

## **COLLABORATING ORGANIZATION'S REPORT ON THE IMPLEMENTATION OF THE BUKHARA DEER MOU**

### **WWF Central Asian Programme (WWF CA)**

#### **Support from WWF Central Asia for the implementation of the CMS MoU concerning the conservation and restoration of the Bukhara deer**

#### **National, regional and international collaboration and cooperation**

1. WWF CA ensured active collaboration with the CMS Secretariat, beginning with preparation of the Action Plan, greatly assisted in organizing a side-event of the Inter-Regional Sustainable Development Committee (ISDC) meeting in 2002 for signing the MoU, prepared and presented a report on the implementation of the Action Plan – progress regarding Bukhara deer conservation for a scientific workshop devoted to the 25<sup>th</sup> anniversary of CMS in June 2004 in Berlin; regularly presented information on the intermediate progress in implementing the Bukhara Deer Action Plan for the CMS Secretariat (on inquiries).

2. Cooperation among range states, information exchange and technical expertise to some extent were supported by WWF CA through implementing a common project on Bukhara deer conservation and restoration (project was operational in Turkmenistan in 2000-2009; in Kazakhstan and Uzbekistan – since 1999 till recently; in Tajikistan minor activities from 2000, – comparative in scale with other countries since 2005.)

3. The WWF representative is a permanent participant of ISDC meetings (as an observer), and regularly presents brief results of the on-going projects. Some information on the projects is presented on the WWF Russia website. CMS presented WWF report/presentations on its site (prepared for a scientific workshop devoted to 25<sup>th</sup> anniversary of CMS in June 2004, Berlin; for technical workshop in Astana, Kazakhstan February 2011).

4. Information on the programme of Bukhara deer restoration was submitted to the IUCN Deer specialist group and presented during a number of international workshops and conferences (International deer conferences, a number of the Large Herbivores Initiative /Large Herbivores Foundation (LHI/LHF) meetings, meeting of American Association of Zoos and Aquariums (AZA), Rare deer conservation conference in Kashmir, India, etc.) by the WWF CA programme director and WWF project experts from the countries.

#### **Fundraising for implementing the Bukhara Deer Action Plan – establishment of targeted cooperation/co-funding:**

5. Targeted funding for the Bukhara Deer Action Plan implementation was raised by the WWF Central Asian programme during the reporting period:

- WWF Netherlands project – ~ €50 000 a year for four countries of the region (from 2000 – till recently);
- Minnesota zoo – US\$3000 + US\$2000 in 2005-2006 – ecosystem restoration in Tajikistan
- Disney fund – US\$5000 + US\$15 000 – 2005-2006 - ecosystem restoration in Tajikistan
- MFA/WWF Norway – NOK 150 000 for the first and second year, NOK 120 000 for the third, fourth and fifth year for Tajikistan and Kazakhstan 2007-2011 – for model

Econet implementation (in the areas of recent of historical distribution of Bukhara Deer);

- LHF – €3,000– 2005-2006 – for preparation and publication of the book “Bukhara deer in Uzbekistan”
- Cooperation established with UNDP Uzbekistan – GEF project “Conservation of riparian forests and improving of the system of protected areas in Amudaria delta, Karakalpakstan” - which included various activities beneficial for Bukhara deer conservation and future restoration in the area of Amudaria delta – and co-funding from WWF project provided to UNDP especially for infrastructure preparation for reintroduction of Bukhara deer in new sites in Amudaria delta;
- Government of Kazakhstan (National and regional (“oblast”) levels) – jointly further developed WWF activities on BD reintroduction in Syrdaria river valley (funding for taking care of animals in pens (Turkistan); funding for providing additional group of animals (catching, transportation, etc.) for releasing in Syrdaria valley; establishment of a special sanctuary for Bukhara deer with a budget for staff and running costs (usually not allocated for sanctuaries); funding for improving system of pens for animals adaptation; including establishment of a system of Protected Areas (PA) for Bukhara deer in the national programme for the next 3-5 years period (with budget allocation).

