NEPA 2007), developed as a requirement of ANDS intended to serve as a basic framework for operations and activities. This document is an internal NEPA document and still marked as “draft”. Nevertheless, it contains valid guidance.

NEPA's goal is "to protect the environmental integrity of Afghanistan and support sustainable development of its natural resources through the provision of effective environmental policies, regulatory frameworks and management services that are also in line with the Afghanistan Millennium Development Goals (MDGs)."

The priority expected results over the next five year period (2007 – 2012) are:

1. By 2012, establishment and implementation of legal and regulatory frameworks and management services for "brown" issues, including the protection of air quality, water quality, waste management, and pollution control;
2. By 2012, establishment and implementation of legal and regulatory frameworks and management services for "green" issues, including natural resource management;
3. NEPA is capable of taking the lead in environmental management through the enhancement of its professional capacity;
4. Regular dissemination of a public environmental awareness campaign and provision of environmental information to other Government authorities; and
5. Achievement of Afghanistan's MDGs related to the environment.

As described in [3.3.1.](#), the general opinion within Government is that NEPA's role is environmental policy, planning and regulation while implementation of most biodiversity conservation issues is delegated to MoAIL. However, this approach is not universally accepted nor legally grounded.

3.3.4. Other Central Government Institutions

Other Central Government institutions with a potential role to play in biodiversity conservation and the implementation of CBD include the following:

- Ministry of Rural Rehabilitation and Development
- Ministry of Energy and Water
- Ministry of Information and Culture
- Ministry of Education
- Ministry of Higher Education
- Ministry of Mines and Industry
- Ministry of Frontiers and Tribal Affairs
- Afghanistan National Disaster Management Authority
- Central Statistics Office
- Department of Meteorology
- Afghan Tourism Organization

Coordinating mechanisms such as the Committee for Environmental Coordination ([Section 3.4.1.](#)), legally established under the Environment Law in 2006, serve as an important mechanism to coordinate environmental activities throughout the Government.

3.3.6. National NGOs

3.3.6.1. Save the Environment Afghanistan (SEA)

SEA is Afghanistan's only major grassroots and Afghan-managed conservation organization. SEA (then SAVE) was active in environmental issues during the civil war when there was no active government involvement in environmental issues.

SEA's mission is protection of the environment, sustainable resource utilization, conservation of biodiversity and integrated development of natural resources. SEA is member of IUCN, IUFRO (The Global Network for Forest Science Cooperation) and APAFRI (Asia Pacific Association of Forestry Research Institutions) and works closely with the International Crane Foundation, WWF, ICIMOD, the International Snow Leopard Trust and other environmental organizations.

SEA strives for the revival of a pristine environment in Afghanistan by undertaking programs that:

- Support natural resource management;
- Support waste management and air quality in urban areas;
- Wildlife management and conservation;
- Environmental/Conservation education; and
- Lobby and advocate for the environment.

3.4. Coordinating and Decision-making Committees

Several committees have been set up to provide information sharing, coordination and decision-making.

3.4.1. Inter-Ministerial Committee for Environmental Coordination (CEC)

The CEC was established through Presidential Decree No. 4052 in January 2007 to address the specific requirement spelled out in Article 10 of the EL. The CEC is aimed to gather relevant stakeholders in order to start integrating environmental considerations into the respective ministries' workplans, coordinate existing and new activities in the environment sector and share relevant information on sustainable approaches in one forum. There have been 5 meetings of the CEC held to date, all chaired by NEPA.

3.4.2. National Environmental Advisory Council (NEAC)

The purpose of NEAC, as it is set out in Afghanistan's Environment Law, is to advise the National Environmental Protection Agency on financial matters (including budgets and annual accounts), regulatory matters (including the development of policy, procedures and legislation) and environmental matters that are of national public importance. The Council includes governors, chairpersons of provincial councils, Islamic scholars and tribal elders. The Council members are appointed by the President on the recommendation of NEPA's Director General.

The Inaugural Meeting of the NEAC took place in May 2008. The meeting took the form of a two-day conference for 400 participants and invitees. Extensive preparatory work ensured that the provincial constituents of the NEAC were selected and enabled to participate. Governors or their representatives from 26 out of 34 provinces attended the meeting, and 28 out of 34 provinces sent representatives of the Provincial Councils, Tribal Elders and Islamic Scholars.

3.4.3. Parliamentary Committee on the Environment

The Parliamentary Committee on the Environment is one of 14 parliamentary sectoral committees. Its role is to consider legislation related to the environment, address environmental concerns raised by constituents, and perform an oversight function, particularly in relation to the EL.

3.4.4. Afghanistan Wildlife Executive Committee (AWEC)

The purpose of the AWEC is to recommend additions to the Harvestable and Protected Species List to NEPA as required by Article 47 of the EL ([Section 3.1.3.2.](#)). In future, AWEC may also take on the role of CITES Scientific Authority. Determination of species status is made on the basis of short species assessment reports. Status in Afghanistan is also assigned according to the IUCN Red List regional criteria.

The Committee is currently comprised of a Chair from NEPA, one representative from MoAll, several faculty members from Kabul University and non-voting international advisors. This composition ensures that the Committee has enough depth and expertise to make informed decisions related to wildlife status, take and trade. The AWEC held its first meeting in October 2008 and has listed 31 species (32 counting the split-listing for ibex) to date (see Table 1).

3.4.5. Biodiversity Coordination Committee

This committee was initiated by WCS as an informal forum for NGOs, government departments and UN institutions working on issues related to biodiversity in Afghanistan to share information. The Committee has not been active recently.

3.4.6. Biodiversity Working Group

This multi-stakeholder group was formed by UNEP to serve a consultative and educational function during the NCSA/NAPA process which was completed in December 2008, and was re-formed to review this report. It is comprised of members of academia, Government Ministries and local NGOs.

3.4.7. Protected Area Working Group (PAWG)

The PAWG is an informal, information-sharing gathering of groups working on protected areas in Afghanistan. It is not a decision-making body. The PAWG was initially called the Band-i-Amir Coordination Committee and was intended to integrate the efforts of the many donors, NGOs, Government departments, and UN institutions working in various capacities to establish Band-i-Amir National Park. With Band-i-Amir nearing formal establishment, the name was changed and the mandate was expanded in 2008 to include all protected areas. There have been 12 meetings of the Band-i-Amir Coordinating Committee since October 2006 and 2 meetings of the PAWG since May 2008.

3.5. Multilateral Environmental Agreements (MEAs)

3.5.1. Convention of Biological Diversity (CBD)

The CBD is a legally binding international treaty adopted in Rio de Janeiro in June 1992. The Convention has three main goals:

- conservation of biological diversity;
- sustainable use of its components; and
- fair and equitable sharing of benefits arising from genetic resources.

Afghanistan signed the CBD in 1992 and ratified it in 2002. Afghanistan submitted the Third National Report to the CBD Secretariat in 2007, but otherwise has not been significantly engaged in CBD activities.

Afghanistan is not a Party to the Cartagena Protocol on Biosafety, a supplementary agreement to the CBD. Afghanistan does not currently consider biosafety to be a significant issue relative to others challenges facing the country.

3.5.2. Convention on the Trade in Endangered Species (CITES)

CITES is an international agreement between governments which came into force in 1975. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

Afghanistan acceded to CITES on 30 October 1986 but has not been actively implementing the Convention. Several notifications from the CITES Secretariat have advised Parties not to accept alleged CITES documentation from Afghanistan and to suspend all trade with Afghanistan in CITES-listed species. Currently, Afghanistan is considered by CITES as having substandard legislation to implement the Convention.

Articles 54 – 57 of the EL provide umbrella CITES legislation and state that import or export of CITES-listed species must have valid documentation. However, regulations have not yet been developed to provide specific guidance in implementation of the Convention. Currently, the CITES website lists both the Management Scientific Authorities as being within MoAIL although discussions are underway to transfer the Scientific Authority to the AWEC ([Section 3.4.4.](#)).

In 2008, WCS organized a study tour for senior Government officials to visit CITES headquarters in Geneva, attend the 57th meetings of the CITES Standing Committee, and receive training on CITES principles. In 2009, WCS plans to assist the Government in setting up a CITES-compliant permitting system.

3.5.3. Convention on Migratory Species of Wild Animals (CMS)

The CMS aims to conserve terrestrial, marine and avian migratory species throughout their range. It is an intergovernmental treaty, concluded under the aegis of UNEP, concerned with the conservation of wildlife and habitats on a global scale. The CMS is sometimes called the Bonn Convention, which is distinct from the Bonn Agreement. The latter was a 2001 agreement to set up interim governance for Afghanistan.

Migratory species threatened with extinction are listed on Appendix I of the Convention. CMS Parties strive towards strictly protecting these animals, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them. Besides establishing obligations for each State joining the Convention, CMS promotes concerted action among the Range States of many of these species.

Afghanistan has indicated its intention of becoming a Contracting Party to the CMS, but approvals currently are being delayed in Parliament because of translation issues. The proposal is currently in Committee.

3.5.4. Ramsar Convention on Wetlands (Ramsar)

The Ramsar Convention on Wetlands, signed in Ramsar, Iran in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. Afghanistan is not currently a Contracting Party to the Ramsar Convention. The process for becoming a Party to Ramsar is for the State to deposit an instrument of

accession accompanied with nomination documents for at least one wetland. UNEP has assisted the Government in developing the documentation necessary to nominate Dasht-i-Nawar as a Ramsar site. Approvals to accede have been obtained from the President, but the process is still working its way through government.

3.5.5. Convention Concerning the Protection of the World Cultural and Natural Heritage (WHC)

The World Heritage Convention (WHC) is an international agreement that was adopted by the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1972. It is based on the premise that certain places on Earth are of outstanding universal value and should therefore form part of the common heritage of mankind. The Convention seeks to identify and safeguard our world's most outstanding natural and cultural heritage.

Afghanistan became a Party to the Convention in March 1979. Currently there are two cultural World Heritage Sites in Afghanistan (Cultural Landscape and Archaeological Remains of the Bamiyan Valley and Minaret and Archaeological Remains of Jam). Afghanistan also has three properties on the Tentative List (City of Herat, City of Balkh, and Band-E-Amir). Band-i-Amir is the only natural WHC site proposed for Afghanistan. Draft papers for nomination of Band-i-Amir as a World Heritage Site have been prepared by WCS, but submission to UNESCO is awaiting designation of the area as a legally recognized National Park.

3.5.6. United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. Afghanistan signed the UNFCCC on June 1992. The Transitional Authority ratified the Convention in September 2002 and the Convention entered into force in December 2002. The Kyoto Protocol is an extension to the Convention adopted in 1997 that outlined legally binding commitments to emission cuts. Afghanistan has yet to accede to the Kyoto Protocol.

Afghanistan's first step to address climate change was to undertake the NAPA process ([Section 2.1.2.3.](#)). A report (Savage et al. 2008) on the potential impacts of climate change ([Section 1.3.7.](#)) was written to feed into NAPA. It presents a concise analysis for policy markers and key influencing constituencies within Afghanistan looking to integrate climate change into development planning. Proposals for two adaptation projects have been developed, but not yet funded (Sections [2.1.2.3.](#) and [2.2.1.2.](#)).

3.5.7. United Nations Convention to Combat Desertification (UNCCD)

The objective of the UNCCD is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/ or desertification. Afghanistan signed the UNCCD in 1995 and the Convention entered into force on December 1996. The UNCCD is working to develop long-term integrated strategies that focus simultaneously on improved productivity of land, and the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level.

The NCSA and NAPA process collected and analyzed information on desertification which was finally included in the final written output of the Desertification, Rangelands and Water Resources Working Group (UNEP 2008c). The Working Group identified eight areas as being priority for the implementation of UNCCD in Afghanistan. These were analyzed and associated capacity needs and opportunities for capacity development were identified at

the individual, organizational and systemic levels. Capacity building in the identified areas will enable Afghanistan to:

- Participate in UNCCD and creation and enhancement of enabling environment;
- Establish drought early warning systems that include long-term monitoring and assessment of desertification;
- Develop local, drought and salt resistant crops;
- Strengthen food security systems and rural livelihoods through improved natural resource use and management;
- Develop and implement rangeland management systems;
- Raise levels of education and public awareness about desertification, drought and sustainable land management; and
- Strengthen existing relevant legislation and ensure that desertification is an issue considered by national level policy makers.

A major follow-up action has been the development and approval of the UNDP/FAO/UNEP sustainable land management project ([Section 2.2.1.6.](#)).

Chapter IV - Conclusions: Progress towards the 2010 Target and Implementation of the Strategic Plan

4.1. Progress Towards the 2010 Target

In 2002, the CBD recognized that biodiversity loss was accelerating and that a more strategic approach was needed to achieve the objectives of the Convention. The Conference therefore adopted a Strategic Plan, in which Parties committed themselves to more effective and coherent implementation of the three objectives of the Convention in order to achieve, by 2010, a significant reduction of the current rate of biodiversity loss.

