

Amur, one of the world biggest rivers, starts from a mountain in Mongolia

Davaa, Uvur and Unguljiin rivers start from Khan Khentii Mountain, a peak of Khentii Mountain range, and running along on two sides of Botokhon and Boorji that lie next to Mountains Burkhan Khaldun create a river called “Onon”. The river runs for 808 km along beautiful high mountains that support forests including boreal coniferous forests and through vast meadows and steppe in Khentii and Dornod aimags of Mongolia and then goes to a territory of Chita province of Russian Federation. While running through the territory of Russian Federation, Onon River creates Shilk River by joining Ingedei River started from Sohond Mountain, a peak mountain continued from Khentii Mountain range to the north east. Joining Ergune River, the Shilk River creates scenic Amur River that marks off borders of Russia and China and inflows into Pacific Ocean having run through vast taiga/boreal coniferous forests. Thus, starting from a tributary of Ungulj and Davaa rivers and inflowing into the ocean, this big river runs for 4,444 km. The river width is five km in average by running in narrow streams in its some parts.

It is internationally recognized that Onon River is a head river of Amur River, one of five world biggest rivers that freely runs without any natural embankments and barriers. There are over 400 rivers and streams inflowing in Onon, Ulz, Kherlen, and Khalkh rivers in Mongolia that belong to Amur River basin.

Amur River basin is one of 35 eco-regions that require inevitable conservation as announced by World Wide Fund for Nature (WWF). Therefore, the protection of Amur river, which is specific with its scenery, natural resources, rarely found ecosystem features and regarded as one of the biggest not only in Asia but also in the world, should start from the protection of Onon river basin.

Onon Balj National Conservation Park

Totally 415,752 hectare from the territories of Dadal, Binder, Norovlin, Bayan-adraga soums of Khentii aimag and Bayan-Uul soum of Dornod aimag was taken under State protection by the Parliament decision No: 29 in 2000 as a National Conservation Park (NCP) that has parts “A” and “B”. From the NCP areas, there are 281,858 ha in Dadal soum, 8,732 ha in Bayan-adraga, 21,617 ha in Norovlin soum, 69,009 ha in Binder soum, and 34,504 ha in Bayan-uul soum of Dornod aimag.

The NCP is located at 600 km from Ulaanbaatar city and at 275 km from Khentii aimag center, and at 320 km from Dornod aimag centre. Establishment of Onon Balj NCP plays an important role in conservation of Onon river, which is specific in its rich fresh water resources, and its basin, forest steppe ecosystem, landscape and ecological formation, and biodiversity, sustainable use of natural resources, maintaining ecological balance, development of tourism based on considerable natural and historical sites and monuments, involvement of local communities residing the NCP and its buffer zone into conservation efforts, and ensuring sustainable regional development.

Situated at the southern edge of Siberian forest and boreal coniferous forest and stretched into Daurian steppe, Onon Balj basin is featuring with its natural formation and rich biodiversity

(fauna and flora species), but it is very fragile ecosystem on other hand. Moderate or average mountains that form vertical landscape zone provide for a specific ecosystem in transition of Khentii mountain range ending taiga/boreal coniferous forest into steppe or at forest steppe landscape transition zone.

The highest point in the NCP is Khezuu high mountain (1,568,4 m) and the lowest point is Balj and Onon tributary (840,0 m). A number of mountain ranges e.g. Onon Balj, Bayankhaan, Khalzan Burgedei, Shuvuutiin Zoo, and Ereen Davuu lie in the NCP. The mountains mostly have inclined slopes and rounded tops, where rocks except for a few splendid canyons e.g. Ikh and Baga Yol, Degen, and Jigen are rarely found. In addition to these mountains and canyons, there are scenic big rivers e.g. Balj, Onon, Khorkhon, Bukh-khun, Agats, Kher, Galtai Uliastai, and Chuluut and big lakes e.g. Khurkhree, Tsagaannuur, and Yangi in the NCP.

