IUCN Conservation Outlook Assessment 2014 **(archived)**
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Please note: this is an archived Conservation Outlook Assessment for Uvs Nuur Basin. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Uvs Nuur Basin

SITE INFORMATION

Country:
Mongolia, Russian Federation
Inscribed in: 2003
Criteria:
(ix) (x)

Site description:

The Uvs Nuur Basin (1,068,853 ha), is the northernmost of the enclosed basins of Central Asia. It takes its name from Uvs Nuur Lake, a large, shallow and very saline lake, important for migrating birds, waterfowl and seabirds. The site is made up of twelve protected areas representing the major biomes of eastern Eurasia. The steppe ecosystem supports a rich diversity of birds and the desert is home to a number of rare gerbil, jerboas and the marbled polecat. The mountains are an important refuge for the globally endangered snow leopard, mountain sheep (argali) and the Asiatic ibex. © UNESCO

SUMMARY

2014 Conservation Outlook

Good with some concerns

Overall the conservation outlook for Uvs nuur basin is good, but certain conservation issues exist. The main issue is related to continuous shrinking of the habitat of some endangered species such as argali due to expansion of areas used for livestock grazing. The long-term impact of climate change on the vegetation and hydrological regime of the site remains uncertain. The management framework is in place; however significant budget constraints prevent from carrying out conservation and research activities efficiently. Protection of the site could be further strengthened through sustainable financing. Furthermore, there is a need for the establishment of a joint management authority between Mongolia and Russia. A joint management plan for the whole site was approved in 2010 which is a very positive step. This may improve the conservation status of the site.

Current state and trend of VALUES

Low Concern
Trend: Data Deficient

The unique climatic and hydrological regime of the Uvs nuur basin might ultimately be affected by on-going climate change process and overall dryness in the area. However, at the moment there is no scientific evidence that would prove the tangible changes in the hydrological regime. Though it is apparent that the overgrazing affects greatly the vegetation growth and structure in the basin there are no sufficient data to make any definite conclusions on the status of the endemic plants. There is no evidence of population decline and/or significant problem recorded for the rare and endangered species of the bird. The illegal hunting and continuous shrinking of habitat area for the endangered mammals in particular argali (wild sheep) is of certain concern, though.

Overall THREATS

Low Threat

The low level of urban population, negligible human impact and complete lack of industry in both Tuvan and Mongolian sectors ensure good protection of the site; its geographic isolation, climatic extremes, the limited surface water flow make it an unattractive locality for agricultural industries. Overall increase in annual temperature observed throughout the whole region. This might ultimately result in dryness of the area and increased frequency of forest and steppe fires. Illegal hunting is of some concern, however, its impact on the population of target species appears low.

Overall PROTECTION and MANAGEMENT

Mostly Effective

The Governments of both countries are providing significant support to the protection and management of the site through enabling legislative environment and sustainable financing. Furthermore, all regional and provincial governments have good understanding of the significance of the landscape and biodiversity conservation. The site has a joint management plan, but implementation is falling short of expectations due to budget and staff constraints. Full implementation of the plan is also dependent on additional funding from donor organizations.
The 85% of Uvs nuur basin that lies outside the 9 protected areas seems to have no specific legal protection status. This issue is of some concern because of the threat of over-grazing, particularly in the desert steppe landscape around Uvs nuur in the vicinity of the capital of Ulaangom.

FULL ASSESSMENT

Description of values

Values

World Heritage values

► Unique climatic and hydrological regime

Criterion:(ix)

The closed salt lake system of Uvs Nuur is of international scientific importance because of its climatic and hydrological regimes. Because of the unchanging nature of the nomadic pastoral use of the grasslands within the basin over thousands of years, current research programmes should be able to unravel the rate at which Uvs Nuur (and other smaller lakes within the basin) have become saline (and eutrophic). These processes are on-going and because of its unique geophysical and biological characteristics, the basin has been chosen as an IGBP site for monitoring global warming (Justification for Inscription, 27 COM 8C.9).

► Endemic plants

Criterion:(x)

The Uvs Nuur site has a large range of ecosystems, representing the major biomes of eastern Eurasia, with a number of endemic plants. Although the basin is inhabited and has been used for nomadic pastoralism for thousands of years, the mountains, forests, steppes and deserts are extremely important habitats for a wide range of wild animals, many of them threatened or endangered (Justification for Inscription, 27 COM 8C.9). In the Uvs nuur site of the Russian Federation, out of 1078 plants 43 have been registered as rare species. On the Mongolian part of the site out of 430 plant species, 11 belong to very rare species and 12 have been included in the Red

list of Mongolia (Joint management plan, 2010).