To assess progress in achieving the goals of the Strategic Plan and its 2010 Biodiversity Target, and to help communicate the state of this progress to the public, Parties agreed on a framework of focal areas to guide action. The seven focal areas in decision VII/30, adopted at the 2004 COP include:

1. Reducing the rate of loss of the components of biodiversity, including: (i) biomes, habitats and ecosystems; (ii) species and populations; and (iii) genetic diversity;
2. Promoting sustainable use of biodiversity;
3. Addressing the major threats to biodiversity, including those arising from invasive alien species, climate change, pollution, and habitat change;
4. Maintaining ecosystem integrity, and the provision of goods and services provided by biodiversity in ecosystems, in support of human well-being;
5. Protecting traditional knowledge, innovations and practices;
6. Ensuring the fair and equitable sharing of benefits arising out of the use of genetic resources; and
7. Mobilizing financial and technical resources, especially for developing countries, in particular least developed countries and small island developing states among them, and countries with economies in transition, for implementing the Convention and the Strategic Plan.

This was further refined by Decision VIII/15 (March 2006) in which the COP adopted the *Provisional Framework Reporting on Progress Towards Meeting the Goals and Targets of*

the 2010 Target. The Provisional Framework consists of 11 goals and 21 targets with suggested indicators for each target.

Afghanistan's progress on meeting relevant targets of the Provisional Framework is reported here. Afghanistan has not yet developed national biodiversity targets or indicators.

4.1.1. Goal 1. Promote the conservation of the biological diversity of ecosystems, habitats, and biomes.

4.1.1.1. Target 1.1: At least 10% of each of the world's ecological regions effectively conserved.

Currently, there are no legally established protected areas in Afghanistan, although one, Band-i-Amir, is poised to become a provisional National Park as soon as the necessary legislation is in place. Progress is being made by WCS towards establishment of protected areas in the Ajar Valley and Big Pamir. In 2009, UNEP initiated efforts to establish Shah Foladi in the Koh-i-Baba Range as a protected area.

No national targets for establishment of protected areas have yet been determined. However, through the GEF/UNDP SCAPoWPA grant, progress is being made in developing a NPASP as required by Article 39 of the EL. The NPASP will set national targets for protected area establishment and provide guidance on selection of sites. The NPASP is scheduled for completion in 2009.

It is expected that establishing many of the protected areas proposed under the NPASP process will be difficult until the security situation improves. For the interim, protected area development will largely be restricted to the relatively safe areas of central and north-eastern Afghanistan.

4.1.1.2. Target 1.2: Areas of particular importance to biodiversity protected

Areas of particular importance to biodiversity recognized in the 1970s include the following (Figure 1):

- Band-i-Amir;
- Ajar Valley;
- Small and Big Pamirs;
- Dasht-i-Nawar;
- Ab-i-Estada;
- Kol-i-Hashmat Khan;
- Nuristan;
- Hamun-i-Puzak;
- Imam Sahib and Darqad;
- Registan; and
- Northwest Afghanistan

Of these, only Band-i-Amir and the Big Pamir are currently receiving some level of protection from hunting, fishing and inappropriate land use. There is concern that the biodiversity values recognized in the 1970s may have been lost for many of these areas, although this is difficult to verify because of security concerns. Forest cover in Nuristan Province was found to have decreased by 53% between 1977 and 2002 (UNEP 2003). Field visits to Darqad suggest that human encroachment has destroyed most of the *tugai* forest (UNEP 2008d). Water diversion and tube wells may have largely dried up Ab-i-

Estada, although nobody has reported on the situation in recent years (Khan 2006). Kol-i-Hashmat Khan is threatened by water diversion and pollution, but particularly by encroachment of the rapidly growing city of Kabul (Khan 2006). In contrast, the lake Hamun-i-Puzak seems to have refilled in 2005 and the vegetation appears to have recovered (UNEP Post-Conflict Branch 2006).

These and other areas of potential biodiversity importance will be evaluated during the NPASP development and recommended for protection. However, it is unlikely that many of these sites will see protected area development until the security situation improves.

4.1.2 Goal 2. Promote the conservation of species diversity

4.1.2.1. Target 2.1: Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups.

There are few quantitative data with which to establish population trend. Ibex populations in the Ajar Valley are known to have declined from approximately 5000 animals in the late 1970s to less than 250 today ([Section 1.4.1.](#)). Since the late 1970s, Marco Polo sheep have remained stable or declined slightly in the Small Pamir and are declining at a rate of about 5% per year in the Big Pamir ([Section 1.4.1.](#)). Snow leopards (*Uncia uncia*) are thought to be declining at a rate of 20% over two generations ([Section 1.4.1.](#)).

Anecdotal evidence for other species suggests that populations of many species continue to decline. Local people in Bamian Province are unanimous in their opinion that urial have declined precipitously since 1979 and that hunting pressure is maintaining the decline ([Section 1.4.1.](#)). The common leopard (*Panthera pardus*) is thought to be gone from the Ajar Valley and may be on the verge of extinction in Afghanistan. Cheetah (*Acinonyx jubatus*), onager (*Equus onager*) and goitered gazelle (*Gazella subgutturosa*) may all now be extinct in Afghanistan. The last Siberian Crane (*Grus leucogeranus*) reported seen in Afghanistan was shot in 2002 (UNEP 2009). The last Caspian tiger (*Panthera tigris virgata*) was seen along the Amu Darya around 1940 (Habibi 2003).

4.1.2.2. Target 2.2: Status of threatened species improved.

Assessing this target is problematic for several reasons:

- Afghanistan has only recently begun a process of identifying and listing species threatened at the national scale ([Section 3.4.4.](#));
- There are very few baseline data on the status of species in Afghanistan; and
- There are very few recent quantitative data on species status in Afghanistan.

There are no Afghan species for which status can be demonstrated to have improved. Those species for which there are data have shown relative stability (e.g., Marco Polo sheep, *Ovis ammon polii*) or precipitous declines (e.g., ibex, *Capra sibirica* in central Afghanistan) ([Section 1.4.1.](#)). Anecdotal evidence suggests populations of most Afghan species have been reduced dramatically in the past 30 years with some national scale extinctions known (e.g., Siberian Crane, [*Grus leucogeranus*] or suspected (e.g., onager [*Equus onager*], cheetah [*Acinonyx jubatus*]).

4.1.3 Goal 3. Promote the conservation of genetic diversity

4.1.3.1. Target 3.1: Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained.

Afghanistan once had extensive herbarium and seed collections all of which were destroyed during the war (SciDevNet 2002). There is currently no extensive seed bank in Afghanistan, although MoAIL is currently completing a seed bank facility and several organizations (ICARDA [ICARDA nd], NordGen [NordGen Plants nd], FAO [Samuel Kugbei, FAO; pers. comm., Samuel.kugbei@fao.com]) are maintaining small seed banks for Afghan crops.

Genetic variability of wheat landraces was investigated from samples collected between 1955 and 1978 and maintained by a gene bank in Japan. Results indicated that the gene bank collections of Afghan wheat are true landraces without contamination of modern varieties or introduction of alien genetic factors. The results also indicated that the genetic diversity of Afghan wheat is generally high between regions, but relatively uniform within regions (Terasawa et al. 2008).

No significant herbarium currently exists in Afghanistan. Most surviving plant specimens are located in German herbaria. A small botanical garden is being developed near Kabul University. Plans by MoAIL for a more extensive botanical garden near Paghman have been shelved.

4.1.4. Goal 4. Promote sustainable use and consumption.

4.1.4.1. Target 4.1: Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity.

Although there are few specific data, it is clear that the majority of forests, rangelands and dryland farming areas and wild medicinal plants are not being sustainably managed. Implementing sustainable land management is a major thrust of several new projects ([Section 2.2.](#)).

4.1.4.2. Target 4.2. Unsustainable consumption of biological resources, or that impacts upon biodiversity, reduced.

The *ecological footprint* has emerged as the world's premier measure of humanity's demand on nature. It measures how much land and water area a human population requires to produce the resources it consumes and to absorb its wastes. It is measured in *global hectares* (gha) which are areas weighted by their productivity (for details on methods and definitions, see the Global Footprint Network website at <http://www.footprintnetwork.org/en/index.php/GFN/>)

Afghanistan's 2005 ecological footprint was 0.48 gha per person which tied Afghanistan for lowest rate of consumption among the 150 nations audited by the Global Footprint Network (Ewing et al. 2008). According to this analysis, a typical Afghan uses only about 18% as much of the world's biological capacity as does the average world citizen. Afghanistan's per capita ecological footprint declined 69% between 1961 and 2005 (Figure 6).

- Figure 6. Trend in Afghanistan's ecological footprint 1961 – 2005 by sector. (Courtesy of Global Footprint Network, 2008 National Accounts data. See <http://www.footprintnetwork.org/en/index.php/GFN/>)

Biocapacity represents the ability of ecosystems to produce useful biological materials and to absorb wastes generated by humans. Afghanistan's per capita biocapacity declined from 2.41 gha per Afghan in 1961 to 0.73 in 2005, a reduction of 70% (Figure 7). This reflects the fact that before the war, Afghanistan was nearly self sufficient in food production but now depends heavily on food aid and imports.

- Figure 7. Trend in Afghanistan's biocapacity 1961 – 2005 by sector. (Courtesy of Global Footprint Network, 2008 National Accounts data. See <http://www.footprintnetwork.org/en/index.php/GFN/>)

In 2005, Afghanistan still had an ecological reserve (biocapacity minus consumption) of 0.25 gha per Afghan, but this buffer has declined by more than 70% in the past 44 years (Figure 8). As consumption and population levels rise in the future, Afghanistan's demand on nature will certainly exceed the regenerative capacity of the land and natural resource use will become unsustainable.

- Figure 8. Trend in Afghanistan's biocapacity, consumption and ecological reserve; 1961 – 2005. (Courtesy of Global Footprint Network, 2008 National Accounts data. See <http://www.footprintnetwork.org/en/index.php/GFN/>)

4.1.4.3. Target 4.3: No species of wild flora or fauna endangered by international trade.

The following CITES-listed species are known or suspected to be in trade in Afghanistan.

- jungle cat (Appendix II);
- wildcat (Appendix II);
- lynx (Appendix II);
- common leopard (Appendix I);
- leopard cat (Appendix II);
- snow leopard (Appendix I);
- Pallas Cat (Appendix II);
- wolf (Appendix I);
- Asiatic black bear (Appendix II);
- Eurasian otter (Appendix I);
- Marco Polo sheep (Appendix II);
- musk deer (Appendix I);
- Saker falcon (Appendix I); and
- Afghan tortoise (appendix II).

The country of origin of many specimens is unknown making it difficult to estimate the effect of harvest for trade on the status of species in Afghanistan. It is also difficult to estimate volume of export as many specimens are smuggled into neighbouring countries without official documentation. No CITES permitting system is currently in place ([Section 3.5.2.](#)), so all international trade in the above-noted species is illegal.

4.1.5. Goal 5. Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.

4.1.5.1. Target 5.1. Rate of loss and degradation of natural habitats decreased.

There are no data on trend in rate of loss of Afghanistan's natural habitats. Satellite image analysis document rates of loss of closed eastern forests and open pistachio forests between 1977 and 2002 (UNEP 2003). WCS is currently analyzing remote sensing imagery for eastern forests and should soon be able to assess whether the rate of forest loss has increased or decreased since the period 1977 – 2002 ([Section 1.4.4.](#)).

4.1.6. Goal 6. Control threats from invasive alien species

Alien invasive species are considered a minor threat to Afghanistan's environment relative to other challenges and, consequently, little emphasis has been placed on this issue.

4.1.7. Goal 7. Address challenges to biodiversity from climate change, and pollution

4.1.7.1. Target 7.1. Maintain and enhance resilience of the components of biodiversity to adapt to climate change.

Afghanistan undertook a National Adaptation Programme of Action for Climate Change (NAPA) project, financed by the GEF ([Section 2.1.2.3.](#)). The intent of the NAPA project was to review activities undertaken by Afghanistan to comply with the UNFCCC, identify related priority capacity needs and opportunities for capacity development at individual, organizational and systemic levels, and prioritize potential adaptation activities (UNEP 2008b). As follow-up to the NAPA recommendations, UNEP and NEPA will be initiating the *Improved Water Management and Use Efficiency* project designed to reduce the vulnerability of rural livelihoods in drought affected communities of Northern Afghanistan through improved water management and use efficiency ([Section 2.2.1.2.](#))

4.1.7.2. Target 7.2. Reduce pollution and its impacts on biodiversity.

In Afghanistan, pollution monitoring is in its infancy. Some preliminary work has begun (i.e., UNEP 2003, UNEP/NEPA 2007), but there is no comprehensive understanding of the scope of the problem or the impact on biodiversity.

Broshears et al. (2005) and Houben and Tünnerneier (2005) examined the quality of shallow groundwater in the Kabul Basin which accounts for 85% of the water supply to Kabul. The quality of ground water in the Kabul Basin varies widely. In some areas, ground-water quality is excellent. In other areas, however, the presence of chemicals and bacteria render untreated ground water marginal or unsuitable for public supply and/or agricultural use. Of particular concern are elevated concentrations of nitrate, boron, sulphates, and chloride, and fecal pollution. Houben and Tünnerneier (2005) conclude that the high mortality rate of Kabul infants is probably partially caused by the contaminated water.