Onon river

Starting from back of Khentii mountain range bottom (at 1.950 m), Onon river runs for 445 km through Mongolian territory and the riverbed width varies depending on valley widths through which the river runs. In normality, the typical riverbed width is 80-160 m, tributary area width is 10-25 m, and water depth is 0.5-3.0 m. Onon river water begins to ice over at the end of October and is entirely iced by the second half of November, and is completely covered by ice for 150-170 days. Mean ice thickness reaches 1.2-1.5m. Since the river is fast current and mountainous river, the ice forming in autumn lasts longer (14-25 days). In April, when it is getting warm, ice melting starts and moves; however it does not last for long because of mountain snow melting and flooding in spring.

Onon river water is less mineralized, pollution free, and has quite mild quality. There are 14 water insect species of seven families of mayfly, stonefly and caddisfly orders, which are regarded as fresh water indicator species, recorded in Onon river. It shows that Onon river water quality is relatively good for now.

A number of big and small rivers inflow into Onon river. For instance, there are big rivers e.g. Balj, Kher, Agats, Khurkh, Barkh, Eg, Gurvan Tars, Gurvan Suukhkleg, Shuus, Khue, Ashinga, Khushinga, Ulaan Baiz, Berleg, Khairkhan, Turagt Khan, Ar Unurch, Ar Ereen, & Aaya inflowing.

Gurvan lake

In the eastern part of Khentii mountainous areas, there are four lakes named as Zuun, Baruun, Dund, and Nuden, located among the low mountains dominantly support pine and larch forests in Onon River basin. Gurvan Lake mineral water and natural clay are used for traditional treatment of some diseases e.g. stomach, lever, bile, and allergy. Dund lake has medicinal leech that is good for arthritis treatment.

Balj river

Balj river is the biggest tributary river within Onon. Started from Khumul Saridag mountain situated between Burkhan Khaldun and Sohond, continued mountain of Khentii mountain range, the river runs down for over 40 km in Russian territory and for about 160 km in Mongolian territory. Then the river meets with Onon River at Ishin mountain and Khad bottom in Dadal

soum. Big rivers e.g. Khorkhon, Khumul, Amgalant, Galtai, Khutulj, and Tengeleg inflow into Balj river.

Khurkhree lake

Khurkhree lake lies in a state border strip between Khorkhon and Bukhkhun rivers in territory of Dadal soum of Khentii aimag. The fresh water lake length is two km and width is 1.5 km. A stream started from West Yamnain taiga of Onon Balj mountain range runs down and creates the lake in a depressed area and then inflows into Khorkhon river.

There is a legend on name of Khurkhree: at ancient time, a local inhabitant, Bukhnuden, had a blue bull in his cattle herd and many blue cattle reared in his cattle herd. When the parent bull became old and was nearly to be slaughtered, it went into the lake. Since then, bull roaring noises were heard from the lake in springs and autumns. So the lake was called as Khurkhree (roaring).

Bayankhaan mountain

The scenic mountain lies between Balj and Khorkhon rivers. In terms of its geological formation, Jurassic period granite rock massive penetrated through Cretaceous period black shale formed the crags and rocks. There are a number of ancient graves and burial mounds on the mountain. Moreover, there are naturally formed rocky walls e.g. Burkhan and Takhilgat, where Chinggis Khan and his soldiers were located as it was found in legendary expressions.

Ulaalzargana

Ulaalzargana includes mountains, boreal coniferous forests, and lakes located between Ulaalzargan river and Ar Unurch river along Ereen Davaa mountain range stretched along the southern bank of Onon river in Agats Bagh territory of Dadal soum. Mineral water of Ar Ulaalzargana is well known by its medicinal treatment of pulmonary disease.

Degen Jigen

To the north east of Dadal soum, there are two slanting standing red rocks on two sides of Onon River. These rocks are called as Degen and Jigen. The rocks, Degen and Jigen, are basically formed by metamorphic shale of Palaeozoic era. Vicinities of two rocks are distributed by pine forests, poplar stands, and a number of standing rocks, cliffs, and support the rivers with fast and strong currents providing for natural beauty. Degen and Jigen, rocks, are 200 m high respectively. When it is windy, the vicinities are full of majestic forest and rocky noises that are combined with strong water running sounds. It is really impressive and exceptional.