▶ Rare and endangered bird species

Criterion:(x)

Within the ecologically-diverse Uvs nuur site 359 bird species have been recorded. Many of these are international importance, including: Dalmatian pelican, red-crowned crane, Siberian crane, Houbara bustard, Asian dowitcher, relict gull, white-tailed sea eagle, and black griffon. Some of the migrating birds that use Uvs nuur as a temporary habitat are rare: Bewick’s swan, lesser white-fronted goose, red-breasted goose, and the Baikal teal. There are 81 resident rare and endangered bird species found within the wider Uvs nuur basin (IUCN Technical Evaluation Report 1999).

▶ Endangered mammals

Criterion:(x)

Studies in the both parts of the Uvs nuur basin site have shown the presence of 83 mammal species within their boundaries. Both are important habitats for the endangered Snow leopard and there is active research into the conservation of this species (Joint management plan 2010). Other important mammals are large herbivores such as the Asiatic ibex, argali mountain sheep, wild boar, red deer and musk deer and the Mongolian black-tailed gazelle; predators include: wolf, red fox, lynx, polecats and weasels. Monitoring of large mammals in the two protected areas indicated that Turgen Uul contains around 7,000 ibex and 200 argali, while Tsagaan Shuvuut probably holds 2,000 ibex and 800 argali (IUCN Technical Evaluation Report 1999).

Assessment information

Threats

Current Threats

Low Threat

The low level of urban population, negligible human impact and complete lack of industry in both Tuvan and Mongolian sectors ensure protection of the site; its geographic isolation, climatic extremes, the limited surface water flow make it an unattractive locality for agricultural industries. Except the over-grazing, there are very few serious threats to the natural environment of Uvs nuur.

▶ Fire/ Fire Suppression

High Threat
Inside site
Outside site

Forest fires are frequent and cause harm to the forest areas in the site (Uvs basin Mgmt plan 2000). The incidence and frequency of forest and steppe fires increased in recent years due to dryness in overall climate and negligent human attitudes.

▶ Subsistence hunting

Low Threat
Inside site
Outside site

Low-level subsistence hunting is still exists in the territory of the site. Due to improved patrolling activities the number of illegal hunting cases has reduced.

▶ Other Biological Resource Use

Data Deficient
Inside site

Some endangered and medicinal plants, such as Altai onion are gathered in large quantity within the site (Uvs basin Mgmt plan 2000).

▶ Livestock Farming / Grazing

High Threat

Inside site

With the emergence of individual peasant economies after the collapse of collective system of animal husbandry, the number of moves and distance between seasonal pastures has been decreased substantially. This creates concentration of domestic animals in the vicinity of water sources. Consequently due to the pasture competition, the habitat area of wild ungulates, in particular wild sheep argali, is getting shrunk. The situation is exacerbated by the increase in livestock numbers which results in the expansion of rangeland for domestic animals and overgrazing and trampling in local areas.
The water level in wetlands lowered due to overgrazing, steppe fire and disturbance to the water regime of the river and sources of river and streams (IUCN Consultation, 2013).

Potential Threats

Low Threat

Overall increase in annual temperature has been observed throughout the whole region. This might ultimately result in dryness of the area and frequency of the forest and steppe fires. However, there is no proven evidence of climate change impact based on the long-term monitoring and research, on the natural, environment of the site. There is little potential for commercial forestry in the site and the forest use has been limited by the collection of non-timber forest products, firewood and poles and fencing for livestock keeping. Tourism in increasing and there are some associated problems with littering and waste management.

▶ Temperature changes

Data Deficient
Inside site
Outside site

Recent scientific findings show that among the threats that are posing risks to the site is 70% caused by the climate change and by anthropological factors 30% that includes overgrazing (IUCN Consultation, 2013). The rise in annual temperature and occurrence of consecutive dry years might cause increased risk of forest and steppe fire which ultimately may pose threat to the OuV of the site (IUCN Consultation, 2013). However, there is no reliable

data on the climate change in the region.

▶ Tourism/ visitors/ recreation

Very Low Threat
Inside site
Outside site

Controlled and uncontrolled tourism activities can cause negative impact on the natural and cultural values of the site (Schuerholz et al 2007). However, at the moment the opportunities for large-scale tourism in the basin are very limited due to its remoteness and lack of tourism infrastructure.