4.1.8. Goal 8. Maintain capacity of ecosystems to deliver goods and services and support livelihoods

4.1.8.1. Target 8.1. Capacity of ecosystems to deliver goods and services maintained.

A recent study has used remote sensing technology to examine land degradation at the global scale (Bai et al 2008). Land degradation is defined as a long-term decline in ecosystem function and is measured in terms of net primary productivity using the normalized difference vegetation index (NDVI) as a proxy. According to this analysis, 7658 km² of Afghanistan's land was degraded between 1981 – 2003 resulting in a loss to 62859 tonnes of carbon suggesting very generally that Afghanistan's ecosystems are losing capability of delivering goods and services.

This issue is being increasingly targeted through such projects as the *Capacity Building for Sustainable Land Management* project (Section 2.2.1.8.), SALEH (Section 2.2.1.5.), *Strengthened Approach for the Integration of Sustainable Management in Afghanistan* (Section 2.2.1.6.), and the *Capacity Building and Institutional Development Programme for Environmental Management* (Section 2.2.1.1.).

4.1.8.2. Target 8.2. Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained.

The FAO *Biodiversity Project* seeks to establish sustainable harvest of traditionally utilized wild plants (Section 2.2.1.4.). Management plans for selected species are being developed to ensure that local people benefit from medicinal, food and commercially valuable species.

4.1.9. Goal 9 Maintain socio-cultural diversity of indigenous and local communities

4.1.9.1. Target 9.1. Protect traditional knowledge, innovations and practices.

The 2001 edition UNESCO's *Atlas of the World's Languages in Danger of Disappearing Languages* (Wurm 2001, p. 12) listed many of the languages of the Pamir Mountains of Badakhshan and neighbouring countries as being in danger. However, UNESCO's *Interactive Atlas of the World's Languages in Danger* (<http://www.unesco.org/culture/ich/index.php?pg=00206>), released in February 2009, does not list most of these languages as being at risk. The 2009 list notes 23 languages spoken in Afghanistan as being at some degree of risk. A total of 3 are considered *Unsafe*, 12 *Definitely Endangered*, 6 *Severely Endangered*, and 2 *Critically Endangered*. No Afghan language is known to have gone extinct within the last 150 years. Table 4 presents a list of these languages with their location and the number of speakers. More information on Afghanistan's languages, current to 1996, can be found at <http://www.christusrex.org/www3/ethno/Afgh.html>.

- Table 4. Afghan languages at risk from 2009 *Interactive Atlas of the World's Languages in Danger*. (<http://www.unesco.org/culture/ich/index.php?pg=00206>)

What is clear from Table 4 is that Afghanistan's endangered languages are located primarily in mountain valleys of Nuristan (7 *Definitely Endangered* and 3 *Severely Endangered*) and Badakhshan (1 *Unsafe*, 2 *Definitely Endangered*, 2 *Severely Endangered* and 2 *Critically Endangered*). It is not possible to determine trend in Afghan languages at risk.

Traditional knowledge and practice are being addressed in one form or another by the *FAO Biodiversity Project* ([Section 2.2.1.4.](#)), *Capacity Building for Sustainable Land Management* ([Section 2.2.1.6.](#)), *SALEH* ([Section 2.2.1.5.](#)), *MDG-F* ([Section 2.2.1.6.](#)), and the *Capacity Building and Institutional Development Programme for Environmental Management* ([Section 2.2.1.1.](#)).

4.1.9.2. Target 9.2. Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing.

No specific steps have been taken to ensure rights over traditional knowledge. There is widespread agreement within Government, NGOs and academics that local communities should share in the benefits generated by the land, but there have been no attempts to formally address this issue. One of the objectives of the SCAPoWPA project is to effect a formal revenue sharing agreement that would see a proportion of funds raised in legally recognized protected areas being returned to local communities (Appendix III).

4.1.10. Goal 10. Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources

4.1.10.1. Target 10.1. All access to genetic resources is in line with the Convention on Biological Diversity and its relevant provisions.

Articles 58 – 63 of the EL address access to genetic resources in a manner entirely consistent with the CBD ([Section 3.1.3.2.](#)). However, there have been no regulations developed on access to genetic resources. This is not currently considered to be a priority issue and there are currently no plans to develop these regulations.

4.1.10.2. Target 10.2. Benefits arising from the commercial and other utilization of genetic resources shared in a fair and equitable way with the countries providing such resources in line with the Convention on Biological Diversity and its relevant provisions.

Article 62 of the EL addresses sharing of benefits resulting from the use of genetic resources. However, there have been no regulations developed on access to genetic resources. This is not currently considered to be a priority issue and there are currently no plans to develop these regulations.

4.1.11. Goal 11: Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention

4.1.11.1. Target 11.1. New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20.

Funding provided to Afghanistan explicitly in support of the CBD implementation include:

- GEF funding for NCSA and NAPA ([Section 2.1.2.](#)) (2005 – 2006; \$400 000)
- GEF/UNEP funding for development of the Third National Report to the Convention on Biological Diversity (2006; \$20 000)
- GEF/UNDP funding for development of the Fourth National Report to the Convention on Biological Diversity (2008 – 2009; \$20 000)

- SCAPoWPA funding to WCS and NEPA ([Section 2.3.2.](#)) (2008 – 2010; \$250 000)
- GEF/UNEP funding in support of development of the NBSAP ([Section 2.1.1.](#)) (applied for; \$400 000)
- GEF/UNEP funding for climate change enabling activity funding - Initial National Communication (2008; \$480 000)

Funding from national and international donors provided to third parties more generally in support of biodiversity in Afghanistan include:

- UNEP Phase 1 *Post-conflict assessment report* ([Section 2.2.1.1.](#)) (2002- 2003; \$1 000 000)
- UNEP Phase 2 *Capacity Building and Institutional Development Programme for Environmental Management in Afghanistan* ([Section 2.2.1.1.](#)) (2003 – 2007; \$6 000 000)
- UNEP Phase 3 *Capacity Building and Institutional Development Programme for Environmental Management in Afghanistan* ([Section 2.2.1.1.](#)) (2008 – 2010 \$9 000 000)
- UNEP *Improved water management and use efficiency* ([Section 2.2.1.2.](#)) (applied for; \$6 775 000)
- UNOPS Afghan Conservation Corps ([Section 2.2.1.3](#)) (2003 – 2010; 10 000 000)
- FAO Biodiversity Project ([Section 2.2.1.4.](#)) (2007 – 2010; \$1 700 000)
- FAO SALEH Project ([Section 2.2.1.5.](#)) (2003 – 2008; \$6 000 000)
- UNDP/FAO/UNEP Strengthened Approach to the Integration of Sustainable environmental Management in Afghanistan (MDG-F) ([Section 2.2.1.6.](#)) (applied for; \$5 000 000)
- Green Afghanistan Initiative (GAIN ([Section 2.2.1.7.](#)) (since 2005; \$5 466 000)
- ADB funding to the *Natural Resources Management and Poverty Reduction Programme* ([Section 2.2.2.](#)) (2005 – 2007; \$1,785 000)
- WCS *Afghanistan Biodiversity Conservation Programme* ([Section 2.2.3.](#)) (2006 – 2010; \$10 900 000)
- ECODIT *Biodiversity Support Programme* ([Section 2.2.4.](#)) (2007 - 2010; \$6 400 000)
- ICIMOD *Afghanistan Biodiversity and Community Forestry Programme* ([Section 2.2.5.](#)) (2007-2009; \$1 500 000)
- University of California- Davis PEACE Project ([Section 2.2.6.](#)) (2006 – 2010; \$4 400 000)
- Catholic Relief Services ([Section 2.2.7.](#)) (2006 – 2011; \$6 000 000)

In total, biodiversity-related projects have received approximately \$71M in recent years with more than \$11M in the pipeline. This figure is very rough, but provides a general indication of investment level.

4.1.11.2. Target 11.2. Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4.

No significant biodiversity technology has yet been transferred to Afghanistan.

4.2. Progress towards the Goals and Objectives of the Strategic Plan of the Convention.

In 2002, the CBD COP adopted the *Strategic Plan for the Convention on Biological Diversity* as Decision VI/26. The intent of the Strategic Plan was to focus efforts to effectively halt the loss of biodiversity so as to secure the continuity of its beneficial uses

through the conservation and sustainable use of its components and the fair and equitable sharing of benefits arising from the use of genetic resources.

Afghanistan has not developed national goals or undertaken actions specifically to address the Strategic Plan. However, many activities address goals and targets of the plan. The table below summarizes how Afghanistan has addressed relevant targets of the Strategic Plan.

Strategic Goals and Objectives	Afghanistan's Responses
Goal 1. The Convention is fulfilling its leadership role in international biodiversity issues.	
To be achieved at the Convention level. Afghanistan has not been significantly involved in Convention activities and has no perspectives to share as to whether this goal is being achieved.	
Goal 2. Parties have improved financial, human, scientific, technical, and technological capacity to implement the Convention	
2.1. All parties have adequate capacity for implementation of priority actions in national biodiversity strategy and action plans.	A NBSAP has not yet been developed for Afghanistan, but will likely be completed within the next 18 months (Section 2.1.1.). It is anticipated that capacity deficits will be a major limiting factor to its implementation.
2.2. Developing country Parties, in particular the least developed...have sufficient resources available to implement the three objectives of the Convention.	The total amount provided in the past 5 years is approximately USD70 000 000 (Section 4.1.11.). Funding has been generous, but the needs are great.
2.3 Developing country Parties...have increased resources and technology transfer available to implement the Cartagena Protocol.	Afghanistan has not acceded to the Cartagena Protocol and does not consider biosafety a priority at the present time (Section 3.5.1.)
2.4. All Parties have adequate capacity to implement the Cartagena Protocol.	Afghanistan is not a Party to the Cartagena Protocol (Section 3.5.1.).
2.5. Technical and scientific cooperation is making a significant contribution to building capacity.	WCS hires many Afghans and trains them in a variety of technical and scientific skills (e.g., GIS, wildlife survey). The ECODIT project is transferring skills in EIA management. UNEP is doing the same for protected areas, CBNRM, environmental law and policy, MEAs and EIA and pollution control. All projects work closely with NEPA and MoAIL and transfer skill in an on-the-job context.
Goal 3. National biodiversity strategies and action plans and the integration of biodiversity concerns into relevant sectors serve as an effective framework for the implementation of the objectives of the convention.	
3.1. Every Party has effective national strategies, plans and programmes in place to provide a national framework for implementing the three objectives of the Convention and to set clear national priorities.	Afghanistan has not yet developed a NBSAP, but has done some very preliminary priority setting under the NCSA (UNEP 2008).
3.2. Every Party to the Cartagena Protocol on Biosafety has a regulatory framework in place and functioning to implement the Protocol.	Afghanistan is not a Party to the Cartagena Protocol.
3.3. Biodiversity concerns are being integrated into relevant national sectoral and cross-sectoral plans, programmes and policies.	Biodiversity is being effectively mainstreamed into major planning efforts, but there is as yet little evidence of specific biodiversity concerns being reflected in implementation in other sectors. This will take some time to effect, give the multitude of bigger picture political and security challenges facing the country at present.
3.4. The priorities in national biodiversity strategies and action plans are being actively implemented, as a means to achieve national implementation of the Convention, and as a significant contribution towards the global biodiversity agenda.	Afghanistan has not yet developed a NBSAP, but biodiversity conservation activities are being undertaken.
Goal 4. There is better understanding of the importance of biodiversity and of the Convention, and this has led to broader engagement across society in implementation.	
4.1. All Parties are implementing a communication, education, and public awareness strategy and promoting public participation in support of the	There are currently no coordinated strategies for communication, education or public awareness.

Convention.	
4.2. Every Party to the Cartagena Protocol on Biosafety is promoting and facilitating public awareness, education and participation in support of the Protocol.	Afghanistan is not a Party to the Cartagena Protocol.
4.3. Indigenous and local communities are effectively involved in implementation and in the processes of the Convention, at the national, regional and international levels.	A wide variety of legal and policy structures explicitly indicates that natural resource management will be undertaken using the community-based approach. In fact, the community-based approach is only beginning to be implemented in the field.
4.4. Key actors and stakeholders, including the private sector, are engaged in partnership to implement the Convention and area integrating biodiversity concerns into their relevant sectoral and cross-sectoral plans, programmes and policies.	While there has been significant effort to put into place structures and procedures for mainstreaming environmental issues, there is little evidence that most stakeholders have integrated biodiversity concerns into their implementation planning. This issue will be tackled in preparation of the NBSAP.

4.3. Conclusions

Afghanistan will not be able to meet the CBD's 2010 target of reducing the rate biodiversity loss. Although there is little firm information, it appears that most species and environments are in decline and that the rate of this decline has increased since the onset of conflict in 1979. The reasons for this failure are several.

First, the instability that has gripped the country for 30 years has resulted in Afghanistan being among the very poorest countries in world ranking 174th out of 178 (Centre for Policy and Human Development 2005). Consequently, and quite understandably, biodiversity conservation and implementation of the CBD have not been a high priority for Afghanistan and many Afghan citizens have been more concerned with survival than with nature conservation, even though many recognize its importance in the deep, intuitive manner that rural people often do.

