CMS Technical Report Series No. 25

# Conservation Measures for the Siberian Crane

Prepared by the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals in collaboration with the International Crane Foundation

Fifth Edition



















Published by the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (UNEP/CMS).

Recommended citation:

### Conservation Measures for the Siberian Crane, Fifth Edition. 2011. UNEP/CMS Secretariat, Bonn, Germany. 202 pages.

Cover photograph © Zhou Haixiang

### **Technical Report Series No 25**

Prepared by: UNEP/CMS Secretariat in collaboration with the International Crane Foundation

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ISBN 978-3-937429-19-9

## CONSERVATION MEASURES FOR THE SIBERIAN CRANE

### FIFTH EDITION

including

Memorandum of Understanding concerning Conservation
Measures for the Siberian Crane

**Overview Report** 

Revised Conservation Plans for the Siberian Crane Western, Central and Eastern Flyways

Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds

and

Report of the Seventh Meeting of Siberian Crane Range States (Bonn, Germany, 10-12 June 2010)

















Federal Office for the Environment **Switzerland** 

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### **Foreword**

The Siberian Crane (*Grus leucogeranus*) is the third most endangered crane species in the world, and concern for its survival goes back many years. Facing a range of threats and challenges, the decline of the species is primarily due to the impact of human activities, with hunting and loss of wetland habitat as the crucial factors putting its populations at risk.

The Convention on the Conservation of Migratory Species of Wild Animals has long been associated with efforts to protect the Siberian Crane and in 1993 a specific Memorandum of Understanding concerning Conservation Measures for the Siberian Crane was adopted as a framework for stimulating practical cooperation in conservation activities among all 11 Range States which host these birds.

Since then, the Siberian Crane MOU has been of great value to the Convention. Being the first instrument of its kind developed under CMS auspices, this historic memorandum has consequently long served as an example to many of the other MOUs on the conservation of migratory species concluded to date under CMS.

Over the years, Range States, through their regular meetings, have continued to monitor progress on the status of this species, were able to identify challenges and threats it faces and were successful in developing strategies to address them. Detailed Conservation Plans for the three Siberian Crane flyways with ambitious activities have been developed and implemented and the joint efforts of all stakeholders have led to important achievements in many different areas of work.

The successful completion of the UNEP/GEF Siberian Crane Wetland Project in 2009 is one of the main accomplishments of these common efforts. By building capacity for conservation at site, national and flyway levels, it has played a catalytic role in implementing the MOU and in safeguarding a network of 16 critical sites for the Siberian Crane.

As this project came to a close, sustainable fundraising has become one of the most crucial challenges currently facing the MOU. In this regard, identifying potential synergies and strengthening partnerships with other instruments and initiatives, such as the African Eurasian Migratory Waterbird Agreement (AEWA), the East Asian Australasian Flyway Partnership (EAAFP) and the Central Asian flyway (CAF), would be one of the priorities in the coming years in order to build on the achievement and impacts made as a result of the Project.

At the Seventh Meeting of the Signatories, which took place in Bonn, Germany, from 10-12 June 2010, the range states and other stakeholders confirmed again their common interest in further improving regional co-

operation and their commitment to succeed in ensuring the long-term survival of this species.

Not only have ambitious Conservation Plans been agreed with activities to be undertaken until 2012, but also the urgent need for a common strategy to develop sustainable hunting practices to restore the concerned populations was discussed; hunting along the flyways, especially in Western and Central Asia, remains a serious threat to Siberian Cranes.

With the designation of two new sites in Pakistan to form part of the Western/Central Asian Site Network (WCASN), the meeting recognized their importance for migratory waterbirds and potential for the Siberian Crane. This network provides CMS with a good example of a network of internationally important sites and a model for the work on ecological networks that is currently being pursued under CMS.

The Secretariat wishes to thank all of the individuals and organizations that have contributed to the contents of this document and to the concerted efforts to ensure survival of this endangered species by constantly supporting the development and implementation of this MOU. Special thanks go to the International Crane Foundation and its staff, who have been the true motor of the MOU over the years, and whose role has again been pivotal in the organization of this meeting and the finalization of its outputs. Sincere appreciation is extended to the Federal Office for the Environment of Switzerland, the Government of Germany and Lufthansa German Airlines for their generous financial contribution to the sponsorship of the Meeting of Signatories.

Building on almost two decades of experience and considerable progress achieved within the framework of this MOU, we should now face the upcoming challenges and continue investing energy and resources to assure the future of the Siberian Crane throughout its range. Thus, we trust in participating governments and organizations to expand partnerships and to fulfil their commitments towards saving this iconic species.

#### Elizabeth Mrema

Executive Secretary
Convention on Migratory Species

### Introduction

The present document consists of six sections as outlined below.

#### Part I: Memorandum of Understanding

Text of Memorandum of Understanding concerning Conservation Measures for the Siberian Crane is given with two Amendments (from 26 April 2004 and 15 May 2007).

### **Part II: Overview Report**

The Overview Report was prepared by International Crane Foundation (ICF) on behalf of the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (UNEP/CMS) on the basis of national reports by the Signatories and other information available to ICF. It includes overviews of the current status of the Siberian Crane populations and implementation of Memorandum according to specific actions outlined in the Conservation Plans for the three flyways – western, central and eastern. An overview of implementation shows the progress and results achieved in 2007-2009.

#### Part III. Conservation Plans

The Conservation Plans for the Western, Central and Eastern Siberian Crane populations agreed by the Signatories in June 2010 are presented separately in tabular form. Each is structured according to six basic objectives listed below. These are followed by a list of programmes and specific activities, which recognize both the similarities and differences in the actions required to restore the Western, Central and Eastern populations: (1) reduce mortality; (2) monitor and research; (3) increase numbers and genetic diversity; (4) protect and manage habitats of importance for the Siberian Crane; (5) increase public awareness and ecological education; and (6) enhance national and international cooperation and information exchange among the Range States and other partner organizations.

A Signatory has been identified as being primarily responsible for implementation of each activity, with collaborators identified to assist in carrying out a particular activity. Some activities are to be carried out in

all of the Signatories – "All Range states-WP" (Western Population), "All Range states-CP" (Central Population), or "All Range states-EP" (Eastern Population). The fifth column of the table shows specific follow-up activities identified by the Seventh meeting to be undertaken in 2010-2012.

## Part IV: Activities to be carried out by Individual Range States and Co-operating Organisations

For ease of reference, the activities listed in the fifth column of each Conservation Plan have been compiled in a separate table, arranged in alphabetic order according to Range State and Co-operating Organisation.

## Part V: Western/Central Asia Site Network for the Siberian Crane and Other Waterbirds (WCASN)

The section includes a Brief Report of WCASN activity at designated sites; Action Plan for future WCASN activities; and the updated Guidelines for the Preparation of Site Nomination Documents (version from December 2010) with annexes.

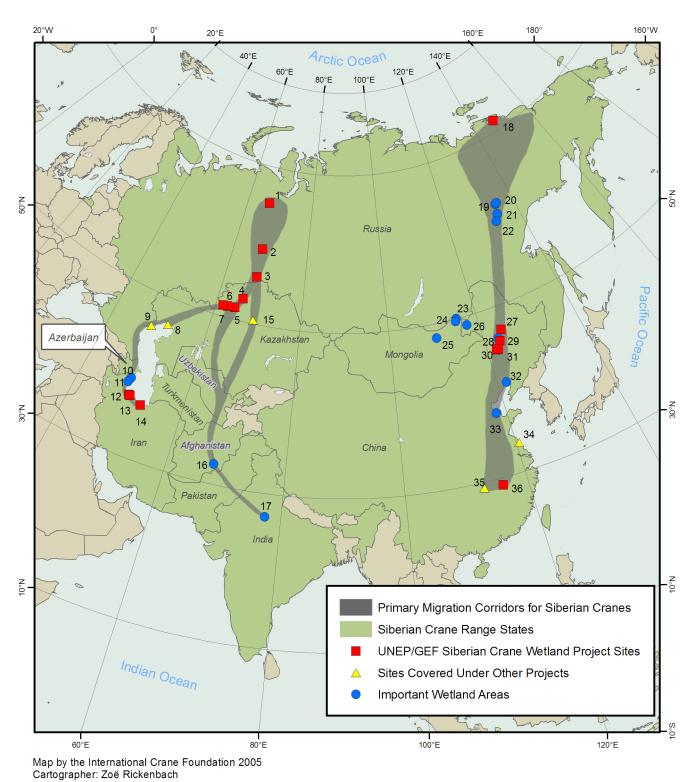
### Part VI: Summary Report of the Seventh Range States Meeting

This section consists of the executive summary and full reports of the Seventh Meeting of the Signatories to the Siberian Crane MoU, prepared by ICF and the UNEP/CMS Secretariat, including the meeting agenda, list of participants, list of documents, and list of administrative and technical focal points.

#### **Part VII: Reference Materials**

The section includes: 1) Overview of the UNEP/GEF Siberian Crane Wetlands Project achievements and lessons learned during implementation in period from 2003 to 2009, prepared by C. Mirande and C. Prentice, and 2) Strategic considerations towards ensuring sustainable waterbird harvesting practices in Western/Central Asia, prepared by C. Prentice

Figure 1: Map of Western, Central and Eastern Siberian **Crane Flyways** 



## **Key to Figure 1: Map of Western, Central and Eastern Siberian Crane Flyways**

#	NAME OF SITE	COUNTRY	TYPE OF USING	MAP LABEL
Wes	tern Flyway			
1	Kunovat River Basin	Russia	Breeding	SCWP Site
2	Kondo & Alymka Rivers Basin	Russia	Breeding	SCWP Site
3	Belozerskiy Wildlife Refuge	Russia	Migration	SCWP Site
4	Tyuntyugur-Zhanshura Lake System	Kazakhstan	Migration	SCWP Site
5	Naurzum Lake System	Kazakhstan	Migration	SCWP Site
6	Zharsor-Urkash Lake System	Kazakhstan	Migration	SCWP Site
7	Kulykol Lake System	Kazakhstan	Migration	SCWP Site
8	Ural River Delta	Kazakhstan	Migration	Important Wetland
9	Volga River Delta	Russia	Migration	Important Wetland
10	Shirvan National Park	Azerbaijan	Migration	Important Wetland
11	Ghyzyl-Aghach Nature Reserve	Azerbaijan	Migration	Important Wetland
12	Bujakh National Park	Iran	Wintering	SCWP Site
13	Amirkelayekh & Rud Posht	Iran	Wintering	Important Wetland
14	Fereydoonkenar	Iran	Wintering	SCWP Site
Cent	tral Flyway			
1	Kunovat River Basin	Russia	Breeding	SCWP Site
2	Kondo & Alymka Rivers Basin	Russia	Breeding	SCWP Site
3	Belozerskiy Wildlife Refuge	Russia	Migration	SCWP Site
4	Tyuntyugur-Zhanshura Lake System	Kazakhstan	Migration	SCWP Site
5	Naurzum Lake System	Kazakhstan	Migration	SCWP Site
6	Zharsor-Urkash Lake System	Kazakhstan	Migration	SCWP Site
7	Kulykol Lake System	Kazakhstan	Migration	SCWP Site
15	Tengiz Lake	Kazakhstan	Migration	Important Wetland
16	Ab-i-Estada	Afghanistan	Migration	Important Wetland
17	Keoladeo National Park	India	Wintering	Important Wetland
East	ern Flyway			
18	Kytalyk Republic Resource Reserve	Russia	Breeding	SCWP Site
19	Kouloma-Chappanda Republic Resource Reserve	Russia	Migration	Important Wetland
20	Kouloma Republic Resource Reserve	Russia	Migration	Important Wetland
21	Kyupski Republic Resource Reserve	Russia	Migration	Important Wetland
22	Chabda Republic Resource Reserve	Russia	Migration	Important Wetland
23	Daurskiy State Nature Reserve	Russia	Migration	Important Wetland
24	Daguur National Nature Reserve	Mongolia	Migration	Important Wetland
25	Khurkh-Khuiten Valley	Mongolia	Migration	Important Wetland
26	Dalainor National Nature Reserve	China	Migration	Important Wetland
27	Zhalong National Nature Reserve	China	Migration	SCWP Site
28	Tumuji National Nature Reserve	China	Migration	Important Wetland
29	Momoge National Nature Reserve	China	Migration	SCWP Site
30	Keerqin National Nature Reserve	China	Migration	SCWP Site
31	Xianghai National Nature Reserve	China	Migration	SCWP Site
32	Shuangtaihekou National Nature Reserve	China	Migration	Important Wetland
33	Yellow River Delta National Nature Reserve	China	Migration	Important Wetland
34	Yancheng National Nature Reserve	China	Migration	Important Wetland
35	Dongting National Nature Reserve	China	Migration	Important Wetland
36	Poyang National Nature Reserve	China	Wintering	SCWP Site
	· · ·			

### Abbreviations used in the text

AF Afghanistan

AEWA African-Eurasian Waterbird Agreement

ACBK Association for the Conservation of Biodiversity of Kazakhstan

AOS Azerbaijan Ornithological Society

ARRINP All Russian Research Institute for Nature Protection (Russia)

AS Academy of Science

AWEC Afghanistan Wildlife Executive Committee

AWC Asian Waterbirds Census Programme

AZ Azerbaijan

BFWD Balochistan Forest and Wildlife Department (Pakistan)

BNHS Bombay Nature History Society (India)

CAF Central Asian Flyway

CBCC Cracid & Crane Breeding and Conservation Center (Belgium)

CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora

CMS Convention on the Conservation of Migratory Species of Wild Animals

CN People's Republic of China

CP Central Population of Siberian Cranes

CWG Crane Working Group

CWGE Crane Working Group of Eurasia

DoE Department of Environment (Iran)

EAAFP East Asian-Australasian Flyway Partnership
ECJ Ecological Center of "Jeiran" (Uzbekistan)
EP Eastern Population of Siberian Cranes

FAO Food and Agriculture Organization of the United Nations

FDK Fereydoon Kenar (Iran)

FHC Forest and Hunting Committee of the Ministry of Agriculture (Kazakhstan)

GEF Global Environment Facility
GIS Geographic Information System

Gosbiocontrol State Biological Control of State Committee on Nature Protection (Uzbekistan)

GSWG Geese and Swans Working Group

IBA Important Bird Area (under BirdLife International Programme)

IBPC Institute for Biological Problems of the Cryolithozone (Yakutia, Russia)

ICF International Crane Foundation

ICWWG Indian Crane & Wetlands Working Group

IN India

IR Islamic Republic of Iran

IUCN International Union for Conservation of Nature

JWMB Jiangxi Wildlife Management Bureau (China)

KGNP Keoladeo Ghana National Park (India)

KPK WLD Wildlife Department of Khyber-Pakhtunkhwa Province KSPI Kostanai State Pedagogical Institute (Kazakhstan)

KZ Republic of Kazakhstan

MAS Academy of Science of Mongolia

MAIAH Ministry of Agriculture, Irrigation and Animal Husbandry (Afghanistan)

MBZ Mohhamed Bin Zayed Species Conservation Fund

MENR Ministry of Ecology and Natural Resources (Azerbaijan)

MN Mongolia

MNET Ministry of Nature Environment and Tourism (Mongolia)

MNP Ministry of Nature Protection (Turkmenistan, Republic of Sakha (Yakutia) of Russia)

MNRE Ministry of Natural Resources and Ecology (Russia)

MoE Ministry of Environment (Pakistan)

MoEF Ministry of Environment & Forest (India)

MoU Memorandum of Understanding

NARC National Agriculture Research Council (Pakistan)

NBBC National Bird Banding Center (China)

NCCW National Council for Conservation of Wildlife (Pakistan)

NEACSN North East Asia Crane Site Network

NEACWG North East Asia Crane Working Group

NGO Non-governmental Organisation

NNR National Nature Reserve (China)

NNR National Nature Reserve (China)

NP National Park (Azerbaijan, Iran)

OCBC Oka Crane Breeding Centre (Russia)

OSNBR Oka State Nature Reserve Biosphere (Russia)

PA Protected area

PK Pakistan

PTT Platform Terminal Transmitter (for satellite telemetry studies)

PWP Pakistan Wetlands Programme RAS Russian Academy of Science

RRR Republic Resource Reserve (Yakutia, Russia)

RU Russian Federation

SACON Salim Ali Center for Ornithology and Natural History (India)

SB Siberian Branch of the Russian Academy of Science

SCF Siberian Crane Flyway

SCFC Siberian Crane Flyway Coordinator

SCNP State Committee on Nature Protection (Uzbekistan)

SEA Save the Environment Afghanistan

SEED Society for Economic and Environmental Development (Pakistan)

SFA State Forestry Administration (China)

SF Sterkh Foundation (Russia)

SNR State Nature Reserve (Azerbaijan, Kazakhstan, Russia)

TM Turkmenistan

UNCCD United Nations Convention to Combat Desertification in those Countries Experiencing

Serious Drought and/or Desertification, Particularly in Africa

UNEP United Nations Environment Programme

UNEP/GEF SCWP UNEP/GEF Siberian Crane Wetlands Project (Development of a Wetland Site and Flyway

Network for Conservation of the Siberian Crane and Other Migratory Waterbirds in Asia)

UNEP/GEF WCA UNEP/GEF Western & Central Asian Project

UNESCO United Nations Educational, Scientific and Cultural Organization

USFWS United States Fish and Wildlife Service

UZ Republic of Uzbekistan

UzCWG Uzbekistan Crane Working Group

WCASN Western/ Central Asian Site Network for Siberian Crane (and other waterbirds)

WI Wetlands International

WOW "Wing Over Wetlands" Project under AEWA
WP Western Population of Siberian Cranes

WR Wildlife Refuge

WWF World Wild Fund for Nature

### Part I. Memorandum of Understanding

### Memorandum of Understanding concerning Conservation Measures for the Siberian Crane

#### among

The Chairman, State Committee on Ecology and Nature Utilization Control, Azerbaijan

The Director General, State Forestry Administration, China

The Secretary, Ministry of Environment and Forests, India

The Head of the Department of Environment, Islamic Republic of Iran

The Minister of Ecology and Natural Resources, Kazakhstan

The State Secretary, Ministry of Nature and Environment, Mongolia\*

The Minister of Environment, Local Government and Rural Development, Pakistan

The Chairman, State Committee on Environmental Protection, Russian Federation\*\*

The Minister of Natural Resource Use and Environmental Protection, Turkmenistan

The Chairman, State Committee for Nature Protection, Uzbekistan

The Ambassador to Germany, Afghanistan\*\*\*

The undersigned, acting on behalf of the respective authorities named above,

Aware that the western and central populations of the Siberian Crane, Grus leucogeranus, have been reduced to the brink of extinction, and that the status of the eastern population is threatened;

Recognizing that the Siberian Crane has the longest migration route of all crane species, ranging from breeding areas in the Arctic regions of Asia to wintering grounds in southern Asia, and that the species is highly dependent on the conservation of shallow wetlands for its survival;

Concerned that hunting and loss of wetlands, particularly in southern Asia, are thought to have been responsible for the decline in the numbers of Siberian Cranes;

Conscious that concerted, co-ordinated action must be taken immediately to prevent the disappearance of the remaining populations;

**Acknowledging** their shared responsibility for the conservation and wise management of the Siberian Crane and the wetland habitats on which the species depends, and the desirability of involving all Range States of the western, central and eastern populations of the species in common initiatives;

AGREE to work closely together to improve the conservation status of the Siberian Crane throughout its breeding, migrating and wintering range.

To that end, in a spirit of mutual understanding and cooperation, they shall:

- 1. Provide strict protection for Siberian Cranes and identify and conserve the wetland habitats essential for their survival;
- 2. Subject to availability of resources, implement in their respective countries the provisions of the Conservation Plan annexed to this memorandum as a basis for conserving the western, central and eastern populations of the species. The Conservation Plan shall aim to reduce mortality, increase numbers and genetic diversity, and enhance international co-operation, and shall include inter alia: measures to protect the traditional breeding, staging and wintering areas of the Siberian Crane; provisions for the identification of key sites for breeding, migrating and wintering Siberian Cranes and the preparation of national action plans; detailed proposals for monitoring, research and practical measures for the rehabilitation of Siberian Crane populations; and proposals for the establishment of a funding mechanism for these conservation measures. Implementation of the Memorandum, including the Conservation Plan, shall be assessed at regular meetings to

<sup>\*</sup> Amendment introduced in April 2004, by consensus of all Signatory States.

<sup>\*\*</sup> From 2002, the Minister of Natural Resources, Russian Federation.

<sup>\*\*\*</sup> Signature effected in 2006

be attended by representatives of each of the Governments concerned and persons or agencies technically qualified in the conservation of Siberian Cranes. Such meetings shall be convened by the Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (1979), and shall be hosted by and organized in collaboration with one of the Range States or Co-operating Organizations.

- 3. Facilitate the expeditious exchange of scientific, technical and legal information needed to co-ordinate conservation measures; and co-operate with recognized scientists of international organizations and other Range States in order to facilitate their work conducted in relation to the Conservation Plan;
- 4. Designate a competent authority to serve as a contact point for the other Parties and communicate without delay the name and contact details of this authority (and any changes thereto) to the Secretariat of the Convention on Migratory Species;
- 5. Provide to the Secretariat of the Convention on Migratory Species, by 31 March of each year, a report on implementation of this Memorandum of Understanding in each of the respective countries. The Secretariat shall transmit to each of the Range States all of the reports received, together with an overview report which it shall compile on the basis of information at its disposal.

### **Basic principles**

- 1. This Memorandum of Understanding shall be considered an agreement under Article IV, paragraph 4, of the Convention on the Conservation of Migratory Species of Wild Animals. It supersedes the Memorandum of Understanding of the same name adopted at Kushiro in June 1993. The Memorandum shall take effect on 1 January 1999 for those two or more Range States that have signed it. It shall remain open for signature indefinitely, and shall become effective for all other signatory States on the first day of the first month following the date on which they sign. The Memorandum of Understanding shall remain in effect indefinitely subject to the right of any Party to terminate its participation by providing one year's written notice to all of the other Parties.
- 2. The Memorandum of Understanding, including the Conservation Plan, may be amended by a consensus of all of the signatory States.
- 3. The working language for all matters related to this Memorandum of Understanding shall be English.

Done at Ramsar on this thirteenth day of December, 1998.

### Amendment to the Memorandum of Understanding concerning Conservation Measures for the Siberian Crane

26 April 2004

Pursuant to paragraph 2 of the Basic Principles of the Memorandum of Understanding, and the unanimous decision of the Fourth Meeting of Siberian Crane Range States (Baraboo, Wisconsin, May 2001) to extend an invitation to the Government of Mongolia to sign the instrument, the Memorandum of Understanding is hereby amended by a consensus of all of the Signatory States to provide for the inclusion of the Minister of Nature Environment, Mongolia, among the list of authorities eligible to sign the Memorandum of Understanding.

### Amendment to the Memorandum of Understanding concerning Conservation Measures for the Siberian Crane

Almaty, Kazakhstan, 15 May 2007

Pursuant to paragraph 2 of the Basic Principles of the Memorandum of Understanding, and the unanimous decision of the Fifth Meeting of Siberian Crane Range States (Moscow, Russian Federation, April 2004) to extend an invitation to the Wetlands International and to the Cracid and Crane Breeding and Conservation Centre to sign the instrument as Co-operating Organizations, the Memorandum of Understanding is hereby amended for that purpose.

#### Co-operating Organizations:

Secretariat of the Convention on Migratory Species
International Crane Foundation
Wild Bird Society of Japan
Wetlands International
Cracid and Crane Breeding and Conservation Centre

### **Part II: Overview Report**

(Prepared by the International Crane Foundation (ICF) on behalf of the CMS Secretariat)

### 1.0. Introduction

- 1. Pursuant to paragraph 5 of the MOU, the Secretariat shall prepare an overview report compiled on the basis of information at its disposal pertaining to the Siberian Crane (*Grus leucogeranus*).
- 2. National reports by the Signatories are the primary source of information for the overview report. The Siberian Crane Flyway Coordinator provided reporting templates to all MOU signatories and co-operating organisations that signed the MOU. As of 24 May 2010, the Signatories from the following range states had submitted their national reports to the Secretariat: Afghanistan, Azerbaijan (draft), China, India, Iran, Kazakhstan, Mongolia, Pakistan, Turkmenistan, and Uzbekistan. Other information available to ICF was also used including data and project reports, conference proceedings and published materials.
- 3. The structure of this report follows the format used by other MOUs under the auspices of CMS. Section 2 addresses the conservation status of the Siberian Crane. Section 3 addresses the implementation of the Conservation Plans. In this section corresponding action points from the Conservation Plan are indicated where appropriate. This report does not repeat the information provided in the national reports. It only summarizes the main issues.

### 2.0. Conservation Status of the Siberian Crane

### **Overview**

- 4. . The Siberian Crane (Grus leucogeranus) is listed as Critically Endangered in the IUCN Red List, regional and national Red Data Books and international agreements. Of the world's 15 species of cranes, the International Crane Foundation considers the Siberian Crane at the highest risk of extinction, although its numbers slightly exceed those of the Red-crowned Crane (Grus japonensis, now at about 2,800 birds) and far exceed those of the Whooping Crane (Grus americana, at about 263 birds in the only self-sustaining wild population). G. japonensis, although seriously declining on the mainland of Asia, is increasing in Japan, and G. americana has slowly and steadily increased from a critical low of about 15 birds in the 1940s.
- 5. In 2010 the total number of the Siberian Crane is

- estimated at 3,500 birds. Approximately 99% belong to the East Asian population, which is stable or slightly increasing. The Western/Central Asian population is estimated at about 10-20 individuals.
- 6. The Siberian Crane is a monotypical species with two isolated populations. The Eastern Asian population spends the winter in China on Poyang Lake in the Lower Yangtze River Basin and breeds in the northeast Siberian tundra between the Yana and Kolyma Rivers. The Western/Central Asian population is divided into Western Asian flock and Central Asian flock. The former winters near the Caspian Sea shores of the Islamic Republic of Iran and nests in the central part of western Siberia. The Central Asian flock wintered in northern India and breeds in Western Siberia near the low reaches of the Ob River.
- 7. Because of the Siberian Crane's dependence on wide expanses of shallow wetlands, habitat loss or deterioration in China due to hydro-engineering projects and high human population pressure is the greatest threat to the East Asian population. In western and central Asia, widespread hunting is believed to have caused dramatic decline of the two flocks in recent decades although other causes of mortality should also be monitored and investigated.

### **Central Asian Flock**

#### **Numbers and Flock Trends**

- 8. In the early 1970s about 160 Siberian Cranes wintered at Keoladeo National Park, India. Although the productivity of the Central Asian flock was relatively strong over the next three decades as evidenced by numbers of juveniles, it continued to decline to just a single pair in 1996. Siberian Cranes have not been sighted in India since the winter of 2001/2002.
- 9. However, during the period from 2003 to 2008, 22 sightings of Siberian Cranes were collected from local people and reported by researchers, mostly in spring and autumn near the breeding grounds of the Central Asian flock in the Yamalo-Nenetsky Autonomous Region of Russia. During the reporting period two sightings were recorded along the Central Asian Flyway in Uzbekistan one young crane in Samarkand Region and 10 in a flock of Eurasian Cranes which were flying over Karnachbul steppe. Siberian Cranes were regularly observed in Kazakhstan in the Naurzum State Nature Reserve (SNR) a migration stopover which

is used by both Western and Central Asian flocks. Up to 20,000 Eurasian Cranes from the population that normally winters in India have been stopping further north and wintering since 1999 along the Amu-Daria River lowlands in Afghanistan, Turkmenistan, Uzbekistan and Tajikistan. There is a possibility that Siberian Cranes have also wintered in that region.

#### Potential and Actual Threats

- 10. Siberian Cranes are strictly protected on their breeding grounds in Russia and on their wintering grounds in India. However, hunting along the migration route is considered to be the primary factor responsible for the demise of this flock.
- 11. Widespread unregulated and illegal hunting in Afghanistan, Kazakhstan, Pakistan, Russia, Turkmenistan, and Uzbekistan is attributed to poor awareness among local people and poor living conditions.
- 12. The loss and degradation of wetland habitats is a growing concern resulting from recent declines in water levels due to climate change and prolonged drought. There is an ecological crisis of the Aral Sea caused by loss of coastal shallows and vast wetlands in Amudaria River Delta. Due to this factor, many suitable Siberian Crane habitats along the migration route disappeared. Habitat changes have also been attributed to specific factors such as water diversion from illegal dams at Naurzum Nature Reserve, fires in northwest Kazakhstan, and water management at Keoladeo (Ghana) National Park.
- 13. In West Siberia of Russia, the status of protected areas has been significantly impaired by the loss of protection status and funding for federal wildlife refuges under the Ministry of Agriculture. Protection is being moved under the Ministry of Natural Resources and Ecology (MNRE) jurisdiction but these refuges are still underfunded and understaffed. Creation of the provincial Synsko-Voikarskiy Nature Park as a buffer zone adjacent to Kunovat WR will improve protection of this key breeding site.

#### **Western Asian Flock**

### **Numbers and Flock Trends**

14. In Iran, the number of Siberian Cranes wintering at their traditional site (waterfowl trapping complexes near Fereydoonkenar) has declined from about 11-14 birds in 1978 to just one bird during winters 2007/2008 and 2008/2009. In winter 2009/2010 no cranes wintered in Iran, but one bird was sighted on 29 January near Gyzyl-Aghach Nature Reserve in Azerbaijan. The wetlands of the Lower Kura River in Azerbaijan were important wintering grounds for Siberian Cranes in the beginning of the 19<sup>th</sup> century. However, a ground sur-

vey of this area in the winter of 2008/2009 showed that no suitable habitats for cranes remain there.

- 15. An aerial survey of the breeding grounds in Uvat District in 2005 showed the possibility of breeding of the Western Asian flock: two birds were sighted and one of them was in breeding plumage. In addition, for the period 2005-2008 there were six sightings by local people near the breeding grounds of the Western Asian flock in Uvat District, mostly in spring and autumn.
- 16. Although it appears that there were no wintering cranes in Iran in 2009/2010, 1-2 cranes have been observed since 2007 at the Naurzum wetlands and adjacent lake systems of northwest Kazakhstan. These wetlands have been important historic resting areas for Siberian Cranes that migrate both to India and Iran.
- 17. Regular sightings of Siberian Cranes have continued to occur at the traditional migration stopover in Astrakhan State Nature Biosphere Reserve (SNBR) in the Volga Delta in Russia. The most interesting sighting was in 2007 when four Siberian Cranes were observed in November, one month after the arrival of a lone Siberian Crane at the wintering ground in Iran. There have been annual reports of 4-7 cranes during migration in Azerbaijan.
- 18. Perhaps there are undiscovered wintering areas for Siberian Cranes in the Middle East. During the winter of 2001-02, three Siberian Cranes were reported in Jordan. Azerbaijan ornithologists have determined a flyway that crosses Azerbaijan through the west of the country. The Siberian Cranes observed in Astrakhan Nature Reserve in 2007 could possibly have used this flyway, which would lead to Iraq and Jordan. Satellite transmitter (PTT) studies of Lesser White-fronted Geese have indicated they use the valley of the Tigris River in Iraq as a wintering site. These geese use the Naurzum wetlands of Kazakhstan as a staging area during migration along with Siberian Cranes. These geese use also a reservoir and adjacent wetlands in Djulfa on the border between Azerbaijan and Iran, where two Siberian Cranes were sighted in 2008. These data also support the existence of another flyway.

### **Potential and Actual Threats**

- 19. The threats in the Western Asian flock closely parallel those in the Central Asian flock. Hunting along the migration route is considered to be a significant factor responsible for the demise of this flock. After the collapse of the former-USSR, uncontrolled hunting might have resulted in losses of Siberian Cranes in Azerbaijan and in other areas along the west side of the Caspian Sea.
- 20. On the wintering grounds in Fereydoonkenar, toward the end of each season, when duck-netting be-

<sup>\*</sup>During the preparation of the publication, an information about arrival of one Siberian Crane in Fereydoonkenar on 29 Otober 2010

comes unprofitable, the trapping area is opened to hunting with guns in a massive "shoot-out". There is a potential threat that Siberian Cranes could be shot accidentally. In 2001, the Department of Environment (DoE) designated a Non-Shooting Area for all of Fereydoonkenar, with a total area of 5,427 ha. At this time, the end-of-season shoot-out became strongly forbidden. However, outside such areas, there is a possibility that cranes might be shot as waterfowl shooting is prevalent across the entire South Caspian lowlands.

21. Similar to the Central Asian flock, the loss and degradation of wetland habitats is a growing concern resulting from human population pressures, declining water levels due to climate change and prolonged drought. Habitat changes have also been attributed to specific factors such oil and gas development in the Western Asian flock breeding grounds at Konda-Alymka, fires in the Astrakhan Nature Reserve and in North Kazakhstan, and urban development encroaching on rice fields and wetlands in the South Caspian Lowlands. The Western Asian flock is also affected by the growing conflict between farmers and waterbirds due to crop damage in southern part of west Siberia.

### **Eastern Asian Population**

### **Numbers and Population Trends**

- 22. The Eastern Asian population of Siberian Cranes that breeds across a huge area of tundra in the Yakutian Region of northeastern Siberia, between the Yana and Kolyma Rivers, has a migration route that includes staging areas in the Aldan-Amga basin in southern Yakutia, through to major wetlands in Songjen Plain in northeast China, and from there south along the coast of Bohai and then overland to Poyang Lake along the middle reaches of the Yangtze River. During the UNEP/ GEF Siberian Crane Wetland Project (UNEP/GEF SCWP), annual censuses of the cranes and other waterbirds were conducted in all five provinces (Jiangxi, Anhui, Huna, Hubei, and Jiangsu) in the middle and lower reaches of the Yangtze River and covered the whole Poyang Lake basin from 2004-2008. According to the results of these censuses, the population of the Siberian Crane has fluctuated, but remained basically stable or slightly increased with about 3,500 individuals.
- 23. Researchers at the Institute of Biological Problems of the Cryolithozone (IBPC) in Yakutia have conducted monitoring at the Siberian Crane breeding grounds since the early 1990s. With support from the UNEP/GEF SCWP the monitoring of breeding grounds was organised annually during recent years. Currently the monitoring system includes a Model Area (36 x 36 km2) with the highest Siberian Crane densities within Kytalyk Republic Resource Reserve. By 2006, within the main study area in Kytalyk RRR, the individual territories of 102 crane pairs were found within an area

totaling 7,884 km2. In 2008, more than 16 new pairs of the Siberian Crane were discovered in the Model Area. In 2009, a joint expedition of IBPC and Northern Prairie Wildlife Research Center of United State Geological Servey (USGS), North Dakota, USA, investigated breeding areas to the west in the northern Khroma River basin. It reported 140 Siberian Cranes along a 520 km transect across the Ust-Yana region near the Laptev Sea (Krapu & Bysykatova, 2009). This area is currently unprotected.

- 24. Regular monitoring conducted by IBPC along flyways during the UNEP/GEF SCWP implementation was set up in three regions along the migration routes: 1) Indigirka Basin in northeastern Yakutia with short stopover in Momsky Region; 2) Okhotsky Perevoz Village in Lower Aldan River in southeast Yakutia; and 3) Kyupski, Chabda and Kuoluma-Chappanda RRRs in Middle Aldan basin in southern Yakutia which cranes use for short-term resting on the banks of the Aldan, Maya, Khandyga Rivers as well as small lakes in these river valleys. During recent years, Siberian Cranes have been stopping more often in the Amur Region near the border between Russia and China, especially during spring migration.
- 25. During the UNEP/GEF SCWP implementation, ground and aerial surveys were conducted along the flyway mainly at four staging areas (Zhalong, Momoge, Keergin and Xianghai NNRs) in the northeast China. These observations indicate that since 2004, the number of Siberian Cranes at Momoge NNR has increased to a maximum of 2,300 Siberian Cranes registered in spring 2009. Momoge is an important stopover site for migratory Siberian Cranes during migrations both in autumn and spring. One more important migratory stopover was discovered by Liaoning Environmental Protection Volunteers' Association in this province at Huanzidong Reservoir, Faku County. In 2007, up to 800 Siberian Cranes were recorded at the reservoir. Many Siberian Cranes also stop at Wolong Reservoir, also in Liaoning Province.
- 26. Wetlands in southeastern **Russia**, eastern Mongolia and northern China serve as summering areas for low numbers of non-breeding Siberian Cranes. For the period 2001-2008, 24 sightings were registered in the Amur River Basin, Torey Lakes, along the Onon, Uldza, and Khalkhin Gol Rivers, and along the upper reaches of the Tuul River.

### **Potential and Actual Threats**

27. The breeding grounds of the eastern population are relatively undisturbed. Long-term monitoring and analysis of satellite imagery for Kytalyk RRR have revealed an increase in the area of large lakes, inundating surrounding land used as breeding habitat by the Siberian Crane, which may be attributable to climate

change. As a result, some breeding habitats located near the lakes have disappeared and this process is continuing. However, taking into account that the huge tundra area includes extensive suitable breeding grounds, this factor is not considered to be an immediate threat. Oil exploration and development pose a significant threat in Yakutia as well as in Mongolia in unprotected Siberian Crane habitats, as the cranes are sensitive to the human disturbance associated with this industry, which is nearly impossible to control.

- 28. Despite the habit for Siberian Cranes to migrate across eastern Siberia through remote and relatively pristine environments, a huge hydro-electric scheme involving a cascade system of power generating dams is under construction for the headwaters of the Aldan River basin. Overhead power transmission lines will transport the electricity northwards to Yakutsk up the Aldan valley. The Yakutsk Energy company has been very open and cooperative in working with IBPC to mitigate the potential impacts of these power lines on migratory birds. They are seeking advice on adjustments of the routes of the power lines and methods of marking the lines to reduce bird collisions.
- 29. Loss of wetlands due to drought during recent years and the effects of water regulation and diversion is the main threat along the Siberian Crane flyway in China. On the other hand, Wolong and Huanzidong Reservoirs offer extensive shallow habitats due to lower water levels in the impoundments. Additional threat comes from human disturbance, including net fishing, harvesting of reeds, and other activities by local people and also outside investors.
- 30. The most important threat at Poyang Lake has been the construction of the Three Gorges Dam on the Yangtze River as well as large numbers of dams on the Gan and other rivers that feed Poyang Lake from the south. These structures almost certainly are affecting the water levels in Poyang Lake basin during the wintering period for the Siberian Crane and hundred of thousands of other waterbirds. On-going development in Jiangxi is likely further to affect water availability and thus water levels and timing of water fluctuations that determine the extent and distribution of shallows and mudflats in the Poyang Basin. In addition, a proposal by the Jiangxi provincial government to create a water control structure at the outlet of Poyang Lake to stabilize water levels to enable navigation is currently under review. This project could have highly significant impacts on the Siberian Crane if the crane's ecological requirements are not fully taken into account. Comprehensive research at Poyang Lake on the relationships among crane distribution, water depth, turbidity and the production of plants on which Siberian Cranes feed in winter is helping to elucidate potential effects of these developments, and its re-

sults have been used to inform decision-makers considering development proposals at Poyang.

### Captive population and reintroduction

- 31. A captive population of Siberian Cranes has been created in order to maintain a genetic bank for the species and to restore wild populations, especially in West Asia. According to the last issue of the Siberian Crane Studbook (2010) 393 captive Siberian Cranes (166 males, 177 females, and 52 unknown) are kept in 55 centres of 14 countries as of 31 December 2009. For the period 2007-2009, 81 Siberian Cranes were reared in 8 captive facilities in 7 countries. There are four main breeding centers for the Siberian Crane: Oka Crane Breeding Center (Russia), International Crane Foundation (USA), Cracid & Crane Breeding and Conservation Center (Belgium) and Beijing Zoo (China).
- 32. The recovery of the Western/Central Asian population can only be achieved by carefully introducing captive-reared cranes into the flyway. Effective protection of the cranes as individuals and the conservation of key wetlands throughout their migration routes are fundamental before efforts can be initiated to restore the population through releases of captive-reared birds. In total for the period from 1992 to 2009, 112 Siberian Cranes from OCBC and 14 from ICF were released into the wild on the breeding and wintering grounds and at migration stopovers. In addition, 39 eggs produced in OCBC were placed into the Eurasian Crane nests in Kunovat Wildlife Refuge, north of West Siberia, for crossfostering. There were few reliable reports about sightings of released Siberian Cranes. Two injured chicks were found in the year of release in south Ural Region (one in Bashkiria and the other - in Chelyabinsk Region) and were returned to OCBC. One banded bird was sighted in Omutinskiy District of Tyumen Region. One Siberian Crane released in winter 2007/2008 at Fereydoonkenar in Iran and marked with green and red plastic color was sighted in the following spring 2008 in Khanty-Mansiyskiy Autonomous Region. It is possible that some of the birds sighted recently in Kazakhstan, Russia, and Azerbaijan are surviving released birds.

### 3.0 Overview of MOU Implementation

The following sections summarize information received as of 3 June 2010 on implementation progress since the Sixth Meeting of the range states in 15-19 May 2007.

### **Objective 1. Reduce Mortality**

## 1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

33. Among direct threats in **Afghanistan**, **Azerbaijan**, **Pakistan and Uzbekistan** poaching is a main

threat for cranes during migration seasons; in Kazakhstan, Turkmenistan, and Russia accidental shooting during hunting season has been reported and is considered a potential threat. In Russia, an injured Siberian Crane was found in May 2009 near settlement Barama, Megino-Kangalassky Ulus of Yakutia. It was sent to Yakutsk Zoo, where it soon died. In India, Mongolia and China poaching is not a threat. Poisoning is a big threat in Afghanistan from hunters, as well as from agricultural chemicals, and in India in unprotected wetlands. Power lines can be potential threats in Afghanistan where rural area electrification activities are planned in the future. In Mongolia and India the number of power lines is increasing and there are some reports of Demoiselle Crane mortality in both countries, along with Sarus Cranes in **India**. Water diversion and drainage are the major threats to Siberian Crane habitats in China. In Russia, water level changes in the breeding grounds in Western Siberia occur infrequently and have no impact on Siberian Crane breeding grounds. In Yakutia, changes in water level are connected with global warming, which has caused an increase in lake size in the Siberian Crane breeding grounds and flooding of coastal territories. However, due to the fact that Siberian Cranes only use an insignificant percentage of optimum nesting biotopes, this factor is not considered to be significant. In Russia and Kazakhstan some disturbance of Siberian Cranes can occur during spring and autumn hunting at migration stopovers. In Russia, a serious disturbance factor is planned oil- and gas production and the development of corresponding infrastructure in the Siberian Crane nesting areas. Besides, disturbance from mineral extraction (in particular, oil and gas) leads to degradation (including pollution) of habitats for which restoration can only occur extremely slowly. Agricultural development projects, construction of irrigation dams, and conversion of wetlands and water basins to agricultural land are other threats to Siberian and other cranes in almost all range states.

### 1.2. Strengthen and improve enforcement of legislation for cranes

34. In **Afghanistan**, based on a presidential decree issued for five years, hunting of all wildlife is banned. Based on Environmental Law, the National Environmental Protection Agency (NEPA) approved and announced the second Red List of 48 species, including the Siberian Crane. In **China**, the National Wildlife Law is the highest powerful instrument for any illegal wildlife case. With regard to bilateral/multilateral agreements, the related provinces have included the agreements' lists into the protection list at the provincial level. The Siberian Crane was listed as a Grade I of national protection wildlife, which indicates the highest legal protection in the country. **India** has placed the Siberian Crane in Schedule 1 of the Wildlife (Pro-

tection) Act, 1972 by which capture, hunting or any other disturbance to the species and its protected environment are not permitted. India has signed an Indo-Russia bilateral agreement for protecting migratory waterfowl between the two countries (1984). The Wildlife (Protection) Act, 1972 in India includes the provision for setting up of conservation reserves and community reserves wherein a participatory mode of resource use and management is feasible. In Iran the Siberian crane is on the top list of protected species, with the highest fine for illegal shooting (according to the Environmental Law Book). Also regulations of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are applied for all species in the CITES appendixes. Kazakhstan participates in the Convention on Biodiversity, CMS, Ramsar Convention and CITES. The penalty for illegal shooting of a Siberian Crane is set at about 6.5 thousand US dollars. New amendments are being prepared into the law on protected areas; in particular it is proposed to include Important Bird Areas (IBAs) into the list of protected areas. In Pakistan, according to the «North West Frontier Province Rules 1964 (Possession, Hunting, Capturing and Sale of Crane)», the Siberian Crane has been declared protected and its hunting, killing and capturing has been completely banned. Violation of this law is punishable with imprisonment for a term which can extend to two years, or a fine which can extend to one thousand rupees, or both. In Russia, during the reporting period, a Governmental Order of the Russian Federation «On Measures to Maintain Performance of Obligations of the Russian Federation Following from the CITES», concerning species of wild fauna and flora under the threat of extinction, was issued in 2008. Another document «Methodology of Assessment of the Harm Caused to Objects of Fauna Listed in the Red Data Book of the Russian Federation as well as to Other Objects of Fauna which are not Objects of Hunting and Fishery, and Their Habitats» was ratified by Ministry of Natural Resources and Ecology (MNRE) of the Russian Federation in 2008. According to this document the penalty for poaching a Siberian Crane is \$5,200. In **Turkmenistan**, before the start of the annual hunting season, the Ministry of Nature Protection (MNP) issues an order «About Opening of a Hunting Season» with an attached List of Species imposing a hunting ban where the Siberian Crane is included. In Uzbekistan all species of animals included in the national Red Book and International Union for Conservation of Nature (IUCN) Red List of Threatened Species are protected by laws (Law on Nature Protection, Law on Protection of Fauna, governmental regulation No. 508 «Position on procedure of using, import and export of objects of fauna outside of Republic of Uzbekistan state boundary and management of hunting and fishing farms» and Hunting Rules). Also Uzbekistan is responsible for the protection of the Siberian Crane, other cranes and their habitats due to signed international conventions and agreements: CMS, Siberian Crane MOU, Ramsar Convention, Convention of Biodiversity, CITES, Convention of Combat Desertification (CCD), and Afro-Eurasian Waterbirds Agreement (AEWA).

### Main challenges

35. Several range states (**Afghanistan**, **Kazakhstan**, **Pakistan and Russia**) still have gaps in implementation of existing laws. In **China** there are no legal measures to punish illegal accidents for some species that share the same habitats as endangered species, such as Siberian Cranes, and therefore there is a need to revise the China National Wildlife Law. In **India** wetlands are in the Common Property Resource regime, which is often a strict 'no take' approach to protection of wetlands. In **Russia**, the actual challenge is prohibition of spring hunting for waterfowll.

### **Objective II. Monitoring and Research**

### 2.1. Monitor and study the Siberian Crane and its habitat

36. Regular monitoring is conducted by most **range dtates** on breeding, migratory, or wintering sites mostly through ground surveys. Aerial surveys were conducted on breeding grounds in West Siberia and Yakutia and on wintering grounds in **China.** 

#### Monitoring at breeding grounds

37. In Russia, in 2008 and 2009 limited financing has allowed surveying only in known areas of the Central and Western Asian flocks in West Siberia, where Siberian Cranes were registered before, but not other potential breeding grounds. In 2008, air surveys of the breeding grounds of the Western Asian flock in Konda and Alymka Rivers Basin were conducted by groups of 3-4 persons using a helicopter and a light aircraft. Siberian Cranes were not recorded, though inquiry of local people provided evidence of regular Siberian Crane records in this area. In 2008 and 2009, during air survey in Kunovat River Basin it was not possible to cover all breeding area because limited fly duration. At the known breeding sites Siberian Cranes were not sighted, only territorial pairs of Eurasian Cranes with chicks have been registered. However experts regularly receive information from local populations about Siberian Crane sightings in *West Siberia* through inquiry or interview. During the reporting period, 6 sightings of 1-7 birds were registered in the breeding grounds of the Western and Central Asian flocks. In August 2008, an air survey was conducted in Yakutia in the course of Siberian Crane banding. In 2007-2009 ground surveys were conducted by the staff of Institute of Biological Problems of the Cryolithozone (IBPC) in the breeding areas of eastern population in the model territory in Kytalyk Republic Resource Reserve (RRR) where the highest

density of nesting Siberian Cranes is registered. All received data on Siberian Crane distribution were entered into a GIS database. During July-August 2009, ground surveys were also carried out in Ust-Yansky Region near Laptev Sea coast, using a boat. Along survey's route of 520 km, 140 Siberian Cranes were counted, mainly in pairs. Regular ground surveys of the whole breeding territory were not conducted due to its extensiveness and inaccessibility as well as financing problems.

#### Monitoring along flyways

38. AAlong the Western Flyway in **Azerbaijan** ground surveys were conducted in 2007 and 2009, and all sites where Siberian Cranes were registered were checked. Every year 1-5 Siberian Cranes were sighted in Gyzyl-Aghach State Nature Reserve (SNR) according to information from the SNR ranger. In Shirvan National Park (NP) there have been no sightings since 2003. The last sighting of a Siberian Crane was in an agricultural area near Gyzyl-Aghach SNR in January 2010, according to personal communication of Sonia Rosenfeld.