Tsagaan chuluut

West tributary area of Khorkhon river lies at the upper side of Tsagaan chuluut river within a State border strip. Started from high mountain glacier, Tsagaan chuluut river water is cold like well water even in summer time. It is said that swimming in the river and scrubbing bodies with fine sand is of medicinal significance. Senjit rocks along the river bank are the stone formations made of lime stone occurrence, where specific karst caves, channels, depressions, and handle-like crags are found. It is said Tsagaan chuluut magnetic rocks are good for restoration of human physical strengths. Medicinal importance of these rocks are not fully studied, however local people come to the area for traditional treatments of some diseases e.g. arthritis, cardiovascular, internal organs, and all types of fatigue diseases.

Biodiversity

Onon Balj river basin is specific with that it supports Daurian-Manchurian forest steppe fauna and flora species belonging to the northernmost part of Central Asia and is more distinctive in its biodiversity richness in comparing to other regions in Mongolia.

Onon Balj NCP provides for a home to a number of northern forest and taiga wildlife species e.g. moose (*Alces alces*), musk deer (*Moschus moschiferus*), red deer (*Cervus elaphus*), roe deer (*Capreolus pygargus*), wild boar (*Sus scrofa*), wolverine (*Gulo gulo*), lynx (*Lynx lynx*), brown squirrel (*Sciurus vulgaris*), ruddy vole (*Clethrionomys rutilus*), mountain hare (*Lepus timidus*), and northern bat (*Eptesicus nilssonii*).

Moreover, the Central Asian steppe species e.g. tolai hare (*Lepus tolai*), Siberian marmot (*Marmota sibirica*), Siberian jerboa (*Allactaga sibirica*), corsac fox (*Vulpes corsac*), red fox (*Vulpes vulpes*), and manul (*Otocolobus manul*) are abundantly distributed. In addition to these species, there are a number of Eastern Asian wildlife representatives e.g. Daurian tsokor (*Myospalax aspalax*), Daurian hedgehog (*Erinaceus dauricus*), Daurian souslik (*Spermophilus dauricus*), raccoon dog (*Nyctereutes procyonoides*), brown rat (*Rattus norvegicus*), and maximovich's vole (*Microtus maximoviczii*) distributed.

The basin provides important habitats and ranges of a number of rare and endangered mammals in Mongolia. There are four species (musk deer, moose, Daurian hedgehog, and Eurasian otter (*Lutra lutra*)) listed in the Mongolian Red Book, two species (red deer and moose) recorded in the Mongolian endangered species list, two species (grey wolf (*Canis lupus*) and wolverine) recorded in International Red List, five species (brown bear (*Ursus arctos*), musk deer, grey wolf, lynx, and manul) listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendix II. Richness and distributions of these rare and endangered species in the basin show the worldwide importance of the region including the NCP and its conservation. On other hand, recently a species of bat and a distribution range of endangered Eurasian otter were newly recorded in Onon Balj basin. It shows that no comprehensive studies have been conducted, but at the same time the region is specific with its wildlife species. In recent years, the Mongolian gazelle (*Procapra gutturosa*) move to the area for its wintering.

From avian species, there are nationally and internationally endangered species e.g. swan goose (*Anser cygnoides*), Baikal teal (*Anas formosa*), sea eagle (*Haliaeetus albicilla*), greater spotted eagle (*Aquila clanga*), imperial eagle (*Aquila heliaca*), lesser kestrel (*Falco naumanni*), saker falcon (*Falco cherrug*), Siberian crane (*Grus leucogeranus*), white-naped crane (*Grus vipio*), Eurasian starling (*Grus monacha*), Eurasian crane (*Grus grus*), great bustard (*Otis tarda*), Ruddy shelduck (*Tadorna ferruginea*), Demoiselle crane (*Anthropoides vigro*), and common golden eye (*Bucephala clangula*) found in the basin.