The second reason is that the central government remains weak and, as has always been the case in Afghanistan, unable to effectively exercise its authority in the provinces. Coupled with a lack of administrative and technical capacity and inadequate funding to the government this has resulted in a lack of Governmental implementation of biodiversity policy and programmes at the ground level. UN institutions and NGOs had stepped in to fill this gap, but by necessity have expended most of their time and resources on developing the conceptual, legal, and policy structure that will provide the foundation for future implementation.

A third reason, is that the extent of Afghanistan's biodiversity loss and ecological degradation is so profound and extensive that halting the decline and restoring a level of ecological integrity to the country will be a massive and long-term undertaking. Basic biodiversity status information is largely lacking. Specific biodiversity conservation projects have been few, very localized and concentrated in areas where security permits and not effectively embedded into the governmental context.

The greatest success in the past five years has been in developing environmental policy, laws and procedures which effectively incorporate best current practice. Legislation and policy, approved or in draft, address many of the Articles of the CBD as well as the goals and targets reflected in the 2010 Target, the Strategy and the Programmes of Work. Significant attention has been paid to developing mechanisms to mainstream environmental issues.

To date, the CBD has had a largely indirect influence in guiding biodiversity actions. Most of the actions taken by government and agencies have been based on fundamental

conservation principles that may have been undertaken even without guidance from the Convention. The CBD is not widely known in government and NGO circles and the obligations and expectations entailed in being a Party are even less understood.

Afghanistan has by default chosen not to address certain issues identified in the CBD processes. Invasive species are not considered to be a significant threat to Afghanistan's biodiversity relative to other issues and are not being treated in a consistent manner. Although the Environment Law provides umbrella legislation to cover access to genetic resources and biosafety, these issues have not been considered significant enough to develop the necessary implementation regulations. Afghanistan has not acceded to the Cartagena Protocol. Community-based natural resource management is a central element in recent law and policy, but there has been no focussed attempt to address Article 8(j).

Despite the largely negative tone of the foregoing, it must be recognized that it has only been seven years since the return of relative stability to Afghanistan. Progress has actually been quite remarkable considering the devastation of the country in 2002 and the short time period of development. A basic environmental law and policy framework is in place, Government is developing capacity to deal with environmental issues, the country is starting to become engaged in MEA's and environmental projects are being initiated in ever-increasing numbers. If the security situation improves, Afghanistan is poised to make significant progress in biodiversity conservation in the next few years. However, the scope of challenge is enormous and daunting.

Priority actions for the near future include:

1. Write a NBSAP for Afghanistan incorporating biodiversity indicators, targets and specific strategies for implementing priority elements of the CBD;
2. Complete drafting and passage of key environmental legislation such as the Protected Area Regulations, the Fauna Conservation and Hunting Regulation, the Rangeland Law and the Forest Law;
3. Engage the Government more fully in the activities of the CBD;
4. Complete CITES legislation and establish a CITES permitting system;
5. Undertake field studies of selected species and ecosystems to better understand biodiversity status and trends;
6. Complete the NPASP for Afghanistan articulating clear targets for the protected area system and methods for implementing it;
7. Ensure that Band-i-Amir, Ajar Valley, Big Pamir, and Shah Foladi are legally designated as a protected area and receive adequate funding for effective management;
8. Understand and utilize traditional knowledge and practices of conservation and sustainable use;
9. Enhance public awareness about conservation and sustainable use;
10. Continue to develop the human and institutional capacities of MoAIL and NEPA, at the national and sub-national levels;
11. Implement projects encouraging a community-based approach to natural resource management, sustainable use and biodiversity conservation; and
12. Develop innovative ways to undertake biodiversity conservation in concert with poverty alleviation.

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Appendix I: information concerning Party and process of report preparation

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Process of Preparation of National Report

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Meetings were held on 18 February, 4 March and 18 March 2009 to review the document. The core consultation group was the Biodiversity Working Group formed during the NCSA/NAPA process, together with other government officials. The following individuals took part in the document review:

18 February 2009 Consultation

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Appendix III: Implementation of the PoW on Protected Areas and the Global Strategy for Plant Conservation

Program of Work on Protected Areas

Following is a list of relevant Activities from the PoWPA adopted by the COP in 2004 as Decision VII/28 (<http://www.cbd.int/decisions/?m=COP-07&id=7765&lq=0>). Short explanations are provided on how Afghanistan has undertaken the suggested activities. To keep the document as brief as possible, only Activities are listed; Programme Elements, Goals and Targets have been removed. The Activity descriptions have also been edited to their essential and relevant elements. Some non-applicable and less specific activities have not been listed.

Activity 1.1.1 ...establish suitable time-bound and measurable national and regional level protected area targets and indicators.

This was one of the five PoWPA activities chosen to be addressed by the SCAPoWPA grant. It is being addressed by development of an NPASP as required by Article 39(1) of the EL. The NPASP is currently being developed and will set targets for establishment of protected areas.

Activity 1.1.2 ...take action to establish or expand protected areas in any large, intact or relatively unfragmented or highly irreplaceable natural areas, or areas under high threat, as well as areas securing the most threatened species in the context of national priorities, and taking into consideration the conservation needs of migratory species.

The NPASP currently under development will identify high priority areas for protection as identified through consultation and gap analysis. The gap analysis is currently underway and aims to identify areas most important for threatened species and migratory species. The ecoregional component of the NPASP will preferentially identify areas in ecoregions listed by WWF as globally at risk. The NPASP will identify areas requiring site verification, when security allows.

Activity 1.1.3 ...take action to address the under-representation of marine and inland water ecosystems in existing national and regional systems of protected areas, taking into account ...and transboundary inland water ecosystems.

Afghanistan is a land-locked country with no marine environment. Several lake systems have been identified as priority areas for protection, but Band-i-Amir is the only area in which the security situation allows management. The most important transboundary inland water ecosystem is the Hamun system of shallow lakes on the Iran-Afghanistan border and fed entirely by rivers draining the Hindu Kush. International talks between Iran and Afghanistan concerning water allocations have been under way for several years. However, the security situation in the area does not allow establishment of a protected area at the current time.

1.1.4 ...conduct...national-level reviews of existing and potential forms of conservation... including innovative types of governance for protected areas ...such as protected areas run by Government agencies at various levels, co-managed protected areas, private protected areas, indigenous and local community conserved areas.

Not done.

1.1.5 ...complete protected area system gap analyses at national and regional levels.... National plans should also be developed to provide interim measures to protect highly threatened or highly valued areas... Gap analyses should take into account Annex I of the Convention on Biological Diversity and other relevant criteria...

Activity 1.1.5. was one of the five PoWPA activities chosen to be addressed by the SCAPoWPA grant. Gap analysis is currently underway and is addressing the Annex I of the CBD and other relevant criteria.

1.1.6 ...designate the protected areas as identified through the national or regional gap analysis (including precise maps) and complete ... establishment of comprehensive and ecologically representative national and regional systems of protected areas.

Not done. The gap analysis and NPASP are currently under development. Because of the security situation, it is expected that establishing the complete system to be identified in the NPASP will take many years.

1.1.7. Encourage the establishment of protected areas that benefit indigenous and local communities, including by respecting, preserving, and maintaining their traditional knowledge in accordance with article 8(j) and related provisions.

The draft Protected Area Regulations state each protected area management plan shall have a Collaborative Management Agreement (CMA) approved by the Government, local communities and other stakeholders. Further, each collaborative management agreement shall specify the way in which the revenue of the protected area is to be shared among the communities located within and adjacent to the protected area, with a greater share to be allocated to any communities located in a special use zone within the protected area.

The CMA, appended to the Band-i-Amir Provisional Management Plan, was signed by all members of the BAPAC which includes representatives from each community within the proposed Park boundaries. The CMA established a formula for distribution of funds earmarked for communities and establishes a Community Conservation Fund.

At present, the Ministry of Finance has not yet approved distribution of revenues to the BAPAC or communities. One of the five targets of the SCAPoWPA programme is to assist the Government in develop a revenue sharing policy for protected areas to ensure that local communities benefit.

1.2.1. Evaluate by 2006 national and sub-national experiences and lessons learned on specific efforts to integrate protected areas into broader land- and seascapes and sectoral plans and strategies such as poverty reduction strategies.

Not done. Afghanistan's protected area system is not yet developed sufficiently to benefit from such evaluation exercise.

1.2.2. Identify and implement, by 2008, practical steps for improving the integration of protected areas into broader land- and seascapes, including policy, legal, planning and other measures.

Not done. Afghanistan's protected area system is not yet developed sufficiently to benefit from such evaluation exercise.

1.2.3. Integrate regional, national and sub-national systems of protected areas into broader land- and seascape, inter alia by establishing and managing ecological networks, ecological corridors and/or buffer zones, where appropriate, to maintain ecological processes and also taking into account the needs of migratory species.

The NPASP, currently under development, will take into account broad ecological objectives in recommending a system of protected areas for Afghanistan.

1.2.4. Develop tools of ecological connectivity, such as ecological corridors, linking together protected areas where necessary or beneficial as determined by national priorities for the conservation of biodiversity.

An area between the Ajar Valley and Band-i-Amir has recently been surveyed for large mammal presence (Chris Shank, WCS, pers. comm. 2009). This area is considered to be a potentially important corridor for migration of urial (*Ovis orientalis*) and will be considered in the NPASP. More generally, the NPASP will address area-specific connectivity issues.

1.2.5. Rehabilitate and restore habitats and degraded ecosystems, as appropriate, as a contribution to building ecological networks, ecological corridors and/or buffer zones.

Not being done.

1.3.1 Collaborate with other parties and relevant partners to establish effective regional networks of protected areas, particularly in areas identified as common conservation priorities... and establish multi country coordination mechanisms as appropriate to support the establishment and effective long term management of such networks.

See 1.3.3.

1.3.3 Establish, where appropriate, new TBPAs with adjacent Parties and countries and strengthen effective collaborative management of existing TBPAs.

For several years, WCS has been promoting development of a TPBA in the Pamirs largely to promote cooperation in protection of the Marco Polo sheep. A Transboundary Park conference was held in 2006 in Urumqi, China in which high-level Government representatives from Afghanistan, Tajikistan, Pakistan and China all expressed support for the concept. However, the project has now been temporarily paused because of internal issues in each of the participating countries, but is expected to be reactivated when conditions allow.

1.3.4 Promote collaboration between protected areas across national boundaries.

Afghanistan does not yet have any existing protected areas.

1.4.1 Create a highly participatory process, involving indigenous and local communities and relevant stakeholders, as part of site-based planning in accordance with the ecosystem approach, and use relevant ecological and socio-economic data required to develop effective planning processes.

Article 11 of the draft Protected Area Regulations requires the establishment of a Protected Area Committee for each protected area with the responsibility to guide planning and management. Protected areas must have majority representation by local communities. All management plans must include a Collaborative Management Agreement setting out conditions on how authority, responsibility and accountability are shared among all stakeholders.

1.4.2 Identify appropriate measurable biodiversity conservation targets for sites, drawing on criteria laid out in Annex I to the Convention on Biological Diversity and other relevant criteria.

Nothing has yet been done to address this Activity. However, indicators will need to be developed for Band-i-Amir prior to submission of nomination documents for WHC status.

1.4.3 Include in the site-planning process an analysis of opportunities for the protected area to contribute to conservation and sustainable use of biodiversity at local and regional scales as well as an analysis of threats and means of addressing them.

It is expected that this issue will be addressed by the NPSAP.

1.4.4. ...develop or update management plans for protected areas, built on the above process, to better achieve the three objectives of the Convention.

The three objectives of the national protected area system, as indicated in Article 38 of the EL, are fully in accordance with the three objectives of the CBD. Management plans must reflect these objectives.

1.4.5 Integrate climate change adaptation measures in protected area planning, management strategies, and in the design of protected area systems.

Protected area planning has not taken climate change into account.

1.4.6 Ensure that protected areas are effectively managed or supervised through staff that are well-trained and skilled, properly and appropriately equipped, and supported, to carry out their fundamental role in the management and conservation of protected areas.

WCS has undertaken very basic training of Band-i-Amir National Park Rangers and community Game Guards in the Wakhan and Badakhshan. WCS has provided uniforms and some basic equipment, but staff are not yet adequately equipped. Training of protected area staff is one of the components of the SCAPoWPA project.

1.5.1 Apply... timely environmental impact assessments to any plan or project with the potential to have effects on protected areas...

The EIA Regulations state that development in any "environmentally sensitive area" (ESA) is subject to review. Legally established protected areas will automatically be considered as ESAs. The EIA Regulations are not yet fully operational and no protected areas have been formally established making them automatically subject to EIAs.

1.5.2 Develop... national approaches to liability and redress measures, incorporating the polluter pays principle or other appropriate mechanisms in relation to damages to protected areas.

The enabling framework for liability and redress are contained in the EL, but steps have not yet been taken to address this issue through regulation.

1.5.3 Establish and implement measures for the rehabilitation and restoration of the ecological integrity of protected areas.

Nothing has been undertaken to date.

1.5.4 Take measures to control risks associated with invasive alien species in protected areas.

Relative to other threats, invasive alien species are not considered to be a significant risk in Afghanistan. No actions have been taken to date.

