



Islamic Republic of Afghanistan

# NATIONAL BIODIVERSITY STRATEGY & ACTION PLAN



Building Environmental Resilience



Framework for Implementation 2014 - 2017

تقویت تاب آوری محیط زیستی



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This report was produced by a team from the National Environmental Protection Agency of the Islamic Republic of Afghanistan, supported by funds for enabling activities under the Global Environmental Facility (GEF) project "Afghanistan: Development of National Biodiversity Strategy and Action Plan (NBSAP), Assessment of Capacity Building Needs for In-situ and Ex-situ Biodiversity Conservation".

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## FOREWORD

This National Biodiversity Strategy and Action Plan for Afghanistan has been prepared by the National Environmental Protection Agency, with technical and advisory inputs from relevant government agencies, non-governmental organizations, international organizations and user groups at national and provincial levels. Its purpose is two-fold: firstly, to provide the Government of Afghanistan with a policy document that will be useful in guiding development of its future biodiversity conservation and management programming, and secondly for communicating biodiversity conservation priorities in Afghanistan to the Secretariat of the Convention on Biological Diversity (a requirement of all countries acceding to the Convention), to other government agencies in Afghanistan, and to Afghanistan's development partners.

The Strategy and Action Plan have been developed on the basis of a thorough review of available information on Afghanistan's biodiversity and its current status, as documented in published reports and currently available databases, and as reported during consultations with government officials and residents representing all of Afghanistan's 34 provinces. The process has been facilitated by the excellent field work, status reporting and analysis previously undertaken by a variety of organizations. The staff and management of the Wildlife Conservation Society and United Nations Environment Programme have been particularly helpful in providing access both to their reporting and to unpublished information.

Although a relatively large amount of information on the biodiversity of Afghanistan is available, much remains to be documented in the remote corners of this large, rugged and ecologically diverse country. Years of ongoing warfare have certainly taken a toll on the nation's biodiversity resources, but the extent of biodiversity loss and degradation remain largely undocumented. Nevertheless, sufficient biodiversity resources remain to justify concerted management efforts. Additional survey work, focussed monitoring efforts, and continuing external support for biodiversity management also are required to ensure the effective conservation of Afghanistan's biodiversity resources.

Additional funding support also will be needed for further implementation and monitoring of key biodiversity management activities at national and provincial levels. Various legislative and planning initiatives have been undertaken and/or are ongoing. Training needs assessment has been completed at a strategic level but concrete engagement and curriculum development with Ministry of Education, Ministry of Higher Education and vocational training plans is required to ensure deeper integration of biodiversity into formal and semi-formal training on biodiversity. Attention will need to be paid to ensuring that the legislative and planning foundations, and implementation capacity for biodiversity management, are both adequate and functional over the long-term.