There are 223 bird species of 126 genera of 44 families of 18 orders recorded in Onon Balj NCP and 51 species of them are residential and 172 species are migratory. Out of migratory species, there are 134 breeding species, 20 visitors, seven wintering species, and one occasionally recorded species. At present, forms/types of existence of 10 species are not clearly identified. In

terms of species abundance and rarity, there are 21 abundant species, 138 commonly found species, and 64 rare species recorded in the basin.

The region provides important stopover and breeding points for globally endangered crane species as it lies along and on the way of their migration routes. There are only over 4500 heads of white-naped crane in the world and about 1000 of them stopover in Mongolia. 70 per cent or 350-400 pairs of them breed and nest in the country. 95 per cent of white-naped crane population recorded in Eastern Mongolia is found in Onon and Ulz river basin. Moreover, the Daurian steppe provides for breeding and gathering sites for Demoiselle crane during its autumn migration. Despite the species is not endangered for the region, the Demoiselle crane is regarded as endangered species throughout its worldwide populations particularly within its the westernmost distribution areas.

From amphibians, there are seven species including Siberian wood frog (*Salamandrella keyserlingii*), Siberian sand toad (*Bufo raddei*), Mongolian racerunner (*Eremias argus*), Pallas' coluber (*Elaphe dione*), Ringed snake (*Natrix natrix*), and Central Asian viper (*Agkistrodon halys*) recorded. Among these species, the Siberian wood frog is recorded in the Mongolian Red Book and as vulnerable species in the Mongolian amphibian and reptile conservation plan of the Red List of International Union for Conservation of Nature (IUCN). In addition to this species, the ringed snake is recorded as nearly endangered species in the conservation plan of the Red List of IUCN.

There are also rare and **unique/endemic?** to Mongolia species e.g. lamprey (*Lampetra japonica*), (*Cambaroides dauricus*) and (*Dahurinaia dahurica*) listed in the Mongolian Red Book distributed in Onon river.

Globally endangered fish species e.g. Amur sturgeons (*Acipenser schrencki*) is found in Onon river only in Mongolia. Additionally, the species listed in the Mongolian Red Book e.g. Taimen (*Hucho taimen*) is found in the river. A number of fresh water fish species e.g. **хорхой загас** (*Lethenteron reissneri*), Kandary whitefish (*Coregonus chadary*), Amur bitterling (*Rhodeus sericeus*), Amur grayling (*Thymallus grubei*), Amur pike (*Esox lucius*), **амарын эрээн живэрт** (*Cottus szanaga*), Amur ide (*Leuciscus waleckii*), and **амарын моголзой** (*Misgurnus mohoity*) are found in the basin rivers. Distribution of these species shows specific characteristics of the region.

Taimen (*Hucho taimen*)

There are four species of Taimen recorded in the world. From these species, the Siberian Taimen is found in Mongolia. Taimen is the biggest predator fish species in fresh water rivers. It is distributed in some rivers and lakes of Arctic and Pacific Oceans, Onon and Selenge river basin rivers and their big tributaries, some lakes of Darkhad depressions, Shishhed, Kherlen and Khalkh rivers in Mongolia. Taimen is listed in the Mongolian Red Book and as rare species in the Mongolian Law on Fauna, and as nearly endangered species in the List made by the IUCN.

Taimen is specific with that its population growth and reproduction process is sluggish and limited. It annually grows 7-10 cm up to 10 ages depending on its prey availabilities and at 6-7 ages its reproductive cells are matured and spawning starts. A breeding aged female produces

about 30,000 spawns depending on its age and body sizes. However, only 1-2 of them survive and become fish overcoming natural harsh conditions as researchers regard. At 11-13 ages, its body length reaches 1m, but its growth becomes slower from years to years. Taimen lives totally for 40-50 years. Taimen has two main migrations: go up in spring, when its spawning is taken place, and go down the rivers in autumn. At its minnow ages, the species is fed by plankton species and river bottom insects including larvae and minnows. Starting from 3 ages, the species eat fish. Taimen is an indicator species of fresh water and natural or untouched ecosystem and plays an important role in the ecosystem sustainability. In recent years, the species distribution areas are limited and its populations are reduced due to illegal harvesting during its spawning period in springs.