▶ Logging/ Wood Harvesting

Data Deficient
Inside site

With the increase of domestic need for timber the forest use could increase significantly.

▶ Mining/ Quarrying

Very Low Threat
Inside site

Small scale mining operates on both parts of the site (Schuerholz et al 2007, Butorin 2005). Illegal vehicle traffic from the salt mine traverses the northern section of the Special Protected Area (SPA) on the Mongolian side.

▶ Water Pollution

Data Deficient
Inside site

Extensive recreational activities occur at the lake Tore-Khol (Tsugeer Els cluster) during the summer season. As a result river and streams are polluted by domestic garbage and petrol from vehicles (Butorin 2005).

▶ Commercial hunting

Low Threat
Inside site

Limited trophy hunting of argali and ibex is allowed in the Mongolian sector of the site. The quota is strictly controlled by the Ministry and is not

detrimental for the species survival. If the quota is uncontrolled and not backed up by scientific reference the trophy hunting could put the animals at danger.

Protection and management

Assessing Protection and Management

► Relationships with local people

Data Deficient

It has been noted that the management authority on the Russian side does not pay sufficient attention to the needs of local population wishing to generate income through their traditional ways of livelihood in the areas neighbouring to the site (Butorin 2005, p. 6)
The park authority on the Mongolian part of the site is engaging local people in the conservation activities by allowing non-detrimental traditional use of natural resources. In addition, park authority is collaborating with local communities in the tourism development by supporting traditional handicraft making of the local people for the sale to tourists.

► Legal framework and enforcement

Mostly Effective

The 5 Tuvan cluster areas making up the Uvs nuur zapovednik were given protected area status by both the governments of the Republic of Tuva and the Russian Federation in 1993. The 4 cluster areas in Mongolia were listed under the Mongolian Law on Protected Areas as Strictly Protected Areas. The current legislation does not ensure the sustainable financing for the parks (Joint management plan, 2010).

► Integration into regional and national planning systems

Highly Effective

The park is managed together with other protected areas in Russian Federation and in Mongolia. In Mongolia, the Ministry of Nature and Green Development is the main authority for the management structure.

► Management system

Mostly Effective

The component protected areas were given a status of Specially Protected Area in 1993. Since then, they have been under the management of their respective park administrations which are financed by the state budget. The park management is appointed by the relevant Ministries and report to the Protected Area Department at the Ministry. The management plan for the Tuvan section (Russian Federation) was approved in 2000 and covers the period up to 2004. The management plan for the Mongolian section has been developed and approved in 2009 and covers the activities until 2014. The joint management plan was approved by both Governments in 2010 and covers the period of 2010-2014 (Joint management plan, 2010).

► Management effectiveness

Some Concern

Transboundary location of the Uvs nuur basin site creates difficulties in management since it involves cooperation between administrations in two different countries (Butorin 2005). In 2008 the Ministry of Environment Protection and Natural Resources of the Russian Federation and the Ministry of Nature and Environment of Mongolia, signed a protocol on establishment of trans-boundary Uvs Nuur Basin SPA. However, up to now no decision has been made to establish a joint SPA (Enkhtsetseg 2009).

► Implementation of Committee decisions and recommendations

Data Deficient

The 27th Committee decisions and recommendations focused on (1) upgrading the Tes River Specially Protected Area in Mongolia, protected at a provincial level at that time, to a Specially Protected Area under State legislation; and (2) encouraging State Parties to ensure adequate resources made available quickly and maintained for the effective implementation of the management plans.
Since the time of inscription, the area of the reserve on the Russian side has been expanded by 600,000 ha (Butorin 2005). There are no other specific information reflecting the actions taken towards implementing the

Committee decisions and recommendations.

▶ Boundaries

Some Concern

Park boundaries are marked at the main entrance points with signboards. The participants of the workshop on the “Management problems and development perspectives of the Uvs nuur basin, WH site” noted that in the Tuvan side, the boundaries of the WH site were not well marked (Butorin 2005, p.6).
There is an agreement between Mongolian and Russian parts of the site to conduct joint inspection along the both sides of the frontier, exchanging information on law infringement (Butorin 2005).

