

**Summary Document for Kumtor Operating Company Biodiversity Strategy workshop
Prepared by Fauna & Flora International in the Kyrgyz Republic (26 November 2012)**



On 19 October 2012, “Kumtor Operating Company” (KOC) and “PRIZMA” LLC held a workshop entitled “Development of Biodiversity Strategy” in Bishkek, Kyrgyzstan. This involved a wide range of stakeholders, including representatives of state, academic and non-governmental institutions, as well as international conservation organizations (see attached program and list of participants).

Presentations by the Participants and Discussion

The workshop was opened by **Mr. Ben Ferris**, Director for Environment of KOC and facilitated by **Mr. Mehrdad Nazari**, Director of “Prizma” LLC. The aim of the seminar was to discuss the development of KOC’s Biodiversity Strategy. Taking into consideration KOC’s planned closure in 2021, the company has set a goal of ensuring that biodiversity value and continued collaboration remain high on the agenda in its compliance, enhancement and global strategy orientation. Thus, the organizers outlined three main directions for the Biodiversity Strategy:

- further integration of biodiversity conservation in the environmental and closure planning;
- seeking net-positive conservation measures; and,
- collaboration and cooperation with stakeholders.

According to Mr. Nazari, the KOC Biodiversity Management Strategy and Plan is intended to cover KOC’s licensed area, but would also consider including a larger region to ensure its effectiveness and to avoid missing possible collaboration opportunities. The Kumtor-Biodiversity Management Plan is to be completed before the end of 2012. Mr Nazari also emphasized that the Plan is intended to seek shared solutions to biodiversity conservation among stakeholders, while seeking opportunities for positive impacts and interactions.

KOC’s readiness to develop its own Biodiversity Strategy received warm welcome from participants. The workshop participants recognized that whilst KOC operated within a framework of international environmental standards, the mining industry in general is intrinsically disruptive to eco-systems, which often cannot be restored to their original state following mine closure. It was noted that the Rio +20 Conference has recently demonstrated that despite global efforts to protect nature, no country in the world has achieved significant progress in halting the loss of nature. It was agreed that Kyrgyzstan, a signatory of many international conventions, finds itself in a similar situation. The national-level Biodiversity Strategy developed in 1995 has not been effectively implemented.

The first guest speaker, **Professor Emil Shukurov**, prominent scientist and the Director of the ecological movement “Aleyne”, suggested that the Biodiversity Strategy should be systematic and complex. Prof. Shukurov prefaced his comments with general concerns about the mining industry posing a threat to nature and also criticism about any country’s hopes for development relying solely on supply of natural

resources. Professor Shukurov also began by stating that the fact that KOC will develop a Biodiversity Management Plan is a productive step and could contribute toward developing a new National cause for Biodiversity Conservation, in light of the fact that despite creation of Nature Reserves, passing laws, etc. “nature continues dying”. He then highlighted a brief history of the KR National Biodiversity Plan – and emphasized that “actions and good examples are needed to demonstrate commitment to biodiversity conservation”, moving to concrete ideas and proposals that adopt a systematic, ecosystem approach that protect habitats and ecosystems in a comprehensive manner – instead of focusing on only species. Prof. Shukurov also expressed his deep concern regarding hunting concessions in the vicinity of the Kumtor mine and the Sarychat-Ertash State Reserve (SESR). Remembering expeditions held in the 1950s, when he was able to observe herds of argali thousands strong, he noted that there were no such herds left. Prof. Shukurov believes that hunting agencies should be improving livelihoods of local communities; however, this is not the case. Hunting agencies are practically engaged in exploitation of wildlife resources. Other threats to biodiversity include competition through overgrazing, loss of food base, and the spread of infectious diseases via contacts with domestic animals leading to weakening of populations of ungulates.

At the same time, the Prof. Shukurov pointed towards means of addressing these issues, which were not always costly and recommended looking for simple solutions that use “natural processes”. He recommended conservation efforts for forested areas which hold half of the biodiversity of KR, but occupy only 17% of the area of the country. For example, reforestation could be achieved, not through planting new trees, but through fencing, since nature has very powerful regeneration resources and is able to restore itself if adequately protected.

He also emphasized the importance of pasture ecosystems and an important task is to identify natural ecosystems as genetic reserves, managing for “correct use” and including all components, including herbs, forbs, invertebrates, etc. He suggested that terracing could be used to improve quality of grassland and reduce erosion.