39. In **Kazakhstan** annual monitoring of the known stopover sites of Siberian Cranes was conducted in Kostanay Region during spring and autumn migration. In addition, regular inspections (2-3 times/ week) of stop-over places of the Siberian Crane were conducted in Naurzum Lake System, as well as regular inquiries of hunters, fishermen, shepherds and local people through questionnaires. On Naurzum Lake System from 2007-2009 E. Bragin observed one Siberian Crane in September 2007. Respondents to questionnaires reported the following sightings: on 4-6 May 2007 - one bird in a flock of Eurasian Cranes on Mokhovoe Lake in Uzunkol District; on 15-19 April 2008, one pair of Siberian Cranes with a group of Eurasian Cranes were observed on the fields to the north of Chily Lake in Aulyekol District. There is doubtful information about sighting of two pairs of Siberian Cranes in near Baytuma Lake in April 2007. Additionally there is information about six Siberian Cranes in a flock of Eurasian Cranes on 7 April 2010 by a bus driver and hunter who was on the bus. The questionnaire in Kostanay Region was conducted in 2006 and 2007. As a result, important new stop-over site for Siberian Cranes were identified near Chily Lake in Aulyekol District (sightings in 2000, 2002 and 2008). A correspondent network was created from people, like gamekeepers, hunters, fishermen and others for collecting information as wide as possible.

40. Along the Central Flyway there were no Siberian Crane sightings in **Afghanistan**, **India**, **Pakistan and Turkmenistan** during the reporting period. In **Pakistan** long-term monitoring is conducted at the provincial level. In **Turkmenistan** inquiry of local people is conducted annually during monitoring of wintering Eurasian Cranes, with focus on possible Siberian Crane sighting during monitoring of migrating Eurasian Cranes.

41. In **Uzbekistan**, long-term monitoring is conducted through the state program, "Cadastre of Fauna of Republic Uzbekistan" by the Institute of Zoology of Academy of Science (AS) of the Republic of Uzbekistan and Uzbek Crane Working Group (UzCWG). This group has organised information campaign among ornithologists, rangers and students of Samarkand, Tashkent, Termez and Bukhara Universities, and schoolchildren in Tashkent and Samarkand Cities since 2000. Respondents have reported new information immediately. Since 2007, two sightings of the Siberian Crane were registered in the country: on 7 April 2007, one young Siberian Crane was observed in a shallow area of the Kattakurgan Reservoir (Samarkand Province, ornithologists observation, Belyalova, Fundukchiev, 2007); and on 10-12 October 2007, ten Siberian Cranes were observed in a flying flock of 150 Eurasian Cranes near Tudakul Lake (Bukhara Region), according to information from rangers. In 2007 questionnaires were distributed among rangers in the southern part of Uzbekistan and Fergana valley. The aim was to find new migration stopovers and wintering grounds of Siberian and Eurasian Cranes in Uzbekistan. This activity was conducted by the UzCWG and State Biological Control (Gosbiocontrol) of State Committee on Nature Protection (SCNP). As result a new wintering place of Eurasian Crane near Talimarjan Reservoirs in Kashkadarya Region was found.

42. Along the Eastern Flyway in China long-term monitoring has been conducted through participation in the North East Asia Crane Site Network (NEASN) and UNEP/GEF Siberian Crane Wetlands Project (UNEP/GEF SCWP). The count was conducted through ground and air surveys. During the implementation period Momoge National Nature Reserve (NNR) became a key staging area for the Siberian Crane, with a maximum of 3,000 birds in spring 2009. In spring and autumn migration periods of 2007, 2008 and 2009, 18 agencies with over 70 people were involved in the monitoring of Siberian Cranes along its flyway in China, which covered from 244-302 monitoring sites at 51-60 wetlands. During the flyway monitoring, a questionnaire was distributed to local people. Some staging sites such as Huanzidong in Liaoning Province, Xianghai Lake of Heilongjiang Province, and the wetlands near Baicheng City of Jilin Province were reported by local people for the first time. In Mongolia and in Dauria, Russia, in summer from 1 to 10 Siberian Cranes are observed in most years. During the reporting period two sightings of the Siberian Crane were made in Mongolia in 2008 and two sighting in Dauria, Russia, in 2007. Since 2007, through surveys of avian influenza, monitoring of Siberian Cranes was also implemented in Yakutia in Russia. Protected area administration staff collect data and send it to the Biological Institute of the Novosibirsk Scientific Center.

### Monitoring at wintering grounds

43. In India the Bombay Nature History Society (BNHS),

along with the Keoladeo Ghana National Park (KGNP), registered the Siberian Crane population until 2001. Currently the KGNP management is conducting long term monitoring of wetland birds. Even though the Siberian Cranes does not winter at KGNP, the staff still continues the ground survey of the KGNP and the surrounding satellite wetlands to monitor the population trend of other migratory waterfowl. ICF in association with the Wildlife Protection Society of India is continuing to conduct ground surveys of cranes and other wetland birds in the Etawah-Mainpuri region, which has also been identified as a possible Siberian Crane site. Questionnaires of local people were taken up by NGOs and university research organisations. University researchers, bird watching societies, NGOs and wetland protected area management continued to conduct studies for recording bird migration details.

44. In **Iran** monitoring is mostly based on ground surveys, using binoculars and telescopes. Two sites (Fereydoonkenar & Bujagh NP) are also covered by the annual mid-winter censuses. During the implementation period only one crane spent the winters of 2007/2008 and 2008/2009 at FDK. There were no confirmed Siberian Crane records in Iran for the 2009/2010 wintering season. However, confirmed sightings of a single bird were reported in October 2010.

45. In **China**, wintering ground surveys were conducted in 2007, 2008 and 2009 in the middle and lower reaches of the Yangtze River with involvement of six agencies with over 100 people. In February 2009 an aerial survey of wintering waterbirds including Siberian Cranes in the Poyang Lake Basin was conducted. On the wintering grounds in Poyang Lake the count of Siberian Cranes ranged from 3,100 to 4,006 individuals during the past seven years.

### Monitoring through colour banding and satellite tracking

46. In **Russia**, in **Yakutia** in 2008, two wild Siberian Crane juveniles were marked with satellite transmitters (PTTs) and white plastic bands with black figures. One of the cranes was tracked during a full year: during autumn and spring migrations and on the wintering and summering grounds. Valuable information about time and duration of autumn and spring migration, migratory stopovers, and details of winter and summer stays was received. The satellite tracking data have shown that one young Siberian Crane finished spring migration around the breeding grounds of its parents. Another juvenile crane was tracked until its arrival on the wintering grounds in Poyang Lake. Preliminary information was published in electronic Siberian Crane Flyway News (#10, 2008). However PTT data need to be analysed and published in the future. In **China** some attempts to capture Siberian Cranes for marking with PTTs were made in winter 2007/2008 and 2008/2009 in the Poyang Lake Basin, but were unsuccessful.

#### **Ecological studies**

47. In China an ecological study on the relationship between aquatic plants, water levels and waterbirds has been conducted in Poyang Lake from 1999 to the present time. The report is available through the International Crane Foundation. In **Mongolia** priorities for research include a survey of the migration route of Siberian Cranes related to climate change (in Mongolia several wetlands and small lakes are dry) and habitat area and nest monitoring of other crane species. In **Kazakhstan** analysis was conducted on all reports and observations of Siberian Cranes on migration in the country: phenology, variety of biotopes in spring and in autumn, ecological conditions on stop-over lakes in different phases of the hydrological cycle, and behavior of cranes. Result of analyses was published in Crane Working Group of Eurasia (CWGE) proceedings "Cranes of Eurasia - 3" (2008). Research in **Uzbekistan** includes surveys along the Siberian Crane Central Flyway and their stopovers, using observations of Eurasian Crane staging areas as well as ecological conditions for Siberian Crane wintering in Ecological Center of "Jeiran" (ECJ) under the framework of the reintroduction program.

### Main challenges

48. Main challenges are lack of funds to conduct survey and establish network to seek alternate wintering sites. In **Kazakhstan**, it is very difficult to check on all reports about Siberian Cranes for the following reasons: reports come usually a few days after each sighting and it is no longer possible to visit the site to confirm species identification; it is not always feasible to drive to sighting location, especially taking into account the large distances and absence of roads. In **Russia**, due to limited financing the survey of potential breeding grounds of the Siberian Crane in West Siberia and Yakutia is impossible.

49. There are also problems with the accuracy and frequency of PTT signals in **China**. Consequently, there is a need to develop alternative methods to track Siberian Cranes wintering at Poyang Lake. One tracking method being discussed includes the deployment of UHF listening stations around the Poyang Lake basin and deploying transmitters that include a GPS unit to record the location of the birds.

### 2.2. Maintain and extend a regional database on the Siberian Crane and its habitats

50. In the framework of the *UNEP/GEF SCWP* implementation in Kazakhstan an international seminar on creation of a crane database took place in 2004 in Kostanay City. During subsequent years information was provided on main stop-over sites of Siberian Crane, including complete description of lakes, their ecological state, features of the hydrological regime, threats, existing protection, lists of species of birds,

and date of sightings of Siberian Cranes. A series of GIS maps were prepared for four projects sites, results of spring and autumn counts of migratory birds, and monitoring of current status of stop-over sites. Under the UNEP/GEF SCWP the China National Coordination Unit in late 2009 compiled and submitted complete waterbird data including Siberian Cranes from 2003 to the present to the Regional Coordination Unit (ICF). Now the China National Bird Banding Center (NBBC) keeps these data and the GIS management systems for Poyang Lake Basin and Songnen Plain. In India the Programme on IBA implemented by the BNHS, as well as the Programme on status of birds in India implemented by Salim Ali Center for Ornithology and Natural History (SACON), are the two programmes in which attempts have been made to create a database. In Iran, under UNEP/GEF SCWP, data were contributed to the database by sending basic information to the database manager, and also by sending regular information to the SCFC (mainly on population, date of arrival and departure, etc.). All range states of western and central flyways participated in preparation of the "Atlas for the Siberian Crane and Other Waterbirds in Western/Central Asia." The atlas was prepared on the basis of existing information sheets and the UNEP/GEF SCWP database.

### 2.3. Promote or take into account avian influenza surveillance at important crane sites

51. In **Azerbaijan** regular waterbirds monitoring along the western coast of the Caspian Sea was conducted by the Veterinary Service of Azerbaijan. In China in 2007, 350 National Wildlife-derived Infectious Disease Surveillance Stations were established under the State Forestry Administration (SFA), which covered over 90% of the crane sites in China. The main responsibility of the stations is to monitor avian influenza in wild birds and poultry. At present, 250 stations have received investments from the central finance in 2008 and 2009, which include equipment and operation fees. An additional 100 stations will be funded this year. Over 1,000 monitoring stations for wildlife disease have been established, and more than 1,700 stations have been planned and reported for approval from the state council. In India the Ministry of Environment and Forest (MoEF), in collaboration with the Ministry of Health, has set up an avian influenza surveillance programme, which includes: setting up a Central Laboratory in Bhopal, training veterinarians to collect impacted waterbirds for testing, and setting up of a process through which wetland protected area managers should report suspected avian influenza to the provincial wildlife and health departments as well as MoEF and Ministry of Health. In Iran, the two UNEP/GEF SCWP project sites were highlighted as avian influenza hotspots, and a sampling was carried out at FDK in 2005. An avian influenza brochure was also developed and distributed to the sites. In Mongolia, since 2007 a research team

from the Biological Institute has conducted surveys for avian influenza in 70 lakes in the western, eastern and central parts of Mongolia between May and September. From 2007 to 2009, the researchers conducted eight training sessions on monitoring of avian influenza for local people who work in the environmental, veterinary and government sectors of 12 provinces. In Kazakhstan within the framework of the national Program of monitoring of avian influenza under Forest and Hunting Committee (FHC), Naurzum SNR staff as well of Inspector Service of Kostanay Region had provided regular monitoring of mortality of waterfowl in lake systems of Kulykol-Taldykol, Tyuntyugur-Koybagar, and Zharsor-Urkash. Collected samples were passed to veterinarian for investigation. In 2008, the Institute of Virology took non-invasive tests (swabs) from chicks on some lakes of Kostanay Region, including in the buffer zone of Naurzum SNR. In Pakistan, the Pakistan Wetlands Programme (PWP), in collaboration with the National Agriculture Research Council Islamabad, has launched a sample collection for surveillance of avian influenza in migratory birds and their habitats. In **Russia**, the problem of avian influenza is within the competence of the Ministry of Agriculture which did not conducted research at areas important for the Siberian Crane. In **Turkmenistan** the regional hunting and fishing societies occasionally conducted controlled shooting of waterfowl on migration routes. Samples were sent to the Veterinarian Service for analyses. In Uzbekistan, ornithologists from the Institute of Zoology of the Uzbek AS assisted the Republic Veterinary Laboratory in the process of sample collection for surveillance of avian influenza H5N1 in migratory waterbirds at network sites and other important crane sites (places of concentration). On a regional level, Guidelines for highly pathogenic avian influenza risk reduction at wetland protected areas were produced under UNEP/GEF SCWP and included in Ramsar Resolution X.21 in 2008.

### 2.4. Evaluate efficacy and application of research/monitoring

52. In **China** the results and related data from the ecological study of the relationship between waterbirds, water level and aquatic plants, and the wintering waterbirds monitoring in the Poyang Lake Basin, are being reviewed by the Chinese scientists. The final evaluation report will be submitted to the Jiangxi People's Government, which will focus on the impacts of dam construction on the wetland ecosystem of Poyang Lake. In **Mongolia**, as a positive result of public awareness activities, the local community recognizes that the Siberian Crane is an important resident of their country. Local people's perspectives and their support of nature and biodiversity conservation have changed. This situation is expanding to several sites where Siberian Cranes have been observed.

### Objective III. Increase number and genetic diversity

### 3.1. Promote recovery of the Siberian Crane populations

#### Captive breeding

53. To date there are several centers where Siberian Cranes breed in captivity. Information is available in the fifth edition of the International Siberian Crane Studbook prepared by T. Kashentseva (Oka Crane Breeding Center (OCBC) and R. Belterman, Cracid & Crane Breeding and Conservation Center (CBCC) in December 2009. The main captive centers are the OCBC, ICF, CBCC and Beijing Zoo in China. These four centers have strong Siberian Crane captive populations and can produce chicks for release programmes. For the reporting period only OCBC produced eggs and chicks the release into the wild.

54. In Afghanistan Kabul Zoo prepared facilities to keep Siberian Cranes. Before they worked with Siberian Cranes, it was decided to check captive conditions using Eurasian and Demoiselle Cranes. It was shown that the Kabul Zoo staff needs additional training to keep Siberian Cranes. In China the SFA contracted with the China Association of Zoological Gardens to establish a genealogy of Siberian Cranes at zoos in the country, and all individuals had been implanted with a microchip for identification. In **Pakistan** a Crane Education Center with crane captive facilities was constructed in Kurram Valley in Lakki in Khyber Pukhtunkhwa Province. In Russia the programme, "Cranes of Eurasia," was organised under the Eurasian Association of Zoos and Aguaria (ERAZA) with the goal to increase the number of captive centers for Siberian Cranes mostly for education purposes. Under this programme OCBC trains the staff of other zoos, and later cranes can be transferred to these zoos. In **Uzbekistan** in 2009 two Siberian Cranes were brought from OCBC to the Tashkent Zoo. The Siberian Cranes on display help to attract the attention of visitors to the problems of protecting critically endangered species.

### Main challenges

55. In **Russia**, reconstruction of specialized facilities for the isolated rearing of Siberian Crane chicks in OCBC is required. It is high priority for rearing Siberian Crane for the release into the wild. CBCC has provided some financial assistance.

#### Reintroduction

56. In **Russia**, the Flight of Hope Project on the Siberian Crane reintroduction through teaching captivereared chicks about migration routes by leading them with ultralight aircraft is being implemented in cooperation of All-Russian Research Institute on Nature Protection (ARRINP), OSNBR and Moscow Zoo with support of Sterkh Foundation and Oil Company "ITERA".

- 57. In **Iran** in winter 2007/2008 one captive-bred Siberian Crane received from OCBC, was released. It was banded with color bands. This bird was sighted in the Khanty-Mansisk Region the following spring. One more captive-bred Siberian Crane from OCBC was released in winter 2008/2009. This bird was marked with a PTT, but the signal stopped just after the start of the spring migration in the mouth of Sofirud River, close to Budzhah NP, a UNEP/GEF SCWP site.
- 58. In Russia, in 2009, two parent-reared Siberian Cranes were released in Kunovat WR at the Siberian Crane breeding grounds. They were marked with color bands and microchips. In 2010 two birds, which are considered likely to be these released birds arrived in an area not far from Khanty-Mansiysk. The cranes were not afraid of people and allowed them to approach to take pictures. They had no bands, probably because they spent the winter with people and their bands were removed. Unfortunately in one week both birds disappeared under suspicious circumstances. In 2009, six captive-bred Siberian Cranes (three chicks and three one-year olds) were released in Astrakhan SNR. Two transmitters were fitted on a chick and a one-year old Siberian Crane. These birds were tracked from 18 September 2009 to 16 November 2009, during their stay in the nature reserve. Soon after the start of migration when birds were in southern Kalmykia near the border with Dagestan, signals ceased to arrive. The reasons are not known.
- 59. An acceptable place for a reintroduction program for the Siberian Crane was determined in the territory of the ECJ near Bukhara located on the central flyway of Eurasian and Siberian Cranes in Uzbekistan. In October 2008, Dr. A. Sorokin and Dr. Yu. Markin visited ECJ with the aim to observe conditions for Siberian Crane reintroduction. In November 2009, two Siberian Cranes from the OCBC were brought to ECJ, where monitoring of their adaptation for winter conditions was started and is continuing to the present time. The first results testify to the basic possibility of using local wetlands for Siberian Crane wintering grounds. However, in view of the possibility of cold winters in that region (for the first time in recorded history of meteorological observations, in winter 2007/2008, within a month the extensive territory was covered by snow and temperatures dropped to -300C) creation of a new wintering area for Siberian Cranes in more southern areas of Uzbekistan where 20,000 Eurasian Cranes spent the winter is being considered. Reintroduction programs were implemented with finance support from oil and gas companies (ITERA and Petroresurs).

### Main challenges

60. Lack of post-release data on birds and poor monitoring of released birds due to lack of financing for PTTs and radio tracking. In **Russia**, due to required

reconstruction of OCBC facilities for isolated rearing of the Siberian Crane chicks, the Flight of Hope Project was delayed.

61. Migration route long, cannot fly birds behind extralight aircraft as ICF has done with Whooping Cranes. Instead birds are transported by vehicle or boat and flown locally.

### 3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes

- 62. In Azerbaijan during the implementation period three migration routes of the Eurasian Crane and other waterbirds were identified, which go to Iran along the Caspian Sea and through the center of the republic, and to Iraq and Jordan through the western part of Azerbaijan. There is a possibility that the Siberian Cranes also can use the migration route leading to Iraq, which can be confirmed by sighting of Siberian Cranes in Samukh District in the west of the country. In **Kazakhstan** new sites of migration concentrations of Eurasian Cranes were found in Kostanai Region near Mamyrkol Lake in Kamysty District and on Mohovoe Lake in Uzunkol District as a result of the questionnaire. The large migration stop-over site of Eurasian Cranes was discovered on Zharsor Lake in Kamystynskiy District in 1998 and 1999, and after that regular monitoring is conducted there. In **Iran**, Siberian and Eurasian Cranes do not share the same migration route, but a number of migration stop-over sites and wintering grounds of the Eurasian Crane were found. Such areas are mainly grassland and cultivated areas and are not habitats for the Siberian Crane, which is a more aquatic dependent bird.
- 63. After discovering the Eurasian Crane wintering grounds in the Amudaria River Valley in 1999, regular monitoring is conducted there by the NGO "Save the Environment of Afghanistan" in Afghanistan, the MNP in Turkmenistan, and the Institute of Zoology and UzCWG in **Uzbekistan**. During the reporting period special observations were conducted by these three range states in January-February 2008 due to an extremely cold winter. All water bodies were frozen in the beginning of January, and ice covered the wetlands during January and February. Snow cover disappeared only in the middle of February. Only 200 Eurasian Cranes were counted on the wintering grounds in that winter in comparison with 6-20 thousand in previous years. Several thousands of cranes died because of lack of food, most of them were weak and were killed by predators, dogs and people.
- 64. In **Turkmenistan** regular monitoring of wintering Eurasian Cranes was conducted in Durnaly, however special research on the possibility of using this site by Siberian Cranes for reintroduction purposes was not conducted. In Uzbekistan new Eurasian Crane migra-

tion stopovers during autumn migration were discovered through ground surveys. One of the new sites is located near Tuzkan Lake in Djizak Province, which is a part of the Aydar-Arnasay Lake System. Siberian Cranes were sighted there in 2002. Ground surveys during few years using car and telescope showed that intensive spring migration of Eurasian Cranes go through the Surkhandarya Region. At this territory many flying and resting migrating flocks of hundreds and sometimes near thousand cranes were counted. The Siberian Crane was recorded in this territory in 1975.

65. In October 2008, a ground survey of Siberian and Eurasian Cranes' migration routes determined by satellite tracking of Siberian and Eurasian Cranes was carried out using car. The surveyed route of 11,000 km started in Belozersky Wildlife Refuge (WR), Russia, went through Kazakhstan and finished in ECJ in Uz**bekistan**. The perspective ultralight migration route for younger Siberian Cranes during Flight of Hope Project is planned with taking into account assessment of main ecological parameters, suitability for ultralight landings and take off and the suitability of roads for land support teams. In October 2009, Dr. A. Sorokin, with assistance of a specialist from Uzbekistan, observed another flyway of the Siberian Crane along the Amudarya River. That study also took into account the possibility for ultralight take off and landing, passage of cars and suitability of places of stopovers for Siberian Cranes during migration. In 2009, a ground survey part of Kyzyl Kum desert located in Uzbekistan and adjacent territories were carried out. Total length of the route was about 2,000 km. The received information was saved with GPS technologies.

## Objective IV: Protect and manage habitats of importance for the Siberian Crane

### 4.1. Protect and manage habitats of importance for the Siberian Crane

66. Improving protection of protected areas has primarily been conducted through the implementation of *the UNEP/GEF SCWP* in **China, Iran, Kazakhstan** and **Russia**. In **Kazakhstan** four UNEP/GEF SCWP sites were included in the Ramsar List and five in the WCASN. In **Mongolia** work to expand and upgrade the conservation status of some protected areas through establishing a joint international protected area (Onon Balj NP in Mongolia and Sokhondinskiy SNR in Russia) is being implemented. The current status of the local protected area of Gun Galuutai on the Kherle River was increased to state level.

67. **Range states** undertook some measures for protection of important habitats of the Siberian Crane outside established protected areas. In **Chin**a in 2008, Huanzidong Reservoir, a new identified important migration stopover for the Siberian Crane, was estab-

lished as a part of Liaoning Provincial Nature Reserves. Jiangxi Forestry Department authorized the Poyang Lake National Nature Reserve to establish protection stations around the whole Poyang Lake. To date, an additional seven stations were established to enhance inadequately protected areas for the Siberian Crane. In India in unprotected wetlands in the state of Uttar Pradesh, NGOs and surrounding village communities have been brought into an organised sector and capacity building training programmes arranged for enlisting their support for the protection of the unprotected wetland sites that are important for other crane species. The wetlands identified as IBAs have been marked with signage for assisting protection of these wetlands through community participation for inclusion to the international IBA network. In Mongolia around 70 areas were identified as IBAs, and most of these areas are Siberian Crane habitats. In Russia, for Kunovat, a system of provincial natural protected areas around Kunovat Federal Wildlife Refuge has been formed. Sobty-Yugansky (217,030 ha), Poluisky (48,260 ha) and Verkne-Poluisky (92,040 ha) regional-level Wildlife Refuges have been established in adjacent areas. The College of Yamal-Nenets Autonomous Area Administration approved the creation of Synsko-Voikarsky Nature Park including "Zhuravliny" Park (317,100 ha) as a buffer zone of Kunovat Wildlife Refuge on 9 December 2008. Kazakhstan, Turkmenistan and Uzbekistan participated in the Programme IBA/CA/Bird-Life International. In Kazakhstan all main migration stopovers of the Siberian Crane were included in the list of IBAs. The users of all these areas, in accordance with the legislation of Kazakhstan, are obligated to meet appointment of the state on their maintenance. The control of user's activities is the responsibility of the territorial regional agencies of FHC. In Turkmenistan, 50 sites were designated as IBAs, including two WCASN designated (Durnaly) and proposed (Tallymerjen & Kelif-Zeyit) sites. According to the Action Plan on Conservation and Sustainable Using of Biodiversity of Turkmenistan (2002), it is planned to establish an international crane sanctuary in Durnaly, which is a part of Meana-Chaacha WR. It is also planned to expand the borders of Tallymerjen & Kelif-Zeyit IBA proposed for inclusion in the WCASN. In Uzbekistan the territory "Amudarya floodlands near Termez" was designated an IBA. UzCWG prepared a proposal for designating protected area status to this IBA. Besides wetlands, where the Siberian Crane was recorded during recent years, were designated as IBAs (Tudakul and Kuymazar Reservoirs, the northern shore of Aydarkul Lake, and Kattakurgan Reservoir). Also all protected areas of the republic are under the control of the SCNP. Gosbiocontrol has prepared nomination documents for including Tudakul Reservoir (one Siberian Crane was sighted not far from Tudakul in 2007) in the Ramsar List.

68. Securing protection through collaboration with

local communities is a priority activity. In countries involved in the UNEP/GEF SCWP implementation (China, Iran, Kazakhstan, and Russia) stakeholder committees were established at all project sites to improve management and protection of wetlands and waterbirds, especially for Siberian Cranes and their habitats. In Iran a Non-Shooting Area at FDK has been established in collaboration with duck trappers and the Department of Environment (DoE). This was the first site establishment through a participatory approach in the country. Also the end of season shoot-out has been phased out by cooperation of local people. In India the KGNP management authority under the UN Foundation supported project has established special village community groups and a student support group for protection and management of the wetland habitats of the protected area. In Mongolia several areas where Siberian Cranes were sighted were included in the PA Network of Mongolia. At these sites conservation and monitoring were being undertaken by local and state organisations and communities.

69. Management plans for Siberian Crane sites were developed mostly under implementation of the UNEP/ GEF SCWP. In China they were prepared for five project sites, except Xianghai NNR, in Iran for FDK, and in Kazakhstan for Naurzum SNR and Zharsor-Urkash WR. In **India** a detailed management plan for the KGNP has been developed that specifies protection, habitat management, avifauna population estimation, hydrology management and intervention, tourism management, research and monitoring and other such activities. In Russia, management plans for two UNEP/GEF SCWP sites in Yakutia (RRR Kytalyk and Aldan-Amga River Basin) and three outline plans for sites in Western Siberia (Kunovat River Basin, Konda and Alymka Rivers Basin, transboundary territories between Tyumen and Kurgan Regions) have been developed. Management plans prepared for the Yakutia sites will be used as a model for all republic protected areas. Within UNEP/GEF SCWP, a complex of the basic studies necessary for management optimization of these sites (social, economic and demographic aspects, legislative bases and national-traditional practice of wildlife management, questions of interaction of local communities with official structures of the power, industrial sphere, formation, a science etc.) were considered. In Pakistan management plans for all the Ramsar Sites in the country are being prepared by the PWP.

70. **For water management** in **India**, in addition to the meteorological data and monitoring of the annual release of water to KGNP, research studies on the hydrological budget have been supported. In **China** research on the relationship of water level and aquatic food plants with the Siberian Crane has been conducted at Momoge NNR since 2009. In **Mongolia**, because of limited water resources, local people and livestock are staying near water. This is negatively affecting nesting of birds. Mon-

gol Daguur SPA lost its nature value, due to drainage of the Ulz River. The number of waterbirds, including Siberian, White-naped and Hooded Cranes, Swan Geese and Relict Gulls, is decreasing in Mongol Daguur SPA. In Kazakhstan, according to the management plan, instrumental measuring was conducted on four lakes in Naurzum Nature Reserve. In Pakistan monitoring of water level is conducted by the Irrigation Department. The PWP sponsored a student's research to determine pollution levels at selected points in the Indus River. The study completed and results are awaited. In Russia, complex climatic monitoring was carried out to confirm trends of global warming. The monitoring data were used in dynamics forecast of Siberian Crane habitats. In West Siberia (Konda and Alymka Rivers Basin) a case was studied when work of geodesic and other expeditions had directly impacted the Siberian Crane habitats. In **Uzbekistan** control of water level is implemented by special departments of the hydro-meteorological service (lakes, rivers, others natural water bodies and discharge lakes) and by the Ministry of Agriculture (water reservoirs, canals and collection network).

71. In support of site management, applied research was conducted mostly on UNEP/GEF SCWP sites. In China study of the ecological relationship between water level, aquatic food plant and Siberian Crane was applied to the management and control of water levels for some important sites, such as Poyang Lake NNR and Momoge NNR. In Iran several projects to support management plans were implemented, including Livelihood of Local People, Wetland Monitoring Plan, Eco-agricultural Guidelines, GIS project, Guard training workshops, and Analysis of Awareness Program. The results of these projects have been incorporated into the management plan of sites, including FDK, and used for proposed action plans. In India studies on the status of the satellite wetlands around KGNP, ecological studies on associated crane species, assessment of hydrological budget and, socio-economic dependency of local human population on wetlands, status of invasive species, and understanding migration patterns of select wetland birds were carried out. In Kazakhstan, according to the management plan of Naurzum NR, research on dynamics of number and monitoring of migratory waterfowl was conducted; however there were not enough resources to finish this study.

72. *Monitoring and assessing* the environmental impacts of human development on important habitats for the Siberian Crane, including possible impacts of climate change, were undertaken under UNEP/GEF SCWP implementation. In **China** environment impact assessment of oil exploration on the Momoge wetlands was conducted from 2005 to 2008. The results present the negative impact of oil operation on the wetlands and waterbirds, and put forward some mitigation measures. In **Iran** the results of eco-agricultural projects show how

to incorporate the biological methods in current unsafe farming activities. In India, using the UNESCO World Commission on Protected Area (WCPA) framework, the management effectiveness of the KGNP has been evaluated under a new project supported by the UN Foundation and implemented by UNESCO and has been made operational. In Kazakhstan, under the framework of the UNEP/GEF SCWP and IBA Program, assessment of ecological status of areas and existing threats related to human development activities was conducted. Basic threats were determined, including the ineffective use of water resources, violations by agriculture (pasture of cattle along the shores of lakes, plowing slopes of lakes hollows and watershed), poaching and fires. In Uzbekistan some years ago a new "grain independence" policy was launched and areas under agricultural crops were increased. This created the favorable feeding conditions for migrating and wintering Eurasian Cranes. Along migration routes and at wintering grounds, cranes concentrated mostly on agricultural fields.

## Objective V: Increase public awareness, community involvement, and ecological education

### 5.1. Share information on Siberian Crane conservation efforts through mass media

73. Range states use mass media for increasing public awareness. In Afghanistan a mass media programme on the general environment has been conducted a few times. In Azerbaijan, Kazakhstan, Russia, Turkmenistan and Uzbekistan information about Crane Celebration was covered in regional and city newspapers and local and national TV and radio channels. In Turkmenistan information on Crane Celebration in Durnaly Site was published on the official website of the MNP on 6 December 2009. In China many TV stations and websites at central, provincial and local levels reported information about Siberian Cranes and their habitats every year, especially when the cranes are present. China Crane News and related publications of bird watching societies also published much information related to Siberian Cranes. In Mongolia the Biological Institute conducted a 40 minute TV broadcast each quarter according to an agreement with Mongolian National TV. The Protected Area Administrations provided information about migratory birds to local people through the local broadcasting office. In Iran there are many articles posted on IRNA (Iranian National News Agency), which other broadcasting agencies use as a source for news. Mr. Sadeghi Zadegan had an interview with TV-Channel One in January 2010 with subject of Siberian Crane. In **Russia**, information about Siberian Crane conservation problems and release into the wild was broadcast through regional and federal TV such as federal TV program «Wildlife World"

in 2008 and 2009 and, published in magazines and newspapers ("Odnako" magazine in December 2009; newspaper "News World" in 2010). In **Pakistan**, the year 2009 was celebrated as National Year of Environment, with active participation of the Ministry of Environment (MoE), all provinces, and PWP. Information about the National Year of Environment was translated on all national channels. Wetlands Day and Biodiversity Day were celebrated at national level and attracted vast media coverage.

- 74. **Kazakhstan**, under the framework of *the UNEP/GEF SCWP*, developed a film about nature conservation problems and efforts undertaken at international and national levels for conservation of the Siberian Crane, which was shown on national TV. In **Turkmenistan** the film, "In Search of Eurasian Crane," was made by the national company "Ogyzkhan's Turkmenfilm" in 2008. Another film about Eurasian Cranes was made and shown on national TV in 2008. The film "Durnaly Crane Paradise" about Durnaly site, designated in WCASN, was made in 2009 with support of *the UNEP/GEF SCWP*.
- 75. Articles about Siberian Cranes and related activities were published in a variety of publications, including the third issue of "Crane of Eurasia," magazines, newsletters (The ICF Bugle, China Crane News, CMS Bulletin, CWGE Information Newsletter and Kazakhstan Ornithological Bulletin), newsletter of the Uzbekistan Society for the Protection of Birds, electronic Siberian Crane Flyway News, "Sandgrouse", and national and local newspapers (information on crane migration in Mongolia; "Flight of Hope" project in Russia and Kazakhstan, and Crane Celebration in Russia, Kazakhstan, Turkmenistan, Azerbaijan, Uzbekistan and Iran). In Mongolia some materials about waterbirds were published jointly with scientific organisation and environmental projects.
- 76. A variety of education and information materials was produced and distributed at the regional level, as well as at national and site levels. The Siberian Crane poster by Robert Bateman in 12 national languages produced in India through funding from the U.S. Fish and Wildlife Service was continued to be shared during education events, with schools, local agencies, and nature conservation organisations in **Kazakhstan**, **Russia**, **Turkmenistan and Uzbekistan**, as well as another Siberian Crane poster prepared in Russian and English for the MOS6 meeting participants. In **Turkmenistan**, a poster was prepared in Turkmen language concerning the designation of Durnaly site and a proposal of Kelif-Tallymerjen site in 2009 in WCASN.
- 77. A colorful and highly informative booklet "The Lily of Birds: A Journey to Save the Most Unique and Endangered of Cranes" on Siberian Cranes and wetland conservation under the framework of the Memorandum of Understanding and the UNEP/GEF SCWP was produced in Russian and English for distribution at the

CMS MOS6 meeting. Another colorful booklet, "Saving Wetlands across Eurasia: Inspired by the Siberian Crane" devoted to the UNEP/GEF SCWP was distributed among project participants at annual project Steering Committee meetings and other related events. On the completion of the UNEP/GEF SCWP in 2009, Final Report about results and lessons of the project was issued by Regional Coordination Unit with participation of National Coordination Units.

78. Various information and educational materials, including posters, t-shirts, booklets, stickers and buttons were prepared by CWGE with financial support of the UNEP/GEF SCWP and CMS Secretariat to support Crane Celebrations in Azerbaijan, Kazakhstan, Russia, Turkmenistan and Uzbekistan. The booklet "101 Questions about Cranes" by Vladimir Flint in Russian was reprinted as a colorful issue and distributed widely in countries where Crane Celebrations were organised. Some of materials were translated into national languages. Range states also produced materials at the national level in national languages, such as posters, stickers, buttons, calendars, t-shirts, pens and notebooks, which were shared among different target groups, including hunters, during Crane Celebrations, Bird Day and World Migration Bird Day.

79. China, Iran, Kazakhstan and Russia issued numerous education and informational materials in national languages through the UNEP/GEF SCWP and distributed these materials among the Siberian Crane sites along the entire migration route. In China an environmental education book series, including "I love Poyang Lake," "My home at Keerqin," "My home at Xianghai," and "Book related to the local perspectives at Zhalong," were issued especially for project sites and were included officially in school curriculum. In Iran a Siberian Crane stamp was issued and many stamps were purchased and/or widely disseminated between the interested persons and organisations. In Kazakh**stan** teaching materials, including training modules, brochures and booklets, for different age and target groups were prepared and distributed as part of school curriculum among schools located around projects sites on the territory of Naurzum, Kamystinsky and Karasusky Districts. In Russia "Siberian Crane in Suitcase" programme was implemented based on the similar project developed by ICF. The main component is plastic models of the Siberian Crane with props to demonstrate biology and conservation. Models were given to colleagues in Kazakhstan and Iran.

80. **Afghanistan** issued a pamphlet and brochures on cranes conservation. Specific charts of Siberian Cranes have been disseminated among local communities and religious scholars. A booklet on Islam and conservation is in process of publication. Materials were widely distributed, especially in clinics and markets, where more people visited. In **Pakistan**, the PWP developed infor-

mational materials on wetlands which are being distributed widely. PWP's poster "Cranes of Pakistan" was reprinted and widely distributed. The newsletter of the Pakistan Forest Institute published awareness materials on cranes. Various articles on wetlands and crane conservation were published in a variety of newspapers. In **Uzbekistan** in 2007 Gosbiokontrol prepared three leaflets: "Save the Cranes" with pictures of Siberian Crane and other crane species, "Identification of Siberian Crane" (pictures showing difference between Siberian Crane, White Stork and Great White Heron), "Flight of Hope," which described the idea of this project. These leaflets were distributed in Bukhara region in connection with forthcoming arrival of the Siberian Crane at Bukhara Center for Reproduction of Rare Animals. In 2009 CWGUz prepared and published the brochure, "Termez, WCASN," to be used in the round table discussion with a goal of nomination of this territory and presentation of CMS certificate.

#### 5.2. Site-based education

81. The Siberian Crane **range states** participated in other various international (World Migratory Bird Day, Biodiversity Day, Wetlands Day) and national events related to conservation of cranes and their habitats. In Iran assessment of "World Migratory Bird Day" shows that this event can involve more people in bird events, counting and reporting.

82. The Crane Celebrations initiated by the CWGE in 2002 became a traditional event in nine countries, including the Siberian Crane range states - Azerbaijan, Iran, Kazakhstan, Russia, Turkmenistan, and Uz**bekistan**. The number of people involved in this celebration is increasing from year to year. Crane Celebrations were conducted in local communities, protected areas, city and rural schools, zoos, libraries and children's ecological clubs. Under the framework of the Crane Celebration in 2008, a Crane Count was organised at the Eurasian Crane staging areas involving students from rural schools. In Russia, the second international Siberian Crane Festival organised by Sterkh Foundation, Administration of YaNAR, with the assistance of ARRINP and Oka SNBR was conducted in Salekhard in June 2009. Festival took place in a building of the largest exposition centre of Salekhard over two weeks. The festival program included competitions of children's drawings, sculptures, hand-made articles, poetry competition about Siberian Cranes, photo-exhibition, Siberian Crane films demonstration, performance of dancing collectives, master classes of "origami" and traditional hand-made articles, informative games with Siberian Crane ideas, etc. A pair of Siberian Cranes from OCBC was demonstrated. In the framework of the Festival, a scientific meeting was devoted to preparation of the new edition of the Red Data Book of YaNAR. Also demonstration of ultralight flights has been organised during the Festival. Experience of carrying out of such festivals indicates that their efficiency is very high and has the prolonged action. Such actions considerably stimulate activity of the respondents informing on Siberian Crane meetings, possible threats for Siberian Cranes and to their habitats. In Turkmenistan Crane Celebrations in 2009 were conducted along with a meeting with local administration for presenting the WCASN Certificate for Durnaly. Crane Celebration was supported by *IBA/CA/RSPB Programme*, MNR, CMS, CWGE, ICF and *UNEP/GEF SCWP*.

83. In Afghanistan integration of traditional and religious knowledge into environmental and conservation education has left positive impacts on the public in a few target areas. Journalism training was conducted by the government with the technical and financial support of international organisations. In northern Afghanistan national environmental councils consisting of local communities, local government, and religious scholars were created, as well as local conservation groups. In China, winter and summer student environmental camp activities were conducted many times at some staging sites and wintering sites on protection of the Siberian Crane and its critical habitats. In Mongolia an art competition between students of Dornod Province in Mongolia, Chita Region in Russia, and Kholonbuir Province of Inner Mongolia in China has been conducted since 2004. Winners from the three countries are invited to an international children summer ecological camp in international SPA "Dauria". The student's camp is organised every year by each country of the international protected area. In 2008, the camp was held in the Mongolian part of international SPA in Mongol Daguur Nature Reserve. In addition to the art competition winners, 22 students from Choibalsan, Dashbalbar, and Chuluunkhoroot soum participated.

84. In China five project sites of the UNEP/GEF SCWP have established community co-management committees during the implementation period. They hold meetings every year to discuss protection and management of Siberian Cranes and their habitats, and also to raise recommendations on alternative mitigation measures between nature protection and community development. In India the concepts of conservation reserves and community reserves are being popularized. Currently the federal government, in association with the state government of Rajasthan where KGNP is located, collaborates with national NGOs, such as WWF-India, BNHS, Wildlife Protection Society of India (WPSI) and government institutions, such as SACON and Wildlife Institute of India, for Siberian Crane and other waterfowl conservation programmes.

85. In **Mongolia** Bird Information Centers were built in the Mongol Daguur SPA of Dornod Province and Ogii Lake of Arkhangai Province. Public awareness activities are provided about conservation of cranes, their

habitats, and nesting, etc. In India a world class Interpretive Centre with a focus on the historical migration of Siberian Cranes into KGNP and its present situation have been established by WWF-India in the KGNP with support from Swarovski. Based on feedback obtained from the visitor book in the Interpretation Centre and the park, the visitors seem to be bringing others into the park and to the Interpretation Centre to understand the message of conservation. The increased use of the Interpretation Centre by schools and colleges is an indication of its effectiveness. A water school has been initiated by WWF-India targeting the surrounding school children for imparting the importance of water and its role on wetland habitat management. In Kazakhstan, through the UNEP/GEF SCWP a Resource Centre was created in Karamendy Village and creation of some new NGOs was initiated. In Pakistan Khyber Pukhtunkhwa Wildlife Department organised Crane Clubs and Wildlife Clubs in the Khyber Pukhtunkhwa Province. In addition, PWP organised Crane Conservation and Education Center in Kurram Valley, Lakki, KP, provides the opportunity to take attention to crane conservation.

86. The UNEP/GEF SCWP supported education activity at WCASN sites in Kazakhstan, Iran, Turkmenistan and Uzbekistan. In Uzbekistan meetings on crane conversation have been organised for border guards during monitoring in Termez, which is a wintering ground of the Eurasian Crane in the Amurdaria Valley. Some of border guards took part in cranes counts. Active collaboration of Gosbiocontrol, CWGUz, Uzbekistan Society of Bird Protection (UzSPB), regional rangers, lectures and high school students allowed for the organisation of a wide observation network. As a result, during recent years information about Siberian Crane records was presented by rangers from Bukhara region and ornithologists from Samarkand State University.

### 5.3. Sustainable livelihood opportunities

87. Different initiatives were undertaken to facilitate sustainable livelihoods in the range states. In Afghan**istan** community-based natural resource management is a key tool that has been initiated in the last two years. This process will support conservation of species. In China some alternative livelihood activities were demonstrated in four project sites of the UNEP/ GEF SCWP over the past few years, such as natural gas construction, water-saving irrigation, fencing livestock, and funding. Almost all NNR have hired some local farmers as guards or patrollers for the nature reserve. The local guards report fires, hunting, poisoning, illegal development and other destructive activities. The responsible authorities organise one or two meetings each year to introduce the guard's responsibilities and train some basic knowledge. In India in KGNP, cycle rickshaw pullers and local youths have been trained as park guides to provide additional income. In Iran,

under the framework of the UNEP/GEF SCWP, Trappers Associations were established with their own trust funds for implementation of eco-agricultural projects. The groups were provided with their core money (e.g. 50% of total) and started with a loan system (e.g. 2 years). In Kazakhstan under the UNEP/GEF SCWP seminars and trainings on alternative activities were conducted on the development of ecotourism, making souvenirs, thick felt, cheese, etc. In addition, a small private hotel was created, Naurzum NR developed and described excursion routes, and equipment was acquired for baking bread in one small settlement. The local NGO "Tulip" (Karamendy, Naurzum district) in 2009 received a grant from the GEF Small Grants Program for development of guest cottages and excursion routes. In Mongolia eight local communities were involved in public awareness activities in the eastern protected areas. In Pakistan in Taunsa of Punjab Province, the PWP has launched several initiatives that included training/capacity building of local communities in growing off-season vegetables; establishing income generation through Typha looms to make Typha mats; installation of 89 biogas plants in the Central Indus Wetland Complex benefited women activities and habitat preservation. The Barclays Bank Pakistan and the WWF-Pakistan & PWP have recently signed a MOU to strengthen these initiatives. In Russia, it was recommended to hire local people (firstly native people) as staff of protected areas established at key Siberian Crane sites in Western Siberia (federal wildlife refuges of Kunovat, Elizarovsky, Belozersky, and Agrakhansky; Regional Nature Park "Synsko-Voikarsky"; and regional wildlife refuges "Stershinyi-1" " and "Stershinyi-2").

#### Main Challenges

88. In **China**, the conservation fund mainly comes from government agencies, and a minor part stems from NGOs. The major problem is lack of operation, maintenance and monitoring costs. In **Iran** the absence of the Siberian Crane has a negative effect on this issue. Justification is very difficult for fund raising.

### Objective VI: Enhance international cooperation and information exchange

### 6.1. Improve international cooperation and information exchange

89. The Memorandum of Understanding concerning Conservation Measures for the Siberian Cranes administered by CMS is a vital vehicle for Eastern and Western/Central Asian Siberian Crane **range states** to work together for the conservation and restoration of these iconic birds. Researchers, educators, officials and enthusiasts now have the opportunity to join forces not only to help the Siberian Crane, but to demonstrate that people from a diversity of cultures can work

together for the common good.

- 90. **All range states** except China send information about Siberian Crane sightings immediately for exchange of information on a flyway and global level. The Siberian Crane Flyway Coordinator (SCFC) collected and shared this information to all interested people and agencies. All information received is published in the electronic Siberian Crane Flyway News, which is shared through an e-mail distribution list. In **China** information is usually shared under the mechanism of the NEACSN and China Crane News.
- 91. **Afghanistan** in 2009 and Iran in 2008 became Signatory countries to CMS. In Afghanistan efforts are needed to strengthen the objective and criteria of CMS. In **India** the Government participated in a bilateral agreement with the Russian Government for facilitating and re-establishing the population of Siberian Crane migrating from Russia to KGNP in India. **Kazakhstan** became a member of CMS in 2007 and joined Ramsar Convention in 2008. In early 2010, a new bilateral "Agreement on Environmental and Biodiversity Protection" between DoE of the **Islamic Republic of Iran** and the MNRE of the **Russian Federation** was signed.
- 92. In the implementation of the Flight of Hope Project initiated by **Russia**, other range states as Kazakhstan and Uzbekistan are involved. Kazakhstan experts had prepared the route with possible stopovers in the country and provided support in the organisation of the Russian expedition through the country in September 2008. The main priority in Kazakhstan is continuing to participate in the international reintroduction program of the Siberian Crane and conduct monitoring of migratory Siberian Cranes, as well as Eurasian Cranes, in the places of their mass concentrations. Uzbekistan conducted investigation and monitoring of Eurasian Crane wintering grounds, which are potential wintering grounds for the Siberian Crane in Amurdaria Valley, together with **Afghanistan, Turkmenistan and Iran.**
- 93. Azerbaijan, Kazakhstan, Russia, Turkmeni**stan and Uzbekistan** participate in CWGE activities by submitting information for the Newsletter and collecting papers, participating in national and international conferences and organising Crane Celebration. The last CWGE International Conference "Cranes of Palearctic: Biology and Conservation" was held in Rostov Region in 2007. Conference proceedings were published in 2008. Besides, Uzbekistan in 2001 established the UzCWG, which is associative member of CWGE. In China the Chinese Crane Network was already formed under the mechanism of the NEACSN. Many Chinese NNRs are involved in the implementation of the NEACSN action plan. Some NNR, especially at wintering grounds, had joined the Asian Waterbirds Count sponsored by Wetland International. The Indian Crane and Wetlands Working Group is active in India. In Mongolia there

is no CWG, only a few crane specialists. The Pakistan CWG was also established. This working group is dormant at the moment primarily due to financial constrains, but the PWP is considering its revitalization.

## 6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds

94. In 2007, at the CMS MOS6 in Almaty, Kazakhstan, ten sites of five countries (India, Iran, Kazakhstan, Turkmenistan and Uzbekistan) were designated as WCASN sites. Certificates were handed to the representatives of India, Iran and Kazakhstan during the CMS Ninth Conference of Parties (COP) in Rome in December 2009. Certificates for sites from Turkmenistan and Uzbekistan were presented during Crane Celebrations and Round Table discussion at Termez site to administrative representatives of the sites. Education activities in WCASN designated sites in Kazakhstan, Iran, Turkmenistan and Uzbekistan were conducted in 2009 with support of the UNEP/GEF SCWP through agreements with ICF.