▶ Sustainable finance

Some Concern

High number of clusters that are remote requires effective transport and communication devices (Butorin 2005)
Lack of investment into the infrastructure can negatively impact the monitoring and protection activities of the park administration (IUCN Consultation, 2013)

▶ Staff training and development

Some Concern

Remoteness of the site and the high cost for travel to the training centres limit professional training and capacity building of site managers and staff. Furthermore, low level of remuneration for the park staff negatively influences the quality of their performance (IUCN Consultation, 2013). The situation is exacerbated by the fact that in overall the park is understaffed and turnover is high. The size of the area monitored by each ranger is enormously large. This discourages rangers to be committed for a long term (Enkhtsetsteg 2009).
In overall the training program is satisfactory but needs to be further improved with the integration of new subjects on monitoring, research, GIS and remote sensing. Uvs nuur basin SPA administration is paying particular attention to its staff development through providing extramural training at

the training institutions (Enkhtsetseg 2009).

► Sustainable use

Data Deficient

Park authority is allowing local people to carry out non-detrimental traditional use of natural resources.

► Education and interpretation programs

Mostly Effective

In the territory of the Mongolian section of the WH site, the environmental information centre is working with the aim to provide local population and visitors with the information on nature conservation, scientific literature and legislative acts. Educational programs are broadcasted regularly through local and national TV and radio. Roundtable discussions are organized with the involvement of scientists, researchers and protected area staff. Annual events such as visits to the most prominent spots in the site, consultation with the local communities and environmental action days are organized in order to raise public awareness on the site protection (IUCN Consultation, 2013). However, several reports refer to the fact that, in overall, the awareness of the local population on environmental issues particularly on the trans-boundary biodiversity conservation, landscape and water conservation (IUCN Consultation, 2013) and ecological knowledge remains to be low (Butorin 2005).

► Tourism and interpretation

Data Deficient

Although the site possesses a variety of places representing diverse natural landscapes and historic importance and has a great potential for eco-tourism, its recreational resources are underutilized (IUCN Consultation, 2013). The tourism does not generate tangible benefits and income for local people and protected area management. Furthermore, there are no statistics and related information on the number of tourists, main tourist routes and possible impact caused by the tourism activities.

► Monitoring

Some Concern

Both park authorities carry out monitoring activities on their respective territories. However, no details are available on the monitoring program. Consultation reveals that the park administration lacks the adequate use of modern monitoring devices that include camera traps, genetic certification, GIS and remote sensing that are required for the monitoring of rare and endangered species (IUCN Consultation, 2013).
Furthermore, there is a need to exchange research and monitoring/assessment data on trans-boundary endangered and migratory wildlife species, which could become a basis for the development of a joint management plans for the PAs. However, so far no progress has been observed due to lack of funding (Enkhtsetsteg 2009).

► Research

Mostly Effective

Research activities are undertaken by the support from WWF and UNDP. Most research works are conducted for the argali, ibex, snow leopard and musk deer population.

Overall assessment of protection and management

Mostly Effective

The Governments of both countries are providing significant support to the protection and management of the site through enabling legislative environment and sustainable financing. Furthermore, all regional and provincial governments have good understanding of the significance of the landscape and biodiversity conservation. The site has a joint management plan, but implementation is falling short of expectations due to budget and staff constraints. Full implementation of the plan is also dependent on additional funding from donor organizations.
The 85% of Uvs nuur basin that lies outside the 9 protected areas seems to have no specific legal protection status. This issue is of some concern because of the threat of over-grazing, particularly in the desert steppe landscape around Uvs nuur in the vicinity of the capital of Ulaangom.

► Assessment of the effectiveness of protection and management in

addressing threats outside the site

Data Deficient

Since Mongolia privatized grazing herds in 1992, there has been a spectacular increase in the number of domestic livestock population from 20 million 1992 to 40 million in 2010. Mongolia's most important sustainable natural resource is its fertile soils and grasslands, so the threat of continually increasing stock numbers leading to overgrazing (and rural conflicts over traditional family pasturage rights) is a very serious issue facing the country (IUCN Technical evaluation report 1999). It is a key issue in maintaining the integrity of the natural and cultural values of ecosystems of Uvs nuur.

State and trend of values

Assessing the current state and trend of values

World Heritage values

► Unique climatic and hydrological regime

Low Concern
Trend:Stable

Although it is difficult to predict, increase in the annual temperature might eventually result in the overall dryness of the area. The process of desertification is gradually shifting from west to east on the Mongolian part of the Uvs nuur site and starts spreading to the area which was not covered by sand previously. Overgrazing in Mongolia and the agriculture development through intensive use of water irrigation and conversion of natural areas into crop plantation on the Russian side could change the hydrological regime of the lakes (Joint management plan 2010).