6. WWF CA raised funding for designing an interstate econet (system of protected areas) which could support self-sustainable population development of Bukhara deer. A database, GIS and scheme of Econet were designed (GEF-UNEP-WWF project 2003-2006) for the entire region of Central Asia and approved by relevant national (Ministries/State Agencies) and regional (ISDC) authorities as the basis for the development of a protected areas system and land use system. “An agreement of intention on the transboundary Econet implementation” was signed between ISDC and WWF in 2007. The Econet database and GIS are passed by WWF to all relevant Governmental structures and various projects (for free - on the basis of bilateral agreements/rules of use) as a basis for the further development of Econet components in more detail for practical implementation. Further development /model establishment of Econet clusters initiated in the region (Kazakhstan – middle reaches of Syrdaria – MFA Norway/WWF project; Tajikistan - MFA Norway/WWF project – Tigrovaja balka and surrounding areas).

7. Important fundraising of WWF CA programme for a medium-size GEF/UNDP/WWF project – Econet Central Asia - was not directly aimed at implementing the Bukhara Deer Action Plan, but nevertheless Bukhara deer conservation benefited from that considerably, as the Ecological network for the region was designed and officially approved – which is an important starting point for the protection and restoration of areas important for the Bukhara deer.

### **Threat reduction**

8. The major threats for Bukhara deer conservation and restoration were the following:
- fragmentation of habitats;
  - degradation of habitats (even inside the PAs in case of improper management) – illegal logging, cow grazing, fires, etc.;
  - ecological disasters (floods/droughts), connected with artificial regulation of water regime and with the climate change;
  - poaching (especially outside the PAs).

Poaching was the major reason for a catastrophic decline of BD populations in the 1990s (period of transition economy); at the same time PAs of the majority of the countries were encountering serious problems with funding for the running costs, staff salaries, etc. That is why major funding of WWF projects was directed for technical support for the Nature Reserves and human dimension activities (ecological education, capacity building – as a tool to prevent poaching).

### **Technical support**

9. Examination of needs was completed and minor technical support was regularly provided to Amudarija NR, Turkmenistan (WWF projects - in 2000–2009: running costs, field equipment, vehicles and motorbikes, border posts, fire protection equipment, rebuilding of ranger stations, personal support to the staff); Badai-Tugai, Kyzylkumskii and Zarafshanskii NR, Uzbekistan (2000–2008: running costs, field equipment, fire protection equipment, forage for deer in pens, personal support to the staff; Zarafshan – finalizing system of pens for deer, taking care of deer); Tigrovaja balka – Tajikistan 1998 – 2002 LHF/WWF – some field equipment for rangers and running costs; since 2007 - WWF/MFA Norway project: running costs, field equipment, tractor, border posts, fire protection equipment, sun batteries, personal support to the staff, natural forest restoration, etc).

### **Capacity building**

10. Besides direct technical support, which allowed to improve rangers system of the PAs, special trainings for rangers were organized (Turkmenistan, Kazakhstan), competition of rangers accomplished (WWF and Committee of game management and protected areas of the State Committee of Forestry, Uzbekistan). A special mobile anti-poaching inspection unit, the “Amudaria basin inspection” was established in the Amudaria basin and is now operational (Gosbiokontrol of the State Committee of Environment conservation of the RUz and WWF)

### **Education and awareness**

9. Various forms of activities were developed in all countries of the region through the WWF project, mostly with children (schools, ecological clubs): competitions of paintings and compositions, practical actions (like collecting acorns and/or brooms as a winter forage for deer in pens – in Uzbekistan); kids’ ecological camps – “training of trainers”; preparation of special newsletters, exhibitions; various education materials produced for kids of different ages and widely distributed (in national languages); various performances prepared by children – for other schools and for adults.

10. Education centres /exhibitions developed in NR (Zarafshanskii – Uzbekistan, Amudarjinskii –Turkmenistan, Tigrovaja balka – Tajikistan), branches of educational centres developed (on the base of three kids’ clubs in Turkestanskii region, Kazakhstan; based on eight local NGOs in the surroundings of Tigrovaja balka NR, Tajikistan).