There are 789 plant species of 323 genera of 73 families recorded in Onon Balj NCP. Due to human activities (timbering, fires, livestock grazing or pastureland use, road & transportation, and others) the species distribution areas and ranges are restricted and lost. There are rare species listed in the Mongolian Red Book e.g. ... (*Larix dahurica*), ... (*Lilium dahuricum*), ... (*Paeonia lactiflora*), ... (*Rhododendron dahuricum*), ... (*Valeriana officinalis*), and ... (*Cypripedium macranthon*) found in the NCP.

The region is distributed by very rare species listed in the Mongolian Law on Natural Plants e.g. *Sambucus manshurica*, *Gentiana macrophylla*, *Acorus calamus*, *Majanthemum dilatatum*, *Sedum pallescens*, *Polygonatum humile*, *Paris verticillata*, *Paeonia lactiflora*, *Rhamnus parvifolia*, *Rhamnus ussuriensis*, *Lilium martagon*, *Rhododendron dahuricum*, *Mitella nuda*, and rare plants e.g. *Stellaria dichotoma*, *Potentilla norvegica*, *Valeriana officinalis*, *Synurus deltoides*, and *A. acuminata* Sch.Bip.

Forests are very specific or unique and support rare and endangered species. For instance, the species listed in the Mongolian Red Book e.g. *Larix dahurica* and Krilov's pine are only distributed in the NCP.

36.3 per cent or 1435.9 км² of the NCP territory are covered by forests. 51.7% of forested areas are larch, 32.3% birch and aspen, 16% pine. 65.2% of total forested areas belong to "A" section and 34.8% to the section "B" of the NCP. The region supports the easternmost distribution edge of сибирь шинэс (*Larix sibirica*), the southernmost distribution edge of дагуур шинэсний, and main distribution range of чекановскийн шинэс, which is hybrid of these two species, in Mongolia. The region is the sole area that supports mixed forests e.g. pine forests, pine, larch, and birch forests in Mongolia. These mixed forests are important for keeping ecological balances through maintaining sustainable moisture regimes and distributions of water and moisture.

Onon Balj supports a number of historically and culturally important sites of the Mongolians

Onon Balj NCP and its buffer zone supports a birth and childhood associated place of Chinggis Khan, who has been called as Hero of the second century as he left his unrepeatable traces in not only in Mongolian but also in the humans history. Therefore, the NCP is rich in Great Chinggis Khan related historical sites.

Deluun Boldog – Chinggis Khan was born in 1162 at Deluun Boldog area nearby Onon river bank. This area is in Dadal soum territory of Khentii aimag.

Khajuu Bulag – is a natural spring that is located to the east of Bayan-ovoo mountain in the north east of Dadal soum. In historic facts, in three days from his birthday a baby Temuujin's body, was washed with this natural spring water and his mother used to use the spring water for making tea. Discharged from ground, the natural spring Khajuu Bulag inflows into Balj river having run to the east (sun rising). The natural spring is well known with its purity and contains carbonate magnesium in its content like mineral water.

Chinggis light monument –was built in 1962 for Chinggis Khaan's 800 birthday anniversary. Its height is 12 m. The monument was erected in a shape of upward arrowhead. It symbolizes that Chinggis was a war hero and outstanding military leader. On the monument, a figure of Chinggis khan was drawn in simple garment and head cover, not in armour and helmet. It shows that he was intelligent/clever, big State figure and emperor according to the historians' explanations.

