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BIODIVERSITY:

Delivering results in Europe and the CIS

Griffon Vulture (Gyps fulvus) in Sünt-Hasardag Reserve, Turkmenistan
Photo: Michael Appleton

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Cover picture. Collecting cranberries at a peatland protected area in Belarus. Photo: Sergei Zyuonak.

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Russian stone idols of Komi.
PHOTO: ADRIANA DINU

Foreword

Humans bear the primary responsibility for the present unprecedented biodiversity loss at several levels – genetic, species, and ecosystems. Of all the problems the world faces in managing 'global goods', only the loss of biodiversity is irreversible. It is important to realize that curbing biodiversity loss is in our own interest. When species experience significant population declines, the result is the underlying loss in the quantity and quality of natural resources and the associated ecosystem services upon which we depend. For example, the halving of the population of the globally threatened aquatic warbler (*Acrocephalus paludicola*) in Belarus has served as a clear indicator of a similar scale of loss of the peatland ecosystems on which it depends. This in turn has led to a loss of soil fertility and of the agricultural and natural resource-based livelihoods of communities over an area of close to one million hectares.

In Europe and the Commonwealth of Independent States (ECIS), the focus of this publication, there is ample evidence of these continuing losses. The erosion of indigenous crop varieties and landraces in Georgia in the middle of the twentieth century has progressively undermined the resistance of agricultural crops to pests and harsh winters, with corresponding impact on crop harvests. The loss of wild plant genes in Kazakhstan could render us incapable of economically harvesting climate change-resistant fruit crops in 30 years' time, a now typical case where food security is threatened by a rapidly changing climate. Humanity is only now starting to scratch the surface of these intricate dependencies between biodiversity and human livelihoods: the unknowns are countless and multifaceted. But we cannot wait until we have a solid understanding of the complex biological systems before we act swiftly to protect their functional health. Biodiversity conservation is the critical insurance for sustained human development.

Climate change is both exacerbating and is being exacerbated by biodiversity loss and ecosystem degradation. Healthy forests and wetlands contain massive carbon reservoirs and are vital for regulating the global climate. While climate change poses an immense challenge today, the continued degradation of these ecosystems threatens to increase greenhouse gas emissions exponentially and intensify the negative effects of climate change in the future. The sustained supply of certain ecosystem services, for example stream flow regulation in drought prone areas, will be critical in buffering human populations from the adverse impacts of climate change, including coastal flooding, droughts and other hazards. Healthy and diverse natural ecosystems are expected to be more resilient in the face of climate change than degraded ones.

More than ever, our efforts are needed to conserve the natural support systems of the planet. The Global Environment Facility (GEF) is the largest financer of projects to conserve threatened and unique biodiversity worldwide. Since 1991, it has invested over $3 billion in biodiversity conservation initiatives. GEF resources have benefited a host of threatened species and their habitats, have contributed to the establishment of more effective and better-financed protected area systems, and have helped to adapt damaging economic sector production practices in a manner that helps protect biodiversity. Recognizing the importance of restoring populations of threatened species in the GEF-5 cycle (2010-2014), a refinement was made to the GEF biodiversity strategy to support the expansion of protected area systems in order to better capture the habitat of threatened species. More than 70 percent of all species

owe their threatened status to the loss of habitat, and this directive is intended to improve the status of particularly threatened species. Kyrgyzstan was among the first countries in the ECIS region to benefit from this: a project to conserve snow leopards (*Panthera uncia*) within an expanding protected area system was approved by the GEF in April 2012.

The United Nations Development Programme (UNDP) has been a key partner of the GEF since its launch in 1991. The sustainable management of biodiversity and ecosystem services is a key part of UNDP's mandate. It is critical for achievement of the Millennium Development Goals (MDGs) and to combating poverty. Unlike the rich, the poor are unable to replace ecosystem services with infrastructure (for example, by building flood control infrastructure once natural flood defences provided by forests and wetlands have been lost). Rural communities depend on ecosystem goods and services, in particular for health and nutrition, as a safety net when faced with climate variability and natural disasters, and for crop and livestock development. UNDP addresses biodiversity loss not just because it threatens to increase poverty and undermine development, but also because the causes of biodiversity loss stem from underdevelopment. In particular, the two main causes of biodiversity loss are weak governance systems (policies, institutions and accountability) and market failures, whereby the market fails to signal a price for many of the diverse services provided by ecosystems. Support to government authorities to address the governance and market failures that drive biodiversity loss requires the broad experience, ability to leverage, and trusted credibility of a neutral UN agency. The objective of UNDP's biodiversity work is maintaining and enhancing the beneficial services provided by natural ecosystems in order to secure livelihoods, food, water and health security, reduce vulnerability to climate change, store carbon and avoid carbon emissions from inappropriate land use, land use change and forestry practices.

This publication presents some of the outcomes of GEF-funded work managed by UNDP in Europe and the CIS that aims to conserve biodiversity. The GEF and UNDP are proud to support the efforts of governments across Europe and the CIS to better protect their biodiversity endowments. The results achieved so far provide a solid basis for future action, whereby biodiversity conservation will need to be closely integrated with sustainable economic development and efforts to mitigate and adapt to climate change. We hope this publication can inspire others to participate in the global conservation movement, and better secure our own future and economic and social welfare in so doing.

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