Information on the Bukhara deer project activities was presented on websites of CMS and WWF; a special website of Tigrovaja balka reserve was established with the support of WWF project (<http://www.tigrovajabalka.tj/>).

11. Video devoted to the Bukhara deer was prepared (NGO Eremurus, Uzbekistan), dozens of publications in national and local mass-media, radio and TV broadcasts were devoted to B

Bukhara deer conservation in each of the countries every year. A book published “Bukhara Deer in Uzbekistan” in Uzbek and Russian (LHF/WWF support), a booklet devoted to the anniversary of Tigrovaja balka. Numerous scientific papers, reports on Bukhara deer biology and restoration prepared and presented during various international conferences.

### **Ecosystem/Habitat protection**

12. The restoration of water-supply regime in Tigrovaja balka, Tajikistan (initiated in 2005 with the support of WWF Netherlands, Minnesota zoo, Disney fund and developed in 2007-2011 – WWF/MFA Norway project) allowed seriously degraded habitats of the Bukhara deer population in southern Tajikistan to be improved.

13. *Inventory works in deer habitats to identify areas still suitable for the deer* were completed on a large scale – by Econet project (2003-2006), and on a more detailed scale by projects led by other agencies and by following WWF projects: Kazakhstan – middle and lower reaches of Syrdaria – MFA Norway/WWF project (2007-2011); Tajikistan – surroundings of Tigrovaja balka (2007-2011); Ily-Balhash region – additional special survey - WWF project in 2010-2011.

14. *Protected areas coverage* slightly increased during the reporting period to a great extent thanks to WWF lobbying and special activities in the framework of above-named projects: .

15. *Kazakhstan:* special sanctuary (site of Bukhara deer reintroduction) was established in the Turkestanii region (South Kazakhstan oblast – regional and state government of Kazakhstan; WWF project – background documents preparation). Additional PAs are in process of being established in the Syrdaria river valley (55,000 ha in the middle reaches of Syrdaria, 65,000 ha – three addition sites in the lower reaches – background documents are in preparation – WWF project; further practical activities on the establishment of PAs are included in the national programme of the Republic of Kazakhstan “Green development”). Potential Bukhara deer habitats in Ily-Balkhash region (totally about one million ha of wetlands are also protected during the reporting period (three sanctuaries established by the government of Kazakhstan; status of the PA is expected to be further improved; the area is being submitted by the Government of the Republic of Kazakhstan for nomination as a new Ramsar site – documents for nomination prepared with the support of WWF project).

16. *Uzbekistan:* There was an opportunity to expand the area of Zarafshanskii NR, initiated by the WWF project (by adding neighbouring territories of forestry departments); special funding was provided by UNDP Uzbekistan Small Grant Programme; preliminary agreement was achieved both with the State Committee of Forestry and with regional administrations. For an unfortunate reason, this activity had to be cancelled.

17. *Tajikistan:* the area of Tigrovaja balka NR has been increased – 11,000 ha have been added (mostly adjacent deserts) by the decision of the Government of Tajikistan in 2007. The process of approval by local administrations / legal land allocation is in its final stage (WWF /MFA Norway project support).

18. *Turkmenistan:* Special regime of protection was extended on the territory of Amudaria island between Kyzylkumskii (Uzbekistan) and Amudarijinskii (Turkmenistan) NRs.

19. *Restoration of the species in suitable habitats with special measures for protection and favourable conditions for reproduction:* process is on-going in two sites – Zarafshan - Uzbekistan and Turkistan-Kazakhstan, one release took place in Altyn-Emel, Kazakhstan.

20. Successful captive breeding was initiated before the MoU with the support of the French National Centre for Scientific Research (CNRS), the French Embassy in Uzbekistan, LHI and WWF – and was followed on by the WWF project in Zarafshan –Uzbekistan and directly by the WWF project – in Turkistan-Kazakhstan – as a way of increasing the number of deer and preparing groups for release. Activities in Zarafshan started earlier (there were already 18 deer in the system of pens in 2002) and were developing progressively; an important number of deer was achieved and the first releases became possible in 2004. In 2005 permission was received and first group released, the second – in 2007. Unfortunately, permissions for additional releases were not obtained, and the rate of reproduction of the group came down (overpopulation of the system of pens).