**Mostapha Zaher**  
Director - General/Minister  
Government of the Islamic Republic of Afghanistan

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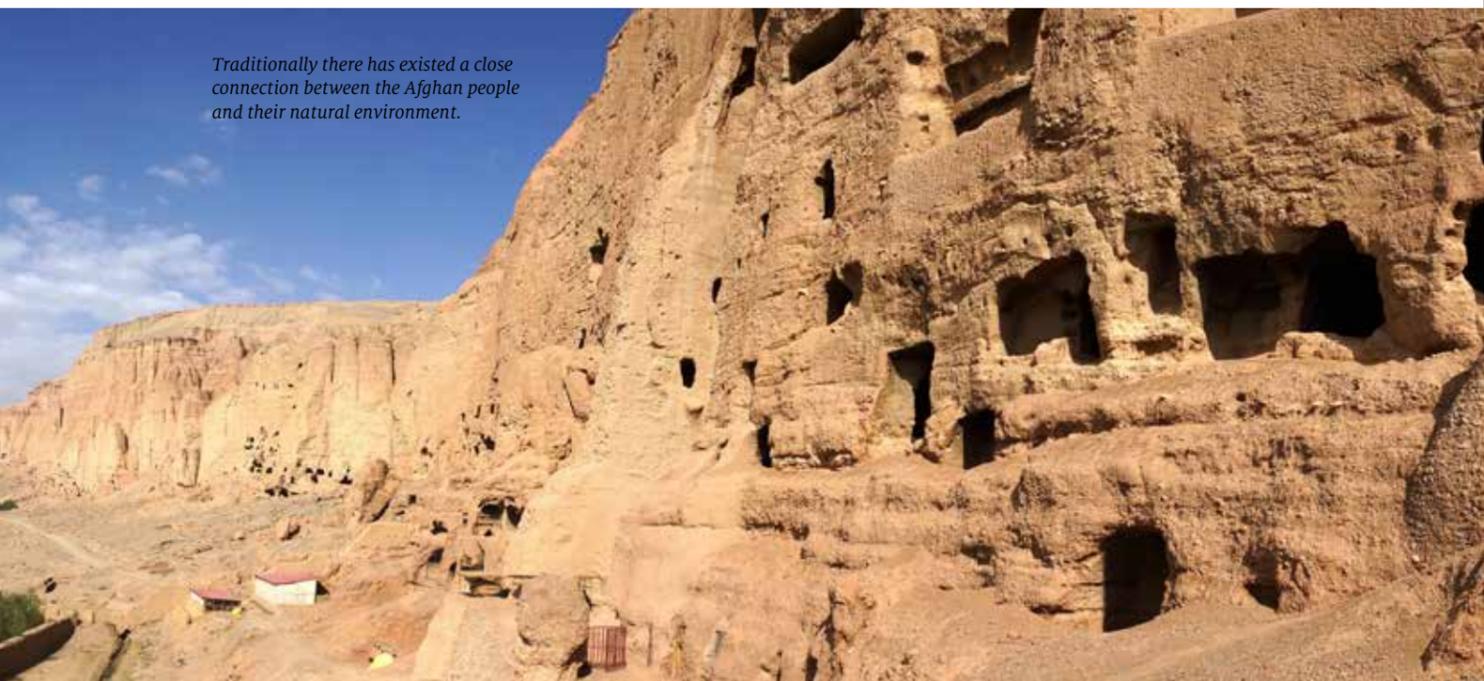
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## EXECUTIVE SUMMARY

*Traditionally there has existed a close connection between the Afghan people and their natural environment.*



## AFGHANISTAN'S NATIONAL BIODIVERSITY STRATEGY AND ACTION PLAN

**GOAL:** TO CONSERVE ALL ASPECTS OF AFGHANISTAN'S BIODIVERSITY, AND TO ENSURE THAT FUTURE UTILIZATION OF AFGHANISTAN'S BIODIVERSITY RESOURCES IS SUSTAINABLE

**STRATEGY:** TO CREATE AND IMPLEMENT A VIABLE, COST-EFFECTIVE AND SUSTAINABLE FRAMEWORK FOR THE CONSERVATION AND MANAGEMENT OF ALL ELEMENTS OF AFGHANISTAN'S BIODIVERSITY, BASED ON THE MOBILIZATION AND EFFECTIVE UTILIZATION OF AVAILABLE NATIONAL HUMAN AND FINANCIAL RESOURCES, AND ON INTERNATIONAL PARTNERSHIPS

**ACTION PLAN:** TO IDENTIFY AND IMPLEMENT SHORT, MEDIUM AND LONG-TERM ACTIONS THAT NEED TO BE TAKEN, INSTITUTIONAL RESPONSIBILITIES, AND (TO THE EXTENT POSSIBLE) OBTAIN THE BUDGETARY REQUIREMENTS FOR IMPLEMENTATION OF THE IDENTIFIED ACTIONS

The goals of the Convention on Biological Diversity are to: promote the conservation of the biological diversity of ecosystems, habitats and biomes; promote the conservation of species diversity; promote the conservation of genetic diversity; promote sustainable use and consumption; reduce pressures from habitat loss, land use change and degradation, and unsustainable water use; control threats from invasive alien species; address changes to biodiversity from climate change and pollution; maintain capacity of ecosystems to deliver goods and services and to support livelihoods; maintain socio-cultural diversity of indigenous and local communities; ensure the fair and equitable sharing of benefits arising out of the use of genetic resources; and ensure that Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention. All Parties to the Convention, which Afghanistan signed in 1992 and formally acceded to in 2002, are urged to develop a National Biodiversity Strategy and Action Plan (NBSAP) as a framework for implementing the Convention's goals.