95. During the reporting period **Pakistan** prepared nomination documents for two sites – Thanedar Wala Game Refuge and Taunsa Barrage. Site Information Sheets for these two sites were considered by the WCASN Review Working Group (RWG) at the CMS MOS7 meeting in Bonn in 2010. WCASN RWG recommended sites in Pakistan to be designated by the WCASN Nomination Committee. Afghanistan, Azerbaijan and Russia continue to work on nomination documents of sites proposed to WCASN. Also Kazakhstan, Turkmenistan, and Uzbekistan proposed additional sites for inclusion in WCASN.

96. **India** hosted the Central Asian Flyway (CAF) meeting in 2006, where a Central Asian Flyway Action Plan was developed. The Government of India is committed to develop and implement commensurate actions relevant to the CAF Action Plan.

97. **All range states** of the Western/Central Asia participated in preparation of the Atlas for the Siberian Crane and Other Waterbirds in West/Central Asia.

## 6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership

98. The Siberian Crane is one of the target species under the focus of the Crane and Stork Working Group, where Russia (Yakutia), China and Mongolia participate. Any activities of Action Plan are related to the conservation of Siberian Crane. In **China**, Keerqin and Momoge NNRs have been designated to the *East Asian – Australasian Flyway Partnership* (EAAFP) for the conservation of the Siberian Crane.

99. In 2007 and 2008, representatives of China, Mon-

**golia and Russia** participated in NEASN and EAAFP meetings devoted to administration issues and the status of the endangered Red-Crowned Crane

### 6.4. Capacity building

100. During the reporting period a number of seminars and training workshops were provided for different target groups by countries involved in the UNEP/ GEF SCWP, as well as other range states. Several experts from Afghanistan have undertaken training on Siberian Crane conservation at the national level. In China specific training courses on the Siberian Crane conservation and capacity building programmes at five UNEP/GEF SCWP sites were conducted. Training workshops on ecotourism and other topics were carried out by **NEACSN** every two years from 2001 to 2008 on the conservation of cranes in East Asia. In India training workshops on research methodology for research biologists, wildlife care and management for veterinarians, on day to day monitoring activities and satellite wetland monitoring for KGNP staff, and on identifying wetland birds and report any sightings of Siberian Crane in and around KGNP for the surrounding village communities were conducted.

101. A network of institutions and organisations in India exist capable of providing capacity building training programmes on Siberian Crane and other waterfowl conservation. Amongst them are the Wildlife Institute of India (WII), whose mandate is training, research and coordination of such activities not only in India but also for the South-Asia region. WII also conducts a Master's programme, Diploma and Certificate Course in Wildlife Management, in which capacity building components are included. The other institutions that contribute significantly in this direction are the BNHS, SACON, WWF-India and a host of Universities, which are involved in ornithological research. In Iran many training and other capacity building activities were undertaken at FDK and Bujagh NP, including training workshops on alternative livelihoods of local people, conducted by the national consultant, wetland monitoring plan (for experts), eco-agricultural guidelines (for local people), GIS training (for experts), guard training workshops (for local guards), participatory management workshops for the local and government staff, and awareness raising campaigns. In **Kazakhstan** the seminars and trainings were conducted for inspectors, teachers, students and hunters. Primary purposes of these seminars were to provide information on why it is necessary to save wetlands, to promote knowledge about the importance of projects sites for the maintenance of cranes and other waterfowl, to provide information about problems, threats to habitats of cranes and waterfowl, and to teach identification of rare and threatened species of birds. Some training workshops were devoted to development of ecotourism and alternative types of livelyhood for local people and to methods of monitoring and account for NR protected staff. In Pakistan two biologists of Crane Education Center in Lakki were sent to CBCC for training in crane captive breeding and husbandry techniques. In **Russia**, trainings on the nature protection legislation were conducted for two Siberian Crane key sites in Yakutia. In Uzbekistan at Termez site in Surkhandaria Province seminars for frontiers, local people, hunters, students at Termes State University, schoolchildren and teachers, representatives of local community and administration, and mass media were held with the aim to inform about the Siberian Crane and its protection. Trainings for Bukhara Center staff were held in October 2008, January 2009, November and December 2009. Round Table "Presentation of Termez as wintering site of the WCASN" was organised in November 2009 for hunters, workers of local department of State Committee for Nature Protection, representatives of local administration, frontiers, department of popular schooling, mass media, staff of Surkhan State Nature Reserve, and students of Termez State University.

102. Capacity building was improved for the UNEP/GEF SCWP sites. In **Kazakhstan** in Karamendy village the Resource Centre was provided with needed equipment and training technique. In **China** all nature reserves involved in the project have improved their infrastructures and instruments, and enhanced the staff capacity building in the past 10 years. The major investments sourced also from the central and provincial finance.

## 6.5. Raise funds to support a comprehensive conservation programme supporting MOU implementation

103. ICF in collaboration with CMS secured financial support through UNEP from the Global Environment Facility to implement the UNEP/GEF Siberian Crane Wetland Project from 2003 to 2009. Funds were provided to China, Iran, Kazakhstan and Russia for regional, national and site level activities, including improved legislation, research, monitoring of waterbirds and wetlands along the Siberian Crane flyways, capacity building, conservation and management of wetlands with key importance for the Siberian Crane, and education and public awareness at project sites (see a copy of the final report at http://www.UNEP/GEF SCWP.info). GEF provided \$10 million, with \$16 million co-financing by governmental agencies of involved countries and \$20 million associated funding (total \$46 million). Details on individual donors and amounts are provided in the Annex of the final report.

104. From 2001 to 2009, **ICF** supported Poyang Lake NNR in China research on the relationship of water level, waterbirds, including Siberian Crane, and aquatic plants.

105. CBCC supported improvements to the captive rear-

ing facility at OCBC; training for Pakistan colleagues on captive rearing techniques; travel for Russian, CBCC and ICF experts to develop Conservation Plan for Central Asia.

106. The **CMS** Secretariat, the UNEP/GEF SCWP and CWGE supported education and public awareness activities for crane conservation in **Azerbaijan**, **Armenia**, **Iran**, **China**, **Kazakhstan**, **Kyrgyzstan**, **Russia**, **Turkmenistan**, **Ukraine and Uzbekistan**, mainly through organisation of Crane Celebrations.

107. The Agricultural Department of the Netherland Embassy, Trust for Mutual Understanding, NABU, Lufthanza Avia Company and Taldom Administration of Protected Areas supported holding of the International Conference "Cranes of Palearctic: Biology and Conservation" in Rostov Region in 2007, where representatives from different countries attended including Azerbaijan, Kazakhstan, Russia, Turkmenistan and Uzbekistan.

108. Iran, Kazakhstan, Turkmenistan and Uzbekistan applied project proposals to ICF for the implementation of education and public awareness activities at the WCASN sites. This activity was supported under UNEP/GEF SCWP.

109. In Afghanistan US Agency of International Development (USAID) has provided funds for conservation of biodiversity over the last three years. Efforts to submit a proposal to GEF are underway. A local conservation NGO has received a small-scale fund through ICF partners to promote conservation education, identify the Siberian Crane flyway in Afghanistan, and to construct a cranes exhibit at the Kabul Zoo. In China some specific funds from the SFA have been mobilized for the implementation of the action plan of the NEACSN, which is closely related to the implementation of the Siberian Crane conservation activities under the Siberian Crane MOU. In **India** the funding support provided to the concerned protected areas under the MoEF, the Government of India's schemes for protected area management, or support for specific endangered species programmes. In Mongolia the Ministry of Nature Environment and Tourism (MNET) submitted the project proposal to the GEF on "Proper Management of the Protected Area Network in Mongolia." If this project is approved by GEF, many activities to conserve Siberian Cranes will be covered. Now the MNET and UNDP office in Mongolia are awaiting the decision from GEF and co-funders. The MNET has its own fund to support nature conservation in the country. The Government takes policy to protect endangered and rare wildlife. There is no special crane conservation activity in Mongolia, but crane species can be protected under conservation of wetlands in northeast Mongolia, where Siberian Cranes spend the summer. In Kazakhstan the National Coordination Unit of the UNEP/GEF SCWP was supported by Naurzum Akymat for organisation

of Crane Festivals. In addition, funding from some national foundations was provided for strengthening the capacity of a new NGO focused on people's livelihoods. The local NGO "Naurzum-Bionet" was funded by the GEF Small Grant Program for a project on the reconstruction of a water reservoir on the Karasu River in the Naurzum Lake System basin. In Pakistan the PWP supported activities that benefited crane conservation. It has been exploring potential funding opportunities to expand its crane program. The government of Khyber Pukhtunkhwa approved a project of Pak. Rs. 8.0 million for improvement of the Lakki Crane Center, in spite of the fact that all Annual Development Projects are frozen due to financial constraints emerged after the floods in July 2010. In Russia, MNRE, and Federal Service on Control of Nature Using (Rosprirodnadzor) supported financially Programmes on the Siberian Crane Conservation which were implemented by ARRINP and Oka SNBR. Administration of YaNAR financed Program on the Siberian Crane conservation was implemented by Sterkh Foundation. Sterkh Foundation also secured accumulated funds from regional oil and gas companies for Siberian Crane reintroduction program in West Siberia. During the reporting period the ITERA Oil and Gas Company ITERA was represented as general sponsor of Flight of Hope Project; Oil Company "Petroresource" sponsored activities on the Siberian Crane reintroduction in Astrakhan SNBR. North Branch of the Russian Academy of Sciences (RAS) supported programmes of IBPC for the Siberian Crane research and conservation in Yakutia. IBPC received financial support from Yakutsk Energy electric company to make ecological examination along Aldan River where power line construction is planned. Insurance Company "Sterkh" support education activity in Yakutia. In Turkmenistan the MNP provided financial support in 2007-2009 for crane conservation activities, with total amount of \$1,300. The grant covered expenses for purchasing books for Turkmenistan Nature, which were used as prizes during crane conservation action (\$300); transportation and rent during Crane Celebration (\$400); stationary (\$150); conference room rental (\$200); and coffee-break during meeting with Administration concerning WCASN activity (\$250). Uzbekistan in 2009 submitted a project proposal to the Ramsar Convention Secretariat on preparation of nomination of the Tudakul Reservoir to the Ramsar List. At present the project is approved, but the funds have not been distributed. Gosbiokontrol supported preparing and printing of three color leaflets in 2007 (\$120), investigation of ecological conditions along the Siberian Crane flyway in the Syrdarya River valley in 2008 (\$100) and in Amudarya River valley in 2009 (\$200). In addition, Gosbiokontrol supported investigation of ecological conditions for the Siberian Crane reintroduction program in Bukhara Center, including building of facilities and providing food (\$1,000). The Institute of Zoology of the AS of Uzbekistan supported an expedition for observation

of conditions for waterbirds and Eurasian Cranes at wintering grounds in the Amudaria River valley during the extremely cold winter in 2008 in southern Uzbekistan (\$800), and organisation of the round table discussion on "Presentation of Termez as a wintering site of the Western/Central Asian Site Network" (\$600).

#### Main Challenges

110. **Azerbaijan, China, Turkmenistan** and **Uzbekistan** reported insufficient skill and staff to conduct Siberian Crane monitoring during migration. In reality, funds are needed in all countries

111. In **China** migration research on the Siberian Crane needs to be carried out in cooperation with Russian Colleagues in the near future; monitoring information exchange needs to be enhanced; research and conservation exchanges should also be encouraged between Russia and China. Training programme is usually required for local nature reserve staff in order to carry out any conservation activities for the Siberian Crane. China has secured important financing towards the conservation of wetlands and water releases for key sites in northeast China.

112. In **Mongolia** there is a need to establish a new agency or organisation which is responsible for biodiversity issues nationwide. In Mongolia there are many specialists and several ornithologists, who work independently. There is a need to unite these specialists and use human resources for useful activities for conservation and management of the endangered and rare species.

113. In Kazakhstan there are several important challenges: (i) national foundation / sponsor organisations that would support NGOs are absent; (ii) existing government grant programs (social order) realized through Region Akymats support only socially significant projects, (iii) Kazakhstan has very few expertsornithologists, therefore, for example, for implementation of project IBAs the Russian colleagues were invited for help. For strengthening of measures on the conservation of the Siberian Crane and their habitats it is necessary, at first, to provide support to the initiative groups/NGOs on realization of the projects focused on concrete sites, for example, pilot project on lakes survey. Secondly, all measures on reintroduction/increasing number of Siberian Crane of west/central population make sense and can be realized only in close cooperation with the Russian side and other countries of the area. A long-term program should be prepared that includes scientific aspects (such as influence of climatic changes on hydrological regime of lakes and habitats of Siberian Crane) and funding secured.

114. In **Russia** there is necessity of more active using of GIS. However, problem includes lack of skilled experts and limited financing.

### Part III: Conservations Plans for Western, Central and Eastern Flyways

### **Conservation Plan for the Western Flyway**

Objective I: Redu	Objective I: Reduce mortality					
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity	
1.1 Determine and monitor prevailing threats of all types to the Siberian	a) Assess and monitor threats in the Siberian Crane nesting and wintering grounds and along the migration routes	All Range States-WP	ICF, CMS	All Range States-WP: 1) Work with partners to raise importance of Poyang Lake for the Siberian Crane and other migratory waterbirds due to dam construction.	1	
Crane and its habi- tats		κz	Akzhaik Reservat	2) Continue monitoring of threats through surveys or questionnaire. <b>KZ:</b> Extend threats monitoring of wetlands to western Kazakhstan (Aktyubinsk and Atyrau Regions) (consider impacts of oil and gas industry).	2	
		RU	Oil and gas Com- panies MNRE	RU: 1) Continue monitoring of impact of oil and gas development in Kunovat River Basin on the Siberian Crane habitats.	1	
				2) Reduce illegal hunting pressure.	1	
	b) Identify and document best practice protocol for conserva- tion and management of the Siberian Crane to minimize threats to the Siberian Crane and its habitats	All Range States-WP		<b>All Range States-WP:</b> Continue to identify best protocols for conservation and management of the Siberian Crane, and try to generate new information.	2	
	and best practices in areas	ICF	All Range States- WP	<b>ICF:</b> Finalize hunting strategy, consult with partners, and develop proposals to cover a range of activities over a long period.	1	
	used by Siberian Crane	All Range States-WP		All Range States-WP: Improve physical control on poaching.	1	
		IR		<b>IR:</b> Maintain Site Management Committees and encourage effective participation of local hunters in the Committees.	2	
	KZ	KZ	Regional Hunting Associations, oth-	<b>KZ: 1</b> ) Discuss the question about experience of spring hunting and possibility of its complete prohibition in hunting association.	1	
			er stakeholders	2) Work with hunting associations and other stakeholders (private hunting organisation) to expand practice of prohibiting of hunting at water bodies.	1	
1.2. Strengthen and improve enforce-	a) Review existing national and local legislation to address	All Range States-WP		All Range States-WP: Improve legislation and strengthen implementation of existing laws.	1	
ment of legislation	gaps or challenges to Siberian	AZ	AOS	AZ: 1) Include the Siberian Crane in the Red Data Book of Azerbaijan	1	
for crane protection	Crane conservation.			2) Increase penalty for the Siberian Crane shooting.	1	
		IR	DoE, Site Management Committees	IR: Include legislation issues in site management plans.	2	

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
1.2. Strengthen and improve enforcement of legislation for crane protection	a) Review existing national and local legislation to address gaps or challenges to Siberian Crane conservation	KZ RU	FHC MNRE	KZ: Continue work on nomination of other important wetlands (Kushmurun, Sarykopa) for waterbirds in Ramsar List. RU: Improve legal status of Ramsar sites.	2
	b) Ensure effectiveness of law enforcement	IR	DoE	<ul><li>IR: 1) Implement the legislation part of the management plan developed under UNEP/GEF SCWP.</li><li>2) Complete construction of the guard station in FDK to enforce protection of the site.</li></ul>	1
		KZ	FHC, SNRs, Regional Hunting Associations& other stakeholders	KZ: Enhance protection under existing laws.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
study the Siberian Crane and its habitat ing of known area flyway to determi	a) Conduct regular monitor- ing of known areas along the flyway to determine estimated numbers of the Siberian Crane	wi	All Range States- WP, AWC	<b>WI:</b> Promote use of the Asian Waterbird Census framework for monitoring of the Siberian Crane and other waterbirds and wetlands for the region.	2
		All Range States-WP	SCFC	<b>All Range States-WP:</b> Continue to monitor Siberian Crane of known areas along the western flyway, if funds will be available.	1
		KZ	SNR, GSWG of	<b>KZ:</b> 1) Continue monitoring of the lakes in Naurzum SNR and Zharsor-WR.	1
			East Europe and North Asia	2) Conduct counts of cranes and other waterfowls on other lakes (Tyuntyugur-Zhanshura, Kushmurun, Shoptikol, Sankebai, Mamyrkol, Kulykol-Taldykol) along the western flyway in Kostanay Region, if funds will be available.	1
		RU	ARRINP, Sterkh Foundation	<b>RU:</b> 1) Conduct aerial surveys at breeding grounds and migration routes if funds are available.	1
				2) Continue activity through distribution of the Siberian Crane question- naire for hunters in key Siberian Crane sites.	1
				3) Cooperate with hunters to involve them in observations and reporting of the Siberian Crane sightings.	2
sto as of sat que oth	stopovers, wintering areas, as well as summering areas of Siberian Cranes through  All Ran	SCFC, ICF	All Range States- WP	<b>SCFC, ICF:</b> Immediately share received information among Range States through e-mail list and website.	1
		All Range SCFC States-WP	SCFC	All Range States-WP: 1) Establish contact with colleagues from Iraq and Jordan on investigation of wintering grounds for possible wintering of the Siberian Crane through questionnaire (coordinated through WI and AWC program).	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity	
2.1. Monitor and study the Siberian Crane and its habitat	b) Determine new migration stopovers, wintering areas, as well as summering areas	All Range States-WP	SCFC	All Range States-WP: 2) Inform people through TV about the Siberian Crane migration and where to send information about its sightings.	1	
Crane and its nabitat	of Siberian Cranes through			3) Continue to check all reported sightings of the Siberian Crane.	1	
satellite or radio tracking, questionnaires, surveys, and other methods, and investi- gate them	questionnaires, surveys, and other methods, and investi-	AZ	AOS	<b>AZ:</b> 1) Collect information from local people in Gyzylagach SNR (main contacts Abbas Abbasov), Shirvan National Park, Samukh Wildlife Refuge etc. through Azerbaijan Ornithological Society (AOS) activities.	1	
				2) Respond immediately to future sightings using correspondence network and mobile telephone connection.	1	
				3) Investigate area of sighting of the Siberian Crane in winter 2009/2010 near Gyzyl-Aghach SNR by S. Rosenfeld.	1	
				4) Continue to monitor migration routes of cranes.	1	
		AZ, IR	SCFC, AOS, DoE	<b>AZ, IR:</b> Investigate area on the border between Azerbaijan (Nakhichivan Region) and Iran, where Siberian Cranes were sighted in 2009 and exchange information about results.	2	
		IR	SCFC, AOS, DoE	IR: 1) Show and distribute the Siberian Crane photos among local people.	1	
			2) Track the released Siberian Cranes if they will be marked with PTTs.	1		
					3) Contact all interested NGOs to encourage them to identify potential Siberian Crane areas.	1 1
				4) Investigate any potential reports of sighting (including all sightings received from Azerbaijani colleagues).		
			KZ	SCFC, Naurzum SNR, local brun-	<b>KZ:</b> 1) Continue interview of hunters, fishermen, shepherds and questionnaire in key Kostanay Region, if financial resources will be available.	1
			ches of FHC	2) Respond immediately to future sightings: verification of reports is possible in cases when information is received on the sighting day and a visit to the place of sighting is feasible.	1	
	RU	SCFC	<b>RU:</b> 1) Continue questionnaire and interview of local people in West Siberia at the Siberian Crane breeding grounds as well as migration stopover of the Eurasian Crane in Armizon District of Tyumen Region.	2		
				2) Establish monitoring network in Dagestan (G. Dzhamirzoyev), North Ossetia (Yu. Komarov), Kalmykia (V. Muzayev).	3	
				3) Continue to investigate all reports of the Siberian Crane sightings in West Siberia received through interviews with local people and questionnaire.	1	
	c) Conduct ecological studies of the Siberian Crane in your country	All Range States-WP	IUCN	All Range States-WP: Note publication by Dr. Carey Krajewski proposing the Siberian Crane is listed in its own genus as ( <i>Leucogeranus leucogeranus</i> ). This emphasizes the taxonomic uniqueness and ancient lineage of the Siberian Crane. Work with IUCN Crane Specialist Group to confirm official change of genus.	3	
		IR	DoE	IR: Conduct student ecological research.	2	

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
2.1. Monitor and study the Siberian Crane and its habitat	c) Conduct ecological studies of the Siberian Crane in your country	KZ		<b>KZ:</b> Continue data collecting about the Siberian Crane sightings, ecological conditions and how they change at stopover sites, and behavior of cranes. Planning of any special researche of Siberian Cranes is not possible because their critically low number at present.	1
2.2. Maintain nation- al database on the	Regularly contribute to and maintain the regional data-	ICF, SCFC	All Range States- WP	ICF, SCFC: Maintain database and explore options to go on-line and link more effectively with databases under other initiatives.	1
Siberian Crane and its habitats	base, and extend it to cover all Range States	All Range States-WP	SCFC	<b>All Range States-WP:</b> Provide information on Siberian Crane sightings and all activities along Western Flyway to SCFC for inclusion in regional database.	1
		IR	ICF, SCFC, DoE	<b>IR:</b> Upload the database online so that any member, at anytime could post their own records.	2
		KZ	ICF, SCFC	<b>KZ:</b> Continue to provide information to regional database.	2
2.3. Promote or take into account avian	Collaborate with, and complement activities of other agen-	AZ	мэрипр, аоо	AZ: Continue regular monitoring.	3
influenza surveil- lance at important crane sites	cies to strengthen sample collection for surveillance of avian influenza in migratory waterbirds at network sites and other important crane sites.	IR, KZ, RU	WI, FAO	IR, KZ, RU: Plan both passive and active surveillance in case of an outbreak.	2
2.4. Evaluate efficacy and application of research/monitoring	a) Review and evaluate research and monitoring activities for their efficacy	All Range States-WP	CMS, ICF	All Range States-WP: Provide national level review in reports. CMS and ICF will coordinate review of data on a regional level.	3
	b) Apply monitoring and research results to improve management practices and mitigation of threats to the Siberian Crane	All Range States-WP		All Range States-WP: Responses to hunting listed above. No other research activities identified at this time.	

<b>Objective III:</b>	<b>Increase numbers and</b>	l genetic diversity
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Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
3.1. Promote recovery of the Siberian Crane populations	a) Produce eggs and chicks of Siberian for release programmes	RU, OCBC	SF	<b>RU, OCBC, ICF, CBCC:</b> Provide chicks or eggs produced during early stages of the breeding season to have Siberian Crane chicks with suitable age for Flight of Hope Project.	1
		СВСС	RU, OCBC	CBCC: Provide Siberian Crane eggs for Flight of Hope Project.	1
	b) Restore Siberian Crane populations through release	RU, OCBC, ICF, CBCC	SF	RU, OCBC, ICF, CBCC: Collaborate to develop release strategy for Flight of Hope Project.	1
	programmes	KZ	RU	<b>KZ:</b> Sign agreement with Russia for implementation of Flight of Hope project.	2
		RU, OCBC	CBCC, Oil and Gas Company "Petroresurs»	<b>RU, OCBC:</b> 1) Increase the number of released captive-bred Siberian Cranes in migration stopovers in Astrakhan SNR and Belozerskiy WR, if funds will be available.	1
				2) Strengthen important restoration efforts through Flight of Hope project and other release techniques to increase number of birds successfully released and to increase collaboration with other countries.	1
		IR	RU	IR: Restore wintering population by resuming releases; collaborate with Russia on monitoring.	1
	c) Monitor Siberian Cranes released into the wild	All Range States-WP	SCFC	<b>All Range States-WP:</b> Participate in tracking of migration of released captive-bred Siberian Cranes supplied with satellite transmitters.	1
	d) Conduct genetic studies to manage the genetic diversity of wild and captive populations	RU	OCBC, Institute of Genetic of RAS, Moscow Zoo	RU: Continue genetic studies in cooperation with Institute of Genetic RAS and Moscow Zoo.	3
3.2. Develop safe migration routes for Siberian Cranes based on those used	a) Identify and survey relatively safe habitats of the Eurasian Crane population - one that frequents ecologically	AZ, IR	SCFC	AZ, IR: Continue to monitor Eurasian Crane migration.	2
by Eurasian Cranes	suitable areas on the breeding grounds, along the migration	KZ	Naurzum SNR	<b>KZ:</b> 1) Survey north and west parts of Kostanay Region to find possible migration stopovers of the Eurasian Crane.	2
	route and on the wintering grounds - into which Siberian cranes could be (re)introduced			2) Continue monitoring of the Eurasian Crane migratory concentrations on Zharsor Lake, if necessary resources will be found.	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes	b) Determine migration routes and wintering sites of various populations of the Eurasian Crane within the current and former range of the Siberian Crane populations through satellite or radio tracking, questionnaires, surveys, and other methods	KZ RU	Naurzum SNR OSNBR	<ul> <li>KZ: Continue work on the questionnaire for inspectors and hunters as soon as funds for printing of questionnaires become available.</li> <li>RU: Continue monitoring of the Eurasian Crane population on nesting grounds and staging areas in West Siberia along migration route used by the Siberian Crane, including PTT marking of Siberian Cranes.</li> </ul>	2
	c) Develop optimal migration routes for Siberian Cranes using migration routes of Eurasian Cranes.	KZ, RU	CBCC, OCBC, Oil and Gas company ITERA	<b>KZ, RU</b> : Realize practical field stage of Flight of Hope Project on reintroduction of Siberian Cranes using ultralight technique.	1

Objective IV: Protect and manage habitats of importance for the Siberian Crane								
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity			
4.1. Protect and manage habitats of	a) Improve institutional and the physical protection of the	AZ	MENR	<b>AZ:</b> Establish National Park on the base of Gyzylagach State Nature Reserve through expanding territory of the nature reserve.	1			
importance for the Siberian Crane sites	Siberian Crane sites	IR	DoE	<b>IR:</b> Review and update Ramsar information sheets for FDK and Bujagh, upgrade protection status of the protected areas.	1			
		KZ	FHC	<b>KZ:</b> Prepare suggestions on additional measures for site protection within the framework of IBA.	2			
		RU	MNRE	<b>RU:</b> Improve protection of federal wildlife refuges which are habitats for the Siberian Crane.	1			
	b) Secure protection through collaboration with local	Азербай- джан	AOS, local NGO	<b>AZ</b> : Involve local communities in wetland protection by PAs and NGOs staff.	1			
	communities and/or legal measures for inadequately	Иран	DoE, Site Management	IR: 1) Continue to maintain Site Management Committees established under SCWP	1			
	protected or newly identified areas of importance for the		Committees	2) Support Trappers Associations and their trust funds.	1			
	Siberian Crane			3) Focus on follow up to UNEP/GEF SCWP results.	1			
	c) Develop management plans for Siberian Crane sites	IR	DoE, Site Management	IR: 1) Finalize and sign FDK Management Plan prepared under UNEP/GEF SCWP.	1			
			Committees, Mazandaran Governor	2) Implement the prepared management plans.	1			

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
4.1. Protect and manage habitats of importance for the Siberian Crane	c) Develop management plans for Siberian Crane sites	KZ	FHC, Hunting & Fishing Association, other stakeholders	<b>KZ:</b> 1) Participate in preparation of development plans for unprotected WCASN areas and newly designated Ramsar sites in collaboration with the existing users of these areas and according to legislation of the Republic of Kazakhstan.	1
on Siberian Crane sites i				2) Determine of responsible initiative groups and provide them resources for plan development.	
		RU	WCASN	<b>RU:</b> Evaluate possibilities of updating and transformation of management plans created during UNEP/GEF SCWP for proposed WSCAN sites.	2
	d) Conduct applied research on Siberian Crane sites in	AZ	AOS, MENR	AZ: 1) Improve research activities in Gyzyl-Aghach SNR, Shirvan NP, and Apsheron NP.	2
	support of site management			2) Organise annual mid-winter census of waterbirds.	2
		IR	DoE	<b>IR:</b> 1) Use the results of waterbird census to implement the management plan.	2
				2) Incorporate the waterbird monitoring analysis results into the management plan.	2
		KZ	SNRs, GSWG of East Europe and North Asia	<b>KZ:</b> Continue monitoring and counts of migratory birds and use their results to update management plans.	1
		RU	ARRINP	<b>RU:</b> Conduct applied research at key Siberian Crane sites in support of site management.	3
	e) Monitor and assess the environmental impacts of	IR	DoE	IR: 1) Apply the university studies on impact of human activities and climate change to the management plan implementation.	2
	human development on habitats of importance for			2) Review documents of the Convention on Climate Change.	2
	the Siberian Crane, including possible impacts of climate	KZ	SNRs	<b>KZ:</b> 1) Continue monitoring of the ecological conditions on stopover sites and dynamics of threats.	2
	change.			2) Consider possibilities of development and implementation of special project on an analysis of possible influence of climatic changes on hydrological regime of lakes and waterbird number dynamics, in cooperation with GSWG of East Europe and North Asia, Working Group on Lesser White-fronted Goose, Wetlands International and other organisations, and seek funds. This work requires collection and analysis of enormous volume of materials, beginning with meteorological data (amounts of precipitation, temperature, etc.) for as long period as possible.	2
		RU	ARRINP	<b>RU:</b> Monitor impacts of oil and gas exploration at the Siberian Crane breeding grounds.	2
	f) Manage buffer zones and external threats for protected areas critical for the Siberian Crane	All Range States-WP		All Range States-WP: No any activites needed.	

Objective V: 1	Increase pu	ublic awarene	ss and eco	logical e	ducation

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
5.1. Share information on	a) Publicize information on the Siberian Crane conservation	All Range States-WP	SCFC, ICF	<b>All Range States-WP:</b> 1) Continue to provide information about the Siberian Crane conservation activities to mass media.	2
the Siberian Crane conservation efforts through mass media	efforts in mass media, public and scientific magazines			2) Publicize information in CMS bulletin, ICF Bugle, Siberian Crane Flyway (SCF) News and other newsletters and scientific journals and books.	1
tillough mass media		IR	DoE, NGO	IR: Continue to send articles and news to the Iranian mass media.	2
		KZ	SNRs	KZ: 1) Continue collaboration with mass-media of Kostanay Region.	2
				2) Continue publish information about Siberian Cranes in newsletters.	2
		RU	ARRINP, SF	<b>RU:</b> Continue publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines.	2
	b) Produce and share education and information	ICF, SCFC	All Range States- WP	<b>ICF, SCFC:</b> Continue to provide the range states with awareness materials especially for the Crane Celebrations, if funds are available.	2
	materials on the Siberian Crane and wetlands	All Range States-WP	SCFC	<b>All Range States-WP:</b> Share educational/awareness materials with other range states.	2
		IR	SCFC	<b>IR:</b> 1) Translate the SCWP Final Report into Farsi and distribute it among interested organisations and people.	2
				2) Produce booklets for case studies.	3
		IR, KZ	WCASN	IR, KZ: Produce information materials for hunters within WCASN activity	2
		RU	CWGE	RU: 1) Create a film about cranes.	2
				2) Continue produce and distribute education materials such as booklets, leaflets, pins, stickers.	2
5.2. Community involvement	a) Develop education and information programmes and	СВСС	IR	<b>CBCC:</b> Deliver one pair of captive-raised Siberian Crane to Iran for education purposes.	2
	public events for target groups of local people (especially	AZ, RU	AOS, SCFC	AZ, RU: Continue organising Crane Celebrations.	1
	hunters) on protection of the Siberian Crane and its habitats	IR	DoE, SCFC	IR: 1) Continue organising "World Migratory Bird Day" and "Crane Celebration" to attract more audience (if cranes arrive).	2
				2) Work towards declaring a "National Bird Day", as this is the best tool to widen this event to all parts of the country.	2
				3) Provide guidelines for raising the awareness of the key stakeholders, target groups and audience at national, provincial and site levels about the Project	2
				4) Contributing to achievement of sustainable change of attitude among the stakeholders at national, provincial and site levels.	
				5) Develop practical action plans for sound implementation and monitoring the activities recommended by the Awareness Strategy	2
				<ul><li>6) Participate in "Siberian Crane in a Suitcase" education program.</li><li>7) Continue education activities in Bujagh NP.</li></ul>	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
involvement information prog public events for of local people (e hunters) on prot	a) Develop education and information programmes and public events for target groups of local people (especially hunters) on protection of the Siberian Crane and its habitats	KZ RU	SNRs, NGOs, KSPI, SCFC	<ul> <li>KZ: 1) Continue organise traditional Crane Celebration and "Migratory Bird Day".</li> <li>2) Expand this activity on Delta Ural area through involvement of Akzhaik Reserve.</li> <li>RU: 1) Continue the education programme "Siberian Crane in a Suitcase"</li> <li>2) Continue organising "Crane Celebration" widely.</li> </ul>	1 1 2 2
	b) Establish and maintain learning/information center	IR KZ	DoE, NGOs SNR, NGOs, KSPI,	<ul><li>IR: 1) Complete establishment of the education center in FDK.</li><li>2) Continue education activities in Bujagh NP.</li><li>KZ: Continue development of student club of birdwatchers.</li></ul>	2 2
5.3. Sustainable livelihood opportunities	Initiate and facilitate sustainable livelihood projects for local communities	IR	DoE, Site Management Committees, NGOs	IR: Facilitate and monitor livelihood activities in the area through intersectional coordination.	1 1
		KZ	Naurzum SNR, FHC	<b>KZ:</b> Develop infrastructure of ecological tourism in Naurzum SNR.	3

Objective VI: Enhance national and international cooperation and information exchange							
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity		
	lead agency responsible for	CMS, SCFC,	All Range States- WP	CMS, SCFC, ICF: Maintain and update focal point list regularly.	1		
cooperation and information	coordinating the Siberian Crane conservation and	All Range States-WP	CMS	All Range States-WP: 1) Identify technical and administrative focal points.	1		
exchange	management policy			2) Inform CMS Secretariat of any changes in responsibilities.	1		
	b) Collaborate and conduct international research and	CMS		<b>CMS:</b> Call attention to the importance of conserving Siberian Cranes and their habitats over their entire range, at relevant international conferences.	1		
	monitoring	ICF, WI, CMS	UNEP, GEF	ICF, WI, CMS: Develop WC Asia GEF proposal with ICF and CMS, in close consultation with partners with a focus on key WCASN and other internationally important migratory waterbird sites.	1		

### Objective VI: Enhance national and international cooperation and information exchange

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.1. Improve national and international cooperation and information exchange	b) Collaborate and conduct international research and monitoring	All Range States-WP, SCFC	GWGE, WI, CAF	<b>All Range States-WP, SCFC:</b> 1) Sthrenthen a network for monitoring migrating cranes in collaboration with network sites and other important sites.	1
Tormation exchange				2) Attend the CWGE Scientific Conference "Cranes of Palearctic: Biology, Conservation, Management (in memory of Academician P.S. Pallas)" in Volgograd, Russia, in October 2011.	2
				3) Participate in CWGE activities.	2
		IR	RU, OCBC	IR: 1) Continue to participate in international and bilateral agreements.	1
				2) Develop and implement activities under bilateral agreement with Russia.	1
				3) Receive Siberian Cranes from OCBC for release and education purposes.	1
		KZ	RU, SF	<b>KZ:</b> 1) Cooperate with Russia in implementation of Flight of Hope Project.	1
				2) Organise monitoring of migratory Eurasian Cranes in places of their mass concentrations within the frame of the Siberian Crane reintroduction programme.	1
		RU	KZ, CBCC, OCBC	<b>RU:</b> 1) Collaborate with Kazakhstan colleagues within the framework of Flight of Hope Project, including field research of a stretch of migration route across the Kazakhstan part of the Kyzyl Kum desert.	
				2) Conduct expert exchange visits on sites and collaborative projects.	
				3) Consider possibilities to provide captive-bred Siberian Cranes for education and further releases upon requests from range states.	
	c) Provide central coordination of information exchange through SCFC and regional	SCFC	ICF, CMS, All Range States-WP	<b>SCFC:</b> Continue to collect and share information. Update SCFC website and establish Russian version of the website. Continue to update Siberian Crane database.	1
	database / GIS on the Siberian Crane and its sites	WI	WOW, AEWA, CMS	<b>WI:</b> Promote use of the Wings Over Wetlands (WOW) Critical Site Network Tool launched in June 2010 with WOW Partners as an information platform for Siberian Crane and migratory waterbirds in the western flyway.	
		All Range States-WP	SCFC	All Range States-WP: Continue to provide information to SCFC.	1
		RU	SCFC	<b>RU:</b> Timely exchange information on migration dates and directions.	1
	d) Submit an annual report on implementation of the Siberian Crane MOU to the UNEP/CMS Secretariat	CMS, ICF, SCFC	All Range States- WP	<b>CMS, ICF, SCFC:</b> 1) Compile and distribute CMS MOS7 report, including revised Conservation Plans for three populations with limited number of hard copies. Send hard copies to governmental agencies of range states. Upload publication on CMS website.	1
				2) Create template and database for electronic online reporting and upload them to CMS website. Request additional information from countries and upload country reports to CMS website, as appropriate.	1

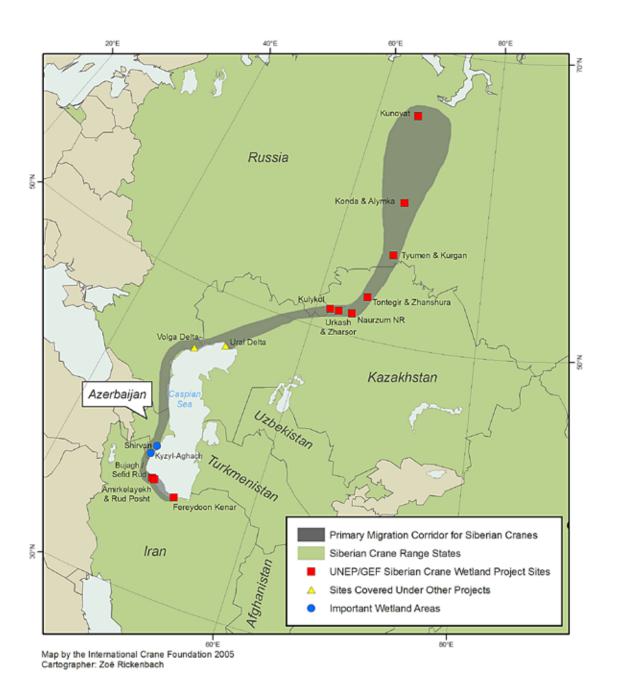
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.1. Improve national and international cooperation and in-	d) Submit an annual report on implementation of the Siberian Crane MOU to the	CMS	ICF	<b>CMS:</b> Produce executive summary of priorities and send to national governments requesting support. Range States will be sent draft to review and provide clarification or details.	1
formation exchange	UNEP/CMS Secretariat	SCFC	CMS, ICF, All Range States-WP	<b>SCFC:</b> Update national report format according to comments from range states.	1
		All Range States-WP	CMS, ICF	<b>All Range States-WP:</b> 1) Review and give technical input to the conservation plan-WP	1
				2) Give comments to national report format	1
				3) Give comments to executive summary of priorities.	1
				4) Submit an annual report on implementation of the Siberian Crane MOU to the UNEP/CMS Secretariat annually.	1
	e) Host and/or attend regular	CMS, ICF	All Range	CMC TCF: 1) Identify heat sounting for MOCO	1
	meetings of the Siberian Crane Range States	3.13, 23.	States-WP, WI, CBCC, Birdlife International	<ul><li>CMS, ICF: 1) Identify host country for MOS8.</li><li>2) Work with host country of MOS8 to ensure that the meeting is financially secure.</li></ul>	1
			2 incommunity	3) Liaise with other potential co-operating organisations as appropriate that signal their interest to sign the MOU.	1
				4) Contact Birdlife International as possible participant and signatory to MOU.	2
		All Range States-WP	CMS, ICF	All Range States-WP: Host and/or attend MOSs.	1
6.2. Development of the Western/Central	a) Promote further specific activities on WCASN	KZ, RU	ICF, SCFC	<b>KZ, RU:</b> Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund at WCASN sites.	1
Asia Site Network for the Siberian Crane	development	IR, KZ, RU	ICF, SCFC	IR, KZ, RU: Implement WCASN Action Plan for 2010-2012.	2
and other waterbirds		AZ	AOS, SCFC, ICF, CMS Secretariat	<b>AZ:</b> Prepare letter of endorsement for nomination of two sites (Shirvan National Park and Gyzyl-Aghach SNR) for inclusion in WCASN.	1
		KZ	SCFC, CMS	<b>KZ:</b> Nominate three more sites for the inclusion in WCASN:	
			Secretariat	q) Sarykopa Lake System is wildlife refuge. There is plan to include it to «Altyn-Dala» SNR in 2011-2012;	
				b) Turgay-Irgiz Lake System. Some of these lakes are located within Turgay WR and others are included in Irgiz-Turgay Reservat;	
				c) Tengiz-Kurgaljino Lake System within Kurgaljinskiy SNR.	
		RU	SCFC, CMS Secretariat	<b>RU:</b> Work on nomination into WCASN of sites proposed by Russian Federation (Agrakhanskiy, Belozerskiy, and Konda-Alymka).	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.2. Development of the Western/ Central Asia Site Network for the Siberian Crane	b) Coordinate with Central Asian Flyway initiative on site network development	wi	CMS, KZ, RU	<b>WI:</b> Work closely with CMS to finalize the institutionalization of the CAF Action Plan in collaboration with Range States and partners to enable its early implementation including development of the CAF site network.	2
and other waterbirds		All Range States-WP	CMS, CAF, ICF, AEWA	<b>All Range States-WP:</b> 1) Cooperate with CAF on development of Species Action Plans, Western/Central Asian Site Network for Siberian Cranes and other Migratory Waterbirds (WCASN), hunting and harvesting.	2
				2) Cooperate with AEWA on protected areas management in Western and Central Asia, encouragement for countries to join AEWA, promote sustainable hunting, and participate in World Migratory Bird Day.	
		KZ, RU	WI, CAF, CMS	KZ, RU: Participate in CAF meetings.	3
6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership	Collaborate with the Crane and Stork Working Group of the EAAP to integrate Siberian Crane conservation with flyway level activities for migratory waterbirds in the annual Partnership workplans	ICF, CMS	All Range States- WP	All Range States-WP: 1) Attend NEACWG and EAAFP meeting for representation of ICF and CMS. 2) Develop paper on partnership opportunities.	2
6.4. Capacity building	Determine country's needs, in terms of human resources,	CMS, ICF	Related organisa- tions	CMS, ICF: Participate in related international workshops and conferences.	2
	knowledge and facilities, in order to build capacity to strengthen conservation mea-	ICF	tions	ICF: Provide technical support to Range States including ordering and data management of PTTs.	2
	sures for the Siberian Crane and its habitats	WI	AEWA, WOW	<b>WI:</b> Promote use of the WOW Flyway Training Kit to build national and local capacity for waterbird and wetland management in Central and Western Asia with WOW Partners and others.	
		AZ	AOS, Ghyzyl- Aghach SNR	<b>AZ:</b> 1) Hire trained people for identification of Siberian Cranes during migration and stopovers.	1
				2) Set up sustainable monitoring network including awareness and training of PA staff and local communities on identification and count of Siberian Crane and other Globally Threatened Waterbirds.	1
				3) Improve infrastructure of Gyzyl-Aghach SNR and create National Park on its basis through expanding of SNR border.	1
		IR	DoE	IR: 1) Complete construction of the education center in FDK.	1
				2) Provide necessary equipments for FDK and Bujagh for guarding and monitoring.	1
				More guarding and law enforcement are required to improve protection activities.	1
				4) Consider training of experts from provinces as a priority.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.4. Capacity building	Determine country's needs, in terms of human resources, knowledge and facilities, in order to build capacity to strengthen conservation measures for the Siberian Crane	кz	FHC, Naurzum SNR, NGOs, KSPI, SCFC	<b>KZ:</b> 1) National possibilities are insufficient: (i) national foundation/sponsors organisations which would support NGO are absent; (ii) existent governmental grant programs (social order) realized through Regional Akymats supports only socially significant projects (iii) Kazakhstan has very few experts-ornithologists, therefore, for example, for implementation of a project on IBAs Russian colleagues were invited for help.	1
	and its habitats			2) To strengthen measures on conservation of the Siberian Crane and its habitats it is first necessary to provide support to the initiative groups/ NGO in realization of projects focused on specific sites (for example, a pilot project on zoning of lakes).	1
				3) All measures on reintroduction/increasing number of the Siberian Crane of west/central population make sense and can be realized only in close cooperation with the Russian side and other countries in the region. A long-term program must be prepared, which includes scientific aspects (such as influence of climatic changes on hydrological regime of lakes and habitats of the Siberian Crane). Funding should be actively sought.	1
		RU	Astrakhan SNR,	RU: 1) Establish a Siberian Crane field station in Astrakhan SNR.	3
			освс	2) Reconstruct facilities for the Siberian Crane chicks at OCBC.	1
				3) Organise training on ecological education for PA staff.	2
				3) Provide satellite devices (PTTs) for released Siberian Crane chicks.	1
				4) Conduct special training for new techniques.	2
6.5. Raise funds to support a	a) Develop comprehensive project proposal(s) to submit	СМЅ	ICF, All Range States-WP, UNEP	<b>CMS:</b> 1) Set up mechanisms for countries to contribute funds dedicated to the Siberian Crane conservation.	1
comprehensive conservation programme	to appropriate agencies for possible funding			2) Request UN Foundation to consider support of Siberian Crane conservation through UNEP/CMS.	1
supporting MOU implementation		ICF	CBCC, All Range States-WP	<b>ICF:</b> 1) Seek funds through CBCC to support continuation of SCFC position for at least one year.	1
				2) Support key regional activities.	1
		СВСС	ICF, OCBC, ICF, SCFC	<b>CBCC:</b> 1) Consider support for travel to build capacity and promote collaboration	
				2) Help seek funds for SCFC position	
				3) Continue support to OCBC for releasing birds for reintroduction.	
				4) Seek support for Flight of Hope Project	
		ICF, WI	All Range States- WP	ICF, WI: See support from countries to apply for UNEP/GEF grants for Western/Central Asia.	1
		RU	Oil and gas companies of ITERA and Petroresurs	RU: Get funds from oil companies (ITERA, Petroresurs) for support of the Siberian Crane release in Caspian Region of Russia.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.5. Raise funds to support a compre- hensive conservation programme support- ing MOU implemen- tation	b) Develop small-scale project proposals to submit to CMS or	KZ, RU	ICF	<b>KZ, RU:</b> Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund.	1
	ICF for their consideration	RU		RU: Develop small-scale project proposals and seek funding sources.	1
		ICF, CMS		<b>ICF, CMS</b> : Provide comments to strengthen proposals and provide letters of support as appropriate.	1
	c) Appeal to governments for funding of Siberian Crane con-	CMS	All Range States- WP, ICF	<b>CMS:</b> 1) Provide letters of support for efforts of national agencies and cooperating partners to secure additional funding for MOU-related activities.	1
	servation activities related to the Siberian Crane MOU			2) Continue to coordinate with Friends of CMS to determine what support could be provided to the MOU's implementation in collaboration with ICF.	
		AZ	MENR, AOS	AZ: Raise funds from both governments and other sources.	1
		KZ	FHC	KZ: Improve access to funding through state budget.	1
		RU	MNRE	<b>RU:</b> 1) Continue work with governments for funding of the Siberian Crane conservation activities related to the Siberian Crane MOU.	1
				2) Get financial support from MNRE for maintaining of OCBC.	1