1.5.5 Assess key threats to protected areas and develop and implement strategies to prevent and/or mitigate such threats.

No formal threat assessments have been done to date.

1.5.6 ...halt the illegal exploitation of resources from protected areas, and ... eliminate illegal trade in such resources taking into account sustainable customary resource use of indigenous and local communities....

The BAPAC has put into place two measures at Band-i-Amir to ensure that renewable resources within the proposed park boundaries are maintained for the traditional use of local communities. First, the practice of leasing grazing lands to non-residents of the Band-i-Amir area has been banned. Grazing is to be for the exclusive use of local communities. Second, the commercial export of shrubs and reeds has been banned. Several lorry-loads of seizures of shrubs have been seized by the Rangers.

2.1.1. Assess the economic and socio-cultural costs, benefits and impacts arising from the establishment and maintenance of protected areas, particularly for indigenous and local communities, and adjust policies to avoid and mitigate negative impacts, and where appropriate compensate costs and equitably share benefits in accordance with the national legislation.

No formal assessment has been undertaken of the costs and benefits of protected areas to local people, largely because there are few protected areas. Article 42 (2) (6) of the EL states that any proposal to establish a protected area must describe any compensatory measures that will be necessary.

2.1.2. Recognize and promote a broad set of protected area governance types related to their potential for achieving biodiversity conservation goals in accordance with the Convention, which may include areas conserved by indigenous and local communities and private nature reserves. The promotion of these areas should be by legal and/or policy, financial and community mechanisms.

Article 40 of the EL requires that each protected area be classified according to the six IUCN categories of protected areas. Section 40(3) states that NEPA will develop guidelines for the management of each category. This has not yet been done.

2.1.3. Establish policies and institutional mechanisms with full participation of indigenous and local communities, to facilitate the legal recognition and effective management of indigenous and local community conserved areas in a manner consistent with the goals of conserving both biodiversity and the knowledge, innovations and practices of indigenous and local communities.

Article 38(3) of the EL states that one of the three objectives of the national protected area system is to "ensure sustainable use of natural resources by involving local communities in all activities related to protected areas, including designating and delimiting areas, developing integrated management plans, and managing protected areas."

As noted in [Section 3.3.2](#), several elements of MoAIL's recent policies entail involvement of local communities in CBNRM and decision-making.

2.1.4. Use social and economic benefits generated by protected areas for poverty reduction, consistent with protected-area management objectives.

The draft Protected Area Regulations state each protected area management plan shall have a Collaborative Management Agreement (CMA) approved by the Government, local communities and other stakeholders. Further, each CMA shall specify the way in which the revenue of the protected area is to be shared among the communities located within and adjacent to the protected area, with a greater share to be allocated to any communities located in a special use zone within the protected area.

The CMA, appended to the Band-i-Amir Provisional Management Plan, was signed by all members of the BAPAC including representatives from each community within the proposed Park boundaries. The CMA established a formula for distribution of funds earmarked for communities and establishes a Community Conservation Fund. At present, the Ministry of Finance has not yet approved distribution of revenues to the BAPAC or communities. One of the five targets of the SCAPoWPA programme is to assist the Government in develop a revenue sharing policy for protected areas to ensure that local communities benefit.

2.1.5. Engage indigenous and local communities and relevant stakeholders in participatory planning and governance, recalling the principles of the ecosystem approach.

A majority of the BAPAC members are representatives of local communities. The entire BAPAC reviewed the draft Preliminary Management Plan for Band-i-Amir National Park and provided comments. The final draft was modified extensively based on these comments. The BAPAC has proved to be an effective forum for community voices to be heard in local decision-making.

WCS has facilitated formation of the Wakhan Pamir Association comprised of 42 villages in the Wakhan and intended to address conservation issues, particularly formation of the Big Pamir Wildlife Reserve.

2.1.6. Establish or strengthen national policies to deal with access to genetic resources within protected areas and fair and equitable sharing of benefits arising from their utilization, drawing upon the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization as appropriate.

Not done. Access to and equitable sharing of genetic resources is not a priority issue for Afghanistan at the present time.

2.2.1. Carry out participatory national reviews of the status, needs and context-specific mechanisms for involving stakeholders, ensuring gender and social equity, in protected areas policy and management, at the level of national policy, protected area systems and individual sites.

Afghanistan's protected area system is only in its formative stages. This activity is premature.

2.2.2 Implement specific plans and initiatives to effectively involve indigenous and local communities, with respect for their rights consistent with national legislation and applicable

international obligations, and stakeholders at all levels of protected areas planning, establishment, governance and management, with particular emphasis on identifying and removing barriers preventing adequate participation.

As reflected in the EL, Afghanistan is committed to involving local people in all aspects of protected area establishment and management.

3.1.1 By 2006, identify legislative and institutional gaps and barriers that impede the effective establishment and management of protected areas, and by 2009, effectively address these gaps and barriers.

The outstanding legislative gap currently is failure of the EL to allow delegation of management authority from NEPA to MoAIL in keeping with recognized roles of the respective Ministries. This prevents Parliamentary approval of the Protected Area Regulations which are intended to provide practical guidelines and authority for protected area establishment and management. Efforts are being made to amend the EL and provide interim measures to circumvent this problem.

3.1.2 Conduct national-level assessments of the contributions of protected areas, considering as appropriate environmental services, to the country's economy and culture, and to the achievement of the Millennium Development Goals at the national level; and integrate the use of economic valuation and natural resource accounting tools into national planning processes in order to identify the hidden and non-hidden economic benefits provided by protected areas and who appropriates these benefits.

Such assessment would be premature considering the nascence of Afghanistan's protected area system.

3.1.3 Harmonize sectoral policies and laws to ensure that they support the conservation and effective management of the protected area system.

Efforts are underway to develop policy within the Ministry for Finance to allow a proportion of revenues generated by protected areas to be allocated back to local communities.

3.1.7 Adopt legal frameworks to national, regional and sub-national protected areas systems of countries where appropriate.

Not applicable.

3.1.8 Develop national incentive mechanisms and institutions and legislative frameworks to support the establishment of the full range of protected areas that achieve biodiversity conservation objectives including on private lands and private reserves where appropriate.

Not addressed.

3.1.9 Identify and foster economic opportunities and markets at local, national and international levels for goods and services produced by protected areas and/or reliant on the ecosystem services that protected areas provide, consistent with protected area objectives and promote the equitable sharing of the benefits.

WCS has provided training in restaurant management and tourist guiding for the local people of Band-i-Amir. AKF has recently started a large Bamiyan Ecotourism Project which will promote economic opportunities to local people in Bamiyan Province.

3.1.11 Cooperate with neighbouring countries to establish an enabling environment for transboundary protected areas and for neighbouring protected areas across national boundaries and other similar approaches including regional networks.

The development of a transboundary protected area in the Pamirs was first proposed in 1914 by the Russian, Simon Tienshasky. More recently, scientists, development agencies, intergovernmental organizations, and NGOs have all raised the idea and have been working on a regional basis in the hopes of taking advantage of a window of opportunity. A conference entitled *Pamirs, Source of Fresh Water for Central Asia* was held in Tajikistan in 2003, in which a presentation from Pakistan promoted the idea of a Pamirs International Conservancy, including large mountain tracts adjoining the Pamirs. In 2004, the Kabul office of AKF proposed a comprehensive four-country program which it termed *Pamir Conservation: Pamir Integrated Development*. In 2005, the Asian Development Bank also proposed a transboundary protected area within this region.

The International Workshop on Wildlife and Habitat Conservation in the Pamirs was held on September 2006 in Urumqi, Xinjiang, China. Government representatives, as well as representatives of IUCN, WCS and WWF, joined the workshop to exchange their experience and information regarding the Pamirs and to discuss the issues of conservation and transboundary cooperation. The overall response was positive, with strong interest by all participants in establishing transboundary protection of the Pamir region. These actions culminated in a draft of the Pamirs Transboundary Protected Area Action Plan.

Much of the area under consideration already is, or may soon be, in reserves and needs only minor additions and adjustments to become a formal and functional entity. These are:

- Pakistan-- Khunjerab National Park (6,150 km²).
- China-- Taxkorgan Nature Reserve (about 14 000 km²)
- Tajikistan--Zorkul Strictly Protected Area (870 km²)
- Afghanistan-- efforts are underway to create three proposed protected areas; Big Pamir Wildlife Reserve (ca. 679 km²), Little Pamir Protected Area (ca. 240 km²) and Waghjir Protected Area (ca. 130 km²)

The process is currently on hold because of a variety of concerns expressed by several of the partner countries. It is expected that the process will be reinitiated when the time is right.

3.2.1 By 2006 complete national protected-area capacity needs assessments, and establish capacity building programmes on the basis of these assessments including the creation of curricula, resources and programs for the sustained delivery of protected areas management training.

No system-wide capacity needs assessment has been done or is planned.

3.2.2 Establish effective mechanisms to document existing knowledge and experiences on protected area management, including traditional knowledge in accordance with Article 8 (j) and Related Provisions, and identify knowledge and skills gaps.

No mechanisms have been established or are planned.

3.2.3 Exchange lessons learnt, information and capacity-building experiences among countries and relevant organizations, through the Clearing-house Mechanisms and other means.

A Sister Parks initiative is being discussed which would pair Scott's Bluff National Monument in Nebraska with Band-i-Amir.

3.2.5 Improve the capacity of protected areas institutions to develop sustainable financing through fiscal incentives, environmental services, and other instruments.

Under the SCAPoWPA programme, revenue sharing agreements will be put in place that allow some of the revenues raised from protected areas to be used for management.

3.3.5 Increase technology transfer and cooperation to improve protected area management.

There has been nothing to date.

3.4.1 Conduct a national-level study by 2005 of the effectiveness in using existing financial resources and of financial needs related to the national system of protected areas and identify options for meeting these needs through a mixture of national and international resources and taking into account the whole range of possible funding instruments, such as public funding, debt for nature swaps, elimination of perverse incentives and subsidies, private funding, taxes and fees for ecological services .

Not done.

3.4.2 By 2008, establish and begin to implement country-level sustainable financing plans that support national systems of protected areas, including necessary regulatory, legislative, policy, institutional and other measures.

Not done.

3.4.3 Support and further develop international funding programmes to support implementation of national and regional systems of protected areas in developing countries and countries with economies in transition and small island developing States.

Not done.

3.4.4 Collaborate with other countries to develop and implement sustainable financing programmes for national and regional systems of protected areas.

Not done.

3.4.5 Provide regular information on protected areas financing to relevant institutions and mechanisms, including through future national reports under the Convention on Biological Diversity, and to the World Database on Protected Areas.

Not done.

3.4.6 Encourage integration of protected areas needs into national and, where applicable, regional development and financing strategies and development cooperation programmes.

Protected area financing has been included in the strategic plans of MoAIL.

3.5.1 Establish or strengthen strategies and programmes of education and public awareness on the importance of protected areas in terms of their role in biodiversity conservation and sustainable socio-economic development, in close collaboration with the Communication, Education and Public Awareness Initiative (CEPA) under the Convention on Biological Diversity and targeted towards all stakeholders.

Not done. CEPA has not been contacted.

3.5.2 Identify core themes for education, awareness and communication programmes relevant to protected areas, including inter alia their contribution to economy and culture to achieve specific end results such as compliance by resource users and other stakeholders or an increased understanding of science-based knowledge by indigenous and local communities and policy makers and an increased understanding of the needs, priorities and value of indigenous and local communities' knowledge, innovations and practices by Governments, non-Governmental organizations and other relevant stakeholders.

Not done.

3.5.3 Strengthen, and where necessary, establish information mechanisms directed at target groups such as the private sector, policy makers, development institutions, community-based organizations, the youth, the media, and the general public.

Not done.

3.5.4 Develop mechanisms for constructive dialogue and exchange of information and experiences among protected-area managers, and between protected area managers and indigenous and local communities and their organizations and other environment educators and actors.

The BAPAC is a forum in which the Band-i-Amir Park Warden can formally exchange views and information with representatives of local communities and community observers.

3.5.5 Incorporate the subject of protected areas as an integral component of the school curricula as well as in informal education.

Not done.

3.5.6 Establish mechanism and evaluate the impacts of communication, education and public awareness programmes on biodiversity conservation to ensure that they improve public awareness, change behaviour and support the achievement of protected area objectives.

Not done.

4.1.1 Collaborate with other Parties and relevant organizations, particularly IUCN, on the development, testing, review and promotion of voluntary protected areas standards and best practices on planning and management, governance and participation.

Not done.

4.1.2 Develop and implement an efficient, long-term monitoring system of the outcomes being achieved through protected area systems in relation to the goals and targets of this work programme.

Not done.

4.1.3 Draw upon monitoring results to adapt and improve protected area management based on the ecosystem approach.

Not done.

4.2.1 Develop and adopt, by 2006, appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected area management and governance, and set up a related database, taking into account the IUCN-WCPA framework for evaluating management effectiveness, and other relevant methodologies, which should be adapted to local conditions.

The NPASP currently under development will address monitoring standards for the proposed protected area system.

4.2.3 Include information resulting from evaluation of protected areas management effectiveness in national reports under the Convention on Biological Diversity.