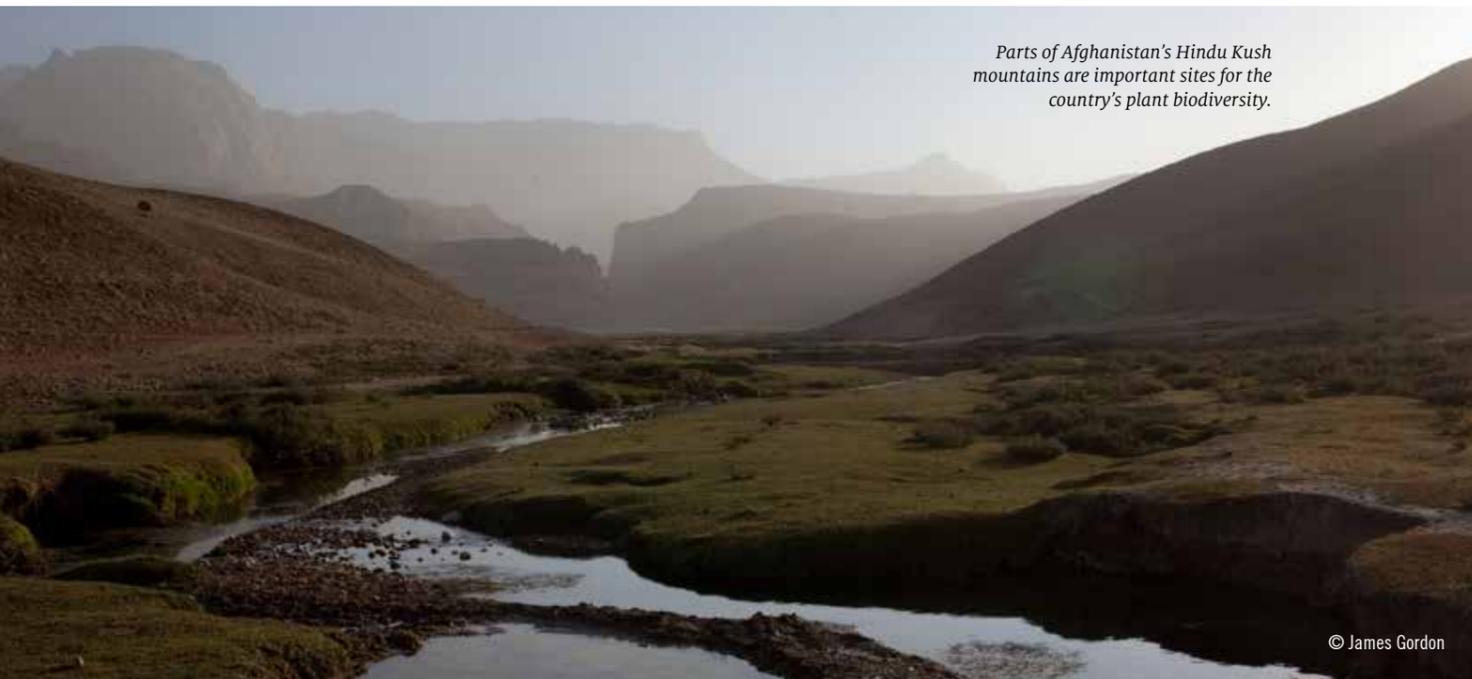
Afghanistan's NBSAP, which aims at conserving all aspects of Afghanistan's biodiversity, and ensuring that future utilization of biodiversity resources is sustainable, comprises the following elements:

- to continue ongoing assessments of Afghanistan's floral and faunal communities, with the overall aim of improving understanding of Afghanistan's biodiversity resources and their conservation requirements
- to expand the protected areas system to ensure that it is representative of all major ecosystems and areas of outstanding conservation or natural heritage value
- to develop and implement the support mechanisms (incentives, rules, regulations, environmental education, public awareness) necessary for the effective conservation of biodiversity and other natural resources
- to continue ongoing assessments of the status of Afghanistan's floral and faunal species, with the overall aim of improving understanding of Afghanistan's biodiversity resources and their conservation requirements

- to develop the mechanisms required for effective conservation of economically important species
- to develop and implement mechanisms to ensure sustainable use of biodiversity resources, including funding, capacity and policy considerations
- to prevent the illegal or unsustainable use of biodiversity resources
- to develop and implement mechanisms for preventing damage to natural ecosystems from invasive alien species
- to control impacts on biodiversity resources resulting from climate change, desertification and pollution
- to develop and implement mechanisms and plans for maintaining goods and services obtained from critical ecosystems, focussing on forests and woodlands
- to maintain cultural diversity by recognizing and valuing traditional knowledge and land uses
- to manage genetic resources for the benefit of all citizens of Afghanistan, and
- to ensure that government organizations have sufficient capacity and resources to carry out Afghanistan's obligations as a signatory to the CBD and other Multilateral Environmental Agreements

