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# Waterbirds around the world

A global overview of the conservation,  
management and research of the  
world's waterbird flyways

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*Cover photography:* Whooper Swans *Cygnus cygnus* arriving at Martin Mere, England. Photo: Paul Marshall.  
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## The role and potential of the Central-Asian Scientific Information Centre of the Interstate Sustainable Development Commission (SIC ISDC) for studying wetlands and waterbirds

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The Central-Asian Scientific Information Centre of the Interstate Sustainable Development Commission (SIC ISDC) is one of various Central Asian organizations and initiatives which coordinates regional co-operation in the area of nature protection and sustainable development. These include the development of regional strategies (programs and action plans) on sustainable development; and the organization, coordination and management of related projects and action plans.

In June 2002, at the seventh meeting of the Asia Pacific Migratory Waterbird Conservation Committee, SIC ISDC made proposals regarding the development of a regional network of experts, cooperation with government departments and agencies, wide public access to information, training, and support for scientific research and monitoring.

During this time SIC ISDC were assisting Wetlands International in the implementation of the Asian Wetland Inventory, raising awareness of waterbird conservation issues, and capacity building in the Central Asian region. The SIC was also keen to assist Turkmenistan and other Central Asian countries becoming signatories to the Ramsar Convention.

Currently, SIC ISDC is mandated to support the development of a wide regional database on ecological issues and sustainable development within the region. Following a series of national seminars in all Central Asian countries on indicators for sustainable development for use in the integrated evaluation of the state of the environment, several indicators on environmental quality (water, land, air, biodiversity) and socio-economic conditions have been prepared and introduced in each Central Asian countries. During the seminars, issues of water resources and wetlands, in particular their biodiversity, were a priority. In the future SIC ISDC could play a role in supporting the coordination of the Asia-Pacific Migratory Waterbird Conservation Strategy in Central Asia.

SIC ISDC also coordinates activities of all conventions and international agreements in Central Asian countries. All these countries are signatories to the Convention on Biological Diversity (CBD), but currently only Uzbekistan, Tajikistan and Kyrgyzstan are signatories to the Ramsar Convention, although Kazakhstan and Turkmenistan are preparing to sign.

In Turkmenistan, wetlands occupy 20% of the total surface area and have extremely important economic, environmental and cultural values. Their role as water regime regulators and as habitats for flora and fauna and for animal species, especially waterbirds for hunting, are important.

Protection of these wetlands and their flora and fauna can only be achieved by a combination of far-sighted national policy in each Central Asian country combined with coordinated international efforts.

Establishing an effective decision-making system for environmental protection and sustainable development is of special importance. This requires good public relations and an understanding of the role of ecological factors in socio-economic planning. To create such a system, sound environmental information is an essential pre-requisite in the development of actions plans for environment protection and sustainable development.

Information requirements arise at all levels of society and the provision to the decision-making process with reliable information requires filling information gaps, and broad access to information. Each participant in sustainable development processes is simultaneously both a user and supplier of information.

In the provision of training on environment and sustainable development at all levels of management in Central Asian countries, international cooperation is also needed. Training should include technical aspects of collection, evaluation and transfer of data, as well as assistance to government bodies in the use of such information.

Governments also need to consider the support of governmental and non-governmental organizations so as to create effective and coordinated information exchange mechanisms at national and international levels, including data formats, forms of access, distribution and communication.

SIC ISDC has carried out an inventory of existing data on indicators/criteria of sustainable development, as stipulated by "Agenda 21" and priority ecological problems of REAP.

Regarding biological diversity, the geographical landscapes of Central Asia are very varied with low populations in the mountainous territories of Kyrgyzstan and Tajikistan steppes, and the deserts and semideserts of Kazakhstan, Turkmenistan and Uzbekistan. Rivers, valley floor, *tugai*, and oases contribute to maintaining the biodiversity of the region. The biological diversity of this arid belt, comprising more than a half of all species in Eurasia, including: 7 000 species of higher plants, 900 vertebrates, and 200 000 invertebrates. The region is an overlap of Asian and Mediterranean floras with a high index of endemism (up to 20% species of higher plants).

The extensive development of arable agriculture, use of toxic chemicals, salinization, overgrazing, deforestation and cutting of *tugai* vegetation in river floodplains are all resulting in environmental degradation and loss of biodiversity.

The implementation of sound environment and sustainable development policies will be essential to maintain genetic biological diversity for the benefit of future generations and their livelihoods.