Not done.

4.3.1 Implement national and regional programmes to monitor and assess the status and trends of biodiversity within protected area systems and sites.

The NPASP currently under development will address monitoring of biodiversity for the proposed protected area system.

4.3.4 Participate in the World Database on Protected Areas maintained by UNEP-WCMC, and the United Nations List of Protected Areas and the State of the World's Protected Areas assessment process.

Updated information of Afghanistan's proposed protected areas will be provided to UNEP-WCMC during 2009.

4.3.5 Encourage the establishment and establishment use of new technologies including geographic information system and remote sensing tools for monitoring protected areas.

WCS has developed an in-house GIS and remote sensing system. UNEP has established a GIS lab in NEPA. The Afghanistan Information Management Service (AIMS) was established in 2001 and provides a wide range of mapping services.

Global Strategy for Plant Conservation.

Although Afghanistan is not directly addressing the Global Strategy for Plant Conservation, actions under some programs opportunistically address many of the Strategy's targets.

Global targets for 2010

(i) A widely accessible working list of known plant species, as a step towards a complete world flora;

There is currently no list of Afghan plant species. A proposal that has been developed to complete an Afghanistan e-flora. Funding is currently being sought (contact: Dr. Wolfgang Pittroff, Wolfgang.Pittroff@gmail.com).

(ii) A preliminary assessment of the conservation status of all known plant species, at national, regional and international levels;

Afghanistan does not yet have a checklist of plant species. However, the AWEC has evaluated 4 plant species or genera already and plans to assign status to more species in 2009.

(iii) Development of models with protocols for plant conservation and sustainable use, based on research and practical experience;

Not currently being done and there are no plans to do so.

(iv) At least 10 per cent of each of the world's ecological regions effectively conserved;

As noted above, Afghanistan does not yet have any legally established protected areas. Band-i-Amir will be established as a Provisional National Park as soon as legislation is in place. An NPASP is being developed which will recommend a system of protected areas.

(v) Protection of 50 per cent of the most important areas for plant diversity assured;

Little is known about important areas for Afghan plant diversity except that diversity and endemism is likely highest in the eastern Hindu Kush.

(vi) At least 30 per cent of production lands managed consistent with the conservation of plant diversity;

Not done and there are no plans to address this issue.

(vii) 60 per cent of the world's threatened species conserved *in situ*;

An international goal not applicable at the national level.

(viii) 60 per cent of threatened plant species in accessible *ex situ* collections, preferably in the country of origin, and 10 per cent of them included in recovery and restoration programmes;

There is no checklist of Afghan plant species and the process of assessing threat status is only beginning. The FAO Biodiversity Project ([Section 2.2.1.4.](#)) will be developing management plans for selected medicinal, commercial and food species.

(ix) 70 per cent of the genetic diversity of crops and other major socio-economically valuable plant species conserved, and associated indigenous and local knowledge maintained;

Afghanistan once had extensive herbarium and seed collections all of which were destroyed during the war (SciDevNet 2002). There is currently no extensive seed bank in Afghanistan, although MoAIL is currently completing a seed bank facility and several organizations (ICARDA [ICARDA nd], NordGen [NordGen Plants nd], FAO [Samuel Kugbei, FAO; pers. comm., Samuel.kugbei@fao.com]) are maintaining small seed banks for Afghan crops. No significant herbarium currently exists in Afghanistan. Most surviving plant specimens are located in German herbaria. A small botanical garden is being developed near Kabul University. Plans by MoAIL for a more extensive botanical garden near Paghman have been shelved.

(x) Management plans in place for at least 100 major alien species that threaten plants, plant communities and associated habitats and ecosystems;

Afghanistan is not currently planning to address alien species.

(xi) No species of wild flora endangered by international trade;

Eight Afghan plant species are listed on CITES Appendix II (Table 1), but there is no evidence that Afghan populations are actually being threatened by trade.

(xii) 30 per cent of plant-based products derived from sources that are sustainably managed;

The AWEC has evaluated two wild plants that are harvested for trade. Several species of *Ferula* are extensively harvested for spice and medicine (assafoetida or hing). Wild plants of the genus *Glycyrrhiza* are heavily harvested for export of liquorice. Anecdotal evidence suggests that both species are declining in abundance in Afghanistan due to overharvest (Johnson 2008 b and c).

(xiii) The decline of plant resources, and associated indigenous and local knowledge, innovations and practices that support sustainable livelihoods, local food security and health care, halted;

There is no evidence that decline in Afghan plant resources is being halted.

(xiv) The importance of plant diversity and the need for its conservation incorporated into communication, educational and public-awareness programmes;

This is not considered to be a high priority issue for Afghanistan.

(xv) The number of trained people working with appropriate facilities in plant conservation increased, according to national needs, to achieve the targets of this Strategy;

There are currently no plant conservation facilities in Afghanistan.

(xvi) Networks for plant conservation activities established or strengthened at national, regional and international levels.

Not applicable.

Appendix IV: National Indicators Used in This Report

Afghanistan has not developed national biodiversity indicators. Development of indicators will be considered during development of the NBSAP.

FIGURES



Figure 1. General map of Afghanistan showing provincial boundaries and proposed protected areas. Courtesy of WCS.

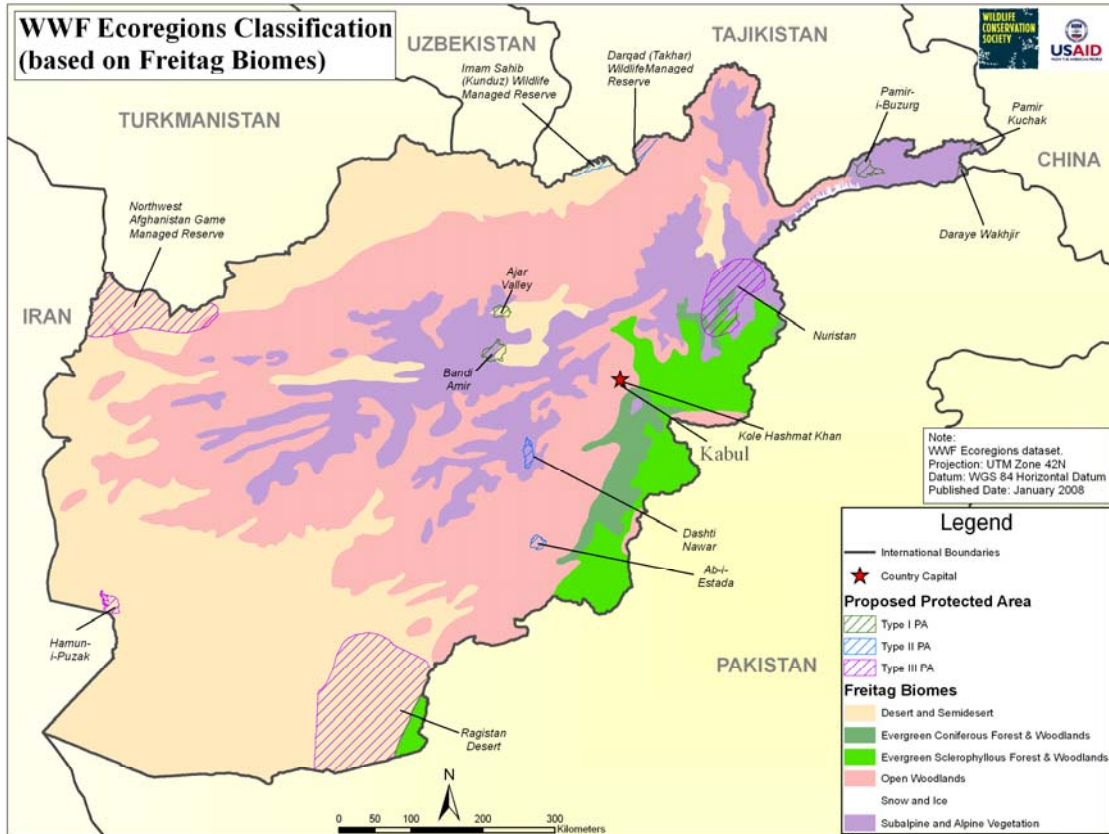


Figure 2. Afghanistan's major biomes based on the WWF ecoregional classification (Olson et al. 2001) organized by Breckle's (2007) vegetation classification. Data from WWF and figure courtesy of WCS.

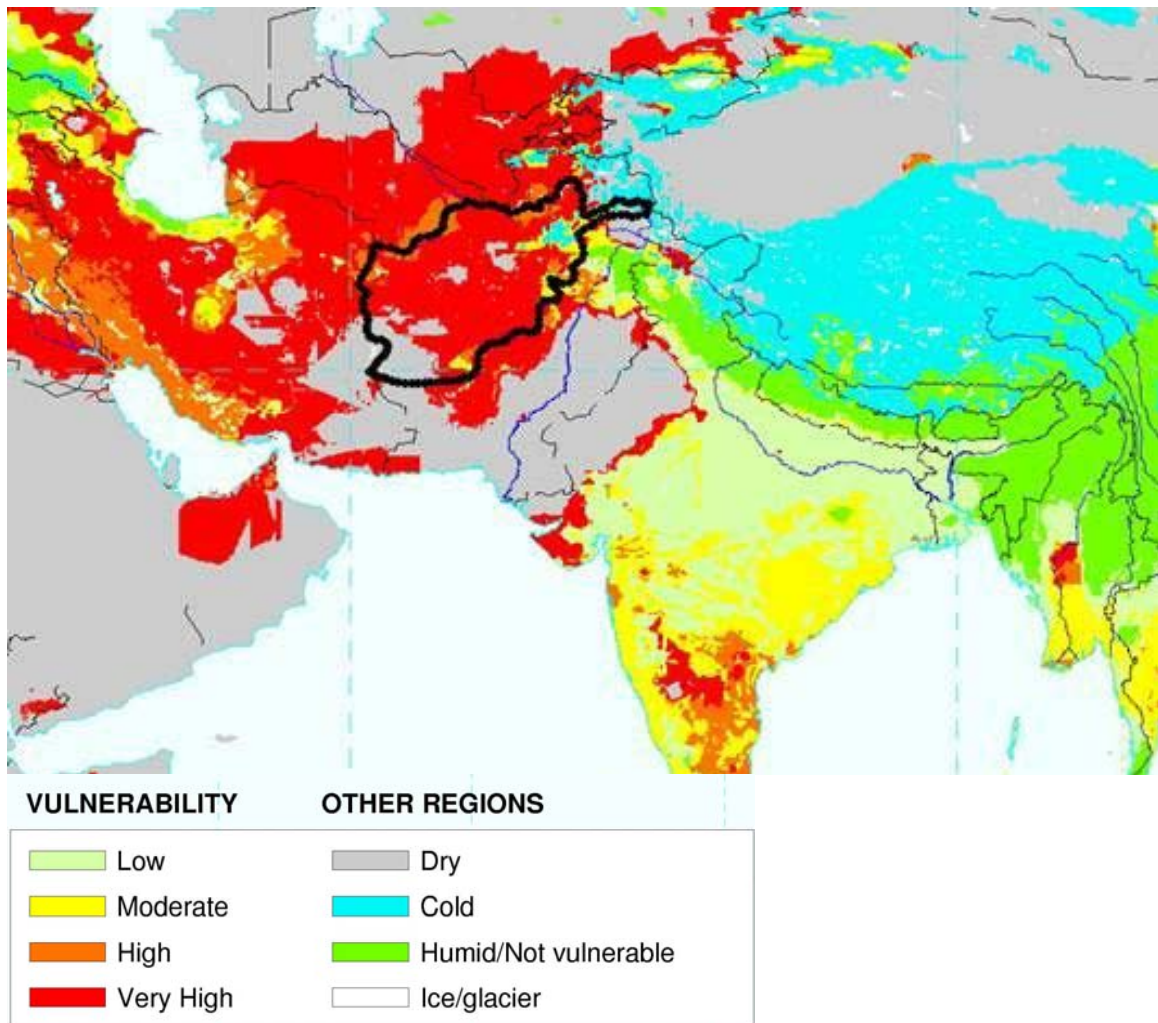


Figure 3. US Department of Agriculture map showing threat of human induced desertification. From UNEP (2008b).