Figure 2. Map of Siberian Crane Western Flyway



# **Conservation Plan for the Central Flyway**

Objective I: Reduce mortality							
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity		
1.1 Determine and monitor prevailing threats of all types	a) Assess and monitor threats in the Siberian Crane nesting and wintering grounds and	All Range States-CP	ICF, CMS, WI	<b>All Range States-CP:</b> 1) Work with partners to raise importance of Poyang Lake for the Siberian Crane and other migratory waterbirds due to dam construction.	1		
to the Siberian Crane and its habitats	along the migration routes			2) Continue monitoring of threats through surveys or questionnaire.	1		
		AF	Wildlife Species Listing Committee	<b>AF:</b> Setup and work to outline protected and harvestable species including Siberian cranes.	2		
		IN		<b>IN:</b> Examine and manage impact of power lines expansion in crane migration range on mortality.	1		
		KZ	Akzhaik Reserve	<b>KZ:</b> Extend threats monitoring of wetlands to western Kazakhstan (Aktyubinsk and Atyrau Regions) (consider impacts of oil and gas industry).	1		
		PK	Pakistan Wetlands Program (PWP)	<b>PK:</b> 1) Assist a study on assessment of pollution levels in the Central Indus Wetlands Complex by Pakistan Wetlands Programme (PWP).	2		
				2) Assist an M.Phil. student to investigate pollution sources in the Indus River by PWP.	3		
		RU	MNRE, Oil and Gaz Companies	<b>RU:</b> 1) Continue monitoring of oil and gaz minefields in Kunovat River Basin on the Siberian Crane habitats.	1 1		
				2) Reduce illegal hunting pressure.			
		TU		<b>TU:</b> Continue this activity, including monitoring of accidental deaths of Eurasian Cranes during wintering.	2		
		UZ	UzCWG	<b>UZ:</b> Continue to monitor poaching along the Siberian Crane flyway and at the Eurasian Crane wintering grounds.	1		
	b) Identify and document best practice protocol for conservation and management of the	All Range States-CP		<b>All Range States-CP:</b> Continue to identify best protocols for conservation and management of the Siberian Crane, as new information becomes available.	1		
	Siberian Crane to minimize threats to the Siberian Crane and its habitats	PK	PWP, CBCC, KPK WLD Arid Agriculture University	<b>PK:</b> 1) PWP plans to extend its activities to enhance captive breeding so that hunting pressure may be reduced on the migratory birds. Pakistan lacks biologists trained in captive breeding of the cranes. Moreover there is a dire need to build the capacity of local peoples in Banuu and Lakki areas of Khyber-Pakhtunkhwa Province for effective captive breeding and disease management.	1		
				2) PWP continues to sponsor students' research on subjects related to cranes. An M.Phil. student of the Arid Agriculture University, Rawalpindi completed her thesis in 2010 and another student research will be completed soon.	1		
				3) The possibilities to work in collaboration with Cracid & Crane Breeding and Conservation Centre (CBCC) should be considered.	1		

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
1.1 Determine and monitor prevailing	c) Determine hunting seasons and best practices in areas	ICF	All Range States-	ICF: Finalize hunting strategy, consult with partners, and develop proposals to cover a range of activities over a long period.	1
threats of all types to the Siberian Crane	used by Siberian Crane	AF	MAIAH	AF: Hunting regulation and procedures is in progress.	1
and its habitats		KZ	Regional Hunting Associations, oth-	<b>KZ:</b> 1) Discuss with hunting association the question about spring hunting and possibility of its complete prohibition.	1
			er stakeholders	2) Work with hunting associations and other stakeholders (private hunting organisation) to expand practice of prohibiting of hunting at water bodies.	1
		PK	BFWD, KPK WLD, SEED Zhob, and	<b>PK:</b> 1) Continue efforts of Balochistan Forest and Wildlife Department (BFWD) on crane conservation in collaboration with PWP.	1
			PWP	2) Continue to support the crane conservation initiatives in Khyber- Pukhtunkhwa and Balochistan provinces by PWP and WWF Pakistan, providing resources are made available.	1
				3) Continue technical support by PWP to build capacity of local NGOs in Zhob such as Society for Economic and Environmental Development (SEED), Zhob to initiate community based crane conservation efforts.	2
	UZ	TU	MNP	<b>TU:</b> Continue the issue, before the start of hunting season, the governmental decree "On Hunting Season Opening" with the List of Species for Banned Hunting, including the Siberian Crane.	2
		UZ	Uzbekistan Hunt- ing and Fishing Society, Gos- biokontrol, UzCWG	<b>UZ:</b> Continue preparing, printing and distribution of information about the Siberian Crane among hunters, collect and analyze all Siberian Crane sightings.	2
1.2. Strengthen and improve enforcement	a) Review existing national and local legislation to address	KZ	FHC	<b>KZ:</b> Continue work on nomination of other important wetlands (Sarykopa, Turgai-Irgiz Lake System, Syrdaria River Delta) in Ramsar List.	2
of legislation for crane protection	gaps or challenges to Siberian Crane conservation.	PK	PWP, NCCW/MoE	<b>PK:</b> 1) PWP continues collaboration with the KPK WLD and BFWD in their crane conservation efforts in Zhob and Musa Khel and make efforts to review crane conservation rules/legislation to identify gaps.	2
				Facilitate approval of amendments and effective enforcement of laws, and harmonize laws among provinces.	2
		RU	MNRE	<b>RU:</b> Take into account problems connected with hunting pressure for the Siberian Crane population through updating of federal and regional hunting legislation.	
		тм	MNP	<b>TM:</b> Continue work on preparation of the third issue of Red Data Book of Turkmenistan.	2
		UZ	Gosbiokontrol	<b>UZ:</b> Plan to update Decree of the Ministry Council #508 from 28 October 2004 regarding significant increasing of penalty for illegal hunting of the Siberian Crane and other crane species.	2

Programme	Activity	BFWD	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
1.2. Strengthen and improve enforcement	b) Ensure effectiveness of law enforcement	IN	MoEF	<b>IN:</b> 1) Promote wetlands to be protected as Conservation Reserves and Community Reserves (new categories of protected areas in India).	1
of legislation for crane protection				2) Identify historical Siberian Crane wintering wetlands for consideration to designate them as wetlands conservation reserves.	1
		KZ	FHC, SNRs, Regional Hunting Associations & other stakeholders	<b>KZ:</b> Enhance protection under existing laws.	1
		PK	PWP, MoE	<b>PK:</b> Present the draft "National Wetlands Policy" to the National Cabinet and National Assembly for approval and adoption at national and provincial levels.	1

Objective II: Moni	Objective II: Monitoring and research							
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity			
2.1. Monitor and study the Siberian Crane and its habitat	a) Conduct regular monitoring of known areas along the	wi	All Range States- CP, AWC	<b>WI:</b> Promote use of the Asian Waterbirds Census framework for monitoring of the Siberian Crane and other waterbirds and wetlands for the region.				
Crane and its nabitat	flyway to determine estimated numbers of the Siberian Crane	All Range States-CP	SCFC	<b>All Range States-CP:</b> Continue to monitor Siberian Crane of known areas along the central flyway if funds will be available.	1			
		AF	AWEC	<b>AF:</b> Develop a plan for monitoring of known Siberian Crane areas by Afghanistan Wildlife Executive Committee (AWEC).	2			
		IN	ICWWG	<b>IN:</b> 1) Continue ground surveys during the migratory season in historical Siberian Crane sites as well as other satellite wetlands for monitoring the status of migratory waterbirds and for documenting any possible arrival of Siberian Cranes.				
				2) Continue the annual bird count programmes.				
		KZ	SNRs, GSWG of East Europe and North Asia	<ul><li>KZ: 1) Continue monitoring of lakes in Naurzum SNR and Zharsor WR.</li><li>2) Count Eurasian Cranes and other waterbirds on the other lakes along the Siberian Crane flyway in KostanayRegion, if funds are available.</li></ul>	1 2			
		PK	PWP, MoE BFWD, SEED,	<b>PK:</b> 1) Continue to conduct regular surveys of the crane's habitats along the Indus River.	2			
			KPK WLD	2) Assist and encourage BFWD and local NGOs such as SEED to conduct surveys of cranes migrating through the Zhob, Musa Khel and Noshki districts of Balochistan. Ahmad Khan, PWP, assisted the SEED to develop a proposal for funding of UK Pounds 1000 by the Oriental Birds Club. This project on surveys will be implemented next migration season (spring 2011).	2			

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
2.1. Monitor and study the Siberian	a) Conduct regular monitor- ing of known areas along the	RU	ARRINP, SF	<b>RU:</b> 1) Continue the regular monitoring and surveys at breeding grounds and migration routes of Central Asian flock.	1
Crane and its habitat	flyway to determine estimated numbers of the Siberian Crane			2) Continue activity through distribution of the Siberian Crane question- naire for hunters in key Siberian Crane sites.	1
				3) Cooperate with hunters to involve them in observations and reporting of Siberian Crane sightings.	1
		τυ	MNP	<b>TU:</b> 1) Continue to conduct inquiry of local people during monitoring of wintering Eurasian Cranes.	1
				2) Continue monitoring of migrating and wintering Eurasian Cranes as far as possible.	1
				3) Check for possibility of the Siberian Crane sightings in the Eurasian Crane flocks.	1
		UZ	Gosbiokontrol, SCNP, Institute of Zoology of AS RUz	<b>UZ:</b> Collect data on rare species including the Siberian Crane within the frame of the state program "Cadastre of Fauna of the Republic of Uzbekistan".	1
	b) Determine new migration stopovers, wintering areas, as well as summering areas of Siberian Cranes through satel- lite or radio tracking, ques-	SCFC, ICF	All Range States- CP	<b>SCFC, ICF:</b> Immediately share received information among Range States through e-mail list and website.	1
		All Range States-CP	SCFC	<b>All Range States-CP:</b> Continue to check all reported sightings of the Siberian Crane.	1
	tionnaires, surveys, and other	AF	AWEC	AF: Develop a plan on investigation of the new Siberian Crane areas.	2
	methods and investigate them	IN	MoEF, Govern- ment of India,	IN: 1) Continue to conduct questionnaire among local people by NGOs and University research organisations;	
			BNHS, WWF-India, ICWWG, ICF	2) The BNHS intends to continue the satellite telemetry work as well as bird banding as the mode for monitoring bird migration.	
				3) Continue ground surveys with increasing involvement of public societies and researchers' network.	
				4) Investigate all reports about Siberian Crane sightings on an emergency basis.	
		KZ	SCFC, ICF, NRs	<b>KZ:</b> 1) Continue interview of hunters, fishermen, shepherds and questionnaire, if funds are available.	1
				2) Respond immediately to future sightings: verification of reports is possible in cases when information is received on the sighting day and a visit to the place of sighting is feasible.	1
		PK	PWP	<b>PK:</b> 1) Procure four satellite transmitters and launch an effective Satellite Tracking Programme for tracking of migratory birds including cranes.	1
				2) Include cranes in the banding programme for effective collaboration with the local hunters.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
2.1. Monitor and study the Siberian Crane and its habitat	b) Determine new migration stopovers, wintering areas, as well as summering areas of	RU	ARRINP, OSNBR	<b>RU:</b> 1) Continue determining new migration stopovers, wintering areas, as well as summering areas of Siberian Cranes through satellite or radio tracking, questionnaires, surveys, and other methods.	1
	Siberian Cranes through satel- lite or radio tracking, ques- tionnaires, surveys, and other methods and investigate them			2) Continue to investigate all reports of the Siberian Crane sightings received through interviews and questionnaire at breeding grounds and along central flyway, if funds are available.	1
	methods and investigate them	TU	WI, AWC	<b>TU:</b> Continue to seek new data concerned Siberian Crane and other crane species during mid-wintering Asian Waterfowl Census.	2
		UZ	Institute of Zool- ogy of AS RUz	<b>UZ:</b> 1) Continue to organise questionnaire among local people, including hunters through correspondence network.	1
				2) Continue inquiry of local people about Siberian Crane sightings during monitoring of migratory Eurasian and Demoiselle Cranes.	1
	c) Conduct ecological studies of the Siberian Crane in your country	All Range States-CP	IUCN	<b>All Range States-CP:</b> Note publication by Dr. Carey Krajewski proposing the Siberian Crane is listed in its own genus as ( <i>Leucogeranus leucogeranus</i> ). This emphasizes the taxonomic uniqueness and ancient lineage of the Siberian Crane. Work with IUCN Crane Specialist Group to confirm official change of genus.	3
2.2. Maintain national database on the	Regularly contribute to and maintain the regional database, and extend it to cover all Range States	ICF, SCFC	All Range States- CP	ICF, SCFC: Maintain database and explore options to go on-line and link more effectively with databases under other initiatives.	1
Siberian Crane and its habitats		All Range States-CP	SCFC	<b>All Range States-CP:</b> Provide information on Siberian Crane sightings and all activities along Central Flyway to SCFC for inclusion in regional database.	1
		IN	SCFC	IN: Plan to formalize the above programmes into a bird database.	
		UZ	Institute of Zoology, UzCWG	UZ: Develop a national database.	2
2.3. Promote or take into account avian influenza surveillance	Collaborate with, and complement activities of other agencies to strengthen sample	IN	MoEF, Ministry of Health	IN: The MoEF and Ministry of Health, Government of India are setting in motion a national avian influenza monitoring programmes	
at important crane sites	collection for surveillance of avian influenza in migratory waterbirds at network sites and other important crane	KZ	FHC, SNRs, Hunt- ing and Fishing Society, Veterinary Service	<b>KZ:</b> Plan for both passive and active surveillance in case of an outbreak.	2
	sites.	PK	PWP, NARC	<b>PK:</b> Continue to collaborate with National Agriculture Research Council (NARC) in Islamabad on analysis of blood and tissue samples collected for surveillance of avian influenza of migratory birds.	2
		ТМ	MNR, Sanitary- Hygienic Service, Hunting and Fish- ing Society	<b>TM:</b> Request the National Hunting and Fishing Society to plan selective shooting of waterfowl during migration and wintering for the following avian influenza analysis by Sanitary & Hygienic Service.	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
2.4. Evaluate efficacy and application of research/monitoring	a) Review and evaluate research and monitoring activities for their efficacy	All Range States-CP	CMS, ICF	All Range States-CP: Provide national level review in reports. CMS and ICF will coordinate review of data on a regional level.	2
	b) Apply monitoring and research results to improve management practices and mitigation of threats to the Siberian Crane	RU, TU, UZ	ARRINP-RU, Institute of Zoology AS RUz, AS of TU	<b>RU, TU, UZ:</b> Use results of monitoring and research to improve management practices and mitigation of threats to cranes along potential migrating routes and wintering grounds of the Siberian Crane.	1

Objective III: Increase numbers and genetic diversity							
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity		
3.1. Promote recovery of the Siberian Crane populations	a) Produce eggs and chicks of Siberian Cranes for release programmes	свсс, освс	RU	<b>CBCC, OCBC:</b> Provide chicks or eggs produced during early stages of the breeding season to have Siberian Crane chicks with suitable age for Flight of Hope Project.	2		
		СВСС	RU, OCBC	<b>CBCC</b> : Обеспечить Питомник ОГПБЗ яйцами стерха, полученными в начале сезона размножения, для последующего выращивания и использования в Проекте Полет надежды.	2		
	b) Restore Siberian Crane populations through release programmes	ICF, CBCC, OCBC, RU	SF	ICF, CBCC, OCBC, RU: Collaborate to develop release strategy .for Flight of Hope Project.	1		
		KZ, TU, UZ	RU	<b>KZ, TU, UZ:</b> Sign the bilateral agreement with Russia for implementation of Flight of Hope Project.	2		
		RU, OCBC	црскж	<b>RU, OCBC:</b> 1) Increase the number of released Siberian Cranes at breeding grounds (Kunovat) and on migration stopovers (Armizon District) along Central Flyway.	1		
				2) Strengthen important restoration efforts through Flight of Hope project and other release techniques to increase number of birds successfully released and to increase collaboration with other countries.	1		
		TU	KZ, RU, UZ	<b>TU:</b> Cooperate with other countries to coordinate activities along the Siberian Crane flyway in Amudaria Valey under Flight of Hope Project.	2		
		UZ	RU, ECJ, Gosbiokontrol, SCNP, UzCWG	<b>UZ:</b> Support Flight of Hope Project at Ecological Center "Jeiran" (ECJ) in cooperation with Russia.	1		
	c) Monitor Siberian Cranes released into the wild	All Range States-CP	SCFC	<b>All Range States-CP, SCFC:</b> Participate in tracking migration of released captive-bred Siberian Cranes supplied with satellite transmitters.	1		

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
3.1. Promote recovery of the	c) Monitor Siberian Cranes released into the wild	KZ, RU, TU, UZ	SCFC	<b>KZ, RU, TU, UZ:</b> Continue to monitor captive-bred Siberian Cranes released into the wild through satellite tracking.	1
Siberian Crane populations		RU, UZ	ECJ	<b>RU, UZ:</b> RU, UZ: Band released Siberian Cranes from ECJ with color bands and radio transmitters if funds will be available.	2
	d) Conduct genetic studies to manage the genetic diversity of wild and captive populations	RU	Institute of Gene- tic of RAS, OCBC, Moscow Zoo	<b>RU:</b> Conduct genetic studies in cooperation with Institute of General Genetic RAS and Moscow Zoo, if funds are available.	3
3.2. Develop safe migration routes	a) Identify and survey relatively safe habitats of the	AF	SFA	<b>AF:</b> Continue research along migration routes and at wintering grounds of Eurasian Cranes.	3
for Siberian Cranes based on those used by Eurasian Cranes	Eurasian Crane population - one that frequents ecologically suitable areas on the breeding	TU	моп	<b>TU:</b> Continue monitoring of the Eurasian Crane wintering grounds in Durnaly and Tallymerjen & Kelif-Zeyit.	3
2, 24, 45, 41, 41, 41, 41, 41, 41, 41, 41, 41, 41	grounds, along the migration route and on the wintering	UZ	Institute of Zoology AS RUz, UzCWG	<b>UZ:</b> 1) Continue monitoring of wintering places of the Eurasian Crane near Termez and Talimarjan Reservoir.	2
	grounds - into which Siberian cranes could be (re)introduced			2) Collect data from correspondents (rangers, hunters, local people, and ornithologists) about Eurasian Crane wintering sites and migration routes.	2
	b) Determine migration routes and wintering sites of various	IN	ICWWG	IN: 1) Continue to determine migratory routes of Eurasian Cranes in western and north eastern India.	3
	populations of the Eurasian Crane within the current and			2) Continue PTT studies on Eurasian Cranes.	
	former range of the Siberian Crane populations through			3) Continue work on the questionnaire of inspectors and hunters pending financial resources for printing of questionnaires.	
	satellite or radio tracking, questionnaires, surveys, and other methods	KZ	SNRs	<b>KZ:</b> 1) Survey north and west parts of Kostanay Region to find possible migration stopovers of the Eurasian Crane.	2
	outer metrious			2) Continue monitoring Eurasian Crane migratory concentrations on Zharsor Lake, if funds are available.	2
		PK	WWF-PK, PWP, KPK WLD BFWD	<b>PK</b> : Conduct survey of key crane hot spots along the Central Indus River in Khyber-Pukhtunkhwa Province and along the Zangi Nawar Lake in Noshki District, Rakhni in Musa Khel District and in Zhob District.	2
		RU	ARRINP, OSNBR	<b>RU:</b> Continue monitoring of the Eurasian Crane population on nesting grounds and staging areas in West Siberia along migration route used by the Siberian Crane, including PTT marking.	2
		TU	MNR	<b>TU:</b> Conduct the Eurasian Crane censuses during autumn migrations in Eastern Kopetdag foothills and in Amudaria Valley, if funds are available.	2
		UZ	Institute of Zoology AS RUz, Gosbiocontrol	<b>UZ:</b> Continue search for new stopovers of the Eurasian Crane along the Siberian and Eurasian Cranes flyway.	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes	c) Develop optimal migration routes for Siberian Cranes using migration routes of Eurasian Cranes	KZ, RU, UZ UZ	OCBC, CBCC, ITERA RU, ECJ	<ul> <li>KZ, RU, UZ: Realize practical field stage of Flight of Hope Project on reintroduction of Siberian Cranes using ultralight technique.</li> <li>UZ: 1) Study adaptatiosn of the Siberian Crane to winter conditions at ECJ.</li> <li>2) Investigate ecological conditions (air temperature, ice and snow covering and others), threats; conduct crane counts and observations on birds' behavior and habitats.</li> </ul>	1 2 2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
manage habitats of	a) Improve institutional and the physical protection of the	AF	Government	<b>AF:</b> Monitor the signing of Ramsar Convention that is under review by Parliament.	1
	Siberian Crane sites	IN	MoEF	<b>IN:</b> Facilitate and support the provincial government to develop proposals for inclusion of wetlands determined as the Siberian Crane historic sites in the PA network, for designation of the IBAs, and examine if these wetlands can be declared as Ramsar Sites.	
		KZ	FHC, ACBK, stake- holders	<b>KZ:</b> Prepare suggestions on additional measures for site protection within the framework of IBA.	2
		UZ	Institute of Zool- ogy AS RUz	<b>UZ:</b> Prepare suggestions on the additional measures of wetlands protection within the strategic plan of IBAs.	1
	b) Secure protection through	AF	SFA	AF: Work on establishment of protected areas of different levels.	1
co co m pr ar	collaboration with local communities and/or legal measures for inadequately protected or newly identified areas of importance for the Siberian Crane	IN	MoEF	IN: The Ministry of Environment & Forests, Government of India has included two other categories of protected area in the Wildlife (Protection) Act - Conservation Reserves and Community Reserves. The provinces are encouraged to work on designation of unprotected wetlands with considerable biodiversity and socio-economic value as Conservation Reserves or Community Reserves, depending on the land use tenure.	1
		PK	PWP, BFWD, KPK WLD,	<b>PK:</b> PWP continues efforts to establish effective collaboration with local non-governmental organisations such as SEED Zhob to secure protection of community owned crane staging and rest areas along the Zhob River.	2
		RU, TM, UZ	MPRE RU, MNP TU, Gosbiokon- trol Uz, UzCWG	<b>RU, TM, UZ:</b> Enhance and expand collaboration between organisations of different levels to provide legal measures for inadequately protected or newly identified areas of importance for the Siberian Crane.	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
4. Protect and manage habitats of importance for the Siberian Crane	c) Develop management plans for Siberian Crane sites	IN	MoEF	<b>IN:</b> In addition to the range of actions listed in the management plan, continue testing the new innovative management approaches and modify them to be implemented under the project, supported by UNESCO – UN Foundation.	3
		KZ	FHC, Hunting & Fishing Association, other stakeholders	<b>KZ:</b> 1) Participate in preparation of development plans for unprotected WCASN areas and newly designated Ramsar sites in collaboration with the existing users of these areas and according to legislation of the Republic of Kazakhstan.	1
				2) Determine responsible initiative groups and provide them resources for plan development.	
		PK	PWP	<b>PK:</b> Develop management plans for selected wetlands including the Makran Coastal Wetlands Complex, Central Indus Wetlands Complex, Salt Range Wetlands Complex, and the Northern Alpine Wetlands Complex.	1
		RU	WCASN	<b>RU:</b> Evaluate possibilities of updating and transformation of management plans created during UNEP/GEF SCWP for proposed WSCAN sites.	1
		TU	WCASN	<b>TU:</b> Evaluate and specifiy the requirements for management plans development for WSCAN sites.	1
		UZ	WCASN	UZ: Develop managements plan for WSCAN sites if possible.	3
	d) Conduct applied research on Siberian Crane sites in support of site management	IN	KGNP	<b>IN:</b> Keoladeo Ghana National Park (KGNP) has organised annual research review meetings and has planned a range of applied research to be taken up by identified institutions.	
		KZ	SNRs, GSWG of East Europe and North Asia	<b>KZ:</b> Continue monitoring and counts of migratory birds and use their results to update management plans.	2
		RU	ARRINP	<b>RU:</b> Conduct applied research at key Siberian Crane sites in support of site management.	3
		TU	State Commission on implementation of Ramsar Convention	<b>TU:</b> Continue monitoring and census of migratory and wintering cranes and other waterbirds at potential Ramsar sites.	1
		UZ	Institute of Zoology AS RUz, Gosbiokontrol	UZ: Conduct applied research on WCASN sites.	3
	e) Monitor and assess the environmental impacts of human development on habitats of importance for	AF	SFA	<b>AF:</b> Provide implementation of Environment Impact Assessment (EIA) regulations at all levels to reduce threats of development projects on wildlife habitats, stopovers and migration routes of Eurasian Cranes.	2
	the Siberian Crane, including possible impacts of climate change	KZ	SNRs	<b>KZ:</b> 1) Continue monitoring of the ecological conditions on stopover sites and dynamics of threats.	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
4. Protect and manage habitats of importance for the Siberian Crane	e) Monitor and assess the environmental impacts of hu- man development on habitats of importance for the Siberian Crane, including possible im- pacts of climate change	кz	SNRs	<b>KZ:</b> 2) Consider possibilities of development and implementation of special project on an analysis of possible influence of climatic changes on hydrological regime of lakes and waterbird number dynamics, in cooperation with GSWG of East Europe and North Asia, Working Group on Lesser White-fronted Goose, Wetlands International and other organisations, and seek funds. This work requires collection and analysis of enormous volume of materials, beginning with meteorological data (amounts of precipitation, temperature, etc.) for as long period as possible.	2
		RU, UZ	ARRINP RU, In- stitute of Zoology AS RUz	<b>RU, UZ:</b> Continue monitoring the environmental impacts of ecological factors on Siberian Crane habitats.	2
	f) Manage buffer zones and external threats for protected areas critical for the Siberian Crane	RU	MNRE	<b>RU:</b> Manage the Synsko-Voikarsky buffer zone of Kunovat River Wildlife Refuge.	2
		UZ	Gosbiokontrol, Institute of Zoology AS RUz	<b>UZ:</b> Identify new wetlands and improve protection and management of wetlands important to Siberian and Eurasian Cranes.	2

Objective V: Increase public awareness and ecological education							
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity		
<b>information on the Siberian Crane</b> Siberian Crane of efforts in mass m	a) Publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines.	All Range States-CP	SCFC, ICF	All Range States-CP: 1) Continue to provide information about the Siberian Crane conservation activities to mass media.  2) Publicize information in CMS bulletin, ICF Bugle, Siberian Crane Flyway (SCF) News and other newsletters and scientific journals and books.	2		
		AF	SFA	<b>AF:</b> Support the environmental and conservation education along migration routes of cranes and waterbirds.			
		IN	ICWWG	<b>IN:</b> Resume promotion of Siberian Crane information through print and electronic media.	3		
		KZ	SNRs	KZ: 1) Continue cooperate with mass-media in Kostanay Region.	2		
				2) Continue publish information about Siberian Cranes in newsletters.	2		
		PK	PWP, ICF	<b>PK:</b> 1) Continue awareness raising activities with a focus on cranes.	1		
			KPK WLD	2) Coordinate with ICF on improvement of the Education Facility at Lakki Crane Center for educating crane hunters and keepers.	1		

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
5.1. Share information on	a) Publicize information on the Siberian Crane conservation	RU, UZ	CWGE, UzCWG	<b>RU, UZ:</b> Continue to publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines.	1
the Siberian Crane conservation efforts	efforts in mass media, public and scientific magazines.	TU	MNR	<b>TU:</b> Continue to publish information about Siberian Cranes in national mass media.	1
	b) Produce and share education and information	ICF, SCFC	All Range States- CP	ICF, SCFC: Continue to provide the range states with awareness materials especially for the Crane Celebrations, if funds are available.	1
	materials on the Siberian Crane and wetlands	All Range States-CP	ICF, SCFC	<b>All Range States-CP:</b> Share educational and awareness materials with other range states.	1
		KZ	WCASN	KZ: Produce information materials for hunters within WCASN activity.	2
		PK	WCASN, PWP	<b>PK:</b> 1) Continue the activities and also raise awareness regarding WCASN sites.	1
				2) Continue targeted education efforts in key areas of crane hunting.	1
		RU	ARRINP, SF,	RU: 1) Create a film about cranes.	2
			CWGE	2) Continue produce and distribute education materials such as booklets, leaflets, pins, stickers.	2
		TU	CWGE	<b>TU:</b> Distribute information about the Siberian Crane to daikhan's communities, especially, in the regions where WCASN nominated sites are located.	1
		UZ	UzCWG, Gosbiokontrol	<b>UZ:</b> 1) Continue to produce and distribute education materials such as booklet «Important areas for cranes in Uzbekistan».	1
				2) Publish calendar with Siberian Crane pictures.	2
				3) Create short video for demonstration on TV.	2
5.2. Community involvement	a) Develop education and information programmes and	СВСС	IN, PK	<b>CBCC:</b> Deliver one pair of captive-raised Siberian Crane to India and one pair - to Pakistan for education purposes.	1
	public events for target groups of local people (especially hunters) on protection of the Siberian Crane and its habitat.	IN	MoEF	<b>IN:</b> Promote the identification and establishment of wetland community reserves and conservation reserves in the historical wintering range of the Siberian Crane with the involvement of NGOs and stakeholders.	2
	Siberian Grane and its napitati	KZ	SNRs, NGOs, KSPI, Turgai-Irgiz	<b>KZ:</b> 1) Continue organise traditional Crane Celebration and "Migratory Bird Day".	
			Reserve, Barca- Kelmes SNR	2) Expand this activity on Turgai-Irgiz and Delta Syr-Darya areas through involvement of Turgai-Irgiz Reserve and Barsa-Kelmes SNR.	
		PK	KPK WLD, PWP, WWF-Pakistan	<b>PK:</b> 1) Conduct public awareness and education programmes (crane pairs from CBCC for Kurram Valley)	1
				2) Maintain a crane exhibit and hunters education at Lakki Crane Center;	1
				3) Hold a crane hunters gathering and competition in captive crane breeding at Lakki Crane Center.	1
				4) Involve communities in effective management of WCASN sites.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
5.2. Community involvement	a) Develop education and in- formation programmes and	RU	ARRINP, CWGE	RU: 1) Continue the education programme "Siberian Crane in a Suitcase". 2) Continue organising "Crane Celebration" widely.	1
	public events for target groups of local people (especially hunters) on protection of the Siberian Crane and its habitat.	TU	MNR, SCFC	<b>TU:</b> 1) Organise Crane Celebration in Tallymerjen & Kelif-Zeyit site, which is proposed for inclusion to WCASN. Organise nomination ceremony, if this site is designated as a WCASN site.	1
	Siberian Crane and its nabitat.			2) Organise meeting with hunters of Hunting and Fishing Society of Turkmenistan regarding crane conservation.	1
				3) Raise awareness on importance of protection of wetland areas for cranes in Amudaria Valey.	1
		UZ	SCFC, CWGE, UzCWG	<b>UZ:</b> 1) Organise Crane Celebration in the Tashkent Zoo to attract attention of visitors and mass media to the problem of protection of critically endangered species and their habitats along the Central Flyway.	2
				2) Organise Crane Celebratins at universities to share information about the Siberian Crane and its habitats among local people.	2
				3) Involve rangers, hunters and border guards in the Eurasian Crane monitoring and counts along the Siberian Crane flyway in the future.	2
				4) Support and develop information network of local people for crane observations and monitoring of wetlands important to Siberian Cranes and other waterbirds.	2
				5) Improve public awareness of wetlands important to Siberian Cranes and other waterbirds.	_
	b) Establish and maintain learning/ information centers	IN	KGNP, MoEF, Government of India	IN: Approach Indian Government to explore possibility of creating a semicaptive Siberian Crane exhibit at the Keoladeo Ghana National Park.	3
		KZ	KSPI	<b>KZ:</b> Continue development of student club of birdwatchers.	1
		PK	СВСС	<b>PK:</b> Collaborate with CBCC to provide crane pairs of various species for public education and information.	2
5.3. Sustainable livelihood	Initiate and facilitate sustainable livelihood projects	AF	SFA	<b>AF:</b> Develop livelihood projects to reduce risks to wildlife especially in migration routes.	2
opportunities	for local communities	IN	MoEF	<b>IN:</b> Explore new approaches for alternative livelihood for communities dependent on wetland resources.	?
		KZ	Naurzum SNR	<b>KZ:</b> Develop infrastructure of ecological tourism in Naurzum.	3
		PK	PWP, CBCC KPK WLD	<b>PK:</b> 1) KPK WLD to extend the scope of Lakki Crane Center with funding from the provincial government;	1
			PWP ICF	2) Support the KPK WLD in improvement and enhancement of the Lakki Crane Center by ICF and PWP.	1
		RU	Kunovat Wildlife Refuge	RU: Hire people from local community for protection of WCASN sites.	2

#### Objective VI: Enhance national and international cooperation and information exchange

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.1. Improve national and international	a) Designate a national lead agency responsible for	CMS, SCFC	All Range States- CP	CMS, SCFC: Maintain and update focal point list regularly.	2
cooperation and information exchange	coordinating the Siberian Crane conservation and management policy	All Range States-CP	смѕ	<b>All Range States-CP:</b> 1) Identify technical and administrative focal points. 2) Inform CMS Secretariat of any changes in responsibilities.	2
	b) Collaborate and conduct international research and monitoring	CMS		<b>CMS:</b> Call attention to the importance of conserving Siberian Cranes and their habitats over their entire range, at relevant international conferences.	1
		ICF, WI	CMS, UNEP, GEF	<b>ICF, WI:</b> Develop WC Asia GEF proposal with ICF and CMS, in close consultation with partners with a focus on key WCASN and other internationally important migratory waterbird sites.	1
		All Range States-CP, SCFC	CWGE, WI, CAF	<b>All Range States-CP, SCFC:</b> Strengthen a network for monitoring migrating cranes in collaboration with network sites and other important sites.	1
		IN	ICF, WI	<b>IN:</b> Explore the possibility of joining the new GEF proposal being developed by ICF & Wetlands International.	
		KZ, RU, TU, UZ	CWGE, SCFC	<b>KZ, RU, TU, UZ:</b> 1) Establish a network for monitoring migrating cranes in collaboration with network sites and other important sites.	2
				2) Attend the CWGE Scientific Conference "Cranes of Palearctic: Biology, Conservation, Management (in memory of Academician P.S. Pallas)" in Volgograd, Russia, in October 2011.	2
				3) Participate in CWGE activities.	2
		KZ	RU, UZ, SF	<b>KZ:</b> 1) Cooperate with Russia and Uzbekistan in implementation of Flight of Hope Project.	1
				2) Organise monitoring of migratory Eurasian Cranes in places of their mass concentrations within the frame of the Siberian Crane reintroduction programme.	1
		RU	UZ, KZ, SF, OCBC	<b>RU:</b> 1) Collaborate with Kazakhstan colleagues within the framework of Flight of Hope Project, including field research of a stretch of migration route across the Kazakhstan part of the Kyzyl Kum desert.	1
				2) Conduct expert exchange visits on sites and collaborative projects.	2
				3) Consider possibilities to provide captive-bred Siberian Cranes for education and further releases upon requests from range states.	2
		тм	AF, IR, UZ	<b>TM:</b> Conduct monitoring on wintering Eurasian Cranes and, probably, Siberian Cranes, at transboundary territories with Afghanistan, Iran and Uzbekistan.	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.1. Improve nation-	b) Collaborate and conduct international research and	UZ	RU, TU	<b>UZ:</b> 1) Continue research along the Siberian Crane Central Flyway through monitoring of the Eurasian Cranes in cooperation with Turkmenistan.	2
al and international cooperation and in- formation exchange	monitoring			Conduct research on adaptation of Siberian Cranes to ecological condition in Ecological Center "Jeiran" in cooperation with Russia.	2
				3) Investigate Tudakul Reservoir for preparation SIS for inclusion in Ramsar List (Siberian Crane was sighted not far from Tudakul in 2007)	2
				4) Conduct investigation of Eurasian Crane wintering grounds in cooperation with Afghanistan.	2
	c) Provide central coordina- tion of information exchange through SCFC and regional	SCFC	ICF, CMS	<b>SCFC:</b> Continue to collect and share information. Update SCFC website and establish Russian version of the website. Continue to update Siberian Crane database.	1
	database / GIS on the Siberian Crane and its sites	All Range States-CP	SCFC	<b>All Range States-CP:</b> Provide information to SCFC for publication in newsletters.	1
		RU	SCFC	RU: Timely exchange information on migration dates and directions.	1
	d) Submit an annual report on implementation of the Siberian Crane MOU to the UNEP/CMS Secretariat	CMS, ICF, SCFC	All Range States- CP	<b>CMS, ICF, SCFC:</b> 1) Compile and distribute CMS MOS7 report, including revised Conservation Plans for three populations with limited number of hard copies. Send hard copies to governmental agencies of range states. Upload publication on CMS website.	1
	CH is secretariat			2) Create template and database for electronic online reporting and upload them to CMS website. Request additional information from countries and upload country reports to CMS website, as appropriate.	
		CMS	ICF	<b>CMS:</b> Produce executive summary of priorities and send to national governments requesting support. Range States will be sent draft to review and provide clarification or details.	1
		SCFC	CMC, ICF, All Range States-CP	<b>SCFC:</b> Update national report format according to comments from range states.	1
		All Range States-CP	CMS, ICF, SCFC	<b>All Range States-CP:</b> 1) Review and give technical input to the conservation plan-CP.	1
				2) Provide comments on national report format.	1
				3) Provide comments on executive summary of priorities.	1
				4) Submit an annual report on implementation of the Siberian Crane MOU to the UNEP/CMS Secretariat.	1
	e) Host and/or attend regu-	CMS, ICF	All Range States-	CMS, ICF: 1) Identify host country for MOS8.	1
	lar meetings of the Siberian Crane Range States		CP, WI, CBCC, Birdlife Interna-	2) Work with host country of MOS8 to ensure that the meeting is financially secure.	1
			tional	3) Liaise with other potential co-operating organisations as appropriate that signal their interest to sign the MOU.	1
				4) Contact Birdlife International as possible participant and signatory to MOU.	2

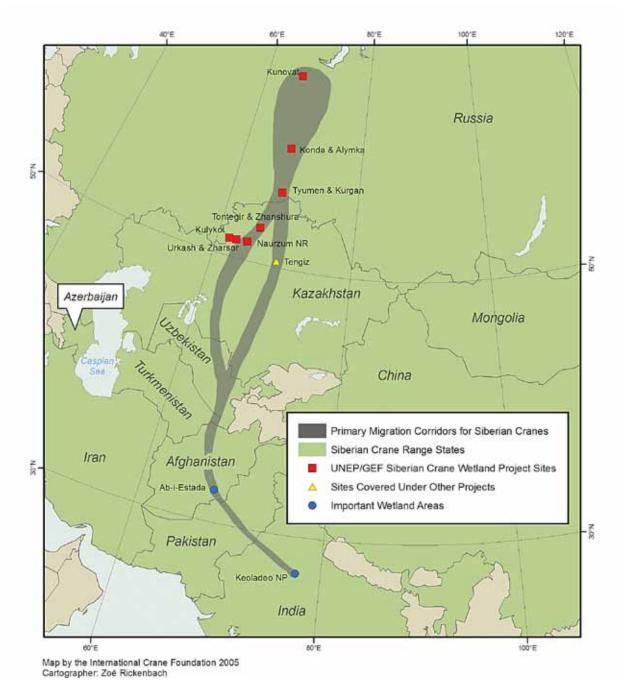
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.1. Improve national and international cooperation and information exchange	e) Host and/or attend regu- lar meetings of the Siberian Crane Range States	All Range States-CP	CMS, ICF	All Range States-CP: Принимать у себя и/или участвовать в регулярных совещаниях Государств ареала, проводимых в рамках выполнения Меморандума.	1
6.2. Development of the Western/ Central Asia Site Network for	a) Promote further specific activities	AF, KZ, PK, RU, UZ	ICF, SCFC	AF, KZ, PK, RU, UZ: Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund at WCASN sites.	1
the Siberian Crane and other waterbirds		KZ, PK, TU, UZ	ICF, SCFC	KZ, PK, TU, UZ: Implement WCASN Action Plan for 2010-2012.	1
		IN	MoEF	IN: Formalize nomination of Etawah-Mainpuri site in WCASN.	1
		KZ	SCFC, CMS	KZ: Nominate three more sites for the inclusion in WCASN:	1
				q) Sarykopa Lake System is wildlife refuge. There is plan to include it to «Altyn-Dala» SNR in 2011-2012;	
				b) Turgay-Irgiz Lake System. Some of these lakes are located within Turgay WR and others are included in Irgiz-Turgay Reservat; c) Tengiz-Kurgaljino Lake System within Kurgaljinskiy SNR.	
		PK	SCFC, PWP	<b>PK:</b> Involve communities in effective management of WCASN sites.	2
		RU	SCFC, MNRE	<b>RU</b> : Work on nomination into WCASN of sites proposed by Russian Federation (Belozerskiy and Kunovatskiy).	1
		TU	MNR, SCFC	<b>TU:</b> Work on nomination of Tallymerjen & Kelif-Zeyit site to WCASN.	1
		UZ	SCFC, CMS, Gosbiocontrol, Institute of Zoology AS RUz	UZ: Nominate Talimarjan site in WCASN.	1
	b) Coordinate with Central Asian Flyway initiative on site network development	wı	CMS, KZ, RU	<b>WI:</b> Work closely with CMS to finalize the institutionalization of the CAF Action Plan in collaboration with Range States and partners to enable its early implementation including development of the CAF site network.	2
		All Range States-CP:	CMS, CAF, ICF, AEWA	<b>All Range States-CP</b> : 1) Cooperate with CAF on development of Species Action Plans, Western/Central Asian Site Network for Siberian Cranes and other Migratory Waterbirds (WCASN), hunting and harvesting.	2
				Cooperate with AEWA on protected areas management in Western and Central Asia, encouragement for countries to join AEWA, promote sustainable hunting, and participate in World Migratory Bird Day.	2
		RU, TU, UZ	Wetlands Interna- tional	RU, TU, UZ: Participate in creation of CAF sites.	3

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership	Collaborate with the Crane and Stork Working Group of the EAAP to integrate Siberian Crane conservation with flyway level activities for migratory waterbirds in the annual Partnership workplans	All Range States-CP	смѕ	<b>All Range States-CP:</b> Attend NEACWG and EAAFP meeting for representation of ICF and CMS. Develop paper on partnership opportunities.	3
6.4. Capacity	Determine country's needs,	CMS, ICF	SCFC	CMS, ICF: Participate in related international workshops and conferences.	2
building	in terms of human resources, knowledge and facilities,	ICF:		ICF: Provide technical support to Range States including ordering and data management of PTTs.	_
	in order to build capacity to strengthen conservation measures for the Siberian Crane and its habitats	WI	AEWA, WOW	WI: Promote use of the WOW Flyway Training Kit to build national and local capacity for waterbirds and wetland management in Central and Western Asia with WOW Partners and others.	2
	Crane and its habitats	AF	SFA	<b>AF:</b> 1) Plan to provide training facilities for Afghan experts at the international level.	2
				Consider capacity building and training in all major component of environment through Environmental Protection Strategy. Provide specific training in these issues.	1
		IN	Wildlife Institute of India, KGNP, MoEF	<b>IN:</b> 1) The Wildlife Institute of India will conduct Masters programme, Diploma and Certificate Course in Wildlife Management in which capacity building components are included. Similar workshops and seminars will be also organized by BNHS, SACON and WWF-India.	
				2) Explore prospect of expanding WCASN site managers exchange programme to other Siberian Crane sites in the Central Flyway region.	
				3) Continue to conduct trainings on day to day monitoring activities and satellite wetland monitoring for the surrounding village communities.	
		KZ	ГКЛОХ, Наур- зумский ГПЗ, НПО, КГПИ, Институт зоологии АН РК	<b>KZ:</b> 1) National possibilities are insufficient: (i) national foundation/sponsors organizations which would support NGO are absent; (ii) existent governmental grant programs (social order) realized through Regional Akymats supports only socially significant projects (iii) Kazakhstan has very few experts-ornithologists, therefore, for example, for implementation of a project on IBAs Russian colleagues were invited for help.	1
				2) To strengthen measures on conservation of the Siberian Crane and its habitats it is first necessary to provide support to the initiative groups/NGO in realization of projects focused on specific sites (for example, a pilot project on zoning of lakes).	1
				3) All measures on reintroduction/increasing number of the Siberian Crane of west/central population make sense and can be realized only in close cooperation with the Russian side and other countries in the region. A long-term program must be prepared, which includes scientific aspects (such as influence of climatic changes on hydrological regime of lakes and habitats of the Siberian Crane). Funding should be actively sought.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.4. Capacity building	Determine country's needs, in terms of human resources, knowledge and facilities, in	PK	PWP, CBCC, MoE/ NCCW, ICF, WWF- Pakistan	<b>PK:</b> 1) Assess needs of an integrated crane conservation programme and search donor assistance for the proposed programme collaboration between PWP/WWF Pakistan and ICF.	1
	order to build capacity to strengthen conservation mea-			2) Improve capacity of local hunters on captive breeding and health management to reduce hunting pressure.	
	sures for the Siberian Crane and its habitats			3) Conduct a training need assessment to explore possibilities for implementation of its suggested trainings in wetland and crane conservation;	1
				4) Organise training for Pakistani biologists at a suitable crane facility such as CBCC in crane and wetland conservation in collaboration with CBCC.	1
		RU	ARRINP	<b>RU:</b> Provide training seminars for different groups of administrative people for supporting conservation of the Siberian Crane and its habitats, training courses for capacity building within the framework of Flight of Hope Project.	3
		TU	MNR, AS of TU	<b>TU:</b> Find relevant human resources to build capacity to strengthen conservation measures for the Siberian Crane.	2
		UZ	RU, Gosbiocontr- rol, UzCWG	<b>UZ:</b> 1) Organise seminars for staff of different state administrative agencies to get their administrative support for protection of the Siberian Crane and other waterbirds.	2
				2) Organise seminars for different groups of people, including border guards, hunters, rangers, farmers, workers of pump station, and the machine operators and others, to support conservation of the Eurasian Crane and its habitats at wintering grounds.	2
				3) Organise training courses for capacity building within the framework of Flight of Hope Project.	2
6.5. Raise funds to support a comprehensive	a) Develop comprehensive project proposal(s) to submit to appropriate agencies for	смѕ	ICF, All Range States-CP, UNEP	<b>CMS:</b> 1) Set up mechanisms for countries to contribute funds dedicated to the Siberian Crane conservation.	1
conservation programme	possible funding			2) Request UN Foundation to consider support of Siberian Crane conservation through UNEP/CMS.	1
supporting MOU implementation		ICF	CBCC, All Range States-CP	<b>ICF:</b> 1) Seek funds through CBCC to support continuation of SCFC position for at least one year.	1
				2) Support key regional activities.	1
		СВСС	OCBC, ICF, SCFC, RU	<b>CBCC:</b> 1) Consider support for travel to build capacity and promote collaboration	2
				2) Help seek funds for SCFC position	1
				3) Continue support to OCBC for releasing birds for reintroduction.	1
				4) Seek support for Flight of Hope Project.	1
		ICF, WI	All Range States- CP	ICF, WI: See support from countries to apply for UNEP/GEF grants for Western/Central Asia.	1
		All Range States	CMS	<b>All Range States:</b> Voluntarily supplement current contributions to the CMS Convention with funds earmarked for the Siberian Crane conservation.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.5. Raise funds to support a	a) Develop comprehensive project proposal(s) to submit	KZ, TU, UZ	ICF, WI	<b>KZ, TU, UZ:</b> Participate in UNEP/GEF WCA project preparation if it will be approved.	1
comprehensive conservation programme	to appropriate agencies for possible funding	RU, TU, UZ	UzCWG	<b>RU, TU, UZ:</b> Develop small-scale grant proposal(s) to submit to appropriate agencies for possible funding.	1
supporting MOU implementation		RU	ITERA, Petroresurs	<b>RU:</b> Get funds from oil companies (ITERA, Petroresurs) for support of the Siberian Crane release in Caspian Region of Russia.	1
	b) Develop small-scale project proposals to submit to CMS or	RU, UZ	ICF, CMS	RU, UZ: Develop small-scale project proposals and seek funding sources.	1
	ICF for their consideration	ТМ	ICF, CMS	<b>TM:</b> Apply to CMS and ICF for financial support for survey and monitoring of Eurasian Cranes' migration and wintering in Turkmenistan in the border with Iran and Afghanistan.	1
		ICF, CMS		ICF, CMS: Provide comments to strengthen proposals and provide letters of support as appropriate.	
	c) Appeal to governments for funding of Siberian Crane conservation activities related to the Siberian Crane MOU		All Range States- CP, ICF	<b>CMS:</b> 1) Provide letters of support for efforts of national agencies and co- operating partners to secure additional funding for MOU-related activities.	1
				2) Continue to coordinate with Friends of CMS to determine what support could be provided to the MOU's implementation in collaboration with ICF.	
		IN	Government	<b>IN:</b> 1) Continue & explore prospect of specific fund by Government of India for activities proposed in the MOU Conservation Plan for the period 2010-2012.	1
		KZ	FHC	KZ: Improve access to funding through state budget.	1
		РК	PWP/ICF/WWF- Pakistan	<b>PK:</b> Continue efforts to develop a proposal on conservation of cranes in Pakistan at national and provincial levels.	1
		RU	MNRE	<b>RU:</b> 1) Continue work with governments for funding of the Siberian Crane conservation activities related to the Siberian Crane MOU.	1
				2) Get financial support from Ministry of Natural Resources and Ecology for maintain OCBC.	1
		TU	AS of TU	<b>TU:</b> Generate funds within national budget for wetland monitoring (within the frame of scientific research by the National Institute of Deserts, Flora and Fauna of Turkmenistan) for monitoring of Altynasyr wetlands.	1