► Endemic plants

Data Deficient
Trend:Data Deficient

The problem of overgrazing, disappearance and melting of glaciers, overall dryness in the area and lowering of water level of rivers and streams due to climate change effects are consequently changing the vegetation structure

of the area. The situation is exacerbated by the anthropological impacts such as illegal artisanal mining, diverting rivers for agriculture use, removal of topsoil for reforestation and gardening activities in the cities and excessive extracting of medicinal plants (Compilation of research work 2011). However, due to the insufficient research data it is difficult to assess the current state of the value.

► Rare and endangered bird species

Good
Trend:Stable

There is no evidence of any population decline of bird species and any concern and major problem raised by the park management and/or research communities.

► Endangered mammals

Low Concern
Trend:Deteriorating

There is an ample case of illegal hunting of argali, recorded on the Mongolian part of the site. Furthermore, decrease of the habitat area due to overgrazing and competition for pasture with the domestic livestock has taken its toll on the population growth of argali.

Summary of the Values

► Assessment of the current state and trend of World Heritage values

Low Concern

Trend: Data Deficient

The unique climatic and hydrological regime of the Uvs nuur basin might ultimately be affected by on-going climate change process and overall dryness in the area. However, at the moment there is no scientific evidence that would prove the tangible changes in the hydrological regime. Though it is apparent that the overgrazing affects greatly the vegetation growth and structure in the basin there are no sufficient data to make any definite conclusions on the status of the endemic plants. There is no evidence of population decline and/or significant problem recorded for the rare and

endangered species of the bird. The illegal hunting and continuous shrinking of habitat area for the endangered mammals in particular argali (wild sheep) is of certain concern, though.

Additional information

Key conservation issues

▶ **International cooperation**

Regional

Trans-boundary cooperation and effective implementation of the joint management plan could be further strengthened.

▶ **Management effectiveness and sustainable financing**

National

At the moment only 70% of the total budget is covered by the state budget and the rest needs to be raised through donor contribution and self generated revenues from tourism, collected fees from the entrance to the park and fines from the law infringement. However, the total income from these activities never reach the sufficient level and even if the park generate some income the administration does not possess full right over the expenditure. Furthermore, 98% of the total budget of the park is spent for to cover the recurrent cost of the administration and remuneration for the staff (Enkhtsetsteg 2009).

▶ **Sustainable/rational land use plan**

National

Land use pattern should include consideration of retaining sufficient habitat area for wildlife species

▶ **Monitoring**

Regional

Trans-boundary collaboration on monitoring needs to be strengthened, including improving methods for monitoring through using modern equipment

and technologies

Benefits

Understanding Benefits

► Water provision (importance for water quantity and quality)

Water catchment, water flow regulation, climate amelioration. The site provides water source in the region for domestic use.

► Wilderness and iconic features

Due to its nomadic way of living Mongolian people have a strong linkage and dependence on nature. The WH site includes sacred mountains, mountain passes and worshiped rivers and streams. The area provides a source of livelihood for local people and security.

► Outdoor recreation and tourism

Unique natural features, presence of historical, cultural and archaeological monuments, traditional nomadic lifestyle with its ethnographic peculiarities and traditional crafts provide an ample opportunity for development of various types of tourism. Cultural and ethnic tourism, hiking, trekking, mountaineering and bird watching are the main types of tourism currently developed in the region. There are multiple burial mounds and fields, deer stones, vertical memorial plates, man stone effigies, rock paintings (petroglyphs) and ancient human camps.

► Legal subsistence hunting of wild game

Revenues from trophy hunting are shared with the local community according to the new legislation on Mongolian side. Local people are benefiting from trophy hunting and simultaneously they take the responsibility to release pasture for wild sheep and use the rotational system of grazing for their domestic animals.

Projects

Compilation of active conservation projects

№	Organization / individuals	Project duration	Brief description of Active Projects
1	WWF		Research projects on Snow leopard, Argali, and Manul
2	UNDP		Establishment of environmental information centres in Ulaangom airport and in soum centres (soum is the administrative unit, equivalent to the district) to raise ecological awareness
3	Mongolian Academy of Sciences		Annual conference is being convened since 10 years ago. The 10th international symposium on “Conservation and sustainable use of resources on the territory of the Ubs nuur basin and adjacent areas” was organized in Ulaangom and 11th conference was convened in Tuvan republic in 2012.
4	Ubsunur International Center for Biospheric Research		Since its establishment in 1992, the center coordinates scientific research in the hollow and maintains relations with the scientific community worldwide. Center has own staff and financed by the Federal budget.

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