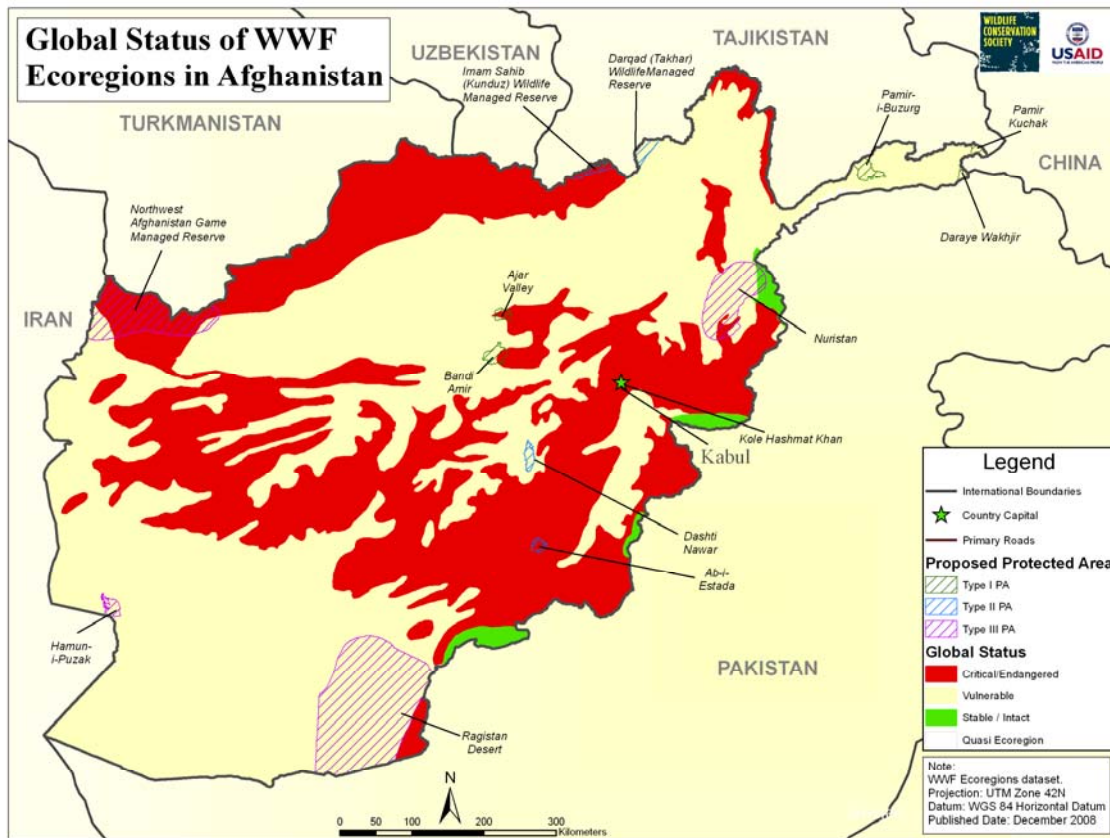


Figure 4. Status of WWF ecoregions in Afghanistan. Data courtesy of WWF and mapping from WCS.

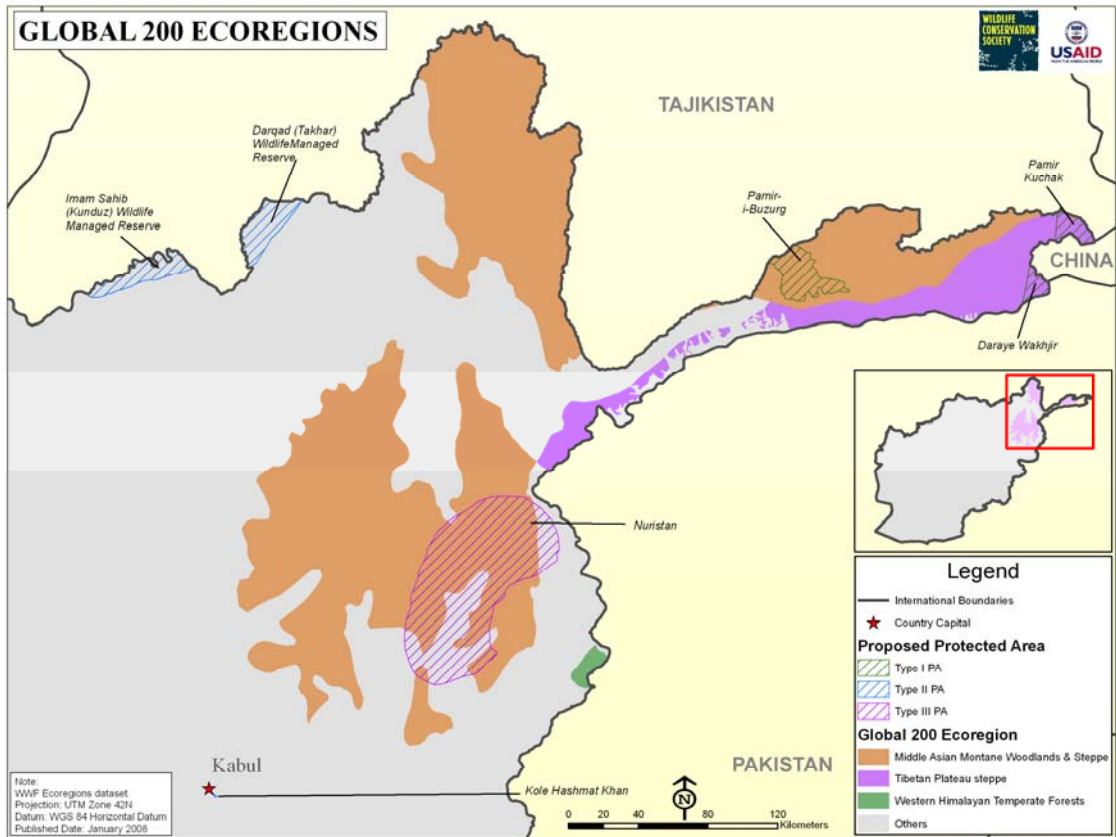


Figure 5. Map showing Global 200 Ecoregions in Afghanistan (Olson and Dinerstein 2002). Mapping courtesy of WCS.

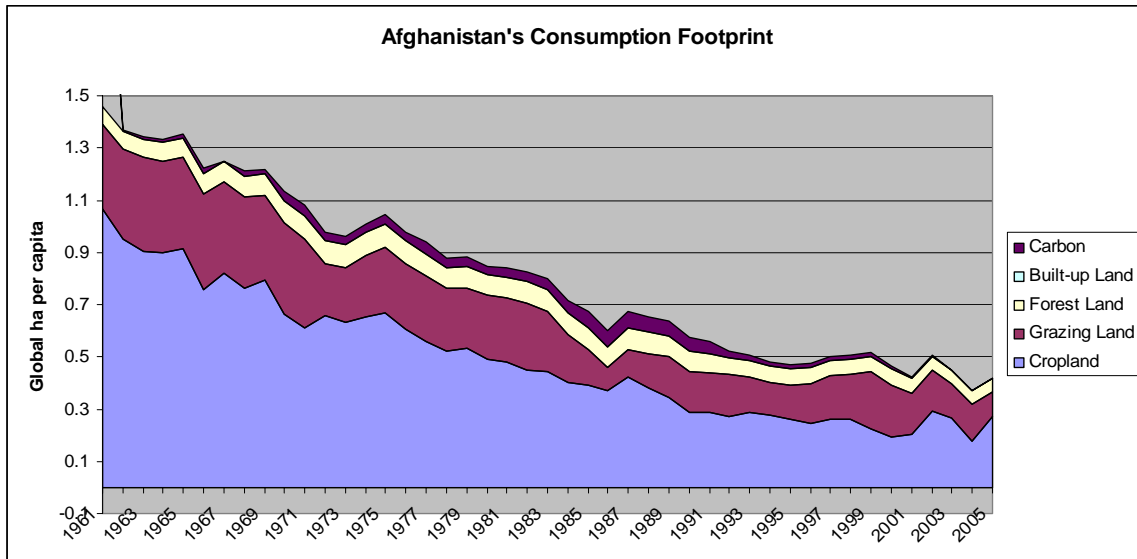


Figure 6. Trend in Afghanistan's ecological footprint 1961 – 2005 by sector. (Courtesy of Global Footprint Network, 2008 National Accounts data. See <http://www.footprintnetwork.org/en/index.php/GFN/>)

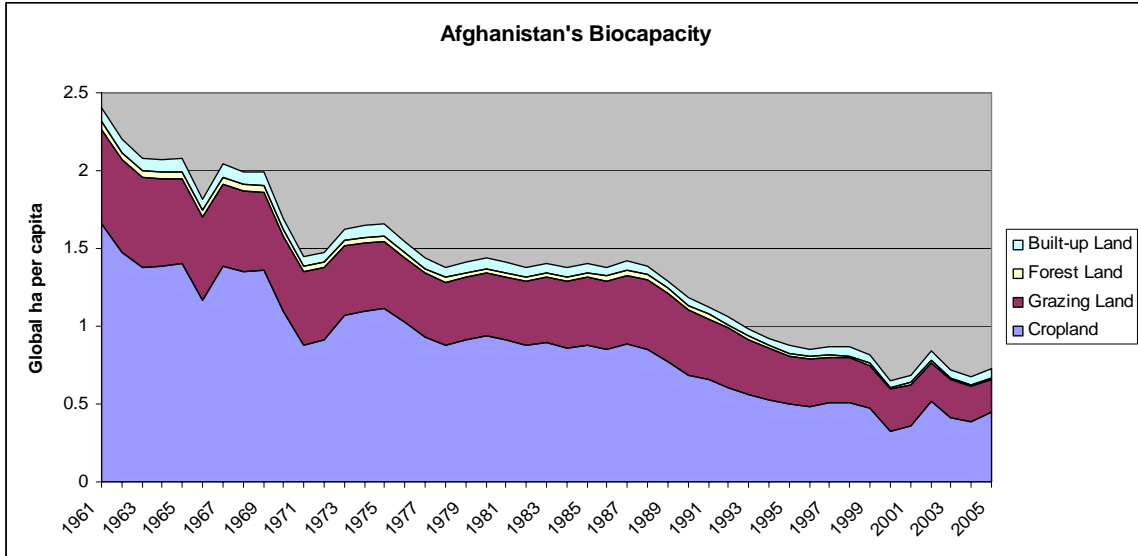


Figure 7. Trend in Afghanistan's biocapacity 1961 – 2005 by sector. (Courtesy of Global Footprint Network, 2008 National Accounts data. See <http://www.footprintnetwork.org/en/index.php/GFN/>)

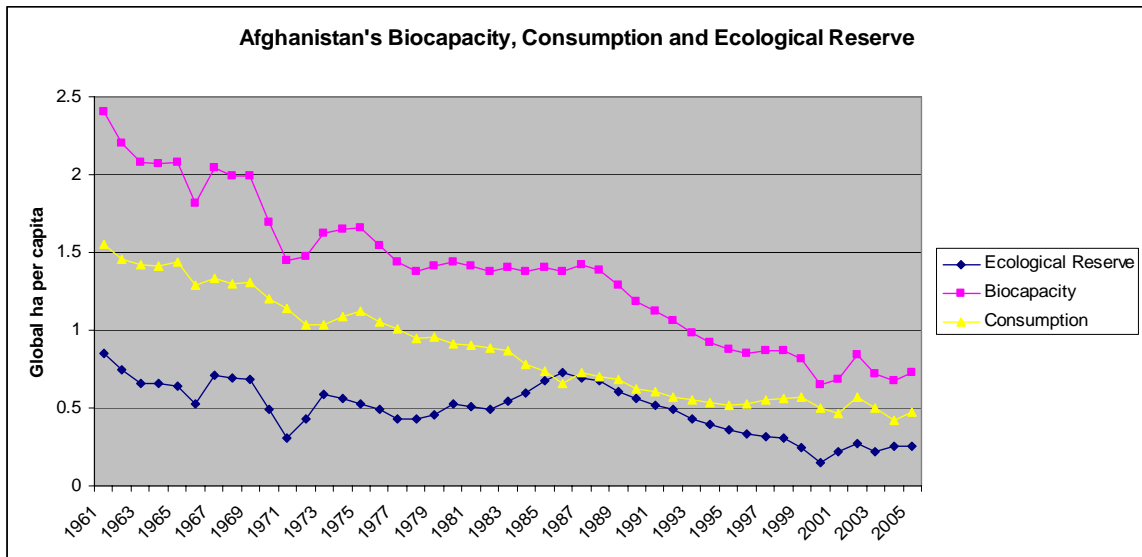


Figure 8. Trend in Afghanistan's biocapacity, consumption and ecological reserve; 1961 – 2005. (Courtesy of Global Footprint Network, 2008 National Accounts data. See <http://www.footprintnetwork.org/en/index.php/GFN/>)

Table 1. Afghan species listed as being at threat by the global IUCN Red List, the AWEC and by CITES.