**Figure 3. Map of Siberian Crane Central Flyway** 



## **Conservation Plan for the Eastern Flyway**

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
1.1 Determine and monitor prevailing threats of all types	a) Assess and monitor threats in the Siberian Crane nesting and wintering grounds and along the migration routes	All Range States-EP	ICF, CMS, WI	<b>All Range States-EP:</b> 1) Work with partners to raise importance of Poyang Lake for the Siberian Crane and other migratory waterbirds in the light of planned dam construction.	1
to the Siberian Crane and its habitats	along the inigration routes			2) Continue monitoring of threats through surveys or questionnaire.	1
		WI	ICF, CMS, CH, oth- er partners	<b>WI:</b> Coordinate activities under WI Arctic Program with focus on wetland management and through working with the oil and gas industry.	?
		СН	Heilongjiang Pro- vincial Govern-	<b>CH:</b> 1) Continue work with various government sectors to provide water for key wetlands (Zhalong NNR, Momoge NNR)	1
			ment, Jilin Provin- cial Government Local wildlife management	2) Wildlife Management Organization to negotiate with Land Management Organisation and Agriculture Organisation for the wetlands used by Siberian Cranes.	1
			agencies Momoge NNR Related NNRs	3) Establish regulations for visitors and diminish disturbance from tourists at Momoge NNR.	1
			SFA	4) Conduct projects on community participation to raise the awareness of local people and promote alternative livelihood of local people.	1
		MN		5) Continue to monitor main threats, including reduced water in PAs in Northeast China and construction of proposed dam on Poyang Lake.	1
			Ministry of Mineral Resources and En- ergy, Saker Falcon Initiative, Energy Authority  MNP of the Re- public of Sakha, Kytalyk RRR, IBPC	<b>MN:</b> Submit proposal on power line standards to Ministry of Mineral Resources and Energy in order to protect birds. Work together with Energy Authority of Mongolia on dewvelopment of standards for device to repel birds from power lines. Work on this issue in cooperation with Saker Falcon initiative.	1
				2) Incorporate biodiversity conservation issue in local land use plan. Work together with Mining Authority and address issue of crane habitat conservation in area licensed for mining.	1
				<b>RU:</b> 1) Monitor cases of mortality and trauma of rare birds through annual express monitoring by staff of natural protection agencies of the Republic of Sakha (Yakutia).	1
		SB RAS	2) Reduce impact of disturbance in Kytalyk Republic Resource Reserve (RRR) and other protected areas located along the Siberian Crane eastern flyway through development of rules for tourists.	1	
				3) Work towards introducing restrictions on spring hunting on waterfowl, which is a cause of disturbance to Siberian Cranes and source of lead pollution in wetlands.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
1.1 Determine and monitor prevailing threats of all types	b) Identify and document best practice protocol for conservation and management of the	СН	SFA	<b>CH:</b> 1) Acknowledge the value of the community projects under UNEP/GEF Siberian Crane Wetlands Project (UNEP/GEF SCWP) and indicated interest to seek funds to continue these activities.	1
to the Siberian Crane and its habitats	Siberian Crane to minimize threats to the Siberian Crane			2) Maintain the water level of marshes used by Siberian Cranes, especially in spring and fall at Momoge NNR.	1
	and its habitats			3) Plan and conduct public education and community participatory conservation activities by nature reserve staff.	1
				4) Conduct monitoring activities along the eastern flyway by nature reserve staff.	1
		MN	MSU, Institute of Biology of MAS	MN: Conduct public awareness activities, especially at 2-3 sites where Siberian Cranes were sighted in recent years, with involvement of nature reserve staff, if funds are available.	1
		RU	IBPC SB RAS	<b>RU:</b> Conduct education and public awareness activities through involving local people in the Siberian Crane monitoring and habitat conservation.	2
	c) Determine hunting seasons and best practices in areas used by Siberian Crane	ICF	All Range States- EP	ICF: Finalize hunting strategy, consult with partners, and develop proposals to cover a range of activities over a long period.	1
		СН	SFA	<b>CH:</b> 1) State Forestry Administration (SFA) will conduct special action on the illegal hunting on wild birds according to the situation.	2
				2) Continue actions to control illegal hunting. Get reports on primary results from provincial wildlife management organisations.	2
		RU	MNP of the Re-	RU: 1) Take special measures against poaching.	1
			public of Sakha, stakeholders	2) Work to establish seasonal "no-hunting" zones at the Siberian Crane migration stopovers and/or major areas of migration.	1
1.2. Strengthen and improve enforcement of legislation for	a) Review existing national and local legislation to address gaps or challenges to Siberian	СН	SFA, Environ-men- tal Agency	<b>CH:</b> 1) No further action for Siberian Cranes will be undertaken. Consider including in the list other crane species and waterbirds, which are evaluated as threatened species in recent years.	2
crane protection	Crane conservation.			2) Strengthen the supervision of the execution of related wildlife laws and regulations.	2
				3) Arrange experts group to develop national resource plan (including the Siberian Crane)	2
				4) Conduct national wildlife resources investigation to help funding of habitat protection.	1
		MN	PAAs, Governors of Khentii and Dornod Provinces	MN: Add Khurh Khuiten to protected areas (PAs) network on local level and Buir Lake to PAs network on national level.	1
		RU	IBPC SB RAS	<b>RU:</b> Evaluate the necessity of increasing the conservation status of the eastern population of the Siberian Crane in the new edition of the Red Data Book of the Russian Federation.	3

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
1.2. Strengthen and improve enforcement of legislation for crane protection	b) Ensure effectiveness of law enforcement	СН:	Environmental Agency SFA Local forestry de- partments	<ul><li>CH: 1) Push the issue of the Wetland Law at the national level by SFA.</li><li>2) Improve law on wildlife conservation with provisions on wildlife habitat protection</li><li>3) Urge the provincial governments of SFA to develop provincial wetland regulations.</li></ul>	1 1 1
		MN:	MNET, NGOs	<ul><li>MN: 1) Improve law implementing mechanism. Develop more detailed rules, as well raise fine sum.</li><li>2) Promote conservation activities by the local community and carry out proper public awareness.</li></ul>	1 2
		RU	IBPC SB RAS	<b>RU:</b> Provide participation of stakeholders and local people in wetlands conservation through improving the capacity and public awareness activities.	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
study the Siberian of known a way to de	a) Conduct regular monitoring of known areas along the fly-	WI	All Range States- EP, AWC	<b>WI:</b> Promote use of the Asian Waterbirds Census framework for monitoring of the Siberian Crane and other waterbirds and wetlands for the region.	
	way to determine estimated numbers of the Siberian Crane	All Range States-EP	SCFC	<b>All Range States-EP:</b> Continue to monitor the Siberian Crane at known areas along the eastern flyway, if funds are available.	1 2 2 2
		CH NBBC, JV	NBBC, JWMB	<b>CH:</b> 1) National Bird Banding Center (NBBC) to continue to take the lead of the monitoring waterbirds all over China.	2
				2) Establish a volunteer group for the monitoring migrating Siberian Cranes and other waterbirds in east China.	2
				3) Continue cooperation between NBBC and Jiangxi Wildlife Management Bureau to conduct simultaneous ground survey of Siberian Crane and other waterbirds at wintering grounds at Poyang Lake.	2
		MN	MSU, Institute of Biology MAS	MN: Implement a small research project on biology and ecology of the Siberian Crane in cooperation with scientists from China and Russia.	2
		RU	IBPS SD RAS	<b>RU:</b> Support and improve the existing monitoring system of the Siberian Crane and its habitats monitoring through scientific and applied research and volunteers' involvement.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
2.1. Monitor and study the Siberian Crane and its habitat	b) Determine new migration stopovers, wintering areas, as well as summering areas of	SCFC, ICF	All Range States- EP	SCFC, ICF: Immediately share received information among Range States through e-mail list and website.	1
craire and its nabitat	Siberian Cranes through satellite or radio tracking, ques-	All Range States-EP	SCFC	<b>All Range States-EP:</b> Continue to check all reported sightings of the Siberian Crane.	1
	tionnaires, surveys, and other methods and investigate them	СН	organisations and funds Local wildlife management agencies  new wintering sites at Poyang Lake, if research funds will lead to be wintering sites at Poyang Lake, if research funds will lead to be si	<b>CH:</b> 1) Continue scientific research on the Siberian Crane to determine new wintering sites at Poyang Lake, if research funds will be available.	2
				2) Establish volunteer groups for the monitoring of the Siberian Crane and other waterbirds along the flyway to determine new migration stopovers.	2
				3) Arrange the NBBC staff or request local people to check sites where information about Siberian Crane sightings is received, if funds will be available.	2
		MN	PAAs, MSU, In- stitute of Biology MAS, NGOs	<b>MN:</b> 1) Combine and share all data about Siberian Crane numbers and habitats; get information from tourism birdwatcher companies for determination of new Siberian Crane summering sites.	1
	RU		2) Conduct training on monitoring and data collection methods for local communities and local rangers who live near crane habitat areas and confirmed sites of Siberian Cranes.	2	
				3) Improve information gathering mechanism through the mobile phone transmitters as mobile connection is established for 80% of the Siberian Crane habitats.	1
			4) Continue to survey areas where Siberian Cranes are sighted.		
		RU	IBPC SB RAS	<b>RU:</b> Continue to conduct the questionnaire among staff of protected areas and local people at the Siberian Crane breeding grounds and along the flyway.	1
	d) Conduct ecological studies of the Siberian Crane in your country	All Range States-EP	мсоп	<b>All Range States-EP:</b> Note publication by Dr. Carey Krajewski proposing the Siberian Crane be listed in its own genus as ( <i>Leucogeranus leucogeranus</i> ). This emphasizes the taxonomic uniqueness and ancient lineage of the Siberian Crane. Work with IUCN Crane Specialist Group to confirm official change of genus.	3
		ICF	СН	ICF: Continue collaboration with Chinese colleagues on ecological studies and environmental management at Poyang Lake.	2
		СН	NBBC, NR Momoge	<b>CH:</b> Study of population dynamics and habitat requirements by NBBC at Momoge NNR, which is the most important staging area for the Siberian Crane during migratory seasons.	2
		RU	IBPC SB RAS	<b>RU:</b> 1) Continue to study population ecology of the Siberian Crane, especially transformation of its habitats.	2
				2) Continue to study interspecies relations of the Siberian and Sandhill Cranes.	3

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
2.2. Maintain national database on the	Regularly contribute to and maintain the regional data-	ICF, SCFC	All Range States- EP	ICF, SCFC: Maintain database and explore options to go on-line and link more effectively with databases under other initiatives.	1
Siberian Crane and its habitats	base, and extend it to cover all Range States	All Range States-EP	SCFC	<b>All Range States-EP:</b> Provide information on Siberian Crane sightings and all activities along Easternl Flyway to SCFC for inclusion in regional database.	1
		СН	Local wildlife management agencies and	<b>CH:</b> 1) Coordinate continued monitoring (by NBBC on behalf of the SFA) along the Siberian Crane flyway in China and maintain the existing GIS management systems.	2
			to national database will be provided to other countries (will be in Chinese language).  3) Share data with the regional database. Need to address.	2) Maintain on-line Chinese language national monitoring database. Access to national database will be provided to other countries (most information will be in Chinese language).	2
				3) Share data with the regional database. Need to address language prob- lems for NNR staff. Support efforts to make regional database on-line.	2
		RU	SCFC	<b>RU:</b> Continue to add data to the republic database as well as information exchange with ICF, other range states and interested organisations through SCFC.	2
2.3. Promote or take into account avian influenza surveillance at important crane sites	a) Collaborate with, and complement activities of other agencies to strengthen sample collection for surveillance of avian influenza in migratory	СН	SFA, Ministry of Agriculture, Minis- try of Health	<b>CH:</b> Cooperate actively with the Ministry of Agriculture and Ministry of Health, to jointly negotiate with the National Development and Reform Commission to push the wildlife-derived infectious disease surveillance plan incorporated into the national plan. If the plan is approved, it would put avian influenza surveillance into the regular business around the whole China	2
	waterbirds at network sites and other important crane sites.	MN	MSU, Institute of Biology MAS, NGOs	MN: Continue to monitor avian flu, share information and deliver research output.	2
		RU	IBPC SO RAS	<b>RU</b> : Continue cooperation with lead Russian scientific organisations as well as United State Fish and Wildlife Service (USFWS) on monitoring of avian influenza.	2
2.4. Evaluate efficacy and application of	a) Review and evaluate re- search and monitoring activi-	сн	NBBC and JWMB	<b>CH:</b> Use research results for the evaluation of the dam construction project at Poyang Lake.	1
research/monitoring t	ties for their efficacy	RU	IBPC SB RAS	<b>RU:</b> Provide regular scientific reporting and give recommendations on Siberian Crane conservation on the basis of scientific and applied research on breeding grounds and along flyways.	1
	b) Apply monitoring and research results to improve	MN	Institute of Biol- ogy MAS, Mongo-	<b>MN:</b> 1) Identify important staging and summering sites through the monitoring results.	1
	management practices and mitigation of threats to the		lian State Univer- sity	2) Implement determined conservation measures for the Siberian Crane and its habitats.	1
	Siberian Crane	RU	IBPC SB RAS	<b>RU:</b> Prepare article for the new edition of the Red Data Book of the Republic of Sakha (Yakutia) to indicate results of the Siberian Crane research and conservation in the republic.	2

Objective III: Increase numbers and genetic diversity							
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity		
3.1. Promote recovery of the Siberian Crane	a) Produce eggs and chicks     of Siberian Cranes for release     programmes	All Range States-EP		All Range States-EP: Not applicable.			
populations	b) Restore Siberian Crane populations through release programmes	All Range States-EP		All Range States-EP: Not applicable.			
	c) Monitor Siberian Cranes released into the wild	All Range States-EP		All Range States-EP: Not applicable.			
	d) Conduct genetic studies to manage the genetic	СН	China Zoo Association	<b>CH:</b> Continue genetic studies for captive hatched chicks in zoos and wild Siberian Crane which are injured and kept at Chinese zoos.	3		
	diversity of wild and captive populations		IBPC SO RAS, OCBC	<b>RU:</b> Participate in genetic studies for creation of a genetic database of the captive population in Russia.	3		
3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes	a) Identify and survey relatively safe habitats of the Eurasian Crane population one that frequents ecologically suitable areas on the breeding grounds, along the migration route and on the wintering grounds - into which Siberian cranes could be (re)introduced	All Range States-EP		All Range States-EP: Not applicable.			
	b) Determine migration routes and wintering sites of various populations of the Eurasian Crane within the current and former range of the Siberian Crane populations through satellite or radio tracking, questionnaires, surveys, and other methods	All Range States-EP		All Range States-EP: Not applicable.			
	c) Develop safe optimal migration routes for Siberian Cranes using migration routes of Eurasian Cranes.	All Range States-EP		All Range States-EP: Not applicable.			

### Objective IV: Protect and manage habitats of importance for the Siberian Crane

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
4.1. Protect and manage habitats of importance for the Siberian Crane	4.1. Protect and manage habitats of importance for the Siberian Crane	СН	SFA, Liaoning Forestry Depart- ment	<b>CH:</b> 1) Continue to work on establishing national nature reserve in Wolong Provincial Nature Reserve in Liaoning Province. The approval is expected in a couple of years.	2
Siberian Crane				2) Carry out monitoring activities and cooperation with local wildlife management organisation.	2
	b) Secure protection through collaboration with local	СН	Interested funds	<b>CH:</b> Continue to operate the community co-management committees with financial support from outside sources.	2
	communities and/or legal measures for inadequately protected or newly identified areas of importance for the Siberian Crane	MN	NEACSN, MNET, Governors of Khentii and Dor- nod Provin-ces, TNC or WCS	MN: Work together with agricultural companies and local governors in order to designate one wetland area in Eastern Mongolia where Siberian Cranes were observed. Develop draft proposal to include this wetland area into international network of Important Bird Areas (IBAs), EAAP Site Network Site, and Ramsar Convention List of Important Wetlands.	1
		RU	MNP of the Re- public of Sakha, IBPC SB RAS	<b>RU:</b> Participate in improving of the protected area system and Siberian Crane conservation in the areas of large economic project implementation.	1
	c) Develop management plans for Siberian Crane sites	СН	Related NNRs	<b>CH:</b> Put related management plans into operation developed for sites of the UNEP/GEF SCWP, and to monitor and evaluate the efficiency of the plans.	2
		MN	MNET, Governors of Khentii and Dornod Provinces	<b>MN</b> : Develop management plan based on Ramsar Convention criteria to conduct monitoring of migratory and summering habitats of the Siberian Crane.	2
		RU	MNP of the Republic of Sakha, IBPC SB RAS	<b>RU:</b> Provide technical and practical support to administrations of RRRs on Siberian Crane conservation and research according to management plans developed during UNEP/GEF SCWP implementation.	1
	d) Conduct applied research on project sites in support of site management	СН	ICF, JWMB	<b>CH:</b> Apply the ecological relationship research at Poyang Lake NNR to the management and protection of key wintering grounds of the Siberian Crane and other waterbirds.	1
		RU	IBPC SB RAS	<b>RU:</b> Provide development of applied researches connected with the Siberian Crane conservation in Yakutia.	2
	e) Monitor and assess the environmental impacts of hu- man development on habitats of importance for the Siberian Crane, including possible im- pacts of climate change	СН	ICF, JWMB	<b>CH:</b> 1) Chinese scientists to review and evaluate impact of dam construction on wetland ecosystems in Poyang Lake Basin.	1
				2) Continue monitoring of ecological responses of Siberian Cranes to climate change and human activities in wetlands of Momoge NNR, initiated in April 2010, results of which will help mitigate the water needs conflicts between agriculture and waterbirds.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
4.1. Protect and manage habitats of importance for the Siberian Crane	manage habitats of importance for the environmental impacts of human development on habitats	MN RU	PAAs , NGOs, local governors, TNC, WCS	MN: 1) Work together with local herders and conduct public awareness activities with focus on wetlands protection in Eastern Mongolia.  2) Implement a project to add water supply for livestock in Khentii Dornod province.  RU: Monitor Siberian Crane habitats in connection with climate change.	2 2 1
	f) Manage buffer zones and external threats for protected areas critical for the Siberian Crane	СН	Related NNRs	<b>CH:</b> Conduct public education activities together with the monitoring of waterbirds along the flyway. Activities can be undertaken especially at the communities in the buffer zones of NRs	2

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Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
5.1. Share informa- tion on the Siberian Crane conservation efforts through mass	a) Publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines.	All Range States-EP	SCFC, ICF	All Range States-EP: 1) Continue to publish information about Siberian Crane research, monitoring and conservation in Siberian Crane Flyway (SCF) News and the CWGE Newsletter.	2
media	and scientific magazines.			2) Publicize information in CMS bulletin, ICF Bugle, SCF News and other newsletters and scientific journals and books.	1
	MN	СН	SFA	<b>CH:</b> 1) SFA will continuously stimulate the related medias to report the information concerning protection of Siberian Cranes and their habitats.	1
				2) Arrange related information of Siberian Cranes in their distribution ranges by SFA taking advantage of the opportunities such as "Love the Bird" week, Wildlife Propaganda Month, Wetland Day, Crane Celebration and Migratory Bird Day.	1
		MN	ICF	<b>MN:</b> Produce a short documentary film about the wetland area where Siberian Cranes were observed, and its importance for ecosystem and biodiversity. Film should tell people that the Siberian Crane is the most important component of the wetland area.	2
	b) Produce and share educa- tion and information materi- als on the Siberian Crane and	ICF, SCFC	All Range States- EP	ICF, SCFC: Continue to provide the range states with awareness materials especially for the Crane Celebration, if funds are available.	2
	wetlands	All Range States-EP	SCFC, ICF	<b>All Range States-EP:</b> Share educational/awareness materials with other Range States.	2
		СН	NNRs	<b>CH:</b> Continue to use related public awareness books in local schools, and to enlarge the targeted audiences to use these materials.	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
5.2. Community involvement	<b>volvement</b> formation programmes and	СН	SFA, NNRs	<b>CH:</b> 1) SFA will encourage the reserve to conduct the winter and summer camps.	2
	public events for target groups of local people (especially hunters) on protection of the Siberian Crane and its habitats	he		2) SFA will continuously encourage the reserves to hire local farmers to act as guards or patrollers, considering the extensiveness of wetlands. This approach not only will increase their incomes, but also establishes good relationship between nature reserve and local communities.	2
		MN	ICF, PAAs, local NGO	MN: 1) Expand public awareness activities on rare cranes and wetlands in cooperation with international projects and programmes.	1
				2) Conduct art competitions at national and international levels, and organise an exhibit of the best artworks.	2
				3) Include an issue on conservation of the Siberian Crane habitats in tourism program to improve public awareness activities among students.	2
		RU	MNP of the Sakha Republic, IBPC SB RAS, ICF, RRRs, Yakutsk Zoo	<b>RU:</b> 1) Continue campaign against spring hunting on waterfowl among local people and hunting societies based on scientific data.	1
				2) Provide education and public awareness activities as well as involving local communities in Siberian Crane monitoring and research in Kytalyk, Chabda, Kuoluma-Chappanda RRRs and in Momskyi Ulus.	1
				3) Support continuation of the international project "Three White Cranes, Two Flyways, One World" in Yakutia.	2
				4) Participate in creation of the Siberian Crane exposition in the zoo of Yakutsk city.	2
	b) Establish and maintain learning/information centers	СН		<b>CH</b> : Carry out activities, which focused on capacity building of the Bird Information Center during SCWP implementation.	2
5.3. Sustainable live- lihood opportunities	ties able livelihood projects for	SFA, NRs	<b>CH:</b> SFA will encourage nature reserves to conduct alternative livelihood projects in order to mitigate the impact of humans to wetlands.	2	
	local communities	RU	IBPC SB RAS, RRRs	<b>RU:</b> Support projects of re-acclimatization of musk-ox in tundra zone including the Siberian Crane habitats	2

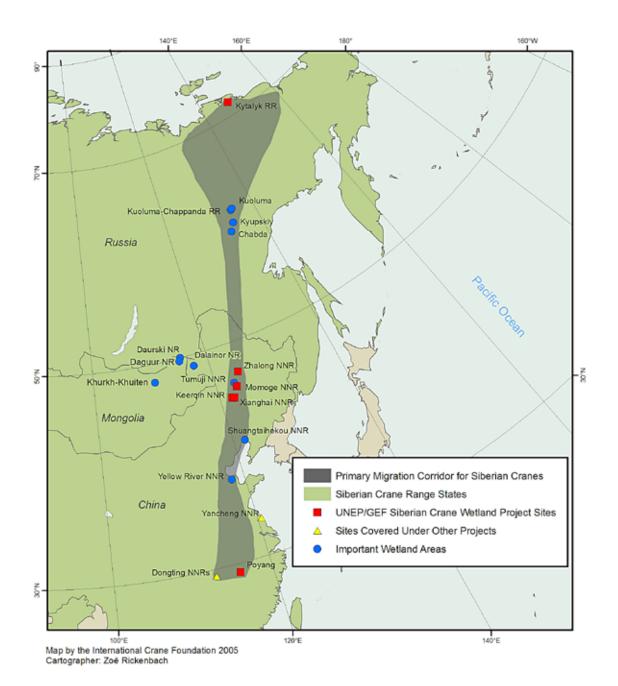
Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.1. Improve national	a) Designate a national lead agency responsible for coor-	CMS, SCFC	All Range States-	CMS, SCFC: Maintain and update focal point list regularly.	2
cooperation and in- formation exchange	dinating the Siberian Crane conservation and manage-	All Range States-EP	CMS	<b>All Range States-EP:</b> 1) Identify technical and administrative focal points.	1
	ment policy			2) Inform CMS Secretariat of any changes in responsibilities.	1
	b) Collaborate and conduct international research and	смѕ		<b>CMS:</b> Call attention to the importance of conserving Siberian Cranes and their habitats over their entire range, at relevant international conferences.	1
	monitoring	ICF	CH, SFA	<b>ICF:</b> Develop UNEP/GEF grant proposal for East Asia. Work with SFA China to submit this grant proposal to UNEP.	1
		SCFC, All Range States-EP	NEACWG	<b>SCFC, All Range States-EP:</b> Strengthen a network for monitoring migrating cranes in collaboration with network sites and other important sites in East Asia.	1
		СН	NEACWG, NBBC	<b>CH:</b> Under the mechanism of NEACWG, NBBC will participate and encourage nature reserves to join the international research, especially for the monitoring of the Siberian Crane and other important waterbirds.	2
		MN	NEACWG, CH, RU	MN: Implement a research project on ecology and biology of the Siberian Crane in cooperation with Russia and China.	2
		RU	NEACWG, CWGE	<b>RU:</b> 1) Attend the International Scientific Conference "Cranes of Palearctic: Biology, Conservation, Management (in memory of Academician P.S. Pallas)" organised by CWGE in Volgograd in October 2011.	1
				2) Participate in NEACWG activities.	1
				3) Participate in CWGE activities.	1
	c) Provide central coordina- tion of information exchange through SCFC and regional	SCFC	CMS, ICF, All Range States-EP	SCFC: 1) Continue to collect and share information. 2) Update SCFC website and establish Russian version of the website.	1
	database / GIS on the Siberian Crane and its sites	All Range	SCFC, ICF,	All Range States-EP: 1) Continue to provide information to SCFC.	1
	Hair Craire and its sites	States-EP	NEACWG	2) Share information also under the mechanism of NEACWG.	1
	d) Submit an annual report on implementation of the Siberian Crane MOU to the UNEP/CMS Secretariat	CMS, ICF, SCFC	All Range States- EP	<b>CMS, ICF, SCFC:</b> 1) Compile and distribute CMS MOS7 report, including revised Conservation Plans for three populations with limited number of hard copies. Send hard copies to governmental agencies of range states. Upload publication on CMS website.	1
				2) Create template and database for electronic online reporting and upload them to CMS website. Request additional information from countries and upload country reports to CMS website, as appropriate.	1

Programme	Activity	All Range States-EP	SCFC, ICF, NEACWG	Future Specific Activities for 2010-2012	Prio- rity
6.1. Improve national and international cooperation and information exchange	d) Submit an annual report on implementation of the Siberian Crane MOU to the UNEP/CMS Secretariat	смѕ	ICF	<b>CMS:</b> Produce executive summary of priorities and send to national governments requesting support. Range States will be sent draft to review and provide clarification or details.	1
		SCFC	CMS, ICF, All Range States-EP	<b>SCFC:</b> Update national report format according to comments from range states.	1
		All Range States-EP	CMS, ICF	<b>All Range States-EP:</b> 1) Review and give technical input to the Conservation Plan-EP.	1
				2) Provide comments on national report format.	1
				3) Provide comments on executive summary of priorities.	1
				4) Submit an annual report on implementation of the Siberian Crane MOU to the UNEP/CMS Secretariat.	
	e) Host and attend regular	CMS, ICF	All Range States-	CMS, ICF: 1) Identify host country for MOS8.	
	meetings of the Siberian Crane Range States	3113, 231	EP, WI, CBCC	2) Work with host country of MOS8 to ensure that the meeting is financially secure.	1 1
				3) Liaise with other potential co-operating organisations as appropriate	1
				that indicate their interest to sign the MOU.	2
				4) Contact Birdlife International as possible participant and signatory to MOU.	
		All Range States-EP	CMS	All Range States-EP: Host and/or attend CMS MOU regular meetings.	1
		CH	CMS, SFA	<b>CH:</b> Confirm with the government China's possible interest to host MOS8 in coordination with sientific meeting, focusing on accomplishments of SCWP and importance of Poyang Lake, and inform CMC as soon as possible.	1
6.2. Development of the Western/Central	a) Further specific activities on WCASN development	All Range States-EP		All Range States-EP: Not applicable.	
Asia Site Network for the Siberian Crane and other waterbirds	b) Coordinate with Central Asian Flyway initiative on site network development	All Range States-EP		All Range States-EP: Not applicable.	
6.3 Support Siberian Crane conservation activities through the East Asian – Austral-	Collaborate with the Crane and Stork Working Group of the EAAP to integrate Siberian Crane conservation with fly-	wi	EAAFP, CMS, ICF	<b>WI:</b> Strengthen conservation activities in East Asia through the framework of the EAAFP and EAAF Site Network through development of a regional project and related activities at important sites for the Siberian Crane and other migratory waterbirds.	2
asian Flyway Part- nership	way level activities for migra- tory waterbirds in the annual Partnership workplans	ICF, CMS	NEACWG, EAAFP	ICF, CMS: Attend NEACWG and EAAFP meeting for representation of ICF and CMS. Develop partnership opportunities.	2
		All Range States-EP	NEACWG, EAAFP	<b>All Range States-EP:</b> Convene a meeting of a Siberian Crane Sub-group linked to the EAAF Site Network or EAAFP to coordinate activities between China Mongolia, and Eastern Russia to implement MOU.	2

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.3 Support Siberian Crane conservation	Collaborate with the Crane and Stork Working Group of	СН	SFA, NEACWG, EAAFP	<b>CH</b> : 1) Encourage more nature reserves to be involved in the East Asian – Australasian Flyway Partnership.	1
activities through the East Asian – Austral- asian Flyway Part-	the EAAP to integrate Siberian Crane conservation with fly- way level activities for migra-			2) Collaborate in protection of network sites, especially Poyang Lake, Zhalong, Xianghai.	1
nership	tory waterbirds in the annual Partnership workplans	RU	MNRE, NEACWG	RU: Reconfirm Kytalyk RRR and Daurski SNR as network sites of NEACSN.	3
6.4. Capacity building	Determine country's needs, in terms of human resources,	CMS, ICF	SCFC	CMS, ICF: Participate in related international workshops and conferences.	2
	knowledge and facilities, in order to build capacity to strengthen conservation mea-	СН	NEACWG	<b>CH:</b> 1) Increase investments for protection and management of wetlands and waterbirds by government agencies at national, provincial and local levels to strengthen the capacity of nature reserves.	1
	sures for the Siberian Crane and its habitats			2) Plan training courses under the mechanism of NEACWG to improve the conservation status of cranes in east Asia.	2
		MN	PAAs, local Gover- nors	<b>MN:</b> 1) Identify and train specialists who will work on survey and monitoring of the Siberian Crane.	1
				2) Implement a small project on training for local community and rangers in monitoring and data collection methods of water birds, Siberian and other crane species, and their distribution.	1
6.5. Raise funds to support a compre-	a) Develop comprehensive     project proposal(s) to submit	CMS	ICF, All Range States-EP, UNEP	<b>CMS:</b> 1) Set up mechanisms for countries to contribute funds dedicated to the Siberian Crane conservation.	1
hensive conservation programme support- ing MOU implemen-	to appropriate agencies for possible funding			2) Request UN Foundation to consider support of Siberian Crane conservation through UNEP/CMS.	1
tation		ICF	CBCC, All Range	ICF: 1) Seek funds through CBCC to support continuation of SCFC position.	1
			States-EP	2) Support key regional activities.	1
		СВСС	ОСВС	<b>CBCC:</b> 1) Consider support for travel to build capacity and promote collaboration.	1
				2) Help seek funds for SCFC position.	1
		All Range States-EP	смѕ	<b>All Range States-EP:</b> Voluntarily supplement current contributions to the CMS Convention with funds earmarked for the Siberian Crane conservation.	1
		СН	SFA	<b>CH:</b> Encourage involvement of NNR in international organisations to conduct conservative projects for Siberian Crane and other important waterbirds.	1
		MN	Institute of Biol- ogy MAS, local NGOs	MN: Develop a project proposal on research and public awareness of the Siberian Crane and submit it to international organisations.	1

Programme	Activity	Range State/ Organisation	Collaborators	Future Specific Activities for 2010-2012	Prio- rity
6.5. Raise funds to support a comprehensive conservation	b) Develop small-scale project proposals to submit to new funding sources	All Range States-EP		<b>All Range States-EP:</b> Identify activities needing funding, seek potential donors, and submit proposals as needed.	1
programme support- ing MOU implemen- tation	c) Appeal to governments for funding of Siberian Crane conservation activities related to the Siberian Crane MOU	CMS	All Range States- EP	<ul><li>CMS: 1) Provide letters of support for efforts of national agencies and cooperating partners to secure additional funding for MOU-related activities.</li><li>2) Continue to coordinate with Friends of CMS to determine what support could be provided to the MOU's implementation in collaboration with ICF.</li></ul>	1
		СН	SFA, State Council, Ministry of Finance	,	1

**Figure 4. Map of Siberian Crane Eastern Flyway** 



# Part IV: Activities to be carried out by individual Range States and Co-operating Organisations in 2010-2012

Drawn from the 2010-2012 Conservation Plans, and arranged as follows:

All Range States – Western Flyway All Range States – Central Flyway All Range States – Eastern Flyway

Individual Range States (in alphabetical order)

Co-operating organisations

RANGE STATES/
CO-OPERATING
ORGANISATIONS

## SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

#### All Range States -

# Western Flyway

(Azerbaijan, Islamic Republic of Iran, Kazakhstan, Russian Federation)

### **Objective I: Reduce mortality**

### 1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

Work with partners to raise importance of Poyang Lake for the Siberian Crane and other migratory waterbirds due to dam construction.

Continue monitoring of threats through surveys or questionnaire.

Continue to identify best protocols for conservation and management of the Siberian Crane, and try to generate new information.

Improve physical control on poaching.

# 1.2. Strengthen and improve enforcement of legislation for crane protection

Improve legislation and strengthen implementation of existed lows.

### Objective II: Monitoring and research

#### 2.1. Monitor and study the Siberian Crane and its habitat

Continue to monitor Siberian Crane of known areas along the western flyway, if funds will be available.

Establish contact with colleagues from Iraq and Jordan on investigation wintering grounds for possible wintering of the Siberian Crane through questionnaire (coordinated through WI and AWC program).

Inform people through TV about the Siberian Crane migration and contacts to get information about its sightings.

Continue to check all reported sightings of the Siberian Crane.

Note publication by Dr. Carey Krajewski proposing the Siberian crane is listed in its own genus as (Leucogeranus leucogeranus). This emphasizes the taxonomic uniqueness and ancient lineage of the SC. Work with IUCN Crane Specialist Group to confirm official change of genus.

#### 2.2. Maintain national database on the Siberian Crane and its habitats

Continue to provide information on Siberian Crane sightings and all activities along Central Flyway to SCFC for inclusion in regional database.

### RANGE STATES/ CO-OPERATING ORGANISATIONS

# SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

### All Range States -

## Western Flyway

(Azerbaijan, Islamic Republic of Iran, Kazakhstan, Russian Federation)

### 2.4. Evaluate efficacy and application of research/monitoring

Provide national level review in reports. CMS and ICF will coordinate review of data on a regional level.

Responses to hunting listed above. No other research activities identified at this time.

### Objective III: Increase numbers and genetic diversity

### 3.1. Promote recovery of the Siberian Crane populations

Participate in tracing of migration of released captive-bred Siberian Cranes in the case of their tagging by satellite transmitters.

#### Objective V: Increase public awareness and ecological education

# 5.1. Share information on Siberian Crane conservation efforts through mass media

Continue to provide information about the Siberian Crane conservation activities to mass media.

Publicize information in CMS bulletin, ICF Bugle, Siberian Crane Flyway (SCF) News and other newsletters and scientific journals and books.

Share educational/awareness materials with other Range States.

# Objective VI: Enhance national and international cooperation and information exchange

## 6.1. Improve national and international cooperation and information exchange

Identify technical and administrative focal points.

Inform CMS Secretariat of any changes in responsibilities for Memorandum implementation.

Establish a network for monitoring migrating cranes species through collaboration including network sites and other important sites.

Attend the CWGE Scientific Conference "Cranes of Palearctic: Biology, Conservation, Management (in memory of Academic P.S. Pallas)" in Volgograd, Russia, in October 2011.

Participate in CWGE activity.

Continue to provide information about Siberian Crane sightings and activities on its conservation to SCFC for pubication in newsletters.

Review and give technical input to the Conservation plan for WP.

Give comments to national report format.

Give comments to executive summary of priorities.

Submit an annual report on implementation of the Siberian Crane MoU to the UNEP/CMS Secretariat annually.

Host and/or attend MoU meetings.

### 6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)

Cooperate with CAF on development of Species Action Plans, Western/Central Asian Site Network for Siberian Cranes and other Migratory Waterbirds (WCASN), hunting and harvesting.

Cooperate with AEWA on protected areas management in Western and Central Asia, encouragement for countries to join AEWA, hunting, World Migratory Bird Day.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
All Range States -	6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership
Western Flyway	Participatee in NEACWG and EAAFP meetings as observers.  6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation
(Azerbaijan, Islamic Republic of Iran, Kazakhstan, Russian Federation)	Voluntarily supplement current contributions to the CMS Convention with funds earmarked for the Siberian Crane conservation.

### RANGE STATES/ SPECIFIC ACTIVITIES TO BE UNDERTAKEN **CO-OPERATING** IN THE PERIOD 2010-2012 **ORGANISATIONS Objective I: Reduce mortality** All Range States -1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats Central Work with partners to raise importance of Poyang Lake for the Siberian Crane and **Flyway** other migratory waterbirds due to dam construction. (Afghanistan, Continue monitoring of threats through surveys or questionnaire. Kazakhstan, Continue to identify best protocols for conservation and management of the Siberian Pakistan, Crane, as new information becomes available. Russian Federation, Objective II: Monitoring and research Turkmenistan, 2.1. Monitor and study the Siberian Crane and its habitat Uzbekistan) Continue to monitor Siberian Crane of known areas along the central flyway if funds will be available. Continue to check all reported sightings of the Siberian Crane. Note publication by Dr. Carey Krajewski proposing the Siberian crane is listed in its own genus as (Leucogeranus leucogeranus). This emphasizes the taxonomic uniqueness and ancient lineage of the SC. Work with IUCN Crane Specialist Group to confirm official change of genus. 2.2. Maintain national database on the Siberian Crane and its habitats Provide information on Siberian Crane sightings and all activities along Central Flyway to SCFC for inclusion in regional database. 2.4. Evaluate efficacy and application of research/monitoring Provide national level review in reports. CMS and ICF will coordinate review of data on a regional level. **Objective III: Increase numbers and genetic diversity** 3.1. Promote recovery of the Siberian Crane populations Participate in tracking migration of released captive-bred Siberian Cranes if satellite transmitters are deployed.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

#### All Range States -

# Central Flyway

(Afghanistan, Kazakhstan, Pakistan, Russian Federation, Turkmenistan, Uzbekistan)

### Objective V: Increase public awareness and ecological education

### 5.1. Share information on Siberian Crane conservation efforts through mass media

Continue to provide information about the Siberian Crane conservation activities to mass media.

Publicize information in CMS bulletin, ICF Bugle, Siberian Crane Flyway (SCF) News and other newsletters and scientific journals and books.

Share educational and awareness materials with other Range States.

# Objective VI: Enhance national and international cooperation and information exchange

# 6.1. Improve national and international cooperation and information exchange

Identify technical and administrative focal points.

Inform CMS Secretariat of any changes in responsibilities.

Establish a network for monitoring migrating cranes species through collaboration including network sites and other important sites

Provide information to SCFC for publication in newsletters.

Review and give technical input to the conservation plan for Central Flyway.

Provide comments on national report format.

Provide comments on executive summary of priorities.

Submit an annual report on implementation of the Siberian Crane MoU to the UNEP/CMS Secretariat.

Host and/or attend MoU meetings.

## 6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)

Cooperate with CAF on development of Species Action Plans, Western/Central Asian Site Network for Siberian Cranes and other Migratory Waterbirds (WCASN), hunting and harvesting.

Cooperate with AEWA on protected areas management in Western and Central Asia, encouragement for countries to join AEWA, hunting, World Migratory Bird Day.

# 6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership (EAAFP)

Participate in meetings of NEACWG and EAAFP.

### 6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation

Voluntarily supplement current contributions to the CMS Convention with funds earmarked for the Siberian Crane conservation.

RANGE STATES/
CO-OPERATING
OPCANISATIONS

### All Range States -

### Eastern Flyway

(China, Mongolia, Russian Federation)

#### **Objective I: Reduce mortality**

### 1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

Work with partners to raise importance of Poyang Lake for the Siberian Crane and other migratory waterbirds due to dam construction.

Continue monitoring of threats through surveys or questionnaire.

### Objective II: Monitoring and research

#### 2.1. Monitor and study the Siberian Crane and its habitat

Continue to monitor Siberian Crane at known areas along the Eastern Flyway, if funds will be available.

Continue to check all reported sightings of the Siberian Crane.

Note publication by Dr. Carey Krajewski proposing the Siberian crane be listed in its own genus as (*Leucogeranus* leucogeranus). This emphasizes the taxonomic uniqueness and ancient lineage of the SC. Work with IUCN Crane Specialist Group to confirm official change of genus.

#### 2.2. Maintain national database on the Siberian Crane and its habitats

Continue to supply data for regional database covering all Siberian Crane sites according to the unified format.

### Objective V: Increase public awareness and ecological education

### 5.1. Share information on Siberian Crane conservation efforts through mass media

Continue to publish information about Siberian Crane research, monitoring and conservation in Siberian Crane Flyway (SCF) News and the CWGE Newsletter.

Publicize information in CMS bulletin, ICF Bugle, SCF News and other newsletters and scientific journals and books.

Share educational/awareness materials with other Range States.

# Objective VI: Enhance national and international cooperation and information exchange

# 6.1. Improve national and international cooperation and information exchange

Identify technical and administrative focal points.

Inform CMS Secretariat of any changes in responsibilities for Memorandum implementation.

Strengthen network for monitoring migrating cranes species through collaboration including network sites and other important sites. Participate in NEACWG activity.

Continue to provide information to SCFC.

Share information also under the mechanism of NEACWG

Review and give technical input to the Conservation plan for WP.

Give comments to national report format

Give comments to executive summary of priorities..

Submit an annual report on implementation of the Siberian Crane MoU to the UNEP/CMS Secretariat annually.

Host and/or attend MoU meetings.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
All Range States -	6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership
Eastern Flyway	Convene a meeting of a Siberian Crane Sub-group linked to the EAAF Site Network or EAAFP to coordinate activities between China Mongolia, and Eastern Russia to implement MoU.
(China, Mongolia, Russian Federation)	6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation
	Range states to identify activities needing funding, seek potential donors, and submit proposals as needed.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Afghanistan	See also activities listed under «All Range States - Central Flyway»
Central	Objective I: Reduce mortality
Flyway	1.1 Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats
	Setup and work to outline protected and harvestable species including Siberian cranes. Hunting regulation and procedures is in progress.
	Objective II: Monitoring and research
	<b>2.1. Monitor and study the Siberian Crane and its habitat</b> Develop a plan for monitoring of known Siberian Crane areas by Afghanistan Wildlife Executive Committee (AWEC).
	Develop a plan on investigation new Siberian Crane areas.
	Objective III: Increase numbers and genetic diversity
	3.1. Promote recovery of the Siberian Crane populations
	Continue research along migration routes and at wintering grounds of Eurasian Cranes.
	Objective IV: Protect and manage habitats of importance for the Siberian Crane
	4.1. Protect and manage habitats of importance for the Siberian Crane Signing of Ramsar Convention is under review by Parliament. Work on different protected areas establishment. Provide implementation of Environment Impact Assessment (EIA) regulations at all level to reduce threats of development projects on wildlife habitat, landing, and migration areas of Eurasian Cranes.
	Objective V: Increase public awareness and ecological education
	5.1. Share information on Siberian Crane conservation efforts through mass media
	Support the environmental and conservation education along migration routes of cranes and waterbirds.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Afghanistan	5.3. Sustainable livelihood opportunities
Central	Develop livelihood projects on reduce risks to wildlife especially in migration routes.
Flyway	Objective VI: Enhance national and international cooperation and information exchange
	6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)
	Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund at WCASN sites.
	6.4. Capacity building
	Plan to provide training facilities for Afghan experts at the international level.
	Consider capacity building and training in all major component of environment through Environmental Protection Strategy. Provide specific training in these issues.

RANGE STATES/ CO-OPERATING	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
ORGANISATIONS	IN THE PERIOD 2010-2012
Azerbaijan	See also activities listed under «All Range States – Western Flyway»
Western	Objective I: Reduce mortality
Flyway	1.2. Strengthen and improve enforcement of legislation for crane protection  Include Siberian Crane in Red Data Book of Azerbaijan Increase penalty for Siberian Crane shooting.
	Objective II: Monitoring and research
	2.1. Monitor and study the Siberian Crane and its habitat
	Collect information from local people in Gyzylagach SNR (main contacts Abbas Abbasov), Shirvan National Park, Samukh Wildlife Refuge etc. through Azerbaijan Ornithological Society (AOS) activities.
	Respond immediately to future sightings using correspondence network and mobile telephone connection.
	Investigate area of sighting of the Siberian Crane in winter 2009/2010 near Gyzyl-Aghach SNR by S. Rosenfeldt.
	Continue to monitor migration routes of cranes.
	Investigate area on the border between Azerbaijan (Nakhichivan Region) and Iran, where Siberian Cranes were sighted in 2009 and exchange information about results (in cooperation with Iran).
	2.3. Promote or take into account avian influenza surveillance at important crane sites
	Continue regular monitoring of avian influenza.
	Objective III: Increase numbers and genetic diversity
	3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes
	Continue to monitor Eurasian Crane migration.

	Specific activities to be undertaken in the period 2010-201.
RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Azerbaijan	Objective IV: Protect and manage habitats of importance for the Siberian Crane
Western Flyway	4.1. Protect and manage habitats of importance for the Siberian Crane
	Establish National Park on the base of Gyzylagach State Nature Reserve through expanding territory of the nature reserve.
	Involve local communities to wetlands protection by PAs and NGOs staff.
	Improve research activities in Gyzyl-Aghach SNR, Shirvan NP, and Apsheron NP.
	Organize mid-winter census of waterbirds.
	Objective V: Increase public awareness and ecological education
	5.2. Community involvement
	Continue to organize Crane Celebrations and involve more participants.
	Objective VI: Enhance national and international cooperation and information exchange
	6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)
	Prepare letter of endorsement for nomination of two sites (Shirvan National Park and Gyzyl-Aghach SNR) for inclusion to WCASN.
	6.4. Capacity building
	Hire trained people for identification of Siberian Cranes during migration and stops.
	Set up sustainable monitoring network including awareness and training of PA staff and local communities on identification and count of Siberian Crane and other Globally Threatened Waterbirds.
	Improve infrastructure of Gyzyl-Aghach SNR and create National Park on its base through expanding on SNR border.
	6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation
	Participate in UNEP/GEF WCA project preparation if approved and required national co-financing secured.
	Raise funds from both governments and other sources for Memorandum implementation.

RANGE STATES/
CO-OPERATING
ORGANISATIONS

#### China

### Eastern Flyway

See also activities listed under «All Range States - Eastern Flyway»

### **Objective I: Reduce mortality**

### 1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

Continue work with various government sectors to provide water for key wetlands (Zhalong National Nature Reserve (NNR), Momoge NNR)

Wildlife Management Organization negotiates with Land Management Organization and Agriculture Organization for the wetlands used by Siberian Cranes.

Establish regulations for visitors and diminish disturbance from tourists at Momoge NNR.

Conduct projects on community participation to raise the awareness of local people and promote alternative livelihood of local people.

Continue to monitor main threats, including reduced water in PAs in Northeast China and construction of proposed dam on Poyang Lake.

Acknowledge the value of the community projects under UNEP/GEF Siberian Crane Wetlands Project (UNEP/GEF SCWP) and indicated interest to seek funds to continue these activities.

Maintain the water level of marshes used by Siberian Cranes, especially in spring and fall at Momoge NNR.

Plan and conduct public education and community participatory conservation activities by nature reserve staff.

Conduct monitoring activities along the eastern flyway by nature reserve staff.

State Forestry Administration (SFA) will conduct special action on the illegal hunting on wild birds according to the situation.

Continue actions to control illegal hunting. Get reports on primary results from provincial wildlife management organizations.

# 1.2. Strengthen and improve enforcement of legislation for crane protection

No further action for Siberian Cranes will be undertaken. Consider including other crane species and waterbirds to the list, which are evaluated as threatened species in recent years.

Strengthen the supervision of the execution of related wildlife laws and regulations.

Arrange experts group to develop national resource plan (including the Siberian Crane).

Conduct national wildlife resources investigation to help funding of habitat protection.

Push the issue of the Wetland Law at the national level by SFA.

Improve law on wildlife conservation with provisions on wildlife habitat protection Urge the provincial governments of SFA to develop provincial wetland regulations.

#### **Objective II: Monitoring and research**

#### 2.1. Monitor and study the Siberian Crane and its habitat

National Bird Banding Center (NBBC) to continue to take the lead of the monitoring waterbirds all over China.

Establish a volunteer group for monitoring migrating Siberian Cranes and other waterbirds in east China.

Continue cooperation between NBBC and Jiangxi Wildlife Management Bureau to conduct simultaneous ground survey of Siberian Crane and other waterbirds at wintering grounds at Poyang Lake.

Continue scientific research on the Siberian Crane to determine new wintering sites at Poyang Lake, if research funds will be available.

### RANGE STATES/ CO-OPERATING ORGANISATIONS

# SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

#### China

# Eastern Flyway

Establish volunteer groups for the monitoring of Siberian Crane and other waterbirds along the flyway to determine new migration stopovers.

Arrange staff by NBBC or request local people to check sites where information about Siberian Crane sightings is received, if funds will be available.

Study of population dynamics and habitat requirements by NBBC at Momoge NNR, which is the most important staging area for the Siberian Crane during migratory seasons.

#### 2.2. Maintain national database on the Siberian Crane and its habitats

Coordinate continuously by NBBC, on behalf of the SFA, monitoring along the Siberian Crane flyway in China and maintain the existing GIS management systems.

Maintain on-line Chinese language national monitoring database. Access to national database will be provided to other countries (most information will be in Chinese language).