21. In Turkistan the first four deer were shipped to the system of pens in 2002 (WWF project). Later deer had to be evacuated to Shimkent zoo because of the threat of flooding; the system of pens was upgraded and deer returned in a year – but the two additional transportations led to the loss of some of the animals. As a result an important growth of the number of animals in the group was achieved only by 2008, the first group was ready for release in 2009 (taking care of animals -WWF project; since 2007 – with important support from the regional budget). An additional group was translocated directly from Karatchangil and released in 2010 (governmental funding and management of the procedure).

#### Research and monitoring

22. *Inventory works in existing populations* were completed by WWF experts before the MoU was developed and in the beginning of the reporting period; and regular monitoring of the majority of populations (see Table 1) was on-going (LHI in 2000, WWF project since 2000 till recently; Kazakhstan – Karatchingil – governmental funding; Uzbekistan 2004 – WWF and CMS support, since 2006 – UNDP –GEF project in cooperation with WWF projects).

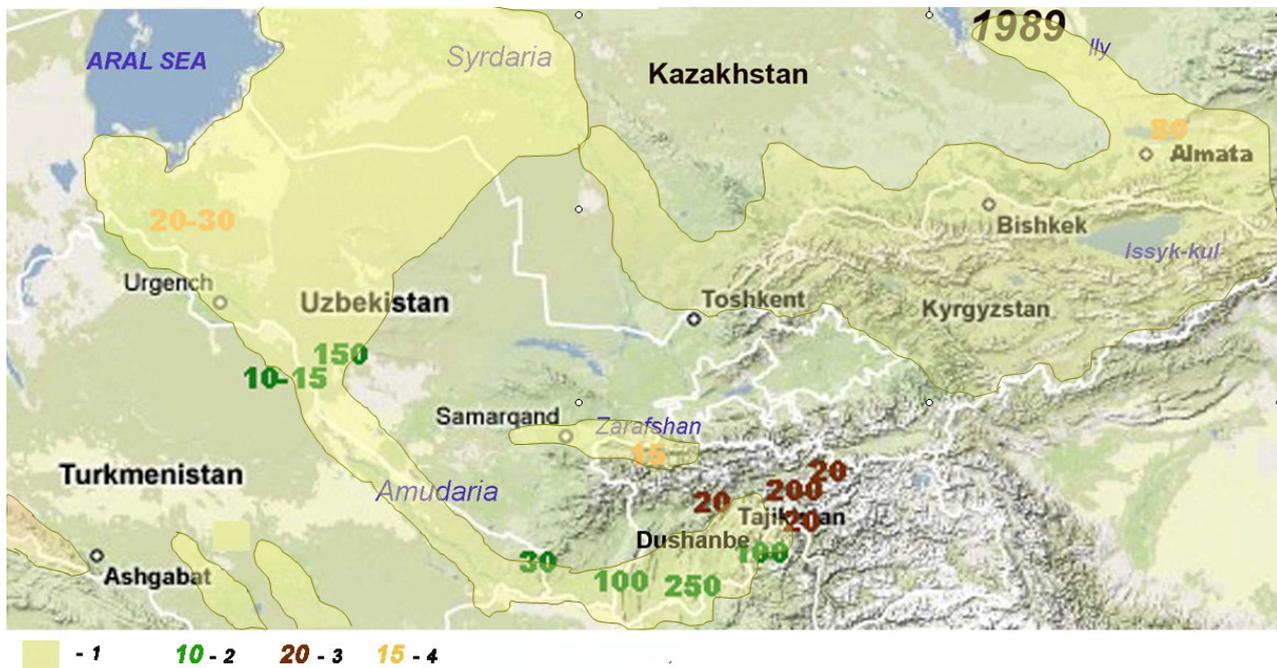
	Year (data for September-October)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>U Z B</b>	Badai-Tuagai NR	~100	120	140	150	160	220	250	265	316	346	374 37% juv	517 <b>2% juv</b> +30 in pens
	Kyzylkumskii NR	76	40	75	80	95	120	80	110	120	120	130	~130
	Other territories	~50	~50	~50	~50	~60	~90	~90	~90	~100	~100	~100	~140-180
	Zarafshan - reintroduction	9	10	14	18	20	23	26	32	33	39	46	~30-32? (+22 in pens)
	<b>Subtotal</b>	<b>~190</b>	<b>180</b>	<b>240</b>	<b>330</b>	<b>385</b>	<b>450</b>	<b>480</b>	<b>490</b>	<b>560</b>	<b>600</b>	<b>700</b>	<b>~900</b>
<b>K A Z</b>	Karatchingil	80	100	150	~200	~250	~250	280	300	>300	>300	320-350	350
	Turkestan (S-D)	0	0	4	6	8	10	12	15	19	22	34	18 (+22 in pens)
	<b>Subtotal</b>	<b>80</b>	<b>100</b>	<b>150</b>	<b>~200</b>	<b>~250</b>	<b>250</b>	<b>280</b>	<b>300</b>	<b>280</b>	<b>350</b>	<b>370</b>	<b>390</b>
<b>T U</b>	Middle reaches of A-D (7 sites)	30	35	35	45	50	60	70	80	94	106	100	60-70
	Djaguzer (A-D)	~20	~25	~35	45	~50	~50	~50	~50	~50	~50	~50	~50