Species Listing	Population/Sub-species Listing	Common Name	Global Threat	National Threat	Protected/Harvestable	CITES
MAMMALS						
<i>Acinonyx jubatus</i>		Cheetah	VU	CR	P	
<i>Canis lupus</i>		Grey Wolf	LC	VU	P	II
<i>Capra aegagrus</i>		Wild Goat	VU			
<i>Capra falconeri</i>		Markhor	EN	EN	P	I
<i>Capra sibirica</i>	Bamiyan Province	Siberian Ibex	LC (sp)	CR	P	
<i>Capra sibirica</i>	Badakhshan Province	Siberian Ibex	LC (sp)	LC	H	
<i>Caracal caracal</i>		Caracal	LC	VU	P	I
<i>Cervus elaphus</i>	<i>bactrianus</i>	Bactrian Deer	LC (sp)			II (ssp)
<i>Equus onager</i>	<i>onager</i> or <i>kulan</i>	Wild Ass	EN (sp) (extinct in Afghanistan)			II (ssp)
<i>Felis chaus</i>		Jungle Cat	LC	DD	P	II
<i>Felis sylvestris</i>		Wildcat	LC	DD	P	II
<i>Gazella subgutturosa</i>		Goitered Gazelle	VU			
<i>Lepus capensis</i>		Cape Hare	LC	DD	P	
<i>Lutra lutra</i>		Eurasian Otter	NT			I
<i>Lynx lynx</i>		Lynx	LC	VU	P	II
<i>Macaca mulatta</i>		Rhesus macaque	LC			II
<i>Moschus cupreus [chrysogaster]</i>		Musk Deer	EN	EN	P	I
<i>Otocolobus manul</i>		Pallas Cat	NT	DD	P	II
<i>Ovis ammon</i>	<i>polii</i>	Marco Polo Argali	NT (sp)	VU	P	II (ssp)
<i>Ovis orientalis</i>	<i>cycloceros</i>	Afghan Urial	VU (sp)	DD	P	II (ssp)
<i>Panthera pardus</i>	<i>saxicolor</i>	Persian Leopard	EN (ssp)	EN	P	I (sp)
<i>Panthera tigris</i>	<i>virgata</i>	Caspian Tiger	EX (ssp)			I (sp)

<i>Prionailurus bengalensis</i>		Leopard Cat	LC	DD	P	II
<i>Rhinolophus mehelyi</i>		Mehely's Horseshoe Bat	VU			
<i>Uncia uncia</i>		Snow Leopard	EN	EN	P	I
<i>Ursus arctos</i>		Brown Bear	LC	DD	P	I
<i>Ursus thibetanus</i>		Asiatic Black Bear	VU	EN	P	I
<i>Vormela peregusna</i>		Eurasian Marbled Polecat	VU			
<i>Vulpes cana</i>		Afghan (Blandford's) Fox	VU			II
<i>Vulpes corsac</i>		Corsac Fox	LC	DD	P	
<i>Vulpes vulpes</i>		Red Fox	LC	NT	H	
BIRDS						
<i>Accipiter badius</i>		Shikra	LC			II
<i>Accipiter gentilis</i>		Northern Goshawk	LC			II
<i>Accipiter nisus</i>		Eurasian Sparrowhawk	LC			II
<i>Aegypius monachus</i>		Cinereous Vulture	NT			II
<i>Alectoris chukar</i>		Chukar	LC	NT	H	
<i>Aquila chrysaetos</i>		Golden Eagle	LC			II
<i>Aquila clanga</i>		Greater Spotted Eagle	VU			II
<i>Aquila heliaca</i>		Imperial Eagle	VU			I
<i>Aquila nipalensis</i>		Steppe Eagle	LC			II
<i>Asio flammeus</i>		Short-eared Owl	LC			II
<i>Asio otus</i>		Long-eared Owl	LC			II
<i>Athene noctua</i>		Little Owl	LC			II
<i>Bubo bubo</i>		Eurasian Eagle-Owl	LC			II
<i>Butastur teesa</i>		White-eyed Buzzard	LC			II
<i>Buteo lagopus</i>		Rough-legged Hawk	LC			II
<i>Buteo rufinus</i>		Long-legged Buzzard	LC			II
<i>Chlamydotis macqueenii</i>		Houbara Bustard	VU	VU	P	I
<i>Ciconia nigra</i>		Black Stork	LC			II
<i>Circaetus gallicus</i>		Short-toed Eagle	LC			II
<i>Circus aeruginosus</i>		Western Marsh-Harrier	LC			II
<i>Circus cyaneus</i>		Northern Harrier	LC			II
<i>Circus macrourus</i>		Pallid Harrier	NT			II

<i>Circus pygargus</i>		Montagu's Harrier	LC			II
<i>Columba eversmanni</i>		Pale-Backed Pigeon	VU			
<i>Falco cherrug</i>		Saker Falcon	EN	VU	P	II
<i>Falco columbarius</i>		Merlin	LC			II
<i>Falco jugger</i>		Laggar Falcon	NT			I
<i>Falco naumanni</i>		Lesser Kestrel	VU			II
<i>Falco pelegrinoides</i>		Barbary Falcon	LC			I
<i>Falco peregrinus</i>		Peregrine Falcon	LC			I
<i>Falco subbuteo</i>		Eurasian Hobby	LC			II
<i>Falco tinnunculus</i>		Eurasian Kestrel	LC			II
<i>Glaucidium brodiei</i>		Collared Owlet	LC			II
<i>Grus grus</i>		Common Crane	LC			II
<i>Grus leucogeranus</i>		Siberian Crane	CR	CR	P	I
<i>Grus virgo</i>		Demoiselle Crane	LC			II
<i>Gypaetus barbatus</i>		Lammergeier	LC			II
<i>Gyps bengalensis</i>		White-rumped Vulture	CR			II
<i>Gyps fulvus</i>		Eurasian Griffon	LC			II
<i>Gyps himalayensis</i>		Himalayan Griffon	LC			II
<i>Haliaeetus albicilla</i>		White-tailed Eagle	LC			I
<i>Haliaeetus leucoryphus</i>		Pallas's Fish-Eagle	VU			II
<i>Hieraaetus fasciatus</i>		Bonelli's Eagle	LC			II
<i>Marmaronetta angustirostris</i>		Marbled Duck	VU			
<i>Milvus lineatus [migrans]</i>		Black Kite	LC			II
<i>Neophron percnopterus</i>		Egyptian Vulture	EN			II
<i>Otis tarda</i>		Great Bustard	VU			II
<i>Oxyura leucocephala</i>		White-Headed Duck	EN			II
<i>Pandion haliaetus</i>		Osprey	LC			II
<i>Pelecanus crispus</i>		Dalmatian Pelican	VU			I
<i>Phoenicopterus roseus</i>		Greater Flamingo	LC	VU	P	II
<i>Picus squamatus</i>		Scaly-bellied Woodpecker	LC			
<i>Platalea leucorodia</i>		Eurasian Spoonbill	LC			II

<i>Psittacula eupatria</i>		Alexandrine Parakeet	LC			II
<i>Psittacula himalayana</i>		Slaty-headed Parakeet	LC			II
<i>Psittacula krameri</i>		Rose-ringed Parakeet	LC			
<i>Saxicola macrorhyncha</i>		Stoliczka's Bushchat	VU			
<i>Tetrax tetrax</i>		Little Bustard	NT			II
<i>Vanellus gregarius</i>		Sociable Lapwing	CR			II
REPTILES						
<i>Eryx elegans</i>		Elegant Sand Boa				II
<i>Eryx johnii</i>		Indian Sand Boa				II
<i>Eryx miliaris</i>		Dwarf Sand Boa				II
<i>Eryx tataricus</i>		Tartary Sand Boa				II
<i>Naja oxiana</i>		Central Asian Cobra				II
<i>Ptyas mucosus</i>		Oriental Rat Snake or Whipsnake				II
<i>Testudo horsfieldii</i>		Afghan Tortoise	VU			II
<i>Uromastyx asmussi</i>		Iranian Uromastyx				II
<i>Uromastyx hardwickii</i>		Indian Spiny Tail Lizard				II
<i>Varanus bengalensis</i>		Bengal Monitor				I
<i>Varanus griseus</i>		Desert Monitor				I
AMPHIBIANS						
<i>Batrachuperus mustersi</i>		Afghani Brook Salamander	CR	CR	P	
FISH						
<i>Acipenser nudiventris</i>		Fringebarbel sturgeon	EN			II
<i>Cyprinus carpio</i>		Wild Common Carp	VU			
<i>Luciobarbus brachycephalus</i>		Shorthead Barbel	VU			
<i>Luciobarbus capito</i>		Bulatmai Barbel	VU			
<i>Pseudoscaphirhynchus hermanni</i>		Dwarf sturgeon	CR			II
<i>Pseudoscaphirhynchus kaufmanni</i>		Amu Darya sturgeon	EN			II
INSECTS						
<i>Parnassius autocrator</i>		None	VU	EN	P	
PLANTS						
<i>Corydalis adiantifolia</i>		No Common Name		EN	P	
<i>Corydalis hindukushensis</i>		No Common Name		EN	P	

<i>Dactylorhiza hatagirea</i>		No Common Name				II
<i>Dactylorhiza majalis</i>	<i>majalis</i>	Southern Marsh Orchid				II
<i>Dioscorea deltoidea</i>		Elephant's foot				II
<i>Eulophia turkestanica</i>		No Common Name				II
<i>Ferula spp.</i>		Hing		NT	H	
<i>Glycyrrhiza spp.</i>		Liquorice		NT	H	
<i>Habenaria josephii</i>		No Common Name				II
<i>Malus niedzwetzkyana</i>		No Common name	EN			
<i>Orchis latifolia</i>		No Common Name				II
<i>Sternbergia fischeriana</i>		No Common Name				II
<i>Taxus wallichiana</i>		Himalayan yew				II
<i>Ulmus wallichiana</i>		Himalayan elm	VU			

EX = Extinct

CR = Critically Endangered

EN = Endangered

VU = Vulnerable

NT = Near Threatened

LC = Least Concern

DD = Data Deficient

P = Protected

H= Harvestable

I = Appendix I

II = Appendix II

sp = listing at species level

ssp = listing at subspecies level

Table 3. Area of Afghan biomes and their status according to WWF ecoregion classification. (GIS calculations by WCS)

BIOME	Area (km²)	% of Country Area	% of Biome Endangered	% of Biome Vulnerable	% of Biome Stable
Subalpine and Alpine	106,584	17	0	100	0
Desert and Semidesert	252,044	39	27	73	0
Open Woodlands	240,745	37	60	38	2
Evergreen Forest and Woodland	49,124	8	70	26	4

Table 4. Afghan languages at risk from 2009 *Interactive Atlas of the World's Languages in Danger*. (<http://www.unesco.org/culture/ich/index.php?pg=00206>)

Language	Location	Number of Speaker (Date of Estimate)	Status
Ashkun	Pech Valley, northwest of Asadabad in Kunar Province, Afghanistan. (i.e., Nuristan)	2000 (2000)	Definitely Endangered
Brahui	Kalat district and parts of Hyderabad, Karachi and Khairpur districts; also small communities in Afghanistan and Iran	Approx. 500000 (date unknown)	Unsafe
Central Asian Arabic	Afghanistan - Uzbekistan - Tajikistan	Unknown	Definitely Endangered
Gambari	Nuristan, Tregam Valley, villages of Katar and Gambir in Kunar Province of Afghanistan	1000 (1994)	Severely Engangered
Gawar-Bati	Kunar Valley, Afghanistan; Arandu, Southern Chitral, Pakistan	9500 (1992)	Definitely Endangered
Kati	Bashgal valley and Papruk valley, Nuristan province of Afghanistan and Chitral district in NWFP, Pakistan	18,700 (1994)	Definitely Endangered
Moghol	Herat Province; according to the Ethnologue, the villages of Kundur and Karez-i-Mulla	200 (date unknown)	Critically Endangered
Munji	Munjan and Mamalgha Valleys in Northeastern Afghanistan (i.e., Badakhshan)	2000 (2000)	Severely Engangered
Ningalami	Pech valley in Afghanistan (i.e., Nuristan)	200 (rough estimate, unknown date)	Severely Engangered
Ormuri	Afghanistan - Pakistan (Baluchistan)	less than 50 in Afghanistan (1997)	Definitely Endangered
Parachi	Villages in Nijrau, Tagau, Pachaghan, Shutul, Ghujula in Hindu Kush Valley near Kabul, Afghanistan	Approx. 6,000 (unknown date)	Definitely Endangered
Parya	Hissor Valley of western Tajikistan, Surkhandarya Valley of Uzbekistan and Kunduz region of Afghanistan	7000 (2005)	Severely Engangered
Pashayi	Afghanistan	Unknown	Unsafe
Prasun	Villages of Shupu (Ishtivi, Shtevgrom), Sech, Ucu, Ushut, Zumu in Prasun valley in Nuristan province of Afghanistan	Approx. 2000 (unknown date)	Definitely Endangered
Rushana	Rushan district, Gorno Badakhshan Region of Tajikistan and Badakhshan Province of Afghanistan	30,000 (2008)	Definitely Endangered
Sanglechli	Sanglech valley, Ishkashim district, Afghanistan and Ishkashim district, Tajikistan	2500 (2008)	Severely Engangered
Savi	Sau village on the Kunar River, Afghanistan; Dir and Drosh in Chitral district, NWFP Pakistan	3000 (1983)	Definitely Endangered
Shugni	Shughnan district, Roshkala district and Khorog city, Gorno Badakhshan Autonomous Region of Tajikistan;	9500 (2008)	Unsafe
Shumasti	Shumasht village in Afghanistan; Kunar Province.	Approx. 1000 (unknown date)	Severely Engangered
Tirahi	Southeast of Jalalabad	100(?) (2007)	Critically Endangered
Waigali	Waigal valley in Nuristan Province and central Kunar Province of Afghanistan	2000 (2000)	Definitely Endangered
Wakhi	Ishkashim district, Tajikistan; Northern Pakistan; Badakhshan Province of Afghanistan and Tashkurghan district of Xinjiang Province of China.	75,000 (unknown date)	Definitely Endangered
Wotapuri-Katarqalai	Towns of Wotapur and Katarqala, Nuristan	Approx. 2000 (unknown date)	Definitely Endangered