Share data with the regional database. Need to address language problems for NNR staff. Support efforts to make regional database on-line.

## 2.3. Promote or take into account avian influenza surveillance at important crane sites

Cooperate actively with the Ministry of Agriculture and Ministry of Health, to jointly negotiate with the National Development and Reform Commission to push the wild-life-derived infectious disease surveillance plan incorporated into the national plan. If the plan be approved, it would put avian influenza surveillance into the regular business around the whole China.

#### 2.4. Evaluate efficacy and application of research/monitoring

Use research results for the evaluation of the dam construction project at Poyang Lake.

#### Objective III: Increase numbers and genetic diversity

#### 3.1. Promote recovery of the Siberian Crane populations

Continue genetic studies for captive hatched chicks in zoos and wild Siberian Crane which are injured and kept at Chinese zoos.

# Objective IV: Protect and manage habitats of importance for the Siberian Crane

### 4.1. Protect and manage habitats of importance for the Siberian Crane

Continue to work on establishing national nature reserve in Wolong Provincial Nature Reserve in Liaoning Province. The approval is expected in a couple of years.

Carry out monitoring activities and cooperation with local wildlife management organization.

Continue to operate the community co-mgt committees with financial support from outside sources.

Put related management plans into operation developed for sites of the UNEP/GEF SCWP, and to monitor and evaluate the efficiency of the plans.

Apply the ecological relationship research at Poyang Lake NNR to the management and protection of key wintering grounds of the Siberian Crane and other waterbirds.

Apply research results for the evaluation of the dam construction project at Poyang Lake.

Review and evaluate impact of dam construction to wetland ecosystems in Poyang Lake Basin by Chinese scientists.

Results of monitoring of ecological responses of Siberian Cranes to climate change and human activities in wetlands of Momoge NNR initiated in April 2010 will help to mitigate the water needs conflicts between agriculture and waterbirds.

### RANGE STATES/ CO-OPERATING ORGANISATIONS

# SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

#### China

# Eastern Flyway

Conduct public education activities with the monitoring the waterbirds along the flyway. Activities can be undertaken especially at the communities in the buffer zones of NRs.

### Objective V: Increase public awareness and ecological education

# 5.1. Share information on Siberian Crane conservation efforts through mass media

SFA will continuously Stimulate the related medias to report the information concerning conserving Siberian Cranes and their habitats.

Arrange related information of Siberian Cranes in their distribution ranges by SFA taking advantage of the opportunities such as love-bird week, wildlife propaganda month, wetland day, crane day and migratory bird day.

Continue to use related public awareness book in the surrounding schools, and to enlarge the targeted audiences to use these materials.

#### 5.2. Community involvement

SFA will encourage the reserve to conduct the wintering and summer camps.

SFA will continuously encourage continuously the reserves to hire the local farmers to act as the guards or patrollers, considering the extensiveness of wetlands. This approach not only will increase their incomes, but also establishes good relationship between nature reserve and local communities

Carry out activities which focused on capacity building of Bird Information Center (project implementation).

Поддержать строительство Орнитологического информационного центра.

#### 5.3. Sustainable livelihood opportunities

SFA will encourage nature reserves to conduct alternative livelihood projects in order to mitigate the impact of humans to wetlands.

## Objective VI: Enhance national and international cooperation and information exchange

### 6.1. Improve national and international cooperation and information exchange

Under the mechanism of NEACWG, NBBC will participate and encourage nature reserves to join the international research and especially for the monitoring of Siberian Crane and other important waterbirds.

Express possible interest in hosting MoU8 in coordination with scientific meeting focusing on accomplishments of SCWP and importance of Poyang Lake. Timing is of concern and options will be discussed.

### 6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership

Encourage more nature reserves to be involved in the East Asian – Australasian Flyway Partnership.

Collaborate in protection of network sites, especially Poyang Lake, Zhalong, Xianghai.

#### 6.4. Capacity building

Increase investments for protection and management of wetlands and waterbirds by government agencies at national, provincial and local levels to strengthen the capacity of nature reserves.

Plan training courses under the mechanism of NEACWG to improve the conservation status of cranes in east Asia.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
China	6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation
Eastern Flyway	Encourage involvement of NNR in international organizations to conduct conservative projects for Siberian Crane and other important waterbirds.
	Coordinate actively with the State Council, National Development and Reform Commissions, Ministry of Finance and other agencies to improve the existing funding mechanisms, and raise more social funds for protection and management on wildlife and their habitats.
	Provide funds annually to support wildlife protection in Jiangxi Province and in NE China.

RANGE STATES/ CO-OPERATING	SPECIFIC ACTIVITIES TO BE UNDERTAKEN
ORGANISATIONS	IN THE PERIOD 2010-2012
India	See also activities listed under «All Range States – Central Flyway»
Central	Objective I: Reduce mortality
Flyway	1.1 Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats
	Examine and manage impact of power lines expansion in crane migration range in mortality.
	1.2. Strengthen and improve enforcement of legislation for crane protection
	Promote wetlands to be protected as Conservation Reserves and Community Reserves (New Categories).
	Identify historical Siberian Crane wintering wetlands for consideration to designate them as wetlands conservation reserves.
	Objective II: Monitoring and research
	2.1. Monitor and study the Siberian Crane and its habitat
	Continued ground surveys during the migratory season in historical Siberian Crane sites as well as other satellite wetlands for monitoring the status of migratory waterfowls and for documenting any possible arrival of Siberian Cranes.
	Continue the annual bird count programmes.
	Continue to conduct questionnaire among local people by NGOs and University research organizations;
	The BNHS intends to continue the satellite telemetry work as well as bird banding as the mode for monitoring bird migration.
	Continue ground surveys with increasing involvement of public societies and researchers' network.
	Investigate all reports about Siberian Crane sightings on an emergency basis.
	2.2. Maintain national database on the Siberian Crane and its habitats
	Plan to formalize the above programmes into a bird database.
	2.3. Promote or take into account avian influenza surveillance at important crane sites
	The MoEF and Ministry of Health, Government of India are setting in motion a national avian influenza monitoring programmes.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

#### **India**

# Central Flyway

### Objective III: Increase numbers and genetic diversity

### 3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes

Continue to determine migratory routes of Eurasian Cranes in western and north eastern India.

Continue PTT studies on Eurasian Cranes

Continue work on the questionnaire of inspectors and hunters pending financial resources for printing of questionnaires.

### Objective IV: Protect and manage habitats of importance for the Siberian Crane

### 4.1. Protect and manage habitats of importance for the Siberian Crane

Facilitate and support the government agencies to develop proposals for inclusion of wetlands determined as Siberian Crane historic sites in the PA network, designation of the IBAs and examine if these wetlands can be declared as Ramsar Sites.

The Ministry of Environment & Forests, Government of India has included two other categories of protected area in the Wildlife (Protection) Act which are conservation reserves and community reserves. The provinces are encouraged to set up unprotected wetlands with considerable biodiversity and socio-economic value to be declared as conservation reserves or community reserves depending on the land use tenure.

In addition to the range of actions existing in the management plan, new innovative management approaches are being tested and modified to be implemented under the UNESCO – UN Foundation supported project.

Keoladeo Ghana National Park (KGNP) has organized annual research review meetings and has identified a range of applied research to be taken up by identified institutions.

## Objective V: Increase public awareness and ecological education

## 5.1. Share information on Siberian Crane conservation efforts through mass media

Revive promotion of Siberian Crane information through print and electronic media.

#### 5.2. Community involvement

Promote the identification and establishment of wetland community reserves and conservation reserves in the historical wintering range of Siberian Crane with the involvement of NGOs and stakeholders.

Approach Indian Government to explore possibility of creating a semi-captive Siberian Crane exhibit at the Keoladeo Ghana National Park.

#### 5.3. Sustainable livelihood opportunities

Explore new approaches for alternative livelihood for wetland resources dependent communities.

# Objective VI: Enhance national and international cooperation and information exchange

# 6.1. Improve national and international cooperation and information exchange

Explore the possibility of joining the new GEF proposal being developed by ICF & Wetlands International.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
India	6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)
Central	Formalize nomination of Etawah-Mainpuri site in WCASN.
Flyway	6.4. Capacity building
	The Wildlife Institute of India will conduct Masters programme, Diploma and Certificate Course in Wildlife Management in which such capacity building components are included. Similar workshops, seminars will be also organized by BNHS, SACON and WWF-India.
	Explore prospect of WCASN site managers exchange programme to other Siberian Crane sites in the Central Flyway region.
	Continue to conduct trainings on day to day monitoring activities and satellite wetland monitoring for the surrounding village communities.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Islamic Republic of Iran Western Flyway	See also activities listed under «All Range States – Western Flyway»
	Objective I: Reduce mortality
	1.1 Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats
	Maintain Site Management Committees and encourage effective participation of local hunters to the Committees.
	1.2. Strengthen and improve enforcement of legislation for crane protection
	Include legislation issues in site management plans.
	Implement management plan developed under UNEP/GEF SCWP which regards to legislation.
	Complete construction of guard station in FDK to enforce protection of the site.
	Objective II: Monitoring and research
	2.1. Monitor and study the Siberian Crane and its habitat
	Investigate area on the border between Azerbaijan (Nakhichivan Region) and Iran, where Siberian Cranes were sighted in 2009 and exchange information about results (in cooperation with Azerbaijan).
	Show and distribute the Siberian Crane photos among local people.
	Track of released Siberian Cranes if they will be marked with PTT
	Call all interested NGO's for more consider the potential areas.
	Investigate any potential reports of sighting (including all sightings received from Azerbaijani colleagues).
	Conduct student ecological research.
	2.2. Maintain national database on the Siberian Crane and its habitats
	Database should be base on online and any member, in anytime could post their own records.

	Specific activities to be undertaken in the period 2010-2012
RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Islamic Republic of Iran	2.3. Promote or take into account avian influenza surveillance at important crane sites
	Plan a passive surveillance and active surveillance in case of outbreak.
Western Flyway	Objective III: Increase numbers and genetic diversity
	3.1. Promote recovery of the Siberian Crane populations  Restore wintering population – release, collaborate with Russia on monitoring.
	3.2. Разработка безопасных миграционных путей для стерхов, используя пролётные пути серого журавля  Продолжать мониторинг миграций серого журавля.
	Objective IV: Protect and manage habitats of importance for the Siberian Crane
	4.1. Protect and manage habitats of importance for the Siberian Crane
	Review and update Ramsar information sheet for FDK and Bujagh, upgrade protection status of the protected areas.
	Continue to maintain Site Management Committees established under SCWP
	Support Trappers Associations and their trust funds.  Focus on follow up to UNEP/GEF SCWP results.
	Finalize and sign FDK Management Plan prepared under UNEP/GEF SCWP.
	Implement of prepared management plans
	Use the results of waterbird census results into the managemnt plan
	Incorporate the waterbird monitoring analysis results into the management plan.  Applied of university studies on impact of human activities and climate change  Review documents of the Convention on Climate Change.
	Objective V: Increase public awareness and ecological education
	5.1. Share information on Siberian Crane conservation efforts through mass media
	Continue to send articles and news to Iranian mass media.
	Translation of SCWP final report in Farsi and distribute it among interested organizations and people.
	Produce booklets for case studies.  Produce information materials for hunters within WCASN activity.
	5.2. Community involvement
	Incorporate "World Migratory Bird Day" and "Crane Celebration". This may absorb more audience to the meeting. (if cranes arrive)
	Work towards to declare a "National Bird Day", as this is the best tool to widen this event to all parts of country.
	Provide guidelines for raising the awareness of the key stakeholders, target groups and audience at national, provincial and site levels about the Project
	Contributing to achievement of sustainable change of attitude among the stakeholders at national, provincial and site levels.
	Develop practical action plans for sound implementation and monitoring the activities recommended by the Awareness Strategy
	Participate in "Siberian Crane suitcase" education program.
	Continue education activities in Bujagh NP.

Complete establishment of education center in FDK

Continue education activities in Bujagh NP.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Islamic Republic of Iran	Objective V: Increase public awareness and ecological education  5.3. Sustainable livelihood opportunities  Further plan is a challenge, because the project ended.
Western Flyway	Facilitate and monitor livelihood activities in the area through intersectional coordination.  Objective VI:Enhance national and international cooperation and information exchange  6.1. Improve national and international cooperation and information exchange  Continue to participate in international and bilateral agreements.  Develop and implement activities under bilateral agreement with Russia.
	Receive Siberian Cranes from OCBC for release and education purposes.  6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds  Implement WCASN Action Plan for 2010-2012.
	6.4. Capacity building  Complete construction of education center in FDK.  Provide necessary equipments for FDK and Bujagh for guarding and monitoring.  More guarding and law enforcement are required to improve protection activities.  Consider training of experts from provinces as a priority.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Kazakhstan	See also activities listed under «All Range States – Western Flyway» and «All Range States – Central Flyway»
Western and Central Flyways	Objective I: Reduce mortality
	1.1 Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats
	Extend threats monitoring of wetlands to western Kazakhstan (Aktyubinsk and Atyrau Regions) (consider impacts of oil and gas industry).
	Discuss the question about experience of spring hunting and possibility of its complete prohibition in hunting association.
	Work with hunting associations and other stakeholders (private hunting organization) to expand practice of prohibiting of hunting at water bodies.
	1.2. Strengthen and improve enforcement of legislation for crane protection
	Continue work on nomination of other important wetlands (Kushmurun, Sarykopa) for waterbirds in Ramsar List.
	Enhance protection under existing laws.
	Objective II: Monitoring and research
	2.1. Monitor and study the Siberian Crane and its habitat
	Continue monitoring of the lakes in Naurzum SNR and Zharsor-WR.

### RANGE STATES/ CO-OPERATING ORGANISATIONS

# SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

#### Kazakhstan

## Western and Central Flyways

Conduct counts of cranes and other waterfowls on other lakes (Tyuntyugur-Zhanshura, Kushmurun, Shoptikol, Sankebai, Mamyrkol, Kulykol-Taldykol) along the western flyway in Kostanay Region, if funds will be available.

Continue interview of hunters, fishermen, shepherds and questionnaire in key Kostanay Region, if financial resources will be available.

Respond immediately to future sightings: verification of reports is possible in cases of their getting in sighting day and possibilities to visit the place of sighting.

Continue data collecting about Siberian Crane sightings, ecological terms of stopover site, their changes and behavior of cranes. Planning of any special researches of Siberian Cranes is not possibly because their critical low number at present.

### 2.2. Maintain national database on the Siberian Crane and its habitats

Continue to provide information to regional database.

## 2.3. Promote or take into account avian influenza surveillance at important crane sites

Plan a passive surveillance and active surveillance in case of outbreak.

### Objective III: Increase numbers and genetic diversity

#### 3.1. Promote recovery of the Siberian Crane populations

Sign agreement with Russia for implementation of Flight of Hope project.

# 3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes

Surveys north and west parts of Kostanay Region to find possible migration stopovers of the Eurasian Crane.

Continue monitoring of the Eurasian Crane migratory concentrations on Zharsor Lake, if necessary resources will be found.

Continue work on the questionnaire inspectors and hunters pending financial resources for printing of questionnaires.

Realize practical field stage of Flight of Hope Project on reintroduction of Siberians Cranes using ultralight technique

### Objective IV: Protect and manage habitats of importance for the Siberian Crane

### 4.1. Protect and manage habitats of importance for the Siberian Crane

Prepare suggestions on additional measures on site protection within the framework IBA developments.

Prepare development plans for unprotected WCASN areas and newly designated Ramsar sites in collaboration with the existing users of these areas and according to legislation of the Republic of Kazakhstan.

Determine of responsible initiative groups and provide them resources for plan development.

Continue monitoring and count of migratory birds and use their result for updating of management plans.

Continue monitoring of the ecological terms of stopover sites and dynamics of threats.

Consider possibilities of development and implementation of special project on an analysis of possible influence of climatic changes into a hydrological regime of lakes and dynamic number of waterfowls, in cooperation with GSWG of East Europe and North Asia, Working Group on Lesser White-fronted Goose, Wetlands International and other organizations, and seek funds. This work requires collection and analysis of enormous volume of materials, beginning with meteorological data (amounts of precipitations, temperatures and etc) for maximally possible period of supervisions.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

#### Kazakhstan

# Western and Central Flyways

### Objective V: Increase public awareness and ecological education

## 5.1. Share information on Siberian Crane conservation efforts through mass media

Continue collaboration with mass-media of Kostanay Region on.

Continue publish information about Siberian Cranes in Newsletters.

Produce information materials for hunters within WCASN activity.

#### 5.2. Community involvement

Continue organize traditional «Crane Celebration» and «Migratory Bird Day».

Expand this activity on Delta Ural area through involvement of Akzhaik Reserve.

Continue development of student club of birdwatchers.

### 5.3. Sustainable livelihood opportunities

Develop infrastructure of ecological tourism in Naurzum SNR.

# Objective VI: Enhance national and international cooperation and information exchange

# 6.1. Improve national and international cooperation and information exchange

Cooperate with Russia in realization of Flight of Hope Project.

Organize monitoring of migratory Eurasian Cranes in the places of their mass concentrations in the frame of Siberian Crane reintroduction programme.

### 6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)

Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund at WCASN sites.

Implement WCASN Action Plan for 2010-2012.

Nominate three more sites for the inclusion in WCASN:

- a) Sarykopa Lake System is wildlife refuge. There is plan to include it to «Altyn-Dala» SNR in 2011-2012:
- b) Turgay-Irgiz Lake System. Some of these lakes are located within Turgay WR and others are included in Irgiz-Turgay Reservat;
- c) Tengiz-Kurgaljino Lake System within Kurgaljinskiy SNR.

Participate in CAF meetings.

#### 6.4. Capacity building

National possibilities are insufficient: (i) national foundation/sponsors organizations which would support NGO are absent; (ii) existent governmental grant programs (social order) realized through Regional Akymats supports only socially significant projects (iii) Kazakhstan have very few experts-ornithologists, therefore, for example, for implementation of project IBAs the Russian colleagues were invited for help.

To strengthen measures on the conservation of Siberian Crane and its habitats it is first necessary to provide support to the initiative groups/NGO on realization of projects focused on specific sites (for example pilot project on zoning of lakes).

All measures on reintroduction/increasing number of Siberian Crane of west/central population make sense and can be realized only in close cooperation with the Russian side and other countries of area. A long-term program must be prepared which includes scientific aspects (such as influence of climatic changes on hydrological regime of lakes and habitats of Siberian Crane and etc). Funding should actively sought.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Kazakhstan	6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation
Western and Central Flyways	Participate in UNEP/GEF WCA project preparation if approved and required national co-financing secured.
	Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund.
	Improve access to funding through state budget.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Mongolia	See also activities listed under «All Range States - Eastern Flyway»
Eastern	Objective I: Reduce mortality
Flyway	1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats
	Submit proposal on power line standard to Ministry of Minerals Resources and Energy in order to protect bird. Work together with Energy Authority of Mongolia on formulation of nest standard on power lines. Work on this issue in cooperation with Saker Falcon initiative.
	Incorporate biodiversity conservation issue in local land use plan. Work together with Mining Authority and reflect conservation issue of crane habitat area in mining licensed area.
	Public awareness activities especially at 2-3 sites where Siberian Cranes were sighted in last years with involvement of nature reserve staff, if funds will be available
	1.2. Strengthen and improve enforcement of legislation for crane protection
	Add Khurh Khuiten to protected areas (PAs) network on local level and Buir Lake to PAs network on national level.
	Objective II: Monitoring and research
	2.1. Monitor and study the Siberian Crane and its habitat
	Implement small research project on biology and ecology of the Siberian crane in cooperation with scientists from China and Russia.
	Combine and share all data about Siberian Crane numbers and habitats; get information from tourism birdwatcher companies for determination of new Siberian Crane summering sites.
	Conduct training on monitoring and data collection methods for local communities and local rangers who live near to habitat area and observed sites of Siberian Cranes
	Improve information gathering mechanism trough the mobile phone transmitters as mobile connection is established for 80% of Siberian crane habitats.
	Continue to survey areas where Siberian Cranes are sighted
	2.3. Promote or take into account avian influenza surveillance at important crane sites
	Continue to monitor avian flu, share information and deliver research output.
	2.4. Evaluate efficacy and application of research/monitoring
	Identify important staging and summering sites through the monitoring results.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

### Mongolia

# Eastern Flyway

Implement determined conservation measures for the conservation of Siberian Crane and its habitats.

### Objective IV: Protect and manage habitats of importance for the Siberian Crane

### 4.1. Protect and manage habitats of importance for the Siberian Crane

Work together with agricultural companies and local governors in order to designate one wetland area in Eastern Mongolia where Siberian Cranes were observed. Develop draft proposal to include this wetland area into international network of Important Bird Areas (IBAs), EAAP Site Network Site, and Ramsar Convention List of Important Wetlands.

Develop management plan based on Ramsar Convention criteria to conduct monitoring of migratory and summering habitats of the Siberian Crane.

Work together with local herders and conduct public awareness activities with focus on wetlands protection in Eastern Mongolia.

Implement a project to add water supply for livestock in Khentii Dornod province..

### Objective V: Increase public awareness and ecological education

### 5.1. Share information on Siberian Crane conservation efforts through mass media

Produce short documentary film about the wetland area where Siberian Cranes were observed, and its importance for ecosystem and biodiversity. Film should tell people that Siberian crane is a main important part of the wetland area.

#### 5.2. Community involvement

Expand public awareness activities on rare cranes and wetlands with cooperation of international project and program.

Conduct art completion on national and international level, and organize exhibition of the paints which distinguished of competition

Include an issue on conservation of Siberian Crane habitats in tourism program to improve public awareness activities among students.

# Objective VI: Enhance national and international cooperation and information exchange

## 6.1. Improve national and international cooperation and information exchange

Implement research project on ecology and biology of Siberian Crane in cooperation with Russia and China.

#### 6.4. Capacity building

Identify and train specialists who will work on survey and monitoring of the Siberian Crane.

Implement small project for local community and rangers on training on monitoring and data collection methods of water birds, Siberian and other crane species, and their distribution.

# 6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation

Develop project proposal on research and public awareness of the Siberian Crane and submit it to the International organizations.

RANGE STATES/
CO-OPERATING
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TIONS

#### **Pakistan**

See also activities listed under «All Range States - Central Flyway»

# Central Flyway

### **Objective I: Reduce mortality**

### 1.1 Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

Assist a study on assessment of pollution levels in the Central Indus Wetlands Complex by Pakistan Wetlands Programme (PWP).

Assist M.Phil student to investigate pollution sources in the Indus River by PWP.

Pakistan Wetlands Programme plans to extend its activities to enhance captive breeding so that hunting pressure may be reduced on the migratory birds. Pakistan lacks biologists trained in captive breeding of the cranes. Moreover there is a dire need to build the capacity of local peoples in Banuu and Lakki areas of Khyber-Pakhtunkhwa Province for effective captive breeding and disease management.

PWP continues to sponsor students research on subjects related to cranes. A M.Phil student of the Arid Agriculture University, Rawalpindi completed her thesis in 2010 and another student research will complete soon.

The possibilities to work in collaboration with Cracid & Crane Breeding and Conservation Centre (CBCC) should be considered.

Continue efforts of Balochistan Forest and Wildlife Department (BFWD)on crane conservation in collaboration with PWP.

Continue to support the crane conservation initiatives in Khyber- Pukhtunkhwa and Balochistan provinces by PWP and WWF Pakistan: provided resources are made available.

Continue technical support by PWP to build capacity of local NGOs in Zhob such as Society for Economic and Environmental Development (SEED), Zhob to initiate community based crane conservation efforts.

# 1.2. Strengthen and improve enforcement of legislation for crane protection

PWP continues collaboration with the KPK WLD and BFWD in their crane conservation efforts in Zhob and Musa Khel and make efforts for review crane conservation rules/legislation to identify gaps.

Facilitate approval of amendments and effective enforcement of laws, and harmonize between provinces.

Present the draft "National Wetlands Policy" to the National Cabinet and National Assembly for approval and adoption at national and provincial levels.

#### Objective II: Monitoring and research

### 2.1. Monitor and study the Siberian Crane and its habitat

Continue to conduct regular surveys of the crane's habitats along the Indus River.

Assist and encourage BFWD and local NGOs such as SEED to conduct surveys of cranes migrating through the Zhob, Musa Khel and Noshki districts of Balochistan. Ahmad Khan, PWP, assisted the SEED to develop a proposal for funding of UK Pounds 1000 by the Oriental Birds Club. This project on surveys will be implemented next migration season (spring 2011).

Procure four satellite transmitters and launch an effective Satellite Tracking Programme for tracking of migratory birds including cranes.

Include cranes in the banding programme for effective collaboration with the local hunters.

### 2.3. Promote or take into account avian influenza surveillance at important crane sites

Continue to collaborate with National Agriculture Research Council (NARC) in Islamabad on analysis of blood and tissue samples collected for surveillance of avian influenza of migratory birds.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

#### **Pakistan**

# Central Flyway

### Objective III: Increase numbers and genetic diversity

## 3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes

Conduct survey of key crane hot spots along the Central Indus River in Khyber-Pukhtunkhwa Province and along the Zangi Nawar Lake in Noshki District, Rakhni in Musa Khel District and in Zhob District.

### Objective IV: Protect and manage habitats of importance for the Siberian Crane

### 4.1. Protect and manage habitats of importance for the Siberian Crane

PWP continues efforts to establish effective collaboration with local non-governmental organizations such as SEED Zhob to secure protection of community owned crane staging and rest areas along the Zhob River.

Develop management plans for selected wetlands including the Makran Coastal Wetlands Complex, Central Indus Wetlands Complex, Salt Range Wetlands Complex, and the Northern Alpine Wetlands Complex.

### Objective V: Increase public awareness and ecological education

## 5.1. Share information on Siberian Crane conservation efforts through mass media

Continue awareness raising activities with a focus to cranes.

Coordinate with ICF on improvement of the Education Facility at Lakki Crane Center for educating crane hunters and keepers..

Continue the activities and also raise awareness regarding WCASN sites.

Continue targeted education efforts in key areas of crane hunting.

#### 5.2. Community involvement

Conduct public awareness and education programmes (crane pairs from CBCC for Kurram Valley).

Maintain a crane exhibit and hunters education at Lakki Crane Center.

Hold a crane hunters gathering and competition in captive crane breeding at Lakki Crane Center.

Involve communities in effective management of WCASN sites.

Collaborate with CBCC to provide crane pairs of various species for public education and information.

#### 5.3. Sustainable livelihood opportunities

KPK WLD to extend the scope of Lakki Crane Center with funding from the provincial government.

Support the KPK WLD in improvement and enhancement of the Lakki Crane Center by ICF and PWP.

## Objective VI: Enhance national and international cooperation and information exchange

# 6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)

Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund at WCASN sites.

Implement WCASN Action Plan for 2010-2012.

Involve communities in effective management of WCASN sites.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Pakistan	6.4. Capacity building
Central	Assess needs of an integrated crane conservation programme and search donor assistance for the proposed programme collaboration between PWP/WWF Pakistan and ICF.
Flyway	Improve capacity of local hunters on captive breeding and health management to reduce hunting pressure.
	Conduct a training need assessment to explore possibilities for implementation of its suggested trainings in wetlands and crane conservation.
	Organise training for Pakistani biologists at a suitable crane facility such as CBCC in cranes and wetlands conservation in collaboration with CBCC.
	6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation
	Continue efforts to develop a proposal on conservation of cranes in Pakistan at national level and provincial levels.

CO-OPERATING ORGANISATIONS
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# Federation

See also activities listed under «All Range States – Western Flyway» and «All Range States – Central Flyway»

# Western and Central Flyways

### **Objective I: Reduce mortality**

### 1.1 Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

Continue monitoring of impact of oil and gas development in Kunovat River Basin into Siberian Crane habitats,

Reduce illegal hunting pressure.

# 1.2. Strengthen and improve enforcement of legislation for crane protection

Improve legal status of Ramsar sites.

Take into account problems connected with hunting pressure for Siberian Crane population through updating of federal and regional hunting legislation.

### **Objective II: Monitoring and research**

#### 2.1. Monitor and study the Siberian Crane and its habitat

Conduct aerial surveys at breeding grounds and migration routes if funds will be available.

Continue activity through distribution of Siberian Crane questionnaire for hunters in key Siberian Crane sites.

Cooperate with hunters to involve in observation and reporting of Siberian Crane sightings.

Continue questionnaire and interview of local people in West Siberia at the Siberian Crane breeding grounds as well as migration stopover of the Eurasian Crane in Armizon District of Tyumen Region.

Establish monitoring network in Dagestan (G. Dzgamirziyev), North Osetia (Yu. Komarov), Kalmykia (V. Murzayev).

Continue to investigate all reports of the Siberian Crane sightings in West Siberia received through interview with local people and questionnaire.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

### Russian Federation

### Western and Central Flyways

# 2.3. Promote or take into account avian influenza surveillance at important crane sites

Plan a passive surveillance and active surveillance in case of outbreak.

#### 2.4. Evaluate efficacy and application of research/monitoring

Use results of monitoring and researching to improve management practices and mitigation of threats to cranes along potential migrating routes and wintering grounds of the Siberian Crane.

### Objective III: Increase numbers and genetic diversity

#### 3.1. Promote recovery of the Siberian Crane populations

Provide chicks or eggs produced during early stages of the breeding season to have Siberian Crane chicks with suitable age for Flight of Hope Project (in cooperation with OCBC and CBCC).

Collaborate with ICF, CBCC and OCBC to develop release strategy for Flight of Hope Project.

Increase the number of released captive-bred Siberian Cranes in migration stopovers in Astrakhan SNR and Belozerskiy WR, if funds will be available.

Strengthen important restoration efforts through Flight of Hope project and other release techniques to increase number of birds successfully released and to increase collaboration with other countries.

Continue to monitor captive-bred Siberian Cranes released into the wild through satellite tracking.

Band released Siberian Cranes from ECJ with color bands and radio transmitters if funds will be available.

Conduct genetic studies in cooperation with Institute of General Genetic RAS and Moscow Zoo, if funds are available.

# 3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes

Continue monitoring of Eurasian Crane population on nesting grounds and staging areas in West Siberia along migration route used by Siberian Crane, including PTT marking of Siberian Cranes.

Realize practical field stage of Flight of Hope Project on reintroduction of Siberians Cranes using ultralight technique.

### Objective IV: Protect and manage habitats of importance for the Siberian Crane

### 4.1. Protect and manage habitats of importance for the Siberian Crane

Improve protection of federal wildlife refuge which are habitats for the Siberian Crane.

Evaluate possibilities of updating and transformation of managements plans created during UNEP/GEF SCWP for proposed WSCAN sites.

Conduct applied research at key Siberian Crane sites in support of site management. Monitor of impact of oil and gas exploration at the Siberian Crane breeding grounds.

### Objective V: Increase public awareness and ecological education

# 5.1. Share information on Siberian Crane conservation efforts through mass media

Continue publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines.

RANGE STATES/
CO-OPERATING
ORGANISATIONS

#### Russian Federation

Create film about cranes.

Western and Central Flyways Continue produce and distribute education materials as booklets, leaflets, pins, stickers.

### 5.2. Community involvement

Continue education programme "Siberian Crane in Suitcase" Continue organize "Crane Celebration" widely..

#### 5.3. Sustainable livelihood opportunities

Hire people from local community for protection of WCASN sites.

# Objective VI: Enhance national and international cooperation and information exchange

### 6.1. Improve national and international cooperation and information exchange

Collaboration with Kazakhstan and Uzbekistan colleagues in the framework of Flight of Hope, including field research of part in migration route across Kazakhstan part of Kyzyl Kum desert.

Mutual expert visits on sites and collaborative projects.

Consider possibilities to provide captive-bred Siberian Cranes for education and further releases on the request of Range States.

Exchange on-time information on Siberian and Eurasian Crane migration time and directions.

### 6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)

Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund at WCASN sites

Work on nomination of sites proposed by Russian Federation (Agrakhanskiy, Belozerskiy, and Konda-Alymka) into WSCAN.

Participate in CAF meetings.

#### 6.4. Capacity building

Provide training seminars for different groups of administrative people for supporting conservation of the Siberian Crane and its habitats, training courses for capacity building in the framework of Flight of Hope Project.

Establish Siberian Crane field station in Astrakhan SNR.

Reconstruct facilities for the Siberian Crane in OCBC.

Organize training on ecological education for PA staff.

Provide satellite devices (PTT).

Training especially for new techniques

### 6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation

Develop small-scale project proposals and seek funduing sources.

Get funds from oil companies (ITERA, Petroresurs) for support of Siberian Crane release in Caspian region in Russia.

Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund

Continue work with governments for funding of Siberian Crane conservation activities related to the Siberian Crane MoU

Get financial support from MNRE for maintaining of OCBC.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

### Russian Federation

### Eastern Flyway

See also activities listed under «All Range States - Eastern Flyway»

### Objective I: Reduce mortality

### 1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

Monitor cases of mortality and trauma of rare birds through annual express monitoring by staff of natural protection agencies of the Republic of Sakha (Yakutia).

Reduce impact of disturbance in Kytalyk Republic Resource Reserve (RRR) and other protected areas located along the Siberian Crane eastern flyway through development of rules for tourists.

Provide limitation of spring hunting on waterfowl which is a cause of disturbance to Siberian Cranes and source of lead pollution in wetlands.

Education and public awareness through involving local people in the Siberian Crane monitoring and habitats conservation.

Take special measures against poaching.

Provide creation of seasonal zones without hunting in the Siberian Crane migration stopovers or more intensive migration areas.

### 1.2. Strengthen and improve enforcement of legislation for crane protection

Consider necessity of increasing of a status of the eastern population of the Siberian Crane in the new edition of the Red Data Book of the Russian Federation.

Provide participation of stakeholders and local people in wetlands conservation through improving of capacity and public awareness.

### **Objective II: Monitoring and research**

#### 2.1. Monitor and study the Siberian Crane and its habitat

Support and improve existed system of the Siberian Crane and its habitats monitoring through scientific and applied researched and involving of volunteers.

Continue to conduct questionnaire of protected areas staff and local people at the Siberian Crane breeding grounds and along the flyway.

Continue to study population ecology of the Siberian Crane, especially transformation of its habitats.

Continue to study interspecies relations of Siberian and Sandhill Cranes.

#### 2.2. Maintain national database on the Siberian Crane and its habitats

Continue to insert data in the republic data base and information exchange with ICF, other Range States and interested organizations through SCFC.

# 2.3. Promote or take into account avian influenza surveillance at important crane sites

Continue cooperation with lead Russian scientific organizations as well as United State Fish and Wildlife Service (USFWS) on monitoring of avian influenza.

#### 2.4. Evaluate efficacy and application of research/monitoring

Provide regular scientific reporting and give recommendations on Siberian Crane conservation on the basis of scientific and applied research on breeding grounds and along flyways.

Prepare article for the new edition of the Red Data Book of the Republic of Sakha (Yakutia) to indicate results of the Siberian Crane research and conservation in the republic.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

### Russian Federation

### Eastern Flyway

### Objective III: Increase numbers and genetic diversity

### 3.1. Promote recovery of the Siberian Crane populations

Participate in genetic studies for creation of genetic data base of the captive population in Russia.

### Objective IV: Protect and manage habitats of importance for the Siberian Crane

### 4.1. Protect and manage habitats of importance for the Siberian Crane

Participate in improving of the protected area system and Siberian Crane conservation in the areas of large economic project implementation.

Provide technique and practical support to administrations of RRRs on Siberian Crane conservation and research according to management plans which were developed during UNEP/GEF SCWP implementation.

Provide development of applied researches connected with the Siberian Crane conservation in Yakutia.

Monitor Siberian Crane habitats in connection with climate change.

### Objective V: Increase public awareness and ecological education

#### 5.2. Community involvement

Continue campaign against spring hunting on waterfowl among local people and hunting societies based on scientific data.

Provide education and public awareness activity as well as involving local communities in Siberian Crane monitoring and research in Kytalyk, Chabda, Kuoluma-Chappanda RRRs and in Momskyi Ulus.

Support continuation of the international project "Three White Cranes, Two Flywaya, One World" in Yakutia.

Participate in creation of the Siberian Crane exposition in the zoo of Yakutsk city.

#### 5.3. Sustainable livelihood opportunities

Support projects of re-acclimatization of musk-ox in tundra zone including the Siberian Crane habitats.

# Objective VI: Enhance national and international cooperation and information exchange

### 6.1. Improve national and international cooperation and information exchange

Attend the International Scientific Conference "Cranes of Palearctic: Biology, Conservation, Management (in memory of Academic P.S. Pallas)" organized by CWGE in Volgograd, Russia, in October 2011.

Participate in NEACWG activity.

Participate in CWGE activity.

### 6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership

Reconfirm Kytalyk RRR and Daurski SNR as network sites of NEACSN.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

#### **Turkmenistan**

### See also activities listed under «All Range States – Central Flyway»

# Central Flyway

### **Objective I: Reduce mortality**

### 1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

Continue activity, including monitoring of accidental death of Eurasian Cranes during wintering.

Continue to issue before start of hunting season the order on "About Hunting Season Opening" with the List of Species for Ban Hunting, including the Siberian Crane.

### 1.2. Strengthen and improve enforcement of legislation for crane protection

Continue work on preparation the third issue of Red Data Book of Turkmenistan.

### Objective II: Monitoring and research

#### 2.1. Monitor and study the Siberian Crane and its habitat

Continue to conduct inquiry of local people during monitoring of wintering Eurasian Cranes.

Continue monitoring of migrating and wintering Eurasian Cranes as far as possible. Check possibility of Siberian Crane sightings in Eurasian Crane flocks..

## 2.3. Promote or take into account avian influenza surveillance at important crane sites

Request National Hunting and Fishing Society to plan selective shooting of waterfowl during migration and wintering for the following avian influenza analyze by Sanitary-Hygienic Service.

#### 2.4. Evaluate efficacy and application of research/monitoring

Use results of monitoring and researching to improve management practices and mitigation of threats to cranes along potential migrating routes and wintering grounds of the Siberian Crane.

### Objective III: Increase numbers and genetic diversity

#### 3.1. Promote recovery of the Siberian Crane populations

Sign bilateral agreements with Russia for implementation of Flight of Hope project.

Cooperate with other countries to coordinate activities along the Siberian Crane flyway in Amudaria Valey under Flight of Hope Project.

Continue to monitor captive-bred Siberian Cranes released into the wild through satellite tracking.

### 3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes

Continue monitoring of Eurasian Crane wintering grounds in Durnaly and Tallymerjen & Kelif-Zeyit.

Conduct Eurasian Crane censuses during autumn migrations in Eastern Kopetdag foothills and in Amudaria Valley, if funds are available.

## Objective IV: Protect and manage habitats of importance for the Siberian Crane

### 4.1. Protect and manage habitats of importance for the Siberian Crane

Enhance and expand collaboration between different levels organizations to provide legal measures for inadequately protected or newly identified areas of importance for the Siberian Crane.

	Specific activities to be undertaken in the period 2010-201
RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Turkmenistan	Evaluate and specified the requirements for WSCAN sites management plans development.
Central Flyway	Continue monitoring and census of migratory and wintering cranes and other water-birds at potential Ramsar sites.
	Objective V: Increase public awareness and ecological education
	5.1. Share information on Siberian Crane conservation efforts through mass media
	Continue to publish information about Siberian Cranes in national mass media.
	Distribute information about the Siberian Crane to daikhan's communities, especially, in the regions where WCASN nominated sites are located.
	5.2. Community involvement
	Organize Crane Celebration in Tallymerjen & Kelif-Zeyit site, which is proposed for inclusion to WCASN. Organize nomination ceremony, if this site is designated as a WCASN site.
	Organize meeting with hunters of Hunting and Fishing Society of Turkmenistan regarding crane conservation.
	Raise awareness on importance of protection of wetland areas for cranes in Amudaria Valey.
	Objective VI: Enhance national and international cooperation and information exchange
	6.1. Improve national and international cooperation and information exchange
	Establish a network for monitoring migrating cranes species through collaboration including network sites and other important sites.
	Attend the CWGE Scientific Conference "Cranes of Palearctic: Biology, Conservation, Management (in memory of Academic P.S. Pallas)" in Volgograd, Russia, in October 2011.  Participate in CWGE activity.
	Conduct monitoring on wintering Eurasian Cranes and, probably, Siberian Cranes, at transboundary territories with Afghanistan, Iran and Uzbekistan.
	6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)
	Implement WCASN Action Plan for 2010-2012.
	Work on nomination of Tallymerjen & Kelif-Zeyit site to WCASN.
	Participate in creation of CAF sites.
	6.4. Capacity building
	Find relevant human resources to build capacity to strengthen conservation measures for the Siberian Crane.
	6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation
	Participate in UNEP/GEF WCA project preparation if it will be approved.
	Develop proposal(s) to submit to appropriate agencies for possible funding.
	Apply to CMS and ICF for financial support for survey and monitoring of European Cranes' migration and wintering in Turkmenistan in the border with Iran and Afghanistan.

Generate funds within national budget for wetland monitoring (in the frame of scientific research of the National Institute of Deserts, Flora and Fauna of Turkmenistan) for

monitoring of Altynasyr wetlands.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

# SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

#### **Uzbekistan**

#### See also activities listed under «All Range States - Central Flyway»

# Central Flyway

#### **Objective I: Reduce mortality**

## 1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

Continue to monitor poaching along Siberian Crane flyway and at Eurasian Crane wintering grounds.

Continue to identify best protocols for conservation and management of the Siberian Crane, as new information becomes available.

# 1.2. Strengthen and improve enforcement of legislation for crane protection

Plan to update Decree of the Ministry Council #508 from 28 October 2004 regarding to significant increasing of penalty for illegal hunting of the Siberian Crane and other crane species.

#### Objective II: Monitoring and research

#### 2.1. Monitor and study the Siberian Crane and its habitat

Collect data on rare species including the Siberian Crane in the frame of the state program of "Cadastre of Fauna of the Republic of Uzbekistan".

Continue to organize questionnaire among local people, including hunters through correspondence network.

Continue inquiry of local people about Siberian Crane sightings during monitoring of migratory Eurasian and Demoiselle Cranes.

## 2.2. Maintain national database on the Siberian Crane and its habitats

Develop national database.

#### 2.4. Evaluate efficacy and application of research/monitoring

Use results of monitoring and researching to improve management practices and mitigation of threats to cranes along potential migrating routes and wintering grounds of the Siberian Crane.

#### Objective III: Increase numbers and genetic diversity

#### 3.1. Promote recovery of the Siberian Crane populations

Sign bilateral agreements with Russia for implementation of Flight of Hope project. Support Flight of Hope Project at Ecological Center of "Jeiran" (ECJ) in cooperation with Russia.

Continue to monitor captive-bred Siberian Cranes released into the wild through satellite tracking.

Band released Siberian Cranes from ECJ with color bands and radio transmitters if funds will be available.

# 3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes

Continue monitoring of wintering places of Eurasian Crane near Termez and Talimarjan Reservoir.

Collect data from correspondents (rangers, hunters, local people, and ornithologists) about Eurasian Crane wintering sites and migration routes.

Continue search new stopover of Eurasian Crane along the Siberian and Eurasian Cranes flyway.

Realize practical field stage of Flight of Hope Project on reintroduction of Siberians Cranes using ultralight technique.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

# SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

#### **Uzbekistan**

# Central Flyway

Research adaptation of Siberian Crane to winter conditions in ECJ.

Investigate ecological conditions (air temperature, ice and snow covering and others), threats, crane counts, observation birds behavior and habitats.

# Objective IV: Protect and manage habitats of importance for the Siberian Crane

#### 4.1. Protect and manage habitats of importance for the Siberian Crane

Prepare suggestions on the additional measures of wetlands protection within the framework of development of protected wetlands.

Enhance and expand collaboration between different levels organizations to provide legal measures for inadequately protected or newly identified areas of importance for the Siberian Crane.

Develop managements plan for WSCAN sites if possible.

Conduct applied research on WCASN sites.

Continue monitoring the environmental impacts of ecological factors on Siberian Crane habitats.

Identify new wetlands and improve protection and management of wetlands important to Siberian and Eurasian cranes.

## Objective V: Increase public awareness and ecological education

## 5.1. Share information on Siberian Crane conservation efforts through mass media

Continue to publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines.

Continue to produce and distribute education materials such as booklet «Important areas for cranes in Uzbekistan».

Publish calendar with Siberian Crane pictures.

Create short video for demonstration on TV.

#### 5.2. Community involvement

Organize Crane Celebration in the Tashkent Zoo to attract attention of visitors and mass media to the problem of protection of critically endangered species and their habitats along the Central Flyway.

Organize Crane Celebratios at universities for sharing information about the Siberian Crane and its habitats among local people.

Involve rangers, hunters and frontier guards in Eurasian Crane monitoring and counts along the Siberian Crane flyway in the future.

Support and develop information network of local people for crane observations and monitoring of wetlands important to Siberian Cranes and other waterbirds.

Improve public awareness of wetlands important to Siberian Cranes and other waterbirds.

# Objective VI: Enhance national and international cooperation and information exchange

# 6.1. Improve national and international cooperation and information exchange

Establish a network for monitoring migrating cranes species through collaboration including network sites and other important sites.

Attend the CWGE Scientific Conference "Cranes of Palearctic: Biology, Conservation, Management (in memory of Academic P.S. Pallas)" in Volgograd, Russia, in October 2011. Participate in CWGE activity.

	Specific activities to be undertaken in the period 2010-2012						
RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012						
Uzbekistan	Continue research along the Siberian Crane Central Flyway through monitoring of the Eurasian Cranes in cooperation with Turkmenistan.						
Central Flyway	Conduct research on adaptation of Siberian Cranes to ecological condition in Ecological Center "Jeiran" in cooperation with Russia.						
	Investigate Tudakul Reservoir for preparation SIS for inclusion in Ramsar List (Siberian Crane was sighted not far from Tudakul in 2007).						
	4) Conduct investigation of Eurasian Crane wintering grounds in cooperation with Afghanistan.						
	6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)						
	Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund at WCASN sites.						
	Implement WCASN Action Plan for 2010-2012.						
	Nominate Talimarjan site in WCASN.						
	Participate in creation of CAF sites.						
	6.4. Capacity building						
	Organise seminars for staff of different state administrative agencies to get their administrative support for protection of the Siberian Crane and other waterbirds.						
	Organize seminars for different groups of people, including frontier guards, hunters, rangers, farmers, workers of pump station and the machine operators and others, to support conservation of the crane and its habitats at wintering grounds.						
	Organize training courses for capacity building in the framework of Flight of Hope Project.						
	6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation						
	Participate in UNEP/GEF WCA project preparation if it will be approved.						
	Develop proposal(s) to submit to appropriate agencies for possible funding.						
	Implement Project on Crane Hunting Mitigation in Asia supported by ICF through MBZ Species Conservation Fund.						

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

# SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

#### Siberian Crane Flyway Coordinator

#### Objective II: Monitoring and research

#### 2.1. Monitor and study the Siberian Crane and its habitat

Immediately share received information among Range States through e-mail list and website.

#### 2.2. Maintain national database on the Siberian Crane and its habitats

Maintain database and develop proposal to go on-line and link more effectively with databases under other initiatives.

#### Objective III: Increase numbers and genetic diversity

#### 3.1. Promote recovery of the Siberian Crane populations

Participate in tracing of migration of released captive-bred Siberian Cranes in the case of their tagging by satellite transmitters

# Objective V: Increase public awareness and ecological education

## 5.1. Share information on Siberian Crane conservation efforts through mass media

Continue to provide the Range States with awareness materials especially for the Crane Celebrations, pending funding.

# Objective VI: Enhance national and international cooperation and information exchange

# 6.1. Improve national and international cooperation and information exchange

Strengthen network for monitoring migrating cranes species through collaboration including network sites and other important sites.

Participate in NEACWG activity.

Attend the CWGE Scientific Conference "Cranes of Palearctic: Biology, Conservation, Management (in memory of Academic P.S. Pallas)" in Volgograd, Russia, in October 2011. Participate in CWGE activity.

Maintain and update focal point list regularly.

Continue to collect and share information. Update SCFC website and establish Russian version of the website.

Continue to update Siberian Crane database.

Compile and distribute CMS MoU7 meeting report, including revised Conservation Plans for three populations with limited number of hard copies. Send hard copies to governmental agencies of Range States. Upload publication on CMS website.

Upload report database to CMS website. Upload country reports there with request of additional information from countries. Countries to add additional information as appropriate.

RANGE STATES/
CO-OPERATING
<b>ORGANISATIONS</b>

# SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

# International Crane Foundation

#### **Objective I: Reduce mortality**

## 1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats

Finalize hunting strategy, consult with partners, and develop proposals to cover a range of activities over a long period.

#### Objective II: Monitoring and research

#### 2.1. Monitor and study the Siberian Crane and its habitat

Continue collaboration with Chinese colleagues on ecological studies and environmental management at Poyang Lake.

#### 2.2. Maintain national database on the Siberian Crane and its habitats

Maintain database and develop proposal to go on-line and link more effectively with databases under other initiatives.

#### Objective III: Increase numbers and genetic diversity

#### 3.1. Promote recovery of the Siberian Crane populations

Provide chicks or eggs produced during early stages of the breeding season to have Siberian Crane chicks with suitable age for Flight of Hope Project.