R	upper reaches )												
K	<b>Subtotal</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>90</b>	<b>100</b>	<b>110</b>	<b>120</b>	<b>130</b>	<b>140</b>	<b>150</b>	<b>150</b>	<b>120</b>
T	Tigrovaja balka					80	>50	>50	>50	>80	>140	>150	>150
A	Zarafshan (upper reaches)					25		35	35	40	60	60-65	60-65
J	<b>Subtotal</b>	<b>?</b>	<b>?</b>	<b>?</b>	<b>60</b>	<b>~100</b>	<b>?</b>	<b>~100</b>	<b>~100</b>	<b>120</b>	<b>200</b>	<b>210</b>	<b>210</b>
<b>BD in the Region TOTAL</b>		<b>~350</b>	<b>400</b>	<b>500</b>	<b>650</b>	<b>800</b>	<b>850</b>	<b>&gt;900</b>	<b>1000</b>	<b>1100</b>	<b>1300</b>	<b>1430</b>	<b>1620</b>

23. **Scientific research.** Various research projects were completed as a follow-up of the scientific research of the WWF CA director Dr. Olga Pereladova on Bukhara deer distribution, ecology, behaviour, communication, etc., which were on going in various sites of the species area since 1972-73, and in 1989 resulted in the development of scientifically-based programme of Bukhara deer restoration in the USSR. Research was on-going on the basis of free-ranging populations (e.g. dynamics of acoustic communication and dependences of its characteristics on the population size, structure and phase of development; variations of Bukhara deer morphology in different ecological conditions – using measurements of lost antlers; etc.) and on the base of deer groups in pens (adaptation to new conditions, behaviors, reproductive success, food preferences, dynamics of molting, etc.). A book published “Bukhara Deer in Uzbekistan” in Uzbek and Russian (LHF/WWF support). Numerous scientific papers, reports on Bukhara deer biology and restoration prepared and presented during various national and international conferences.

24. **Economic measures:** A set of small grants provided to local communities (WWF/MFA Norway projects) in Kazakhstan (Turkistanskii region) and Tajikistan (surroundings of Tigrovaja balka zapovednik) – in order to implement sustainable practices of nature resource use, to decrease anthropogenic pressure on the Bukhara deer habitats, and a way of alternative income generation for local communities (poaching prevention).

1. Maps of BD distribution/numbers prepared on the base of WWF Reports data



- 1- historical area of Bukhara deer (after Heptner, et.al, 1961)
- 2- numbers of deer in natural populations
- 3- numbers of deer in introduced groups (mountain populations)
- 4- numbers of deer in reintroduced groups (natural habitats)