Prof. Shukurov recommended conservation directions that enable “maximum participation with the maximum number of stakeholders”. Professor Sukurov also introduced the concept of “Micro-Reserves” and/ or “demonstration plots” that involve working with local communities, especially youth groups, reiterating the need for support groups within the general population.

He also recommended vaccination programs for livestock and guarding dogs, creation of a small public council and having “advisors” to settlements, creation of jobs – such as planting of quick growing trees, or culturing of plants used for indigenous handicrafts, creation of various forms of Co-ops, and continuous awareness raising work about the importance of the environment and conservation.

The overall approach, according to Prof. Shukurov, should be ecosystem based rather than focused on particular species.



Mr. Kylychbek Jundubaev, Senior Biodiversity Specialist from the State Agency of Environmental Protection and Forestry under the Government of the Kyrgyz Republic, gave a clear overview of the Agency's work and also informed participants about Agency restructuring planned for 2013. Mr. Jundubaev pointed out that continuous changes of status, and restructuring of the institution, has been the major reason for weak biodiversity conservation to date. This has impacted not only on KOC's neighbor, the SESR, but also other nature reserves and national parks. The number of specialists in the Department of Specially Protected Areas and Biodiversity Protection within the Agency has decreased from 7 to 2 in the last few years. Frequent changes in senior management, lack of staff and limited capacity, are some of the reasons causing delay in approval of such documents as the SESR's Management Plan. Mr. Jundubaev reassured participants that the Agency highly respected its partners' initiatives; however, these kinds of factors sometimes prevented the adoption of excellent documents.

Mr. Jundubaev also stated that a government discussion of "SCER buffer Zones" will be addressed in the upcoming National Biodiversity Action Plan (2013). He expected (some form) of the KOC biodiversity plan to be included as an appendix to the new National Action Plan.

He also recognized the need for National inventories of all "zapovedniks and national parks, and the urgent need for biodiversity monitoring", also stating he was happy to see actions taken by KOC to include environmental monitoring (land, air, water) in addition to complex monitoring of biodiversity.

He also stated a specific need to identify "routes of migration" and mechanisms of assessment within the framework of Socio-economic development; a priority to look at ecosystem functioning; addressing issues arising from Protected areas located near sub-soil resources; and synergy of geological and environmental issues. Mr. Jundubaev closed in stating that he hoped Kumtor's biodiversity management plan would serve as an example for other industry in KR.

Director of the Kyrgyz branch office of the UK-based conservation organization Fauna & Flora International (FFI), **Ms. Jarkyn Samanchina**, shared the organization's experience in biodiversity conservation efforts in Central Asia and China. She particularly emphasized FFI's global corporate partnership experience encompassing almost 40 countries where FFI implements its programs. In Kyrgyzstan, in 2005–2008, together with its local partners, FFI implemented the first Technical Cooperation project titled "Institutional Capacity Building for Biodiversity Conservation in Kyrgyzstan". The project was funded by the European Bank for Reconstruction and Development, International

Finance Corporation, and KOC. The project focused on the SCSR and included several main components, such as: 1) strengthening the material and technical base of the Reserve; 2) developing an anti-poaching strategy; 3) developing a biodiversity monitoring strategy; 4) developing the SESR Management Plan; and, 5) improving livelihoods of local communities through a targeted Small Grants Program.

This project was an excellent example of cooperation and yielded many positive outcomes with relatively modest funding. Ms. Samanchina stated that despite the Reserve's Management Plan not having been officially adopted by the State Agency, it had been a good tool for the Reserve's organizational development and had enabled progress with their biodiversity conservation work. However, as the Management Plan was developed more than 5 years ago, it now required revisiting, updating and most importantly, support to implement management actions.

She expressed FFI's openness for future collaboration within that scope of work, and noted that this approach would "need continuity" and also require long-term planning "with greater detail" to achieve maximum efficiency.

Deputy Director of the SESR, **Mr. Alexander Vereschagin**, informed participants about the Reserve and its work, including details of past projects implemented with FFI and Snow Leopard Trust. Mr. Vereshagin highlighted results of over 140 expeditions, the significant restoration of the forage base (within the Reserve); and detailed increases in numbers of argali, ibex and snow leopards (now 18 within the SCER boundaries), showing increases in populations of "all key species". He also shared updates on some more recent activities on radio-collaring of ungulates together with Japanese scientists, and steps towards developing the economic self-sustainability of the Reserve with support from WWF. Mr Vereshagin spoke of good historic relations between KOC and SCER, citing only a recent (2010-2012) dispute over buffer zones. According to Mr. Vereschagin, the territory of the Reserve has been reevaluated using GIS and is the core area is 62,060 ha. In his interpretation, including buffer zones, the Reserve is now believed to be 149,117.9 hectares. The Reserve is also intended to become a corridor to link with a soon-to-be-established new Reserve – *Khan Tengri*. Echoing Prof. Shukurov's concerns about hunting concessions, including pressure from "hunting farms" – suggesting control of "single point of access for hunting",