The Environment Law enacted in 2007 assigns National Environmental Protection Agency (NEPA) the responsibility for coordinating and monitoring conservation and rehabilitation of Afghanistan's environment. This mandate gives NEPA overall responsibility for implementation of the National Biodiversity Strategy and Action Plan, in partnership with Ministry of Agriculture, Irrigation and Livestock and other government organizations, and with the technical and financial assistance of international organizations and non-governmental organization partners.

# INTRODUCTION



*Parts of Afghanistan's Hindu Kush mountains are important sites for the country's plant biodiversity.*

© James Gordon

## BACKGROUND

The Convention on Biological Diversity (CBD), developed in response to growing threats to species and ecosystems, and inspired by a world-wide commitment to sustainable development, was opened for signature in 1992. Parties to the Convention are urged to develop a National Biodiversity Strategy and Action Plan (NBSAP) as a framework for implementation. A total of 177 Parties have now done so. The ninth meeting of the Conference of the Parties (COP) in 2008 called on the remaining 26 Parties to develop their NBSAPs by 2010.

Afghanistan signed the CBD agreement in 1992 and became a Party in 2002. The Environment Law (2007) requires the National Environmental Protection Agency (NEPA) to prepare, in consultation with relevant ministries, a NBSAP that addresses both in situ and ex situ conservation within two years of entry into force of the Act.

This NBSAP has been produced by NEPA in compliance with both of these requirements. COP guidance on developing NBSAPs (Annex 1v) has been followed in terms of process and issues to be addressed.

## PROCESS

The development of Afghanistan's National Biodiversity Strategy and Action Plan was a participatory process led by NEPA, with the technical guidance of a 19 member Biodiversity Working Group comprising senior representatives from Kabul University, NEPA and Ministry of Agriculture, Irrigation and Livestock (MAIL).

Development of the NBSAP was based on the following process and activities:

- a review of the CBD and its guidance on NBSAP preparation.
- a review of NBSAPs prepared for surrounding countries, and of representative NBSAPs from

elsewhere, to extract lessons learned and guidance on best-practice approaches and techniques.

- a comprehensive assessment of available information on biodiversity status and threats to biodiversity in Afghanistan, based on a review of available reporting and interviews with government, international donors and non-governmental organisation (NGO) personnel. The review of background and scientific information was based on English language reporting, as little if any original reporting is available in other foreign languages or the national languages of Dari and Pashto.
- provincial-level consultations in Bamyan, Mazar, Herat, and Kabul, primarily involving personnel from provincial NEPA offices, but also community members, NGOs and journalists. The provincial level consultations were designed to solicit information on biodiversity status, threats, and management options, and included representatives from 27 of Afghanistan's 34 provinces. Follow up telephone interviews were conducted by NEPA to solicit information from the remaining seven provinces.
- a comprehensive review and ranking of management options (as developed through the above process) by the Biodiversity Working Group.
- preparation of a threats assessment, including ranking of threats to biodiversity in Afghanistan by the Biodiversity Working Group.
- preparation and review of a strategic framework for the future conservation of Afghanistan's biodiversity resources, identifying priority actions required to address the 11 goals and 13 strategic objectives incorporated in the strategy, the proposed timeframe for each action, the responsible government organization (RGO) under existing legislation policy, and the designated implementing government organization (IGO).

## NATIONAL BIODIVERSITY STRATEGY: PRINCIPLES, PRIORITIES AND TARGETS

Afghanistan's NBSAP aligns with other national environmental strategies that are already in place or under development. Two such policies of particular importance and relevance are the Environment Sector Strategy 1387-1391 (2007/08-2012/13) (Government of Afghanistan 2007) and the National Priority Programme 1: National Water and Natural Resources Development Programme (Government of Afghanistan 2012). The overarching longer-term goals and objectives of these policies and strategies are mirrored in this NBSAP.