Dobu Mergen monument – is located at the end of Tengeleg stream and south of small Yargait. According to the historic facts, one day Dobu Mergen along with his brother, Duba Sokhor, was going on hunting on Burkhan Khaldun Mountain. Duba Sokhor found a beautiful woman among a tribe people moved to Tengeleg stream. In this area, he engaged the beautiful woman for his brother.

Tugiin ovoo (Bayan-ovoo mountain) – prior to going on war with the Tatars, Chinggis Khan worshipped a flag and prayed for the sky according to the legendary facts. Since the 1860s, a high monk, Dovdon, of Ugtam monastery worshipped the mountain and called as Bayan-ovoo.

Chinggis' ancestor, Bodonchar's tribe – Bodonchar's resided area was Bayantsagaan mountain that is located in the north west of Dadal soum. In 2006, the Chinggis Khan University team erected a monument and hay shelter.

Chinggis' dirt wall track – there are Chinggis' name related areas e.g. Chinggis dam, Chinggis track, and Chinggis wall in Mongolia. One of them is fragmented some dirt walls that are continued from the west of former Bayan-adraga soum center of Khentii aimag to Ulz Undur Dov of Norovlin soum via Khermiin Khudag in Bayandun soum of Dornod aimag and then into a territory of China. Length of these dirt walls that goes through the territory of Mongolia is over 600 km. The fragmented dirt walls are called as "Durvuljin Buudal", "Ulziin Undur Dov Engeriin Kherem", "Mogoin Adgiin Kherem", "Uguumuriin Kherem", "Delgerehiin Tal", and "Bayanbulgiin Kherem". Average thickness of the dirt walls leftover is 4 metre, height is 1.5-1.8 metre. Deep holes were dug behind the walls and filled in with water for water forts. Dirts out of holes were firmly compacted like concrete and made the walls. It would be a part of architure of nomadic living style.

Rashaan stone memories– the eastern tip of Binder mountain in Batshireet soum is called as Rashaan Khad. There are many ancient burial graves, where a number of household items (pots) made of clay and arrows pertaining to paleolite, neolite, stone weapons, bronze period, Khunu, Kidan, and Mongol States are found. On the stones, there are numerous carvings, paintings and petrography depicting animals and humans, as well as carvings of several hundreds of tribal seals

pertaining to the Palaeolithic period to middle Ages and about 20 scripts in Orkhon-Enisei, Hidan, Arabic-Persian, Mongolian, and Tibetan languages. These petrography of animals, human, and seals on the stones are contingent to different historic periods.

Historical places of great Mongolian queen consorts – Bayan-Adraga soum is a historical place, where great Mongolian queen consorts were from. Thus, memorial complexes for the queen consorts Dondogdulam and Genepil, last Mongolian Empiror Bogd Javzandamba's queens, are being built on Onon river bank.

Buffer zone:

Buffer zones are the areas that are designated with the purposes to reduce, eliminate, and prevent from actual and potential negative impacts on Strictly Protected Area and National Conservation Parks upon the consideration of the needs of increased participation of local communities in conservation efforts and ensuring their livelihoods through sustainable use of natural resources in the protected areas.

Onon Balj NCP and its buffer zone include territories of Batshireet, Binder, Norovlin, Dadal, and Bayan-Adraga soums of Khentii aimag, and Bayan-Uul soum of Dornod aimag that are resided by totally about 18,000 inhabitants. Total number of livestock is 407,351. There are 1527 individuals of 365 households and 31,251 heads of livestock inhabiting within the NCP boundaries. There are totally 75 environmental conservation local community groups and NGOs operating in Buffer zone soums.

The relations connected to the establishment of boundaries of Protected Areas and their buffer zones and the permitted activities in Protected Area buffer zones are regulated by the Mongolian Law on Buffer Zones. In accordance with the Law, non-permanent/part-time Buffer Zone Councils (BZCs) have been established and run in five soums above situated in Onon Balj NCP in order to support BZ development and increased participation of local communities in the sustainable use, protection, and restoration of natural resources. The BZCs in cooperation with the soum governments and NCP administration study and develop proposals on designated areas for BZ and their boundaries under the criteria specified in the Law and submit the proposals to the soum/district Governors for consideration. Reviewing the proposals, the soum/district Governors present them the soum Citizen's Representative Khural for discussion and the State administrative central organization in charge of environmental issues for approval.