Mr. Vereschagin mentioned that the people of Ak-Shyirak Village, situated near the Reserve and where most of the rangers lived with their families, did not have its own hunting territory. The land around the village has been bought and is now under private ownership, a violation of local people's rights. Mr. Vereschagin believes that following successful examples from Pakistan, pilot community-based hunting could be implemented in the villages of Ak-Shyirak and Enilchek. Interestingly, the number of ungulates has increased in the recent years despite, or, perhaps, thanks to the presence and guarding measure undertaken by the Kumtor mine. Other issues raised in his presentation included the need for species inventory, improvement of the material and technical base of the Reserve, and, most importantly, more information, awareness, advertising work about the Reserve and the importance of biodiversity conservation work among local community members, as well as broader public.

Mr. Vereshagin also discussed future needs, including: remote sensing (photo traps and radio collars) for ibex and wolves; the pressing need to document and identify migration routes; the creation of a data base; and general lack of resources for the Reserve and staff that has been stated elsewhere.

Mr. Vereshagin asked the rhetorical question "what will happen when Kumtor leave?" and was also keen to emphasize the great opportunities for SCER and Kumtor working together on several fronts, including opportunities with regard to "co-finance" for mutual activities with outside researchers and institutions. Finally, Mr. Vereshagin made a general request for Kumtor support for joint work to preserve the "Natural Wealth" of KR, which belongs to all the people.



Discussions among all the participants, following Mr. Vereshagin's presentation then identified several "Key Problems" pertaining to biodiversity on the National level:

- Hunting Farms
- Logistical Support of protected areas
- Common research goals and strategies
- Maintenance of "ecological corridors"
- Impacts to water
- Preservation of flora and fauna

Mr. Joldoshbek Kyrbashev, Deputy Director of the Naryn State Reserve, gave a very informative presentation about the Reserve's work, including the most recent activities supported by FFI: the baseline surveys in zoology, hydrobiology, entomology, and botany, carried out jointly with specialists from the National Academy of Sciences of the Kyrgyz Republic; and training to help develop a biodiversity monitoring strategy.

The Naryn Reserve's second Deputy Director, **Mr. Orozbek Aliev**, shared with participants the concern felt by residents of the Naryn Region about the Naryn River's change of color and its lack of freezing during the winter. People in Naryn often assume that these changes are caused by KOC's mining activities, and believe that further research is needed to get to the bottom of this issue. He also mentioned the Reserve's lack of a laboratory, which prevents them from performing water quality tests. This question was addressed by Mr. Ferris, who assured the participants that these observed changes could be caused by several other factors, such as city garbage/pollution, but not by Kumtor, which is situated a significant distance from Naryn. He also stressed that KOC worked in accordance with international standards and complied with all regulations.

Mr. Kyrbashev also highlighted several successful initiatives currently underway with the Naryn Reserve, including: the Nursery activities for endangered red deer; the Naryn Environmental Center and Museum

of Nature; Environmental eco-tourism efforts to show the unique flora and fauna, yet also stated some of the similar problems stated elsewhere in the workshop - including low salaries and lack of resources and staff; pressures from hunting- including foreign trophy hunting; and general concerns over water quality.

Dr. Georgy Lazkov, Leading Specialist in botany from the National Academy of Sciences, in his presentation about the flora around the Kumtor area, said that there were 205 plants from 30 families found in the area, including only 4 trees in the form of shrubs and semi-shrubs. In the SCER area, there are just over 500 plants. Overall, the flora in the area around Kumtor and in SCER is very depauperate due to severe climate and long winters. It is not unique and very typical of the Central Tien Shan, including China and Kazakhstan. There is only one Red Data Book species, *Tulipa tetraphylla*, actually collected in Barskoon Village area (and noted that this species is, in fact, more widely distributed in the Central Tien Shan region). Dr Lazkov also discussed another “endemic” species of dandelion- that may also have a wider distribution in the Central Tien Shan region.

However, he noted the Red Data Book is lacking in data on many plant species, and it is possible that there are other rare plants in the region. Dr. Lazkov suggested that after the mine closure, it would be very worthwhile to plant seeds of dominant species from native species of vegetation, using an ecosystem approach. It is important to make sure these seeds are from the local area, and not brought from elsewhere, because that would create anthropogenic communities which either cannot grow or, if successful, create problems for the area in future.