The Environment Sector Strategy 1387-1391 (2007/08-2012/13) focuses predominantly on the use of protected areas to manage and sustain Afghanistan's biodiversity. Acknowledging that Afghanistan has never had the benefit of an effective protected areas system, it recognises the history of Afghanistan's protected area system from the 1970s through to a review carried out in the 1990s. However, the lack of overall enabling legislation providing for the establishment and management of protected areas has meant that the precise current legal status of each protected area is uncertain (Government of Afghanistan 2007). The strategy therefore seeks to secure clarity on the legal status and boundaries of each protected area, with enabling legislation to facilitate the establishment and management a protected area network, including accession to the Ramsar Convention on Wetlands to support internationally important migratory and breeding waterbird populations. It also looks for assessments on the impacts of human settlements, war, drought, tourism and landmines on these areas, as well as on associated hydrological systems and biodiversity. Finally, the strategy seeks to address specific threats such as the regulation of hunting and other human activities within the protected areas, and the clearance of land mines (Government of Afghanistan 2007).

# BIODIVERSITY OF AFGHANISTAN

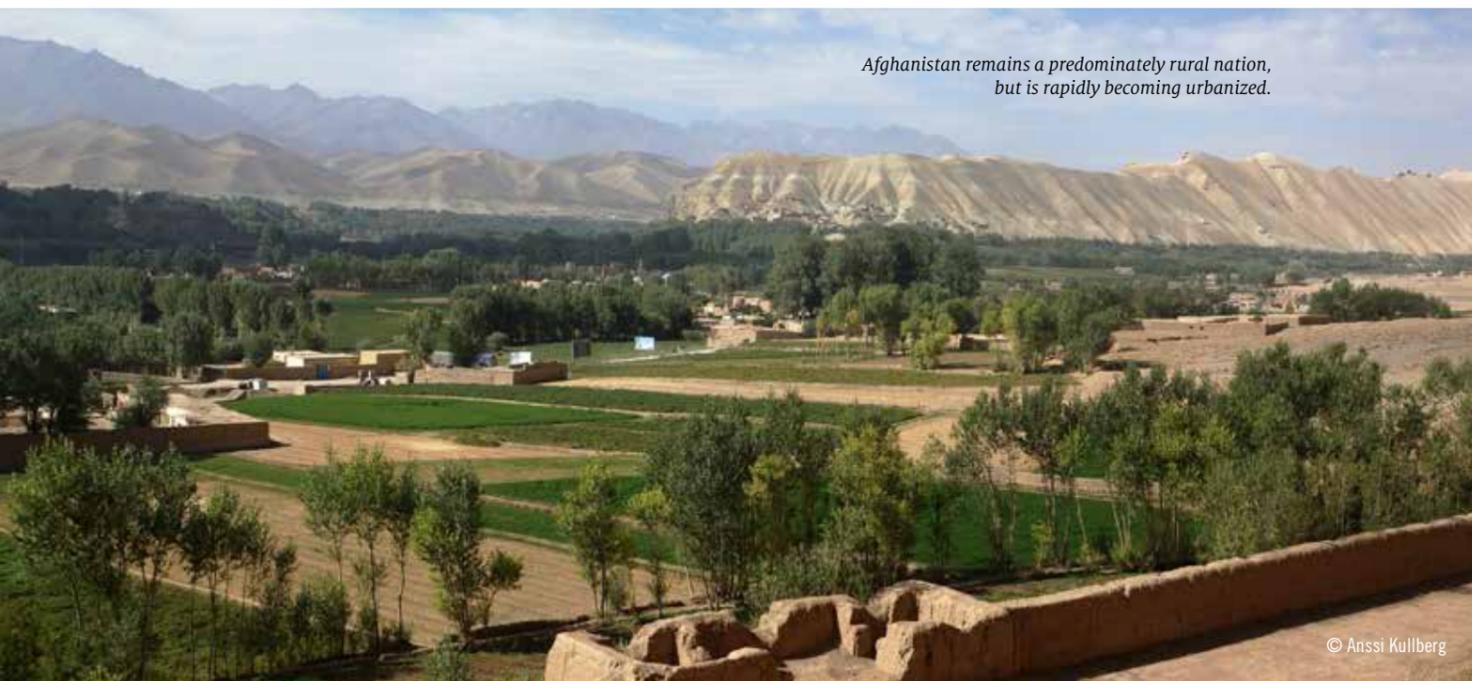
The National Priority Programme 1: National Water and Natural Resources Development Programme has set its goal to be to “ensure effective utilization, together with proper management, of existing water and other natural resources to accelerate agricultural productivity and provide safe drinking water and a hygienic environment, with viable rural energy options for rural prosperity” (Government of Afghanistan 2012). It therefore has a series of three overarching objectives:

1. Better irrigation systems that will conserve water, expand agriculture, and increase access to potable water.
2. Water, forests and rangeland will be restored and protected by incentivized communities with technical support.
3. Enhancing access to rural energy will improve rural livelihoods and allow opportunities for new agribusiness to create sustainable jobs.