Local communities:

Onon Balj NCP includes itself territories of Binder, Norovlin, Dadal, and Bayan-Adraga soums of Khentii aimag, and Bayan-uul soum of Dornod aimag. These areas are the historical places, where noble or blue-blood Mongolians originated from 'three rivers' inhabited at ancient time. By the beginning of the 20th century, this area belonged to Khuvchiin Jonon Vangiin Khoshuu of Khalkh Tsetsen Khan aimag (Binder, Bayan-adarga, and western part of Dadal soum), Erdene Dalai Vangiin Khoshuu (Norovlin, eastern part of Dadal, and western part of Bayan-Uul) and territories of State border Khumul, Khyorkhon, Gilber, Kher, and Ulkhan Kharuul/Guarding posts. Local inhabitants of those periods were mostly the people of Borjigon family, who served as guards for Khuvch Jonon Van, governor. Moreover, the Buriad people have moved and resided this area from the ancient time and the people of Khori, Aga, Songuul, and Kamigad

origins were belonged to this group. Khori and Aga people were the Khori 11 parent family people, a part of the Buriad origin. There were also some Khudir and Bargajin people of the Buriad origin inhabited. The Songols were the people of various Mongolian families, who fled to Russia when Khalkh Mongol was occupied by the Manchurs and came back by the beginning of the 20th century. The Khamigads were the nomads of Evenk origin, who used to reside the Onon river basin from ancient time, speak in Mongolian language and have the Buddha religion. The Khamigads included the Buriad families' e.g. Galzuuds and Bodons and the ancient Mongolian families e.g. the Khatagin Sartuul, and Uzeen. It shows that the region was inhabited by diverse groups of the Mongols from the ancient time. In addition to these diverse ethnic groups, the neighboring or adjacent areas of Bayan-Adarga and Norovlins soums were resided by the Khuuchid Mongols, who moved from Inner Mongolia around 1945. To date, majority of local residents of Binder, Dadal, and Bayan-Uul soums are the Buriads, when the majority of local residents of Norovlin and Bayan-Adarga soums are the Khalkh people.

Main economic activity of local communities is animal husbandry and the Buriad traditions and cultures are widely found among the local populations. Usually living in wooden houses they built, the soum center residents and rural herders run the animal husbandry business in sedentary form. They mostly raise cattle for meat and milk products and are well known by sweet or tasty soy cream and horse wagons and sledges used for running their economic activities e.g. haymaking. They do not raise small livestock in large amounts. The region is much suitable for cultivation particularly vegetables.

Running their economic activities in harmony with nature, local communities have had considerable experiences in sustainable use and conservation of natural resources. They are used to live and run their economic activities e.g. haymaking, grazing their livestock, and protecting heads of natural springs, rivers and lakes based on their long term environmental conservation practices. Even today, the traditions, customs, and art of living are appropriately inherited to young generation.

National Conservation Park conservation regimes:

National Conservation Parks are divided into the following zones upon the consideration of the natural features, the location of flora and fauna, the preservation requirements of its historical and cultural Monuments, and the conditions for developing travel and tourism:

Special zone and its regimes:

- Implement conservation measures;
- Conduct research and investigation;
- Enhance flora and fauna reproduction;
- Take measures for elimination of damages caused by natural disasters;

Travel and Tourism zone and its regimes:

- Conduct all the activities stated for the Special zone;
- Conduct forest maintenance and cleaning;
- Take measures for regulation of wildlife herd structures pursuant to approved programs and methodologies;
- Use mineral water and other treatment value resources;
- Organize and implement eco-tourism activities;
- Overnight and camp by visitors and individuals, who have permits;

- Take photographs and make video and audio recordings;
- Conduct mountain and ovoos and other traditional ceremonies;
- Pursuant to the appropriate procedures, local residents may collect and use side-line natural resources and medicinal and food plants for their household needs;
- Fishing in permitted areas;

Limited Use zone and its regimes:

- Conduct all the activities stated for the Special and Travel and Tourism zones;
- Run traditional livestock husbandry;
- Construction of buildings for travellers and others with permissions pursuant to approved proposals, drawings, and permissions;

From the Mongolian Law on Special Protected Areas:

Onon Balj NCP administration is responsible for the development of recommendations and monitoring on enforcement of activities in connection to the NCP conservation regimes.