## Objective V: Increase public awareness and ecological education

# 5.1. Share information on Siberian Crane conservation efforts through mass media

Continue to provide the Range States with awareness materials especially for the Crane Celebrations, pending funding.

# Objective VI: Enhance national and international cooperation and information exchange

# 6.1. Improve national and international cooperation and information exchange

Develop WC Asia GEF proposal with ICF and CMS, in close consultation with partners with a focus on key WCASN and other internationally important migratory waterbird sites.

Develop UNEP/GEF grant proposal for East Asia. Work with SFA China to submit this grant proposal to UNEP.

Compile and distribute CMS MoU7 meeting report, including revised Conservation Plans for three populations with limited number of hard copies. Send hard copies to governmental agencies of Range States. Upload publication on CMS website.

Hire specialist to create electronic reporting database. Upload report database to CMS website. Upload country reports there with request of additional information from countries. Countries to add additional information as appropriate..

Identify host country for MoU8.

Work with host country of MoU8 to ensure that the meeting is financially secure.

Liaise with other potential co-operating organizations as appropriate that signal their interest to sign the MoU.

Contact BirdLife International as possible participant and signatory to MoU

#### 6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership

Attend NEACWG and EAAFP meeting for representation of ICF and CMS Participate in EAAFP and NEACWG activities that support CMS MoU goals Develop partnership opportunities.

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012					
International Crane Foundation	<b>6.4. Capacity building</b> Participate in related international workshops and conferences.					
roundation	Provide technical support including ordering and data management of PTTs.  6.5. Raise funds to support a comprehensive conservation programm supporting MoU implementation					
	Seek funds through CBCC to support continuation of SCFC position for at least one year.					
	Support key regional activities.  Develop and submit proposal to UNEP/GEF for Western/Central Asia pending country					
	commitment to co-financing through GEF allocations.					

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012				
Wetlands	Objective I: Reduce mortality				
International	1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats				
	Coordinate activities under WI Arctic Program with focus on wetland management and through working with the oil and gas industry.				
	Objective II: Monitoring and research				
	<b>2.1. Monitor and study the Siberian Crane and its habitat</b> Promote use of the Asian Waterbird Census framework for monitoring of the Siberian Crane and other waterbirds and wetlands for the region.				
	Objective VI: Enhance national and international cooperation and information exchange				
	6.1. Improve national and international cooperation and information exchange				
	Develop WC Asia GEF proposal with ICF and CMS, in close consultation with partners with a focus on key WCASN and other internationally important migratory waterbird sites.				
	Promote use of the Wings Over Wetlands (WOW) Critical Site Network Tool launched in June 2010 with WOW Partners as an information platform for Siberian Crane and migratory waterbirds in the western flyway.				
	6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds (WCASN)				
	Work closely with CMS to finalize the institutionalization of the CAF Action Plan in collaboration with Range States and partners to enable its early implementation including development of the CAF site network.				
	6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership				
	Strengthen conservation activities in East Asia through the framework of the EAAFP and EAAF Site Network through development of a regional project and related activities at important sites for the Siberian Crane and other migratory waterbirds.				

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012				
Wetlands	6.4. Capacity building				
International	Promote use of the WOW Flyway Training Kit to build national and local capacity for waterbird and wetland management in Central and Western Asia with WOW Partners and others.				
	6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation				
	Develop and submit proposal to UNEP/GEF for Western/Central Asia pending country commitment to co-financing through GEF allocations.				

RANGE STATES/ CO-OPERATING ORGANISATIONS	SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012
Cracid & Crane	Objective III: Increase numbers and genetic diversity
Breeding and Conservation	3.1. Promote recovery of the Siberian Crane populations
Center	Provide chicks or eggs produced during early stages of the breeding season to have Siberian Crane chicks with suitable age for Flight of Hope Project.
	Provide Siberian Crane eggs for Flight of Hope Project.
	Collaborate to develop release strategy for Flight of Hope Project.
	Objective V: Increase public awareness and ecological education
	5.2. Community involvement
	Provide India and Pakistan with one pair of the Siberian Crane each for education purposes.
	Objective VI: Enhance national and international cooperation and information exchange
	6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation
	Consider support for travel to build capacity and promote collaboration.
	Help seek funds for SCFC position.
	Continue support to OCBC for releasing birds for reintroduction.
	Seek support for Flight of Hope Project.

RANGE STATES/
CO-OPERATING
ORGANISATIONS

# SPECIFIC ACTIVITIES TO BE UNDERTAKEN IN THE PERIOD 2010-2012

#### CMS Secretariat

# Objective VI: Enhance national and international cooperation and information exchange

# 6.1. Improve national and international cooperation and information exchange

Maintain and update focal point list regularly.

Call attention to the importance of conserving Siberian Cranes and their habitats over their entire range, at relevant international conferences.

Compile and distribute CMS MoU7 meeting report, including revised Conservation Plans for three populations with limited number of hard copies. Send hard copies to governmental agencies of Range States. Upload publication on CMS website.

Hire specialist to create electronic reporting database. Upload report database to CMS website. Upload country reports there with request of additional information from countries. Countries to add additional information as appropriate.

Produce executive summary of priorities and send to national governments requesting support. Range States will be sent draft to review and provide clarification or details. Identify host country for MoU8.

Work with host country of MoU8 to ensure that the meeting is financially secure.

Liaise with other potential co-operating organizations as appropriate that signal their interest to sign the MoU.

Contact BirdLife International as possible participant and signatory to MoU.

# 6.3 Support Siberian Crane conservation activities through the East Asian – Australasian Flyway Partnership

Attend NEACWG and EAAFP meeting for representation of ICF and CMS.

Participate in EAAFP and NEACWG activities that support CMS MoU goals.

Develop partnership opportunities.

# 6.5. Raise funds to support a comprehensive conservation programme supporting MoU implementation

Set up mechanisms for countries to contribute funds dedicated to the Siberian Crane conservation.

Request UN Foundation to consider support of Siberian Crane conservation through UNEP/CMS.

Provide letters of support for efforts of national agencies and cooperating partners to secure additional funding for MoU-related activities.

Continue to coordinate with Friends of CMS to determine what support could be provided to the MoU's implementation in collaboration with ICF.

# Part V: Western/Central Asia Site Network for the Siberian Crane and Other Waterbirds

WCASN Brief Report for 2007-2009
WCASN Action Plan for 2010-2012

**Guidelines to Prepare Site Nomination Documentation** (version from December 2010)

#### **Introduction**

The Western/Central Asian Site Network for Siberian Cranes and Other Waterbirds (WCASN) was formally launched on 18 May 2007 in Kazakhstan, in a special signing ceremony held during the Sixth Meeting of the Signatories (MOS6) to the CMS Memorandum of Understanding on Conservation Measures for the Siberian Crane (MOU) under the Convention on Migratory Species (CMS).

The establishment of a Siberian Crane site network has critical importance for Siberian Cranes. It has also benefited other cranes and waterbirds. WCASN is the first step towards developing a more comprehensive site network for migratory waterbirds under a wider framework proposed within the Central Asian Flyway (CAF) Initiative under CMS. WCASN will eventually be integrated within the wider waterbird site network under CAF.

The WCASN focuses on conservation efforts on sites of international importance for the Siberian Crane along its West and Central Asian flyways in Afghanistan, Azerbaijan, India, Islamic Republic of Iran, Kazakhstan, Pakistan, Russian Federation (western Siberia), Turkmenistan and Uzbekistan. According to approved principles of WCASN, such sites include a) sites important for the conservation, recovery and reintroduction of the Siberian Crane; b) sites which are also important for other migratory cranes and waterbirds; c) the importance of involving local people in conservation efforts at the sites.

The WCASN goal is to ensure the conservation of the Siberian Crane and other migratory waterbirds along the Western and Central Asian Flyways through recognition and appropriate management of a network of internationally important sites.

During the CMS MOS6 in Kazakhstan in May 2007, the first ten sites were designated within WCASN included

five sites from Kazakhstan, two from Iran and one each from India, Turkmenistan and Uzbekistan. Two sites from Pakistan were added to WCASN through recommendations given to WCASN Nomination Committee by the current WCASN Nomination Review Working Group and through presentation of these sites by governmental representative during special ceremony at the CMS MOS7 in Bonn, Germany, on 12 June 2010.

Other range states (Azerbaijan, Afghanistan, Russia and Pakistan) also proposed their sites and are working on the preparation of nomination documents. Besides Kazakhstan proposed more three and Uzbekistan proposed more one sites for including to WCASN for future nomination. WCASN Committee and WCASN Review Working Group will advance the work of this initiative before the next meeting by reviewing proposals for additional sites.

Since WCASN lunch at the CMS MOS6 in 2007 in Kazakhstan, some activities were implemented at the designated sites of six countries including preparation of new sites nomination preparation, increasing of protected level of WCASN sites, CEPA and information exchange. Most of activities were implemented during implementation of the UNEP/GEF Siberian Crane Wetlands Project (SCWP) or with support of SCWP for countries which were not involved in it implementation. All range states were involved in preparation of Atlas of Key Sites for the Siberian Crane and Other Waterbirds in Western/Central Asia with was issued in Russian and English languages.

Future WCASN actions will be focused on the designated sites as well as on new sites of other range states which can be designated until the next CMS MOS8 meeting, supporting new nominations, CEPA, hunting reducing and regional actions to service the site network.

## **WCASN Brief Report for 2007-2009**

#### 1. Site nominations

During the CMS MOS6 in Kazakhstan in May 2007, the first ten sites were designated within the Site Network included five sites from Kazakhstan, two from Iran and one each from India, Turkmenistan and Uzbekistan. Other range states (Azerbaijan, Afghanistan, Russia and Pakistan) also proposed their sites and are working on the preparation of nomination documents.

During the site nomination ceremony in Kazakhstan representatives from the five countries were handed provisional certificates. After the meeting, a logo and certificate for the WCASN were developed. The final certificates signed by CMS Secretariat and ICF were handed to representatives of Kazakhstan, India and Iran in Rome, Italy, during the CMS COP9 meeting with short introductions of the designated WCASN sites. Certificates for Turkmenistan site «Durnaly" were passed to the technical focal points. In these countries, meetings with representatives of local administrations were organised during Crane Celebration events and the certificates were presented to them. In Uzbekistan, certificate was handed to a representative of Termez local administration during Round Table «Presentation of Termez as a wintering site of the Western/Central Asian Site Network».

# 2. Status of nomination of new WCASN sites

Before the CMS MOS7, possibilities for the nomination of new sites were investigated. During the CMS MOS6, Azerbaijan and Pakistan proposed two sites each for nomination. However Azerbaijan did not submit a Letter of Endorsement to the CMS Secretariat, and Pakistan provided insufficient information on the proposed sites. Pakistan has since submitted a Letter of Endorsement for the two nominated sites and Site Information Sheets with updated information to the CMS Secretariat. These documents are being reviewed by the WCASN Review Working Group which will make recommendations to the WCASN Committee on the nomination of these sites. Turkmenistan planned to nominate one more site - Tallymerjen & Kelif-Zeyit, however the local administration in that region has changed, therefore the process of endorsement has to be started again. The same situation has occurred for the Russian site "Kunovat" located in Yamalo-Neneytskiy Autonomous Region, where the Governor was recently replaced. Kazakhstan has prepared proposals for three new sites, Sarykopa, Turgai-Irgiz and Tengiz-Kurgaljino Lake Systems, which can be considered for future nomination. Uzbekistan proposed additional site Talimarjan for nomination to WCASN.

# 3. Increasing the protection level of WCASN sites

Since the last MOU meeting in 2007 progress was made on improving the protection level of a number of WCASN sites with support from the UNEP/GEF Siberian Crane Wetlands Project (UNEP/GEF SCWP). All 5 WCASN sites in Kazakhstan were included in the List of Wetlands of International Importance (Ramsar Convention). In addition, Naurzum Lake System was included as part of a World Heritage Site called "The Saryarka—Steppe and Lakes of Northern Kazakhstan". In Zharsor-Urkash Lake System, the Zharsor-Urkash State Wildlife Refuge at the republic level was established, under the management responsibility of Naurzum State Nature Reserve. Since June 2001, Fereydoonkenar in Mazandaran Province in Iran has been a "Non-Shooting Area", covering Fereydoonkenar, Ezbaran, Eastern & Western Sorkh Rud Damgahs and Fereydoonkenar Wildlife Refuge, including a buffer zone around each of these areas. The Ramsar site at Bujagh has been extended (500 ha) to cover the whole national park which consists of the whole of the lagoon area, its associated marshes and the marshes and sand flats at the mouth of the Sefid Rud river to the west. Management plans for Naurzum Lake System and Zharsor-Urkash Lake System were completed. The management plan for the site of Fereydoonkenar, Ezbaran & Sorkh Rud Ab-Bandans was finalized through a significant community participation process, and input was provided to the draft management plan for Bujagh National Park.

# 4. Atlas of Key Sites for the Siberian Crane and Other Waterbirds in Western/Central Asia

The Atlas has been prepared for presentation during the CMS MOS7 with the active participation of country representatives. For the preparation of this publication, Site Information Sheets for designated and proposed sites were used as well as information from the Siberian Crane database, which was created and managed within the framework of the UNEP/GEF SCWP, and data from the literature.

For each country, a brief overview of wetlands used by the Siberian Crane and detailed descriptions of historical and recent sightings of the Siberian Crane along the Western and Central Asian flyways has been prepared. The most important Siberian Crane sites (green squares) and known Siberian Crane sightings are presented in the map for each country (or its part). Each sighting is described in detail in the legend with reference to information sources. Despite the quite com-

prehensive overview of Siberian Crane sightings, it is possible that some sightings have been be missed, especially those described in local publications. Please provide information on any omissions to Elena Ilyashenko (eilyashenko@savingcranes.org).

For the most important Siberian Crane sites, experts from the Siberian Crane range states presented information including maps of the sites, a brief overview of physiographic features, importance for the Siberian Crane with detailed description of all sightings, importance for other crane species and other waterbirds; negative factors for the wetlands, current and proposed conservation measures and the sites' international importance.

#### 5. Information exchange

A section on the WCASN has been created in the merged UNEP/GEF SCWP – Siberian Crane Flyway Coordination website: http://sibeflyway.org/flyway-conservation/wcsan. Guidelines for Site Nomination have been uploaded here and can be used for the preparation of nomination documents for new sites. Information about each site has been included on a separate page with links to photos, maps and other documents.

Information on the launch of the WCASN was published in various newsletters, including the CWGE Newsletter. Presentations including WCASN activities were made during the CMS COP9 in Rome (December 2008), SCWP Project Completion Workshop in Harbin (October 2009), UNEP General Council Meeting in Bali (Press Conference February 2010) and others

# 6. Education activities at WCASN sites

Education activities were conducted at WCASN sites in Iran, Kazakhstan, Turkmenistan and Uzbekistan with support from the UNEP/GEF SCWP. As Turkmenistan and Uzbekistan were not involved in project implementation, agreements were signed between ICF and the related organisations in these countries.

Booklets with information about the sites were published in all four countries. In Kazakhstan, Uzbekistan

and Turkmenistan, Crane Celebrations were organised where education and information materials provided by the Crane Working Group of Eurasia and published with the support of UNEP/GEF SCWP and CMS Secretariat were shared. Turkmenistan also published the poster "Protect Cranes and their Habitats" in Turkmen language which was shared widely. In the framework of the Crane Celebration, a meeting with the local administration was organised at Durnaly site and the certificate of designation of this site signed by CMS Secretariat and ICF was handed to the Head of Administration. In Uzbekistan a Round Table on «Presentation of Termez as a wintering site of the Western/Central Asian Site Network» was organised for different target groups: decision makers (regional and local administration, regional branch of State Committee for Nature Protection), stakeholders (frontier guards), hunters, scientific workers of the neighboring protected area (Surhanskiy State Nature Reserve), lecturer of Termez state university and local mass media. In Kazakhstan, a Siberian Crane Festival was organised at Naurzum involving nearly three thousand students, teachers, stakeholders and different groups of local people from Karamendy (where the administrative office of Naurzum State Nature Reserve is located) as well as from adjacent regions of Kazakhstan and Russia.

# 7. Future support for the development of the WCASN

Recognizing that the WCASN was developed as an initial step towards the development of a wider water-bird site network under the CMS Central Asian Flyway initiative, ICF and Wetlands International are working with CMS and UNEP to develop a regional proposal covering part of the Central Asian Flyway which would provide support for the sustainable management of key WCASN sites, the extension of the site network and for addressing the important threat that unsustainable hunting practices pose to the Siberian Crane and other migratory waterbirds. ICF is also seeking funds to support hunter education including some WCASN sites.

#### WCASN Action Plan for 2010-2012

The Action Plan for Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds (WCASN) forms a subset of actions under the overall Siberian Crane MOU Conservation Plans and it is presented as part of the Conservation Plans for western and central populations.

The actions will be focused on the designated sites, supporting new nominations, and regional actions to service the site network such as website, sharing information, raising funds, etc. The Action Plan is expected to focus on activities in the six countries (Iran, India, Kazakhstan, Pakistan, Turkmenistan and Uzbekistan), that have already designated sites as well as on new sites of other range states of western and central populations which can be designated during Siberian Crane MOU implementation period from 2010 to 2012.

Objectives and Specific Activities	Countries	WCASN Sites	Confirmed Funding Sources	Proposed Funding Sources	
Objective I: Reduce mortality					
1.2. Strengthen and improve enforcement of legislation for crane protection					
Implement key activities from Hunting Strategy developed and approved under the MOU as outlined below:  a) Reduce uncontrolled hunting and poaching through publication and distribution of awareness materials (poster, booklets, and video). Identify key audiences and messages to promote needed changes in behavior (legislation, penalties for poaching, and species identification). Share these materials through national inspection services, hunting and fishing societies and in public sites (markets, shops, clubs, clinics, administration buildings, schools and colleges, and NGOs)	KZ, TU, UZ	<b>KZ:</b> Naurzum Lake System, Zharsor-Urkash Lake System, Tyuntyugur-Zhanshura Lake System, Kulykol-Taldykol Lake System, Ural Delta and Nearest Caspian Sea Coastal Zone <b>TU:</b> Durnaly	MBZ Species Conservation Fund		
b) Reviews current waterbirds harvesting practices, national policies, legal frameworks and their conservation implications	All involved countries	UZ: Termez All designated sites			
c) Develop and promote regional guidelines for sustainable waterbirds harvesting and Code of Conduct for hunters for national adaptation and use	All involved countries	All designated sites			
d) Conduct activities at demonstration sites with significant hunting issues including community participation, sustainable livelihoods and awareness raising	To be determined	To be determined		To be included new GEF proposal under development	

Objectives and Specific Activities	Countries	WCASN Sites	Confirmed Funding Sources	Proposed Funding Sources	
Objective II: Monitoring and research					
2.1. Monitor and study the Siberian Crane and its habitat					
Strengthen/establish regular monitoring of cranes and other waterbirds at WCASN sites to ensure updated knowledge of crane usage, habitat needs and conservation issues	All involved countries	All designated sites and all potentially important sites			
Provide monitoring information to the Siberian Crane database,     International Waterbirds Census and IBA databases	All involved countries	All designated sites and all potentially important sites			
Objective III: Increase numbers and genetic diversity					
3.1. Promote recovery of the Siberian Crane population	s				
1. Support Flight of Hope Project activities approved by international planning group established under MOU for reintroduction programme on recovery of Western/Central Asian population	KZ, UZ (in cooperation with RU)	KZ: Naurzum Lake System UZ: Termez			
3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes					
Conduct census of cranes and other waterbirds during migration and at wintering grounds as far as possible at WCASN sites     Study relationship between waterbirds distribution, habitat condition and climate change, as a basis for proposing adaptation measures to reduce the vulnerability of regional waterbirds populations.	All involved countries All involved countries	All designated sites and all potentially important sites All designated sites and all potentially important sites			
Objective IV: Protect and manage habitats of importance for the Siberian Crane					
4.1. Protect and manage habitats of importance for the Siberian Crane					
Build capacity for effective site management and financial sustainability through development and implementation of site management plans, incorporating climate change adaptation measures	All involved countries	Selected demonstration sites		To be included new GEF proposal under development	
Review water management needs to sustain wetlands and local communities	All involved countries	Selected demonstration sites			

Objectives and Specific Activities	Countries	WCASN Sites	Confirmed Funding Sources	Proposed Funding Sources				
Objective V: Increase public awareness and ecological education								
5.1. Share information on Siberian Crane conservation efforts								
Publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines	All involved countries	All designated sites						
5.2. Community involvement								
Organise mass education and public awareness events (Crane Celebration, World Migratory Bird Day, World Wetlands Day) at WCASN sites	All involved countries	All designated sites						
2. Organise lectures and discussions with key stakeholders including hunters, frontier guards and other group of local people near WCASN sites about conservation of cranes and other waterbirds and wetlands	All involved countries	All designated sites	MBZ Species Conservation Fund					
3. Increase public awareness through involving local people in waterbirds and habitat monitoring	All involved countries	All designated sites						
4. Develop methods on involving volunteers in crane count and waterbirds monitoring by adapting ICF, WI, and BirdLife International experiences to local communities	All involved countries	All designated sites						
5. Implement young scholar programmes and competitions to mentor and empower promising young students	All involved countries	All designated sites						
Objective VI: Enhance national and international cooperation and information exchange								
6.1. Improve international cooperation and information	exchange							
Publish information in CWGE Newsletter, ICF Bugle and other international publications	All involved countries	Selected demonstration sites		To be included new GEF proposal under				
2. Include list of new publications in regional newsletters	All involved countries	All designated sites		development				
3. Share successful examples (i.e. Sterkh Foundation) of awareness raising activities undertaken by countries, network sites, local NGOs	All involved countries, other Range States	WCASN sites, other key sites, local NGOs						
4. Upload information about activities and news at WCASN sites to WCASN webpage	All involved countries	All designated sites						

Objectives and Specific Activities	Countries	WCASN Sites	Confirmed Funding Sources	Proposed Funding Sources				
Objective VI: Enhance national and international cooperation and information exchange								
6.2. Development of the Western/Central Asia Site Network for the Siberian Crane and other waterbirds								
Prepare and submit to CMS Secretariat documents for nomination of proposed sites	AF, AZ, IN, KZ, RU, TU, UZ	AF: Ab-i-Estada and Dashte- Nawar AZ: Shirvan National Park and Gyzyl-Aghach Nature Reserve IN: Etawah-Mainpuri KZ: Sarykopa, Irgiz-Turgai, Kurgaljino RU: Kunovat, Kondo-Alymka, Belozerskiy and Agrakhan TU: Tallymerjen & Kelif-Zeyit UZ: Tallymjen						
Review nominations submitted by countries and give recommendations to Committee on Site Nomination	WCASN RWG							
3. Evaluate proposals of potential site in Afghanistan – Amudaria Valley near the border with Uzbekistan	AF	<b>AF:</b> Amudaria Valley						
4. Investigate possibility to create an international transboundary site in the border region between Uzbekistan and Turkmenistan and between Uzbekistan and Afghanistan in the Amudaria Valley.	AF, TU, UZ	AF: Amudaria Valley (proposed) TU: Tallymerjen & Kelif-Zeit (proposed for nomination) UZ: Termez (designated)						
6.4. Capacity building								
Promote and organise regional and national training workshops on wetland protected area management and monitoring, business planning, climate change adaptation, water management and community participation for network sites	All involved countries	All designated sites						
6.5. Raise funds to support a comprehensive conservation programme supporting MOU implementation								
1.Identify existing projects and programmes that are or could support the WCASN sites				WWF Forever Indus program				
Secure support from national or regional governments for finance (co-finance) support priority activities	All involved countries	All designated sites with support from CMS, ICF, and WI						

Objectives and Specific Activities	Countries	WCASN Sites	Confirmed Funding Sources	Proposed Funding Sources				
Objective VI: Enhance national and international cooperation and information exchange								
6.5. Raise funds to support a comprehensive conservation programme supporting MOU implementation								
3. Submit grant applications to support:     a. Hunting strategy (Part GEF, To Be Determined (TBD))     b. Monitoring of cranes and other waterbirds at WCASN sites (TBD)     c. Research on relationship between waterbirds distribution, habitat condition and climate change (GEF)     d. Support "Flight of Hope" Project (TBD)     e. Review water management needs to sustain wetlands and local communities (GEF?)     f. Regional and national training workshops held on wetland protected area management and monitoring, business planning, climate change adaptation, water management and community participation for network site management (GEF)     g. CEPA activities including     i. organising mass education and public awareness events (TBD)     ii. young scholars program (GEF)	CMS, ICF, WI with involved countries	All designated sites						















# Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds



# **Guidelines for the Preparation of Site Nomination Documents**

**Version: December 2010** 

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# I. Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds

#### 1.1. Introduction

The Siberian Crane (*Grus leucogeranus*) is a critically endangered species that is dependent upon the existence of large open areas of shallow wetland habitats along its migration routes. Three routes are currently known - a West Asian flyway that leads from breeding grounds in Western Siberia around the western shore of the Caspian Sea to the Caspian Lowlands of northern Iran; a Central Asian flyway connecting Western Siberian breeding grounds to the wintering site in northern India; and an East Asian flyway leading from Yakutia to the central Yangtze floodplain lakes in China.

The flyways and habitats used by the Siberian Crane are shared with many other species of migratory waterbirds, including at least 32 globally threatened waterbird species, and thus have significance far beyond conservation of the Siberian Crane alone.

#### 1.2. Summary

The UNEP/GEF Siberian Crane Wetland Project (SCWP) implemented from 2003 to 2009 had a stated goal to develop flyway site networks with nomination procedures for sites harmonized with other site network schemes. On the other hand, the Central Asian Flyway Action Plan to Conserve Migratory Waterbirds and their habitats (CAF Action Plan) was finalized in New Delhi in June 2005 by the range states of the Central Asian Flyway. The CAF Action Plan includes a provision to establish a site network for migratory waterbirds in the CAF.

At the "Waterbirds Around the World" Meeting (Edinburgh, April 2004), side events were held to discuss steps needed to develop these two related initiatives. Joint discussions focused on exploring the best mechanisms to link these initiatives, identifying frameworks for cooperation and applying lessons learned from the successful North East Asia Crane Working Group (NEACWG) established under the Asia-Pacific Migratory Waterbird Conservation Strategy, which now falls under the framework of the East Asian - Australasian Flyway Partnership.

Efforts for the conservation and recovery of the Siberian Crane gained momentum in recent years through the CMS Memorandum of Understanding concerning Conservation Measures for the Siberian Crane (the Siberian Crane MOU). The Siberian Crane MOU involves the Siberian Crane's 11 range states and provides the basis to develop and implement Conservation Plans for the Western, Central and Eastern populations of the Siberian Crane.

The Fifth Meeting of the Signatories (MOS5) to the Siberian Crane MOU (Moscow, April 2004) agreed on the need to establish a network of sites critical for the Siberian Cranes of the Western and Central populations to promote protection of key wetlands and coordination among the Signatories in the Western/Central Asian flyways. It also agreed with a proposal to introduce the site network concept into the next version of the respective Siberian Crane MOU Conservation Plans.

The preliminary conclusions of an Inter-sessional Working Group established by the CMS MOS5 were presented to the UNEP/GEF SCWP's Third Project Steering Committee Meeting (SCM3) in December 2004 in Iran. The process, title, objectives, site selection criteria, scope of activities to be conducted under the network, and opportunities for interaction and exchange were discussed throughout the course of the SCM3.

The SCM3 participants recommended that the site network be called the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds or WCASN.

The Meeting to Endorse the Proposed Western/Central Asian Site Network for the Siberian Cranes and Other Waterbirds (New Delhi, 13 June 2005) agreed on criteria and qualifiers for selection of sites for the network, the site information (datasheet) required for site nominations, and procedures to nominate, review and approve sites.

#### 1.3. Goal of the WCASN

To ensure the long-term conservation of the Siberian Crane and other migratory waterbirds along the Western and Central Asian Flyways through recognition and appropriate management of a network of internationally important sites.

#### 1.4. Principles of the WCASN

The initiative to establish a Siberian Crane site network under the CMS MOU will focus attention on:

- Sites important for the conservation, recovery and reintroduction of the Siberian Crane;
- Sites which are also important for other migratory cranes and waterbirds; and
- The importance of involving local people in conservation efforts at the sites.

# **1.5. Administrative Structure of WCASN**

WCASN is served by the CMS Secretariat, the WCASN Committee and the WCASN Review Working Group (RWG).

At the Meeting to Endorse the Proposed WCASN (New Delhi, 13 June 2005), it was agreed that the vetting of nominations should be conducted by WCASN RWG, composed of the chair (elected at every MOS) one representative from the breeding range (Russian Federation), two representatives (rotating) from the staging areas of each flyways (western and central), two representatives from the wintering range (Islamic Republic of Iran and India), as well as BirdLife International, Wetlands International and the International Crane Foundation.

The WCASN RWG has been operating on an interim basis. It considers nomination documents presented by range states and makes recommendations to the WCASN Committee for approval. The WCASN Committee consists of one governmental representative of each Siberian Crane range state of western and central flyways. Terms of References for the WCASN RWG (Annex 5) and the WCASN Committee (Annex 6) were developed and approved during the CMS MOS6 (Almaty, Kazakhstan, May 2007) and updated during the CMS MOS7 (Bonn, Germany, June 2010).

#### 1.6. Activities under the WCASN

The 2005 New Delhi Meeting to Endorse the Proposed WCASN agreed joint activities which would be conducted within the framework of the network as follows:

- Providing monitoring and management of the sites;
- Facilitating staff exchange programme;
- Participating in education and public awareness activities in the WCASN;
- Maintaining a regional Siberian Crane database;
- Providing training workshops for site managers and experts;
- Participating in communication and information exchange between site management bodies researchers, and other relevant agencies in the network and other global networks; and
- Fundraising.

These activities were integrated in Conservation Plans for western and central flyways under the CMS Siberian Crane MOU issued in 2008<sup>1</sup>. At the CMS MOS7 to the Siberian Crane MOU held in Bonn in June 2010 it was decided to develop a separate WCASN Action Plan which should constitute a subset of actions under the overall Siberian Crane MOU Conservation Plans.

<sup>1</sup>UNEP/CMS Technical Report Series 16. Conservation Measures for the Siberian Crane, Fourth Edition. 2008.

#### 1.7. List of Priority Sites

Range states representatives to the Meeting to Endorse the Proposed WCASN suggested a preliminary list of priority sites<sup>2</sup> for possible inclusion in the network.

During the CMS MOS6 to the Siberian Crane MOU held in Kazakhstan in May 2007, the first ten sites were designated within the Site Network including five sites from Kazakhstan, two from Iran and one each from India, Turkmenistan and Uzbekistan. Two sites from Pakistan were added to WCASN at the CMS MOS7 held in Bonn, Germany, in June 2010.

Several other sites have been identified by range states (Afghanistan, Azerbaijan, Kazakhstan, Pakistan, Russia and Uzbekistan) for future nomination (*Annex 1*).

# **1.8.** Criterion and Qualifiers for Site Selection<sup>3</sup>

For site selection, attention will be focused on sites important for the conservation, recovery and reintroduction of the Siberian Crane, including sites that are also important for other migratory cranes and waterbirds. Please see the Site Information Sheet (Annex 1) and Explanatory Notes (Annex 2) for details.

**Criterion 1** and its four temporal sub-criteria are designed to ensure that governments will select sites based on their current and past importance for Siberian Cranes.

**The Qualifiers** give an indication of the additional importance for other cranes and waterbirds of sites that have been selected primarily because of their importance for Siberian Cranes. They are also important to promote the future integration of the WCASN into the larger proposed waterbird site network for the Central Asia Flyway under the CMS Central Asian Flyway Action Plan for the Conservation of Migratory Waterbirds and their Habitats.

The criteria and qualifiers are adapted from selected criteria to nominate Wetlands of International Importance under the Ramsar Convention. Guidance for applying the Ramsar criteria can be found in the Convention's document: Ramsar Convention Handbook #7: Designating Ramsar Sites<sup>4</sup>.

<sup>2</sup>The original preliminary list included two sites from Mongolia (Khuiten-Kurkh, and Gun Galuut and Ayagin Lakes), however it was clarified that the proposed Mongolian sites were outside the geographic remit of the network and that the populations in question fit completely into the East Asian-Australasian Flyway Site Network.

<sup>3</sup>As agreed by the Meeting to Endorse the Proposed Western/ Central Asian Site Network for Siberian Cranes (and other waterbirds) (New Delhi, 2005), with minor editorial revisions.

<sup>4</sup>Ramsar Convention Secretariat 2004. Ramsar handbooks for the wise use of wetlands. 2nd Edition. Ramsar Convention Secretariat, Gland, Switzerland. Can be downloaded free from www.ramsar.org.

#### 1.9. Site Information Sheet

The 2005 New Delhi Meeting to Endorse the Proposed WCASN discussed the information needed to nominate a site. The meeting agreed to a list 15 categories of information needed as part of the nomination procedure. However, during the process to develop these guidelines, the list of information categories was revised to reflect the last updated version of the Ramsar Information Sheet. The revised list now encompasses all comments from the meeting participants and the additional updates. This information is reflected in the Site Information Sheet (Annex 2).

The Site Information Sheet standardizes the information needed for the site nomination procedure. Site management bodies will submit the Site Information Sheet along with a Site Map and provide the required details on a proposed site, without regard to whether:

- a. The site is currently listed as a national, provincial or local nature protection area or internationally important area (under the Ramsar Convention, World Heritage Convention, etc.); or
- b. Constant monitoring of birds is being undertaken at the site.

#### II. Procedure for Listing Sites<sup>5</sup>

The primary basis for a site's nomination to join the WCASN is the site's importance for Siberian Cranes. By nominating a site, the relevant site management body pledges to incorporate the conservation of Siberian Cranes, other waterbirds and their wetland habitats into management goals for the site in line with the aims of this site network.

In order to nominate a site to join the WCASN, a **Site Information Sheet** must be completed (**Annex 2**). A detailed description and a **Site Map** of the boundaries of the wetland or wetlands should be provided with the Site Information Sheet. The Siberian Crane Flyway Coordinator (SCFC), whose contact details are found below, can assist with completion of the Site Information Sheet.

The relevant site management body should send a **Nomination Letter** proposing the nomination to the national government agency responsible for administrating the implementation of the CMS MOU on the Siberian Crane for endorsement. This will help to ensure that there is local support for the proposal. A sample Nomination Letter is given in **Annex 3**. Site nominations may originate from local site management bodies, including private landowners, however these entities are encouraged to send a letter proposing the nomination to the responsible national government agency for endorsement and final submission.

The responsible national government agency should then send the Site Information Sheet and Site Map together with an appropriate **Letter of Endorsement** to the CMS Secretariat in Bonn, Germany. A sample Endorsement Letter is given in **Annex 4.** 

The WCASN Review Working Group (RWG), serviced by the Siberian Crane Flyway Coordinator, will undertake a technical review of the nomination. The WCASN RWG may seek additional information from the site management body if required. The Chair of WCASN RWG will provide a report containing WCASN RWG recommendations to the CMS Secretariat. Terms of References for WCASN RWG are given in Annex 5.

The Secretariat will then seek final approval of the nomination from the **WCASN Committee**, comprising representatives of the Siberian Crane MOU Signatories from the Siberian Crane western and central flyways. Once approved by the WCASN Committee, through its Chair, the site will be announced on the CMS and SCFC websites. Communications normally are conducted by email. Terms of References for WCASN Committee is given in **Annex 6**.

**A Site Certificate**, co-signed by the CMS Executive Secretary and the Chair of the SNC, will be provided to the site management body. Such agencies are encouraged to then conduct a **Dedication Ceremony** at the new network site. A suggested procedure for Network Site Dedication Ceremonies is given in **Annex 7**. Where possible, a member of the Site Network Committee will attend the ceremony to help promote the importance of the site locally.

# **Contact details for the Siberian Crane Flyway Coordinator**

#### Ms. Elena Ilyashenko

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Tel/Fax: +7 (495) 605-90-01

Email: eilyashenko@savingcranes.org

<sup>5</sup>This procedure is based on that used for nominations of sites to the site networks under the former Asia-Pacific Migratory Waterbird Conservation Strategy.

#### III. References

- 1. Anonymous 1996. Asia-Pacific Migratory Waterbird Conservation Strategy: 1996-2000. Wetlands International Asia Pacific, Kuala Lumpur and International Waterfowl and Wetlands Research Bureau, Japan Committee, Tokyo. http://www.jawgp.org/anet/str1996.htm.
- 2. Asia-Pacific Migratory Waterbird Conservation Committee 2001. Asia-Pacific Migratory Waterbird Conservation Strategy: 2001-2005. Wetlands International-Asia Pacific. Kuala Lumpur, Malaysia. 67pp. <www.wetlands.org/publication.aspx?ID=f45b0a90-3ffe-42-f8-9b63-c86da73c23e7>.
- 3. IUCN (1994). Guidelines for Protected Area Management Categories. CNPPA with the assistance of WCMC. IUCN, Gland, Switzerland and Cambridge, UK. x + 261pp. <www.unep-wcmc.org/protected\_areas/categories/eng/index.html >.
- 4. Ramsar Convention Bureau, 1997. The Ramsar Convention Manual: a Guide to the Convention on Wetlands (Ramsar, Iran 1971). 2nd Edition. Ramsar Convention Bureau, Gland, Switzerland.

- 5. Ramsar Convention Secretariat 2004. Ramsar hand-books for the wise use of wetlands. 2nd Edition. Ramsar Convention Secretariat, Gland, Switzerland. <www.ramsar.org>.
- 6. Report on the Fifth Meeting of Signatory States to the CMS Siberian Crane Memorandum of Understanding (Moscow, April 2004). < www.cms.int/species/siberian crane/sib meetings.htm>.
- 7. Report on the Meeting to Endorse the Proposed Western/Central Asian Site Network for the Siberian Cranes (and other waterbirds) New Delhi, India, 13 June 2005. <a href="https://www.cms.int/species/siberian\_crane/sib\_meetings.htm">www.cms.int/species/siberian\_crane/sib\_meetings.htm</a>.
- 8. The Central Asian Flyway Action Plan to Conserve Migratory Waterbirds and their Habitats can be downloaded from the CMS website. <www.cms.int/bodies/meetings/regional/caf/caf\_meeting\_report.htm>.

# List of designated and proposed sites (as to June 2010)

#### **Designated Sites**

#### **India**

1. Keoladeo (Ghana) National Park

#### **Iran**

- 2. Fereydoonkenar, Ezbaran and Ruds Ab-Bandanas
- 3. Bujagh National Park

#### Kazkahstan

- 4. Naurzum Lake System
- 5. Zharsor-Urkash Lake System
- 6. Kulykol-Taldykol Lake System
- 7. Tyuntyugur-Zhanshura Lake System
- 8. Ural Delta and Nearest Caspian Sea Coastal Zone

#### **Pakistan**

- 9. Taunsa Barrage Wildlife Sanctuary
- 10. Thanedar Wala Game Reserve

#### **Turkmenistan**

11. Durnaly

#### **Uzbekistan**

12. Termez

#### **Proposed Sites**

#### **Afghanistan**

- 1. Ab-i-Estada
- 2. Dasht-e-Nawar

#### **Azerbaijan**

- 3. Shirvan National Park
- 4. Gyzyl-Aghach Nature Reserve

#### **India**

5. Etawah-Mainpuri

#### Kazakhstan

- 6. Sarykopa Lake System
- 7. Turgay-Irgiz Lake System
- 8. Tengiz-Kurgaljino Lake System

#### **Russian Federation**

- 9. Kunovat
- 10. Kondo-Alymka
- 11. Belozerskiy
- 12. Agrakhanskiy

#### **Turkmenistan**

13. Tallymerjen & Kelif-Zeyit

#### Uzbekistan

14. Talimarjan

#### **WCASN Site Information List**

The relevant site management body intending to nominate a site to be included in the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds (WCASN) established under the CMS Memorandum of Understanding concerning Conservation Measures for the Siberian Crane (*Grus leucogeranus*) is requested to complete a Site Information Sheet and submit a Site Map.

The Site Information Sheet is based on the Ramsar Information Sheet. Please note that not all Ramsar sites would necessary qualify for inclusion in the WCASN, and not all network sites would necessary satisfy all of the Ramsar criteria for listing under that convention.

Guidance to fill in the form is provided in Explanatory Notes for the WCASN Site Information Sheet uploaded at SCFC website (www.sibeflyway.org).

All information provided and communications should be in the English language in view of the international nature of this site network. This information sheet may be used:

- (a) For an existing Ramsar Site (if so, please update the entries in the existing Ramsar Information Sheet here on this form, and provide additional information in Questions 9 & 13); or
- (b) For a site that is not listed under the Ramsar Convention (please complete all the entries in the Site Information Sheet form).

The Site Information Sheet has been divided into two parts. It is essential to provide all of the basic information requested in Part 1, comprising Sections 1-13. Part 2 seeks additional information. It is strongly encouraged that that both parts be completed as fully as possible.

The completed Site Information Sheet, Site Map and supplementary information with an Endorsement Letter should be submitted to the CMS Secretariat:

UNEP/CMS Secretariat Nations Campus Hermann-Ehlers-Str. 10 53113 Bonn, Germany Tel. (+49 228) 815 2401 Fax. (+49 228) 815 2449

E-mail: secretariat@cms.int

Part 1

- 1. Date of submission
- 2. Country
- 3. Name of site
- 4. Geographical coordinates
- 5. Altitude
- Area
- 7. Outline map of site (specify digital or hardcopy of map format)
- 8. Overview
- 9a. WCASN criterion and qualifiers
- A. **CRITERION 1:** Site's Importance for Siberian Cranes **Temporal Sub-criteria** for the Siberian Crane: a site must meet one of the following sub-criteria (listed in order of importance). Please tick only **ONE** of the following boxes::

**Sub-criterion 1.1:** Siberian Crane(s) were recorded at the site at least five times during the last 10 years. This should not include records within the same season or repeated sightings of the same individual birds.

- **Sub-criterion 1.2:** The site has held one or more Siberian Cranes during the last 50 years, but there are less than five records during the 10 last years.
- **Sub-criterion 1.3:** The site is historical habitat of the Siberian Crane, but there are less than five records during the last 50 years.
- **Sub-criterion 1.4:** There are no records of Siberian Crane at a site, but it is considered to contain appropriate habitat for the species (wide expanses of shallow water containing appropriate food resources, and with low levels of disturbance) and it is suitable for release and reintroduction projects (e.g., safety of the site is secured, a management regime is in place, etc.).
- B. **QUALIFIER 1:** Site's importance for other crane species

Please tick this box if the site meets the following qualification:

The site is important for other crane species when it is known to support a total of 25 or more migratory cranes (which can be of more than one species) at any stage of their life cycle (e.g., breeding, migration stop-over (staging), non-breeding birds (wintering), etc.).

# **B. QUALIFIER 2:** Site's importance for other waterbird species.

Please tick ANY of the following boxes that apply:

**Sub-qualifier 2.1:** The site regularly supports 20,000 or more migratory waterbirds during migration periods.

- **Sub-qualifier 2.2:** The site regularly supports 5,000 or more migratory waterbirds or 0.25% of a migratory waterbird population on a single count during a single migration period.
- **Sub-qualifier 2.3:** The site regularly supports 1% of the individuals in a population of one species or subspecies of migratory waterbird.
- **Sub-qualifier 2.4:** The site supports migratory waterbird species at a critical stage in their life cycles, or provides refuge during adverse conditions.
- 9b. Justification of the WCASN criterion and qualifiers (summary of the Siberian Crane records)
- 10. Wetland types (see explanatory notes for codes)
- 11. Jurisdiction
- 12. Management authority
- 13. Name and address of compiler

#### Part 2

(Please limit this part to a maximum of 10 pages)

- 14. General Location
- 15. Physical features of site
- 16. Physical features of catchment area
- 17. Hydrological values
- 18. Ecological features
- 19. Noteworthy flora
- 20. Noteworthy fauna
- 21. Social and cultural values
- 22. Land tenure/ownership
- 23. Current and potential site usage
- 24. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects
- 25. Conservation measures taken (the lack of any current protection status/regime does not disqualify a site for consideration for inclusion in the Network if it meest listed criteria for Siberian Crane)
- 26. Conservation measures proposed, but not i mplemented yet
- 27. Current scientific research and monitoring (although the presence of constant monitoring is not a requirement for nominating a site for inclusion in the Network)
- 28. Current conservation communication, education and public awareness
- 29. Current recreation and tourism
- 30. Bibliographical references

#### **Sample Nomination Letter**

**PURPOSE:** To guide Nominating Authorities (such as site management bodies) to develop a nomination letter to nominate a site to the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds.

**SENDER:** Site management body or provincial agency.

**ADDRESSED TO:** National Agency responsible for administering the implementation of the CMS MOU concerning Conservation Measures for the Siberian Crane (and copied to the National Agency responsible for protected area management, if this is a different agency or department).

To:

The Director,
Division of ...
Department of ...
Address
Reference number <insert number>
Date <insert date>

#### Dear Sir/Madam,

Under the framework of the Convention on Migratory Species (CMS) Memorandum of Understanding concerning Conservation Measures for the Siberian Crane, a Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds is being developed. This site network will contribute to the conservation of the Siberian Crane, other waterbirds and their wetland habitats.

As the site management body responsible for <insert name of site(s)>, it is my pleasure to propose the nomination of <insert name of site(s)> to join the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds.

According to the attached Site Information Sheet(s) and Site Map(s), the site(s) meets the criteria for inclusion in the site network as follows:

<List sub-criteria and qualifiers as applicable>

Nominating the site(s) represents a significant and cost-effective step towards our national biodiversity conservation objectives and we look forward to participating in the cooperative conservation activities of the site network.

I would be very grateful if you could endorse this nomination and then transmit a letter of endorsement, together with the Site Information Sheet(s) and Site Map(s), for consideration by the Secretariat of the Convention on Migratory Species. On behalf of the site managers, I look forward to the successful nomination and participation in the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds.

Yours sincerely,

<insert name>

<insert position, organisation>

<insert contact details>

Enclosed: Site Information Sheet and Site Map

#### **Sample Endorsement Letter**

**PURPOSE:** To guide National Agencies to develop a letter to endorse the nomination of a site to the Western/Central Asia Site Network for the Siberian Crane and Other Waterbirds for submission to the Convention on Migratory Species (CMS) Secretariat.

**SENDER:** National Agency responsible for administering the implementation of the CMS MOU concerning Conservation Measures for the Siberian Crane.

ADDRESSED TO: The CMS Executive Secretary with a copy to the ICF/CMS Siberian Crane Flyway Coordinator.

To:

The Executive Secretary UNEP/CMS Secretariat United Nations Premises Hermann-Ehlers-Str. 10 53113 Bonn, Germany Tel. (+49 228) 815 2401

Fax. (+49 228) 815 2449 E-mail: secretariat@cms.int

Reference number <insert number>

<Insert date>

#### Dear Sir,

Re: Endorsement of the nomination of a new site in <insert country name> for inclusion in the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds

<Insert country name> recognizes the importance of conserving the Siberian Crane and other waterbirds and their wetland habitats and wishes to participate in the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds established under the Convention on Migratory Species (CMS) Memorandum of Understanding concerning Conservation Measures for the Siberian Crane. It is my sincere pleasure to endorse the nomination of <insert name(s) of site(s)> to join this site network in order to further the aim of conserving the Siberian Crane, other waterbirds and their wetland habitats.

According to the attached Site Information Sheet(s) and Site Map(s), the site(s) meet(s) the criteria for inclusion in the site network as follows:

<List sub-criteria and qualifiers as applicable>

I look forward to the CMS Secretariat confirming that the site(s) will be included in the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds.

Yours sincerely,

<Insert name>

<Insert position>

<Insert agency>

Enclosed: Site Information Sheet and Site Map

cc: Ms. Elena Ilyashenko, Siberian Crane Flyway Coordinator (eilyashenko@savingcranes.org)

# WCASN Review Working Group (RWG) Terms of Reference

**The WCASN Review Working Group (RWG)** is to be appointed by the WCASN Committee under the framework of the CMS Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane.

#### 1. Membership

The WCASN RWG has the following composition:

- One representative of a breeding ground range state Russian Federation;
- Two representatives (rotating) of staging area range states of each flyway western (Azerbaijan and Kazakhstan) and central (Afghanistan, Pakistan, Turkmenistan, and Uzbekistan);
- Two representatives of wintering area Range States Islamic Republic of Iran and India;
- BirdLife International representative to be confirmed;
- Wetlands International Dr. Taej Mundkur;
- International Crane Foundation Mr. Crawford Prentice;
- ICF/CMS Siberian Crane Flyway Coordinator Ms. Elena Ilyashenko.

WCASN RWG selects its own chair by consensus and would conduct its business by e-mail correspondence.

#### 2. Tasks

The SNRWG will conduct the following tasks:

- Review site nomination forms submitted by range state governments (to be undertaken within one onth of receipt of the completed nominated forms);
- Assess from a technical standpoint the adequacy of information provided to determine if the nominated sites meet the criteria;
- Request additional information if necessary;
- Make recommendations to the WCASN Site Network Committee; and
- Report to meetings of the CMS MOU on the activities of the SNRWG.