In discussions following Dr Lazkov’s presentation Professor Shukurov recommended that Kumtor reclamation efforts should also focus on conservation of productive ecosystems, rather than solely focusing on areas with high environmental impact, such as waste rock areas.

Mr. Bakytbek Satybekov, Director of Central Asia Regional Environmental Center (CAREC), provided an overview of the organization’s work, which focused on nature preservation; best industry practices; multi-stakeholder dialogues - especially trans-boundary water issues; GAP analysis of Climate Change; and water and energy efficiency. He said that although CAREC did not have projects directly related to biodiversity conservation, it worked on the National Plan on Climate Change Adaptation, and had also worked directly with several projects in the Issyk-Kul, including some 57 youth organizations and smaller projects to raise environmental awareness, such as cleaning of beaches.

Mr. Tolkunbek Asykulov, Director of the Kyrgyz branch office of the German nature protection organization NABU, talked about general activities in the Issyk-Kul Biosphere Reserve, including: monitoring, ecotourism, rehabilitation of environments, tracking numbers of birds in the Issyk-Kul area; and the organization’s snow leopard protection activities in Kyrgyzstan, including awareness raising, community work, collaboration with law enforcement agencies, and NABU’s special group of enforcement officers (anti-poaching group), known as “*Gruppa Bars*” (‘snow leopard group’). Mr. Asykulov also informed the participants about the upcoming Snow Leopard Forum to be held in the summer of 2013 in Bishkek, and the steps being taken to organize this event.

Exercises during the Workshop

During the course of the workshop, in addition to discussions during and following presentations, the participants collaborated in several individual and group exercises.

The first, a warm-up exercise, was aimed at developing a model cover page for the future KOC Biodiversity Strategy document. Participants individually chose from a list of choices and constructed their own models to recommend to KOC and explain how and why KOC's Biodiversity Strategy cover page should be different from the country's Biodiversity Strategy cover page. The list of choices included: 1) map (description), 2) mining industry (description), 3) the Marco Polo sheep, 4) snow leopard, 5) ibex, 6) flora (title/description), 7) local community (title/description), 8) climate change (description), and 9) other.

The second exercise was done in two groups. The workshop participants were asked to answer 2 questions: 1) name 3 areas with significant lack of information for KOC's future Biodiversity Strategy, and 2) name 3 areas with significant lack of information in the Kyrgyz Republic's Biodiversity Strategy. Both groups found many similarities on information gaps for both documents.

The first group identified the following gaps for both strategies:

- lack of awareness about what biodiversity is and lack of up-to-date/truthful information about its state;
- lack of information about funding needs and the costs of biodiversity protection measures; the need for more money to be invested into awareness work in the first 3 years to pave the way for future work; the need to create public committees which would decide how resources must be spent;
- lack of information about local communities and their socio-economic situation (e.g.: stratification, poverty level, how the situation is changing, why people are forced to compensate at nature's expense, etc.);
- lack of information about test results on water and air quality, and other tests — this information should be made available to the public;
- lack of information about the plans of the mining industry — decisions must be made in agreement with specially protected areas (e.g. which territories will be affected); and,
- lack of monitoring activities on the part of the Government, although funds for such activities are budgeted.

The second group, in addition to above answers, also suggested the following:

- lack of ecosystem research — it is not possible to observe overall dynamics;
- lack of publicity — research results should be widely publicized; and,
- lack of information about the state of flora and fauna — there is no unified monitoring center.

The third exercise asked participants to give their final recommendations to KOC to consider in developing its Biodiversity Strategy document. The following recommendations were given:

- KOC is to pay attention to biodiversity;
- conduct regular monitoring of environmental and economic aspects of the mining industry;
- support the updating and approval of the SESR's Management Plan; support the implementation of the Plan; and, help to bring the Reserve to a world class level;
- include the broader ecosystem, especially the Naryn Reserve, in KOC's Biodiversity Strategy;
- conduct active research and provide proper coverage of scientific results in the mass media;
- support the training of existing and future specialists in biodiversity;

- collaborate with local communities; implement KOC's own grant program; and, implement projects on strengthening monitoring work; and,
- disregard political motives and be open towards collaboration and partnership;
- understand the context and fulfill expectations.

The workshop organizers summarized the workshop discussions and thanked all participants for active participation. An announcement was made that all materials presented and developed at the workshop would be made available to all on a CD or memory stick.