Through the collation and analysis of existing data, the Programme aims to improve future environmental conservation and management with strengthened governance mechanisms and the design and implementation of practical Community-Based Natural Resource Management (CBNRM) environmental conservation and management interventions. It therefore aims to restore at least 15% of existing degraded forests and rangeland areas (195,000 ha (1,950 sq. km) of forests and 4.5 million ha (45,000 sq. km) or rangelands). It also expects a substantial increase in the protected area network, with at least eight new protected areas established and fully operational with management structures in place and biodiversity conservation interventions initiated (Government of Afghanistan 2012).



# BIODIVERSITY OF AFGHANISTAN



*Afghanistan remains a predominately rural nation, but is rapidly becoming urbanized.*

## SOCIAL, POLITICAL AND ECONOMIC CONTEXT

Afghanistan is a medium-sized (652,230 km<sup>2</sup>), land-locked country with six neighbours: Iran, Turkmenistan, Uzbekistan, Tajikistan, China and Pakistan. The Hindu Kush mountain range extends from the east into the centre of the country, limiting relatively flat relief to the north-west and south-west, and elsewhere to river valleys. Elevation varies from 258 m to 7,485 m, the highest point being in the Pamir Mountains (where there are glaciers and permanent snow cover) near the Chinese border in the far east. The climate is arid/semi-arid steppe, with cold winters and dry summers. Only an estimated 12% of the land area is arable.

The estimated population of Afghanistan in July 2005 was 29,928,987 (CIA World FactBook website), nearly double the population at the beginning of the period of war and civil strife in 1978. This figure represents the upper estimate for the 2005 population predicted by the World Bank in 1978 (Saver and

provides to them. The most obvious of these are the direct uses of the components of biodiversity from traditional crops, fruits, grazing, fuel, timber harvesting, fishing, and hunting. Less obvious are the indirect “ecosystem services” provided by biodiversity. These include soil fertility, erosion control, crop pollination, and climatic stability, to name a few. The ecosystem services provided by biodiversity are rarely understood and usually taken for granted, but as Diamond (2005) has argued, loss of these ecosystem services has often contributed in a central way to the decline and ultimate collapse of societies.

Biodiversity has been termed “the wealth of the poor” (World Resources Institute 2005) because the poor tend to be rural people living close to the land and dependent on it for the goods and services provided by biodiversity, e.g. productive crop and grazing land, fuel, building materials, wild fish and game. Land rich in biodiversity is a form of wealth, even if that wealth cannot be measured in strictly monetary terms. The converse is that a country that has eliminated its biodiversity is a country condemned to remain poor. Without the basic goods and services provided by biodiversity it is not possible for rural people to make a living from the land. Poverty and emigration are the only options. If Afghanistan is to develop into a vibrant and economically secure nation, it must first control the loss of its biodiversity.

## LEGISLATIVE AND INSTITUTIONAL CONTEXT

Biodiversity resources in Afghanistan comprise an estimated 3,500-4,000 native species of vascular plants, 428-515 bird species, 137-150 mammal species, 101-139 fish species, 92-112 reptile species, and 6-8 amphibian species (UNEP 2009). The number of endemic species is relatively low for vertebrates (7 species), but relatively high for plants (possibly more than 1,000 species). Wild biodiversity resources have historically been primary sources of food, medicine, building materials and trade items, and continue to be important at all levels of the economy.

Landraces of crop and livestock species are critically important elements of Afghanistan’s agricultural biodiversity, being adapted to the often severe environmental conditions across the country and providing the basis for rural livelihoods. Fodder and forage plants in particular sustain the estimated 30 million strong goat and sheep flocks.

Responsibility for management of biodiversity resources is currently split between two agencies: the NEPA and MAIL. Both agencies currently have a presence at both national and provincial levels. International organizations (WCS, UEP, International Centre for Integrated Mountain Development (ICIMOD), among others) currently play an active role in support of biodiversity assessment and conservation initiatives. However, overall financial and human resources capacity for effective

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