Prioritized issues and concerns:

Forest and stepp fires

One of the prioritized concerns for Onon Balj NCP is the forest and steppe fires that result in most of negative impacts and damages. Fires are usually outbreak in April, May, and June and negatively impact on plant growing and restoration process. In recent decade, forest and steppe fires were subsequently occurred in the years and the fires occurred in 6 years were the trans-boundary fires. Due to these subsequent fires, about 85 per cent of forest funds have been affected by fires to severe and low extents. Because of fires, the forest vegetation communities have been deteriorated and changed and coniferous forests are gradually replaced by birch forests. In addition to damages to nature, the fires cause substantial damages to haymaking fields, harvested hays and fodder, private houses and fences, livestock herds, and other properties.

Forest pests & disease outbreaks:

In recent years, particularly since 2000 a disease “pine shute” has been widely spread in Onon Balj NCP and its buffer zone and the Krilov’s pine forest, one of endangered species in Mongolia, has been badly affected by the disease. Because of the disease outbreak, the pine forests have been entirely deteriorated, dried and turned into yellow.

Totally 191 insect species that are fed by wood plant parts are recorded in forests and forested areas along Onon River. According to the recent research findings, the distribution of wood stem and bark insects is enhanced by human activities (e.g. fires and timbering), while the distribution of other group insects is enhanced by natural and ecological process. Forested areas along Onon river are distributed by destructive pests that deteriorate leaves and conifers e.g. gypsy moth, Siberian silkworm, and Jacobson’s looper and forest conditions are being deteriorated and lost. Frequent fires occurred in forests result in vast pest distributions and loss of natural forest conditions. The current state of forests in the region requires immediate restoration and forestation efforts.

Biodiversity and endangered species

Due to human destructive activities and natural and climatic changes in recent years, biodiversity changes to biodiversity in Onon Balj NCP have been observed. Because of forest and steppe fires, a number of wildlife species have lost their habitats and ranges being pushed away from their distribution areas and their populations have been decreased due to human destructive activities. For instance, very rare species e.g. musk deer and moose, and rare species e.g. Taimen, brown bear, wild boar, and red deer are nearly threatened with extinction in the region.

Onon Balj NCP administration:

Onon Balj NCP administration was launched in Undurkhaan town of Khentii aimag by an Order No: 238 by the Minister of Nature and Environment dated on 24 July, 2006. Since January, 2009 the park administration has been located and running in Dadal soum of Khentii aimag.

The park administration runs its operations with staffing, which includes a head, two officers in charge of monitoring, research and public awareness activities, five rangers, and rangers of “Otter” study and protection team that is supported and funded by the WWF Mongolia Programme Office. Onon Balj NCP administration provides daily supervision and management to Khar Yamaat Nature Reserve.

Onon Balj NCP is adjutant to Sohond International Biosphere Protected Area in Russia along the altitude and specific with its natural and geographic formation. Sohond Biosphere PA in Russia was established in 1973 and it is located to the north east of Khentii-Chikoin mountain range. Total area is 211 thousand hectares. As Sohond PA was established, it has been playing an important role in conservation and preservation of the southernmost edge of Siberian taiga/boreal coniferous forests, pine, birch and larch mixed forests, biodiversity, a number of rivers and tributaries running through Pacific Ocean basin, and a number of East Asian water species. Therefore, the Onon Balj NCP administration closely cooperates with Sohond international Biosphere PA administration.

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