In closing of the meeting, Professor Shukurov stated that the workshop provided a "good discussion" with much constructive thinking and little conflict of opinion. He recommended several separate major directions for the stakeholders to pursue, including:

A cooperative effort relating to biodiversity with local communities, and with the assistance of stakeholders and experts to address conservation of important ecosystem, within the framework of "Project(s)" including participation of Kumtor and other entities;

Strengthening of biodiversity monitoring with the assistance of experts using appropriate indicators; and

Implementation of specific (biodiversity) programs within the National legal framework, including institutions and public participation with clear goals and objectives.

Program
Workshop “Development of Biodiversity Strategy”

Location: Bishkek, 60 Elebaeva Str.
“Zolotoi Drakon” Hotel

Date: 19 October 2012

Organizers: “Kumtor Operating Company” and “Prizma” LLC

Time	Presentation
9.00	Workshop Welcoming Speech by Ben Ferris, Environment Director, KOC, and Mr. Mehrdad Nazari, Director, Prizma
9.20	Speech by Prof. Emil Shukurov <i>“Cooperation with Mining Industry for Conservation of Biodiversity in the Kyrgyz Republic”</i> (includes 10 minutes for Q&A and discussion)
9.55	Presentation by Mr. Kylychbek Jundubaev <i>“The Impact of Mining on Biodiversity”</i> (includes 10 minutes for Q&A and discussion)
10.30	Presentation by Ms. Jarkyn Samancina <i>“FFI’s Activities and Experience Working in the Kyrgyz Republic, including Cooperation with EBRD, IFC, and KOC”</i> (includes 10 minutes for Q&A and discussion)
11.05	Presentation by Mr. Ishemkul Asakeev and Mr. Alexander Verschagin <i>“Activity of the Sarychat-Ertash Reserve for Conservation of Biodiversity”</i> (includes 10 minutes for Q&A and discussion)
11.40-12.00	Coffee- break
12.00	Presentation by Orozbek Aliev and Joldoshbek Kyrbashev <i>“Activity of the Naryn Reserve for Conservation of Biodiversity”</i> (includes 10 minutes for Q&A and discussion)
12.35	Speech by Dr. Georgy Lazkov <i>“State of Flora around the Kumtor Mine”</i> (includes 10 minutes for Q&A and discussion)
13.05-14.00	Lunch
14.00	Presentation by Mr. Bakytbek Satybekov <i>“Activity of CAREC in Kyrgyzstan”</i> (includes 10 minutes for Q&A and discussion)
14.35	Presentation by Mr. Tolkunbek Asykulov <i>“Activity of NABU in Kyrgyzstan”</i> (includes 10 minutes for Q&A and discussion)
15.05-15.25	Coffee- break
15.25-16.30	Workshop Summary and Closing

List of Participants

1. Emil Shukurov – Professor , Director of Environmental Movement “Aleyne”
2. Kylychbek Jundubaev– Senior Biodiversity Specialist, Specially Protected Areas and Biodiversity Protection Department, State Agency of Environmental Protection and Forestry under the Government of the Kyrgyz Republic
3. Ishenkul Asakeev – Deputy Director of the Sarychat-Ertash State Reserve
4. Alexander Vereschagin – Deputy Science Director of the Sarychat-Ertash State Reserve
5. Orozbek Aliev – Deputy Director of the Naryn State Reserve
6. Joldoshbek Kirbashev - Deputy Science Director of the Naryn Reserve
7. Dr. Georgy Lazkov– Leading Specialist of the Flora Laboratory, Institute of Biology and Soil, National Academy of Sciences of the Kyrgyz Republic
8. Jarkyn Samanchina – Director, Fauna & Flora International – Kyrgyzstan
9. Tolkunbek Asikulov – Director, NABU – Kyrgyzstan
10. Bakytbek Satybekov– Director, CAREC – Kyrgyzstan
11. Dr. Don Proebstel, Senior Biodiversity & ESIA Advisor, “Prizma” LLC
12. Mehrdad Nazari, Senior ESIA & CSR Advisor, Director, “Prizma” LLC
13. Douglas Grier – Director, Sustainable Development, KOC
14. Eric Kojomkulov – Health, Safety & Environmental Systems Manager, KOC
15. Ben Ferris - Director, Environment, KOC
16. Aibek Abduvaliev- Manager, Environment, KOC
17. Uran Junusov – Coordinator, Sustainable Development, KOC
18. Aygerim Dyikanbaeva - Coordinator, Sustainable Development, KOC