#### For the period 2010-2012:

Dr. Taej Mundkur was elected as a chair of RWG.

Members of WCASN RWG as follows:

Russia: Dr. Alexander Sorokin (breeding grounds of central & western flyways)

Islamic Republic of Iran: Mr. Sadegh Sadeghi Zadegan (wintering grounds of western flyway)

**India:** Mr. Gopi Sundar (wintering grounds of central flyway)

**Azerbaijan:** Dr. Elchin Sultanov (staging areas of western flyway) **Turkmenistan:** Dr. Eldar Rustamov (staging areas of central flyway)

# WCASN Committee Terms of Reference

**WCASN Committee** has been established under the framework of the CMS Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane (hereafter CMS Siberian Crane MOU).

#### 1. Membership

The WCASN Committee, serviced by the CMS Secretariat, has the following composition:

• One governmental representative of each of the range states for the western and central Siberian Crane flyways (Afghanistan, Azerbaijan, Kazakhstan, India, Islamic Republic of Iran, Pakistan, Russian Federation, Turkmenistan and Uzbekistan).

WCASN Committee selects its own chair by consensus and conducts its business by e-mail correspondence.

#### 2. Tasks

The Site Network Committee will conduct the following tasks:

- Oversee implementation of the Site Network programme to be undertaken under the WCASN Action Plan;
- Appoint and review membership of WCASN Review Working Group;
- Approve site nomination forms submitted by range state governments, normally within 2 months from the date of receipt of completed nomination documentation according to the prescribed requirements;
- Receive technical reviews of the nominated sites to be undertaken by WCASN Review Working Group (RWG) and make decisions on the approval of nominated sites based on the recommendations of RWG;
- Co-sign with CMS Secretariat the Site Certificates for designated sites; and
- Report on activities to each Meeting of the range states to the CMS Siberian Crane MOU.

#### For the period 2010-2012:

Dr. Alexander Sorokin was elected as a chair of WCASN Committee

## **Suggested Procedure for Network Site Dedication Ceremonies**

#### 1. Purpose of the Dedication Ceremonies

Sites are nominated for inclusion in the WCASN by the national agency responsible for administering the CMS MOU concerning Conservation Measures for the Siberian Crane. Following review by the Site Network Review Working Group, they are approved by the Site Network Committee and certificates are issued by the CMS Secretariat. The main purpose of the Network Site Dedication Ceremony is to provide formal recognition of a site's status as part of this international network under the CMS MOU at local level. In addition, Network Site Dedication Ceremonies can be used as a means of attracting publicity about the conservation values of sites and their role as part of an international network of sites supporting migratory waterbird populations. Similarly, they provide a way of raising awareness of local stakeholders of the values of sites and shared responsibilities for the management and/or sustainable use of these sites.

#### 2. Suggested Participation

#### **Organisers**

Site Dedication Ceremonies should be organised by the local site management authority in cooperation with the national agency responsible for administering the CMS MOU concerning Conservation Measures for the Siberian Crane. Other key stakeholders may also collaborate in organising the event.

#### **Participants**

#### International

The organisers should liaise with the Siberian Crane Flyway Coordinator at an early stage to arrange for participation of a Site Network Committee member at the Dedication Ceremony as far as possible..

#### National

- Senior representative of the national agency responsible for administering the CMS MOU concerning Conservation Measures for the Siberian Crane
- Representatives of other national government agencies with an interest in the site or biodiversity conservation
- Representatives of national environmental NGOs with an interest in the site or biodiversity conservation
- Popular figures, national experts, etc with an identified interest

#### Local

- Senior representative of the local site management agency
- Senior representative of the local government administration
- Key stakeholders (this can include: political representatives, religious leaders, local government
  agencies, local NGOs, community representatives, business interests, local universities and schools, etc.)

#### Media

As far as possible, the national and local media should be invited to cover the event (newspapers, TV, radio, specialist magazines, etc)

#### 3. Programme

The main focus of the Site Dedication Ceremony should be the official presentation of the WCASN Site Certificate to the local management authority.

Beyond that the programme should be tailored to suit local circumstances. Some possibilities include:

- Speeches by VIPs & other invited guests
- Talks, presentations or videos on the conservation of Siberian Crane and other migratory waterbirds, including description of the WCASN

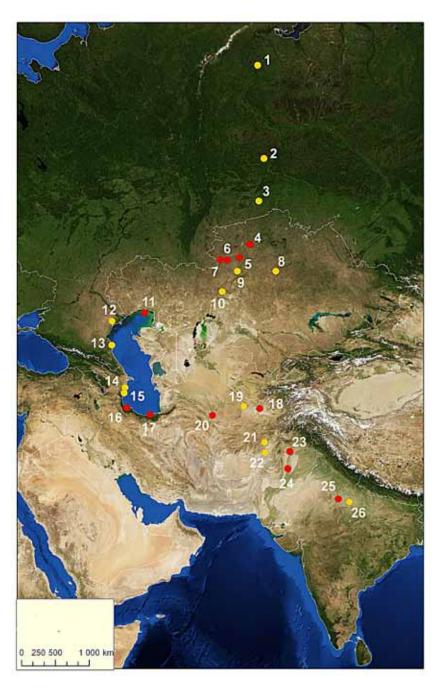
- Talks, presentations or videos on the conservation values of the site
- A site visit including a commentary by a suitable expert
- Local cultural performances (songs, dances, music, etc)
- Exhibitions of art, photographs, posters, etc
- Activities for children and youth (art competitions, games, site exploration, etc)

#### 4. Follow up

The organisers are requested to send reports or articles on Site Dedication Ceremonies (including digital photographs) to the Siberian Crane Flyway Coordinator for use in international newsletters and websites related to the WCASN and CMS MOU.

Local stakeholders should be reminded of the international status of the site during communications, education and awareness programmes, and through news stories concerning Siberian Cranes at the sites or elsewhere in the flyway.

# Figure 5. Map of the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds



- designated sites
- proposed sites

#### Legend:

- 1 Kunovat, Russia
- 2 Kondo-Alymka, Russia
- 3 Belozerskiy, Russia
- **4** Tyuntyugur-Zhanshura Lake System, Kazakhstan
- **5** Naurzum Lake System, Kazakhstan
- **6** Zharsor-Urkash Lake System, Kazakhstan
- 7 Kulykol-Taldykol Lake System, Kazakhstan
- 8 Irgiz-Turgai Lake System, Kazakhstan
- 9 Sarykopa Lake System, Kazakhstan
- 10 Tengiz-Kurgaljino Lake System, Kazakhstan
- 11 Ural Delta and Nearest Caspian Sea Coastal Zone, Kazakhstan
- **12** Astrakhan State Nature Biosphere Reserve, Russia
- 13 Agrakhanskiy, Russia
- 14 Shirvan National Park, Azerbaijan
- 15 Ghyzyl-Aghach State Nature Reserve, Azerbaijan
- 16 Bujagh National Park, Iran
- 17 Fereydoonkenar, Ezbaran and Ruds Ab-Bandanas, Iran
- 18 Termez, Uzbekistan
- 19 Tallymerjen & Kelif-Zeyit, Turkmenistan
- 20 Durnaly, Turkmenistan
- 21 Ab-i-Estada, Afghanistan
- 22 Dashte-Nawar, Afghanistan
- 23 Thanedar Wala Game Reserve, Pakistan
- 24 Taunsa Barrage Wildlife Sanctuary, Pakistan
- 25 Keoladeo (Ghana) National Park, India
- 26 Etawah-Mainpuri, India

# Certificate of the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds



# Part VI: Report of the Seventh Meeting of the Signatories of the Memorandum

Executive Summary of the Seventh Meeting of the Signatories
Full Report of the Seventh Meeting of the Signatories
Annexes















Federal Office for the Environment **Switzerland** 

#### Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane

The Seventh Meeting of the Signatories of the Mamorandum Bonn, Germany 10-12 June 2010

#### **Executive Summary**

The meeting was attended by 30 representatives from 16 countries (including seven range state governmental officials, two Germany governmental officials, eight technical experts, four representatives from partner organisations, four United Nations Environment Programme (UNEP) / Convention on Migratory Species (CMS) staff, and five International Crane Foundation (ICF) staff). Since the Sixth Meeting of Signatories of the Siberian Crane Memorandum there have been no new signatures. Birdlife International (BLI) has been suggested as future participant or partner, and, since BLI was unable to attend this meeting, the CMS Secretariat was asked to liaise with BLI to explore its interest in signing the Memorandum of Understanding (MOU).

Governmental and technical focal points (FP) were confirmed for all countries except Pakistan and India. Pakistan had just appointed their new Inspector General for Forestry as an Administrative FP (name and contact information to be provided shortly), and India will need to appoint a new Administrative FP soon due to retirement of the current FP. A deadline of 31 July 2010 was set for updates on FPs. The Report on the Conservation Status of the Siberian Crane was approved pending inclusion of points agreed during discussion. Further discussion focused on the following themes: responding to hunting along the Siberian Crane flyways, challenges of the Siberian Crane reintroduction to Western / Central Asia, updating reporting and information man-

agement, further activities under Western / Central Asian Network for the Siberian Crane and other Waterbirds (WCASN), partnerships with other processes and initiatives (East-Asian Australasian Flyway Partnership (EAAFP), Central Asia Flyway Initiative, Africa-Eurasia Waterbird Agreement, BLI, integration of MoU with Regional Flyway Programmes, future funding of MoU activities, which should be feasible with national resources, and its financial sustainability.

Recent results of crane counts reported that the total population of the Siberian Crane is estimated at 3,000–3,500 birds, of which approximately 99% belong to the East Asian population. The meeting discussed and further developed drafts of the three new flyway Conservation Plans including detailed activities. Signatories were given an opportunity to undertake final review and revision (by 1 September 2010), before the posting of the final version on the Siberian Crane Flyway Coordination website. The following priority actions were conformed for all Signatories and cooperating organisations.

#### Azerbaijan

• Identify unknown wintering grounds in Iraq and Jordan, work with local ornithologists to obtain information on possible Siberian Crane occurrence and follow up on Siberian Crane sightings in different parts of Azerbaijan.

#### China

- The State Forestry Administration (SFA) to prepare a national plan for 2010-2020 that will include the Siberian Crane Conservation Plan:
- Improve the 1988 law on wildlife conservation with provisions on wildlife habitat protection;
- SFA will conduct a survey of national wildlife resources that may help funding habitat protection activities;
- SFA will provide funds annually to support wildlife protection on Jiangxi and Northeast China Siberian Crane sites;
- SFA indicated interest to seek funds to continue community projects initiated under UNEP/ Global Environment Facility (GEF) Siberian Crane Wetland Project (SCWP) activities;
- MoU signatories expressed concerns on reduced water flow to protected areas in Northeast China and proposed dam construction at the mouth of Poyang Lake as main threats to the eastern population; a draft statement was given to the Chinese delegation for comments, to be finalized and sent from the MoU7 participants to the Chinese government.
- Strengthen coordination and cooperation on research and monitoring between China, Russia, and Mongolia; consider opportunities for a meeting under the EAAFP and the North East Asian Crane Working Group.

#### India

- Assess and manage impacts of power lines on birds;
- Identify historic sites of the Siberian Crane wintering and bring under the protected area network;
- Finalize the nomination of Etawah-Mainpuri to WCASN;
- Approach Indian government to allocate funds for Siberian Crane conservation;
- Initiate satellite tracking of the Eurasian Crane that would help identify wetlands with habitats suitable for Siberian Cranes (Bombay Ornithological Society to carry out this activity).

#### Iran

Focus on following up UNEP/GEF SCWP activities:

- Maintain Site Management Committees involving local people;
- Site protection;
- Restore wintering population by way of releases, collaborate with Russia on monitoring of released birds using satellite tracking if funding permits;
- Support the Trappers Association;
- Finish construction of a guard station at Fereydoon Kenar;

- Investigate alternate wintering sites besides Fereydoon Kenar to identify better natural habitats such as Miankaleh or Bujagh, where conflict with communities is less pronounced;
- Develop and implement activities under bilateral agreement with Russia.

#### Kazakhstan

- Continue to cooperate with Russia and sign an agreement on implementation of the Flight of Hope Project;
- Enhance protection of key sites under existing laws;
- Extend monitoring of wetlands to western Kazakhstan, where economic development is very dynamic (numerous oil and gas companies are exploring there) but information is lacking on cranes;
- Improve access to funding through state budget; Kazakhstan should have a Single Species Action Plan (SSAP) for the Siberian Cranes as it has for other species which provides a means of gaining financial support for State budget;
- Collaboration on monitoring of released Siberian Cranes.

#### Mongolia

- Conduct monitoring and research on ecology and biology of Siberian Cranes in collaboration with Russia and China;
- Train local communities and rangers on data collection;
- Increase public awareness on rare cranes and wetlands;
- Continue international cooperation with Russia and China including agreement on information sharing and research;
- Protect and manage habitats including one site on the national level and one site at the local level.

#### Pakistan

- Improve capacity of local hunters for breeding and health management of captive cranes to reduce hunting pressure. Cracid and Crane Conservation and Breeding Center (CBCC) considering support;
- Conduct public awareness and education (request a pair from CBCC for Crane Education Center in Kurram Valley);
- Involve communities in effective management of WCASN sites;
- Facilitate approval of amendments and effective enforcement of laws, harmonize between provinces.

#### Russia - Central and Western Flyways

• Monitor and satellite track Eurasian Cranes at stopover sites and along the length of the flyway

where both Eurasian and Siberian Cranes occur;

- Band of Siberian and Eurasian Cranes using the same routes;
- Strengthen important restoration efforts through Flight of Hope project and other release techniques to increase number of birds successfully released and to increase collaboration with other countries;
- Nominate breeding and migratory sites for inclusion into the WCASN;
- Continue training programmes and capacity building for various target groups;
- Address hunting issues and reduce hunting pressure by developing cooperation with hunters to obtain information about the Siberian Crane sightings.

#### Turkmenistan

- Raise awareness on importance of protection of wetland areas for cranes, and importance of Amudarya Valley area;
- Generate funds within the national budget for wetland monitoring;
- Work with government to nominate another Turkmen site, Tallymerjen & Kelif-Zeyit, located in the Amudarya Valley for WCASN;
- Cooperate with other countries to coordinate activities for Amudarya Valley under Flight of Hope project.

#### Uzbekistan

- Identify new wetlands and improve protection and management of wetlands important to Siberian and Eurasian Cranes;
- Monitor wetlands important to Siberian Cranes and other waterbirds through creating of wide network of correspondents by working with local people;
- Improve public awareness of wetlands important to waterbirds and Siberian Cranes;
- Continue monitoring of wintering grounds of Eurasian Cranes as potential wintering grounds for Siberian Cranes;
- Support Flight of Hope Project at Jieran Eco-center in cooperation with Russia and invite governmental agencies to join this project.

#### **ICF**

- Host Siberian Crane Flyway Coordinator (SCFC) position and support key regional activities;
- Maintain website, newsletters, and distribution list;
- Maintain database and develop proposal to go online and link more effectively with databases under other initiatives;
- Work with countries to complete GEF proposal for Western / Central Asia;
- Work with SFA in China to submit GEF proposal for East Asia;

- Finalize hunting strategy, consult with partners, and develop proposals to cover a range of activities over a long period;
- Provide technical support including purchase or data retrieval for satellite transmitters;
- Continue collaboration with Chinese colleagues on ecological studies and environmental management at Poyang Lake.

#### Wetlands International

- Work closely with CMS to finalise the institutionalisation of the CAF Action Plan in collaboration with range states and partners to enable its early implementation including development of the CAF site network;
- Promote use of the "Wings Over Wetlands" (WOW) Critical Site Network Tool launched in June 2010 with WOW Partners as an information platform for Siberian Crane and migratory waterbirds in the western flyway;
- Promote use of the WOW Flyway Training Kit to build national and local capacity for waterbird and wetland management in Central and Western Asia with WOW Partners and others;
- Develop Western / Central Asian GEF proposal with ICF and CMS, in close consultation with partners with a focus on key WCASN and other internationally important migratory waterbird sites;
- Strengthen conservation activities in East Asia through the framework of the EAAFP and EAAF Site Network through development of a regional project and related activities at important sites for the Siberian Crane and other migratory waterbirds;
- Work with partners to raise importance of Poyang Lake for the Siberian Crane and other migratory waterbirds;
- Coordinate activities under Wetlands International Arctic Program with focus on wetland management and through working with the oil and gas industry;
- Promote use of the International Waterbird Census framework for monitoring of the Siberian Crane and other waterbirds and wetlands for the region.

#### Cracid & Crane Breeding and Conservation Center

- Continue support to OCBC for releasing birds for reintroduction;
- Send a pair of cranes to Pakistan, Iran, and India for education and awareness programs;
- Consider support for travel to build capacity and promote collaboration;
- Help seek funds for SCFC position;
- Provide eggs for Flight of Hope project;
- Seek support for Flight of Hope program.

#### CMS Secretariat

 Produce an executive summary of priorities and send to national governments requesting support (Counties will receive draft to review and provide clarification or details).

As of 12 June 2010 there were ten sites officially designated in WCASN in five countries: Iran, India, Kazakhstan, Turkmenistan, and Uzbekistan. Four sites were proposed for the shadow list of WCASN: three in Kazakhstan and one in Uzbekistan. Representation of BirdLife International in WCASN is pending. The WCASN Committee had formally approved the two sites nominated in Pakistan; site certificates were presented to the official representative of Pakistan at a special designation ceremony

Discussion on fundraising among CMS Secretariat, ICF, Wetlands International, and CBCC gratefully acknowledged the value of UNEP/GEF SCWP funding during the last six years. This funding is no longer available due to project completion. CMS also has very finite resources. Short term funding priorities include the SCFC position. The International Trust Fund that has been on the table for discussion for the last three years is not considered viable. CMS has potential to set up a mechanism for voluntary supplementary contributions paid at the same time as main CMS assessed contributions from CMS. The UN Foundation has funds which UN organizations can draw upon. CMS through UNEP could seek funds from this source.

Mr. Dereliev noted that AEWA would like to see more Siberian Crane MoU countries which qualify to become parties. He indicated that the AEWA Secretariat would like to help in process of accession through the Moscow workshop, bilateral discussions during this meeting, and visit to Kazakhstan for the Lesser White-fronted Goose workshop. Parties have to pay contributions to join AEWA and a minimum contribution was set at Euro 2,000, raising the minimum from a few hundred. This proposal was put forward by African countries. Amounts at this level are not usually a problem. There are more technical and administrative issues. Under AEWA \$25,000 funding for new parties (Kazakhstan, Azerbaijan and Iran) would be eligible. But AEWA does not extend to India, Pakistan, China and Mongolia. There is some possibility of extending AEWA to cover CAF so these countries would be able to join and therefore benefit.

It was agreed to convene the next CMS MoU7 meeting in 2013, at a venue still to be determined. It was noted that five of the Range States (Iran, India, Russia, USA and Kazakhstan) have hosted a MoU in the past. The China delegate expressed possible interest in hosting MoU8 in coordination with scientific meeting focusing on accomplishments of SCWP and importance of Poyang Lake. Another opportunity for a scientific or technical meeting might combine with the EAAFP. The Signatories were invited to consider hosting the Eighth Meeting and to make pledges for financial or in-kind support to the meeting. CMS Secretariat will send out letter to all signatories (states and organizations).















Federal Office for the Environment Switzerland

### Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane

### The Seventh Meeting of the Signatories of the Mamorandum Bonn, Germany 10-12 June 2010

#### **Full Report**

### Agenda Item 1: Greetings and Welcoming Remarks

- 1. Mr. Bert Lenten, Acting Deputy Executive Secretary UNEP/CMS, opened the meeting by welcoming the delegates to the United Nations (UN) Campus and the former German parliamentary offices. He thanked the Governments of Switzerland and Germany, the International Crane Foundation (ICF) and the Global Environment Facility (GEF) for their financial support as well as ICF and the CMS Secretariat for organizing the meeting. Mr. Lenten noted that the Siberian Crane Memorandum of Understanding (MOU) was the first of 18 MOUs concluded under CMS. The challenge resulting from implementing so many MOUs had resulted in the "Future Shape" process. The long standing support from ICF and funding through a GEF project were the key elements that had determined the success of the Siberian Crane MOU. As the UNEP/GEF Siberian Crane Wetland Project (SCWP) was now coming to a close, it was necessary to agree on the next steps to be taken for the conservation of Siberian Cranes. More work needed to be done in order to ensure stable and viable crane populations throughout their range. Mr. Lenten pointed out that the development of the Critical Site Network Tool under AEWA, which was also funded by GEF, could contribute to this work.
- 2. The ICF Co-founder, Dr. George Archibald, thanked the CMS Secretariat and ICF for their hard work to organize this meeting. He expressed his regret that the meeting had to be postponed and thanked the CMS Secretariat for hosting it now in Bonn. Dr. Archibald noted that there could be reason to be pessimistic as no Siberian Cranes had been observed in India since 2002 and no cranes turned up at Fereydoon Kenar in Iran in winter 2009/10. There was, however, evidence that there were still some birds in West Asia. He thanked Russia for its reintroduction work and all those involved in the SCWP, which had achieved a lot for the protection of Siberian Crane habitats and the establishment of a

network of critical sites. Many historic sites were better protected, which was an important precondition for reintroduction programmes. Dr. Archibald emphasized the importance to address hunting, which was the main cause for losses of Siberian Cranes in West Asia, and was threatening also other endangered bird species. He noted that Crawford Prentice, ICF, was working on a strategy to deal with hunting in the region. Dr. Archibald congratulated China and the SCWP team for their wetland and water management in and around Poyang Lake. He also expressed his concerns about the plans of the Provincial Government to build a dam across the lake and to raise the water levels as this might have negative impact on the lake system, which is the most important habitat for the last viable population of Siberian Cranes.

#### **Agenda Item 2: Election of Officers**

3. The participants elected Mr. B.C. Choudhury (India) as Chair of the meeting. Mr. Choudhury thanked all delegates for their trust. The governmental representative of Iran, Mr. Sadegh Sadeghi Zadegan was elected as Vice Chair.

### Agenda Item 3: Adoption of the Agenda and Meeting Schedule

- 4. Ms. Claire Mirande, ICF, introduced the provisional agenda (document UNEP/CMS/SC-7/1/Rev.2), the annotated agenda and the meeting schedule (UNEP/CMS/SC-7/2/Rev.2). The final list of meeting documents (UNEP/CMS/SC-7/3) is reproduced as Annex 3 to this report. The list of participants was updated during the meeting and appears as Annex 1.
- 5. The agenda was adopted with few amendments. Mr. Douglas Hykle, CMS Secretariat, proposed to present the synthesis review of the Secretariat after the discussion on the national reports, highlighting most important aspects of the national reports. The agenda as adopted is reproduced as Annex 2 to this report.

#### **Agenda Item 4: Opening statements**

6. The Chair invited opening statements from governmental delegates. There were none.

#### Agenda Item 5: Report of the Secretariat

7. Dr. Marco Barbieri, CMS Secretariat, explained that the report of the Secretariat (document UNEP/CMS/SC-7/4/Rev.1) covered the Agenda items 5.1 (Status of Signatures (UNEP/CMS/SC-7/Inf/2) and 5.2 (List of designated competent authorities and national focal points (UNEP/CMS/SC-7/Inf/5).

#### Agenda Item 5.1: Status of signatures

8. Dr. Barbieri noted that the CMS Secretariat was servicing most MOUs, including the Siberian Crane MOU as secretariat and depositary. As depositary, it was maintaining the list of signatories and the original documents. Since the Sixth Meeting of Signatories of the Siberian Crane MOU (MOS6) there had been no new signatures and the number of Signatories remained at 11 (Afghanistan had been the last to sign the MOU in 2006). Three organizations had signed the MOU as cooperating organisations (ICF, Cracid & Crane Breeding and Conservation Center (CBCC), and Wetlands International). Ms. Claire Mirande, ICF, noted that CBCC had now taken over Vogelpark Walsrode and changed its name into Weltvogelpark Walsrode. BirdLife International (BLI) was suggested to become a collaborating organization to the MOU. Since BLI was unable to attend this meeting, Mr. Hykle mentioned that the CMS Secretariat would explore the interest of BLI to sign the MOU.

### Agenda Item 5.2: List of designated competent authorities and focal points

9. Dr. Barbieri noted that paragraph 4 of the Siberian Crane MOU invites Signatories to nominate a competent authority and person as a Focal Point (FP) for the MOU. Document UNEP/CMS/SC-7/Inf/5 reflected the latest information that was available to the Secretariat about these focal points. Mr. Barbieri asked if any updates were required. The official delegate from Pakistan noted that a new Inspector General for Forestry had been appointed as Administrative FP a few days before the meeting and that name and contact details would soon be submitted to the Secretariat. The representative of India announced that the new Administrative FP was expected to relinquish his post shortly. For the position of Technical FP, questions about which organisations should be involved (Natural History and Bombay Ornithological Society) still needed to be addressed. The Chair announced that the deadline for updating the information on the Administrative and Technical FPs would be the end of July. The updated list of FP is attached as Annex 4 to this report.

### Agenda Item 6: Review of MoU and Conservation Plans Implementation

10. The Chair invited Ms. Elena Ilyashenko, CMS/ICF Siberian Crane Flyway Coordinator (SCFC) to present, on behalf of the Secretariat, the portion of the Secretariat's overview report (document UNEP/CMS/SC-7/5) addressing the conservation status of the Siberian Crane. It was decided that the second portion of the overview report regarding the status of the MOU and the implementation of the Conservation Plans would be presented after the reports of the Range States.

### Agenda Item 6.1: Conservation status of Siberian Cranes within the agreement area

- 11. Ms. Ilyashenko presented the report on the conservation status of the Siberian Crane within the agreement area for the eastern, central, and western populations as a summary of the information received and available as of 7 June 2010. She referred to document UNEP/CMS/SC-7/5, prepared by ICF on behalf of the Secretariat.
- 12. The Chair thanked Ms. Ilyashenko and noted that the overview report included both good and bad news. He pointed out aspects of the reintroduction programmes and invited the Range States, collaborating organisations and observers to contribute their comments. The information provided in the draft overview report was reviewed and amended by participants during the following discussion. Dr. Alexander Sorokin, Russia, commented that the Siberian Crane was a priority species in Russia. Western and Central Asian flocks of the Siberian Crane still bred in West Siberia. Their numbers were low but stable over the last 20 years. Unfortunately, there was not enough money to conduct aerial observations. With regard to the eastern population, he noted that climate change was not likely to become a major threat because while some sites might become unsuitable for the cranes, others might evolve as new habitat at the same time. Mr. Sadegh Sadeghi Zadegan, Iran, noted that ten Siberian Crane chicks were released in Fereydoon Kenar, however, only one bird completed the annual migration. The chicks joined wild birds but satellite tracking data suggested that they did not complete the migration. Mr. Sadeghi Zadegan concluded that the release technique was still problematic and he suggested further discussions. Mr. Evgeny Bragin (Kazakhstan) did not agree that the problem was the release technique but suggested that there was a lack of information for vast areas of the range. Furthermore, the received data could not be verified as they often relied on anecdotal sightings of Siberian Cranes with Eurasian Cranes far from the traditional migration routes. Mr. Sorokin, Russia, replied to Mr. Bragin's comment regarding the sightings of Siberian Cranes among Eurasian Cranes. He suggested that the results of the reintroduction program could be improved if Siberian Cranes were released into flocks of Eurasian Cranes. Siberian Cranes seemed to adapt to Eurasian

Cranes and learn their migration routes. He agreed that monitoring of populations of Eurasian Cranes would greatly contribute to Siberian Crane monitoring. While it is not possible to track all Siberian Cranes with PTT, efforts to monitor key routes should be undertaken. This will help in monitoring released birds.

#### Agenda Item 6.2: Overview of the UNEP/GEF Siberian Crane Wetland Project achievements and lessons learned

13. The Chair invited Ms. Claire Mirande, ICF and Director of SCWP, to report on the SCWP achievements and lessons learned. Ms. Mirande informed that the achievements at site level included the establishment of site management committees, and community participation as well as the development of projects at selected sites in China, Iran and Kazakhstan. Management plans had been developed for most project sites, following the Ramsar Convention's approach for participatory, science-based management. Some immediate threats to Siberian Cranes were mitigated, including the removal of an exploratory oil well inside a protected area at Konda Alymka (West Siberia, Russia) and working with an oil company at Momoge (NE China) to monitor and reduce operational impacts on wetlands. Achievements at the national level included the upgrading of the conservation status of protected areas and the expansion of their size; provision of water for wetlands, wetland restoration, capacity building, monitoring, and awareness programs. Achievements at the regional level included creation of a regional database and website, improvement of capacities, monitoring and applied research on Poyang Lake, strong cooperation with regional flyway initiatives, official launch of the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds, enhanced waterbird monitoring along flyways, better connections between countries through exchange of staff and coordinated surveys, and regional public awareness programmes. Overall, the project had increased the security of the network of key wetlands for the Siberian Crane and millions of other waterbirds. The management of wetlands was linked to water resource management policies and allocation of funds to purchase water rights, the conservation of wetlands and waterbirds were strengthened through improvements of national policies, legislation and plans.

14. The many lessons learned during the implementation of the SCWP were documented in project reports and the UNEP Biodiversity Issue Paper BD/001 "The Experience of UNEP/GEF and Partners in Flyway Conservation". It had become clear that for flyway conservation, long-term projects and long-term commitment were needed. Due to their complexity, flyway projects required a long start-up time and conservation solutions needed to involve diverse stakeholders who had very different priorities and needs. In building such in-

volvement and enlarging alliances, care was needed in communicating about conservation threats and conflicts in order to include multiple players in the solutions. Given the diverse audiences who must be involved in solutions to waterbird and wetland conservation, communication must be a vital component. The SCWP was completed in December 2009. Its final report "Safe Flyways for the Siberian Crane" was released at the 11th UNEP Governing Council Meeting in February 2010 and was made available through the project website. Hard copies were made available to all participating organizations including the CMS Secretariat.

15. Dr. Sorokin, Russia, expressing the official position of the Ministry of Natural Resources and Ecology (MNRE), pointed out that he still had not received an official report on the project and MNRE representatives had not been invited to the project completion workshop. Therefore, the MNRE had no idea of the accomplishments of the project. As an expert, he highlighted two aspects in relation to the SCWP. First, in West Siberia, where the Siberian Crane was a priority species, the species was disappearing from its breeding grounds; and second, in Yakutia, the population was stable and even growing. Concerning the Yakutia component, SCWP achieved very good results and the outcomes exceeded the expectations, especially in the southern migration stopover sites. But unfortunately, there were no such achievements in West Siberia. Local administrations of the Yamalo-Nenetsky and Tyumen regions that were involved in the implementation noted that the objectives of the SCWP were not achieved. Mr. Crawford Prentice replied on the first point that a popular publication was compiled and produced by ICF and involved countries at UNEP's request. This publication was a comprehensive technical evaluation of the project including all four countries, showing positive outcomes and examples. UNEP was content with the report and an independent Terminal Evaluation of the project was planned to be undertaken within six months to one year under UNEP's coordination. Ms. Mirande noted that copies of the final report were shipped to all four National Coordination Units for distribution to governmental agencies and project partners. Copies were presented to governmental representatives of all four countries at the UNEP General Council Meeting in February 2010. The document was available online (UNEP/CMS/SC-7/Inf/12) at:

http://www.cms.int/species/siberian\_crane/RS7\_Bonn/Inf\_12\_Wings\_Across\_the\_Continent\_Eonly.pdf.

16. Mr. Qian Fawen, China, thanked ICF for all the coordinating efforts during the past six years, on all site, local, and central government levels. In China, officials at all levels understood the importance of the project. He mentioned that after the completion of the SCWP, China would be happy to participate in another international project to continue the conservation efforts for the Siberian Crane, especially in North East China. Ms. Mirande thanked Mr. Qian Fawen for his comments and verified that these ideas will be put on the table for consideration by ICF in fundraising and planning and ICF is definitely looking for other funding opportunities. She acknowledged the efforts of all SCWP national teams by handing out certificates of participation on behalf of ICF and UNEP.

#### Agenda Item 6.3: Status of MoU Implementation

- 17. The Chair invited representatives of all Siberian Crane range states present and cooperating organisations to present brief reports on highlights, problems, gaps in the implementation of the MOU during the period 2007-2009 and their priorities for 2010-2012.
- 18. Mr. Arzu Mustafayev, Azerbaijan, presented the country's position in the conservation and protection of Siberian Cranes. Since 2005, after the avian flu, hunting of birds had been totally banned. The enforcement of the ban was under strict government control. During the past few years, Siberian Cranes had been closely monitored along their entire flyway in Azerbaijan. It was however difficult to verify the collected information since the data came from independent researchers such as Azerbaijan Ornithological Society (AOS) (Elchin Sultanov) and from staff of Environmental Protection Agency (EPA) and included observations from sites where Siberian Cranes historically had never been sighted. Observation of six Siberian Cranes in Kyzyl-Aghach State National Reserve (SNR), for example, had to be confirmed. There was a need to establish a comprehensive monitoring programme in order to render the monitoring activities more effective. For the next three years Azerbaijan hoped to organize training sessions with Iran.
- 19. Dr. George Archibald, ICF Co-Founder, asked about the possibility to verify the sightings of the six Siberian Cranes in Azerbaijan. Mr. Mustafayev noted that the relevant information was received from Mr. Abbas Abbasov, a ranger of Kyzyl-Aghach SNR, who had taken a picture of these cranes at an island. Unfortunately, the ranger did not submit that picture to him before his departure to the meeting because of an illness. The SCFC likewise did not receive the information from Mr. Elchin Sultanov, director of AOS. Mr. Mustafayev promised to get the picture of those six cranes from Mr. Abbasov after returning to Azerbaijan. Dr. Sorokin, Russia, suggested that these six cranes could be birds that had been released in autumn 2009 in Astrakhan by Yuri Markin, Director of Oka SNR.
- 20. Replying to a question from Mr. Zadegan (Iran) about the cooperation between Iran and Azerbaijan. Mr. Mustafayev noted that Siberian Cranes were sighted every year very close to the Iranian border. Cooperation on the ministerial level and on the EPA level, as well as information exchange between colleagues

across the border as soon as cranes were observed, would have helped to organize regular monitoring.

- 21. Mr. Qian Fawen, China, reported on the implementation of a study analyzing the relationship between water level, water plants and waterbirds in the Poyang Lake Basin. The results of the study contributed to the evaluation of the environmental impact of the dam construction project at the mouth of Poyang Lake. He also reported on the monitoring of Siberian Cranes and other cranes by the National Bird Banding Center (NNBC) under the mechanism of the Northeast Asian Crane Sites Network with financial support from SCWP; the preparation for publishing three books on waterbirds breeding in the Songnen Plain, flyway monitoring of waterbirds, and wintering waterbirds at Yangtze River; maintenance of the water level for the wetlands in Momoge National Nature Reserve (NNR), which were the most important stopover sites for Siberian Cranes with financial support from Jilin Forestry Department; supplying water to the wetlands of Zhalong NNR, which were traditional stopover site for Siberian Cranes with financial support from the Heilongjiang Provincial Government; research for a water supplement plan, the results of which were to be applied to the water supplementation of the Zhalong wetland; community participation pilot projects and public education activities at SCWP sites of Zhalong, Xianghai, Keerqin, and Poyang Lake from 2007 to 2009, which greatly improved the awareness and involvement of local communities in wildlife conservation; and the improvement of water quality after the implementation of the SCWP.
- 22. Challenges for the implementation in China included the continuing water shortage that impacted on the sustainable availability of flooded wetlands at NE China; scientific research for the evaluation of the dam construction project in Poyang Lake so that the government could make the correct decision; strengthening of monitoring, especially at Poyang Lake, through training on monitoring techniques and providing binoculars and telescopes.
- 23. China's priorities for the next three years were identified as follows: wetland monitoring, especially the dynamics of water levels in key wetlands for Siberian Cranes; strengthening of the monitoring of the flyway and wintering sites of Siberian Cranes, especially at some new stopover sites in northern Liaoning Province; research on population dynamics, wintering distribution, habitat selection and other aspects of Siberian Crane ecology at Poyang Lake, which should be addressed in the evaluation of the dam construction at Poyang Lake. Another priority includes the organization of an international workshop for the conservation of Siberian Cranes in the following two years; the strengthening of information exchange and fundraising to support conservative activities under the MOU.

24. For China, lessons learned included that different education strategies should be applied to different target groups; workshops and training courses were the usual tools to raise public awareness; community pilot projects were necessary for public participation in conservation; sufficient funding and time as well as the involvement of experts were seen to be the three most important aspects for success.

25. The participants discussed the Chinese proposal to organise an international workshop for the conservation of Siberian Cranes. Mr. Qian Fawen specified that it should be an international crane workshop, where government representatives, field practitioners (such as nature reserves staff) and the media should attend. Mr. Hykle suggested considering the possibility of convening the next Siberian Crane MOS8 in China. Mr. Prentice supported this idea indicating that this could also relate to the plans of building a dam across the Yangtze River. The Ramsar Convention on Wetlands only recently published a report that outlined a number of recommendations with respect to the dam project for the attention of the Chinese government. Mr. Qian Fawen mentioned that China would be prepared to convene such a meeting in China, in Nanchang specifically, in order to involve the Jiangxi provincial government in the meeting. Participants suggested that the Chinese government should consider all possible alternatives before starting to implement this huge project. To this effect, participants discussed the possibility of drafting a statement by the end of the meeting that should be sent to the Chinese government on behalf of the MOU meeting.

26. Mr. Taej Mundkur, Wetlands International, gave compliments on China's presentation and its great work within the SCWP and beyond for the conservation of the Siberian Cranes. Water management issues go beyond the responsibility of the State Forestry Administration (SFA) and the Siberian Crane could be used to bring together the different ministries in China to discuss these issues. Mr. Mundkur emphasized the need to integrate strongly the conservation activities on the flyway level and those on the local, basin level. There is a need to focus on flyway issues for both flocks, especially with regard to climate change. Dr. Sorokin, Russia, thanked China for its great work and noted that Poyang Lake was also very important to Russia, as it was the wintering site not only for cranes but also for waterfowl and waders. MNRE had prepared a bilateral agreement to protect migratory birds in both countries. Russia had such agreements with USA, Korea and other countries. So it was very important to sign an agreement on migratory bird conservation with China, especially for Poyang Lake. Mr. Qian Fawen agreed that such an agreement was very important and assured that SFA was supportive and that it was just a matter of time until such an agreement would have been signed.

27. Mr. B.C. Choudhury, India, reported that his government has a lot of interest in a national wetland site list. Sites with possible sightings of Siberian Cranes should be protected. The Bombay Ornithological Society and the new Center for Ornithological Studies started a new project to create a database for Siberian Crane sites and sightings. All bird sightings were being reported to this Center. India had been recording data for the last 60-70 years, historical Siberian Crane sites had been identified, and a national wetland sites list had been established. Keoladeo Ghana National Park was a UNESCO World Heritage Site. Mr. Choudhury proposed to include the Etawah-Mainpuri site into the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds (WCASN). India was exploring the possibility for a Siberian Crane breeding and reintroduction programme. Dr. Archibald gave a brief summary about their work to restore the water levels in Keoladeo National Park. Mr. Choudhury confirmed that three projects were being considered by the government, including the transportation of water from two rivers and all sewer water from nearest town to the Keoladeo NP. The government had made good experiences in other places, and was able to create a new sanctuary for birds.

28. Mr. Sadegh Sadeghi Zadegan, Iran, reported on two successful release projects, which included satellite tracking in 2007 and 2008 in cooperation with ICF and the Oka Crane Breeding Center (OCBC). He furthermore mentioned the considerable improvements in the protection of Siberian Crane sites including the expansion of the Kiashahr Ramsar Site to the Bujagh National Park in 2009, the improvement of the protection of this site through hiring more locals guards, establishing infrastructure, as well as improving the management system through a new environment office for the site and conducting training on the development of a management plan. Awareness raising programs included the organisation of the Annual Crane Celebration and the World Migratory Bird Day, the implementation of education activities at WCASN sites, such as establishing an education center in Fereydoon Kenar with financial support of the Iranian government. The international cooperation was being improved by signing a bilateral agreement between the MNRE of the Russian Federation and the Department of Environment of Iran to protect wild species, including the Siberian Crane. Iran had become a CMS Party in 2008.

29. The main implementation challenge in Iran was the low number of Siberian Cranes at wintering sites. Other implementation challenges included the lack of specific MOU-related financial resources that could be used for the implementation of Conservation Plan (CP) activities; lack of "operational coordination" for the implementation of the CP; lack of financial resources for regular monitoring and tracking; insufficient training

for technical staff, especially on new techniques; and insufficient availability of technical tools such as PTTs.

30. Iran's priorities for the next three years were identified as follows: mobilize financial support for the release program (with PTTs) especially in the Western Flyway; involve local stakeholders in the implementation of the CP; improve capacity building and provide training for technical staff especially on new capture and release techniques; develop management plans for all sites; support applied research studies at all sites; and exchange educational/awareness materials with other Range States. Additional measures for the CP implementation in Iran included: direct communication between the CMS MOU Secretariat and the National Focal Points; establishment of flyway working groups and appointment of a coordinator/s for each flyway; prioritization of the CP activities into long term, short term and/or urgent activities; follow-up to the SCWP activities within the MOU; and develop national projects to support the implementation of the CP.

- 31. As a lesson learned, Mr. Sadeghi Zadegan mentioned that time was running quickly and that the CP should be (as far as possible) more concise, realistic and feasible to implement. It should be a dynamic document applied by authorities. The participation of local people in the implementation of the CP was seen to be very important.
- 32. Ms. Mirande, ICF, thanked Iran for the great work and commented that the lack of coordination for Siberian Crane activities was a very important issue for all conservation groups working with this species. Dr. Sorokin, Russia, reiterated the high value of the work in Iran and noted that the range states should set realistic goals which should have a practical focus. He emphasized that the bilateral agreement between Russia and Iran on the protection of biodiversity and the environment was very important, as it not only mentioned tigers and leopards, but also the Siberian Crane. The agreement itself did not provide for funding, but presented a good basis for further development of funding agreements. Oka State NR was giving birds for the Education Center in Fereydoon Kenar. Dr. Sorokin also suggested that Siberian Cranes were still wintering in Iran, maybe along the eastern border with Afghanistan, as Siberian Cranes had been there in the past. Therefore, good monitoring was needed in that area. Iranian Mesopotamia was mentioned as another possible area to look for Siberian Cranes.
- 33. Mr. Batdorj Bekhbat, Mongolia, reported that since the last CMS MOS6 in Kazakhstan in 2007, the public awareness campaign about Siberian Cranes had been intensified. It included broadcasting of videos about Siberian Cranes and other threatened birds on Mongolian national TV; publishing information about Siberian Cranes' migration and summering grounds in national

and foreign newspapers and magazines; organization of eight training sessions on monitoring of avian flu for local people who work in the environmental, veterinarian and government sector of 12 provinces as well as international training on ecological education; organising children art competitions in Mongolia, China and Russia and student ecological camps in cooperation with Russia for the winners of the competition. During the reporting period, Mongolia strengthened the international cooperation through the organisation of joint monitoring of Siberian Cranes, Swan Geese and other threatened birds, and by organising international trainings and events.

- 34. Mongolia set the following priorities for 2010-2012: continue research, monitoring and public awareness and look for international and local funding opportunities to improve the protection and monitoring in protected summering areas of Siberian Cranes. Ms. Mirande, ICF, noted that ICF had little communication with Mongolia since the last meeting in 2007, so it was very interesting to see all the good work and achievements in Mongolia and to know how the country was going to accomplish goals in the future.
- 35. Dr. Evgeny Bragin, Kazakhstan, reported that regular monitoring of the known stopover sites of Siberian Cranes in the Kostanay Region was conducted annually during spring and autumn migrations within the framework of the SCWP. Ground surveys included counts of waterfowl, description of ecological features of lakes, water levels, and threats. Regular inspections (two or three times per week) of the Siberian Crane stopover sites were conducted on Naurzum Lakes together with distribution of questionnaires and interviews of hunters and fishermen; a correspondent network was created among gamekeepers, hunters, fishermen and other local people for collecting information; public awareness was increased through community involvement and education activities under the SCWP including the organization of annual crane celebrations and especially the Siberian Crane Festival in Naurzum and the participation in other international ecological events; pilot projects on the reconstruction of water reservoirs on the Naurzum-Karasu River in the basin of the Naurzum Lake System, development of ecological tourism in Naurzum, and other projects were implemented by local NGOs.
- 36. Other highlights of implementation activities included the improvement of the legislation on wetlands conservation at the national and international levels as well as integrating the concept of «Important Bird Areas» and a procedure for including Biosphere Reserves into the Law of Protected Areas (PAs) of Kazakhstan; increasing protection level of PAs (four SCWP sites were designates as Ramsar sites and Naurzum and Kurgaljino SNRs were included in the "Sary-Arka the steppe and lakes of Northern Kazakhstan" World Heritage Site); creation of new PAs (Zharsor-Urkash Wildlife Refuge

and Akzhaiyk Sanctuary), including five Siberian Crane sites in WCASN; improving management and funding of wildlife refuges through linked management with nearby nature reserves or national parks; preparation of management plans for Naurzum, Kurgaljino SNRs and Irgis-Turgai Refuge by the Forest and Hunting Committee (FHC); improving the hydrological regime of lakes and quality of water, optimizing the withdrawal of water in accordance with necessities; and observance of requirements of nature protection legislation in Kazakhstan through establishing a Public Basin Council and signing a Basin agreement on separate rivers or waters systems with involvement of all interested parties.

37. Major challenges in Kazakhstan included: water storage; poor management in rivers and lake basins; irregular monitoring due to a lack of financial support; and insufficient capacity building and funding. Kazakhstan's priorities for the next three years would focus on the reintroduction programme; expansion of the protected area network; management improvements; and a monitoring programme for the Siberian and Eurasian Cranes.

38. As lessons learned, Kazakhstan mentioned the following issues: 1) permanent monitoring during the whole migration season at the one-two stopover sites that were regularly used by Siberian Cranes (especially Naurzum Lakes) was more effective for searching the species, taking into account the critically low number of Western and Central Asian flocks and monitoring experience during the last few years; 2) similar monitoring is important at Eurasian Crane migratory congregations (on Zharsor-Urkash Lake System and possibly in Uzunkol District), especially if the release of captivereared juvenile Siberian Cranes into Eurasian Crane flocks in Belozerskiy Wildlife Refuge in Russia continues; 3) the development of a correspondent network to better monitor the stopovers of Siberian Cranes was considered useful as ground surveys did not work due to shortage of people and funds.

39. Dr. Sorokin, Russia, thanked Kazakhstan for the systematic approach to the activities under the Siberian Crane MOU. He noted that Kazakhstan had a very wise system of protected areas, good legislation, and effective governmental efforts. Russia could only dream about real protection of key bird areas. Dr. Sorokin agreed with Kazakhstan's proposal to intensify activities under the reintroduction programme. Mr. Mundkur, Wetlands International, agreed with Dr. Sorokin comments and added that even though the SCWP had been concluded, there was still the UNDP/ GEF Kazakhstan Wetland Project. Mr. Mundkur asked how these two projects complemented each other to protect biodiversity and how the national funding was coming into place. Mr. Bragin replied that although a trust Fund for Kazakhstan's Biodiversity and a council were established under the UNDP project, in practice

little money was available and did not promote conservation work in Kazakhstan except for small regional Akimat level projects, of which all but one were socially oriented. Environmental protection in Kazakhstan is not considered important officially and therefore there are no funding opportunities in Kazakhstan for the Siberian Crane monitoring.

40. Mr. Samar Khan, Pakistan, reported that Demoiselle and Eurasian Crane were still found in Pakistan, but Siberian Cranes had not been sighted for the last 20 years. The main challenge in Pakistan was traditional hunting and live capture of cranes as pets. To mitigate the hunting impact, Pakistan suggested captive breeding. People in the relevant areas live according to their tribal rules and it is difficult to enforce national laws in these regions. The captive breeding programme could reduce the hunting pressure on cranes by providing a source of birds and reducing demand for wild caught birds. The tribal people maintain cranes in captivity very successfully and are keeping them as pets and for food. Training in captive breeding is desired. He emphasized that law enforcement was also very important.

41. Ms. Anastasia Shilina, Russia, reported on the aerial and ground surveys in the Kunovat River Basin and Konda and Alymka River Basins. Activities in Russia also included the distribution of questionnaires among hunters and other local people; improving legislation by increasing the fine for illegal killing of a Siberian Crane to US\$5,200; creating a new protected area "Zhuravlinyi" under management framework of the regional nature park "Synsko-Voikarskyi" (about 200,000 ha) in the Kunovat River Basin which was expected to serve as buffer zone for Kunovatskiy Federal Wildlife Refuge; conducting public awareness including annual Crane Celebrations, developing the "Siberian Crane in a Suitcase" education programme (7 plastic model of Siberian Crane were produced and given to YaNAR, Tyumen Oblast and Kazakhstan for their Crane Day Celebrations at all key sites); organizing the second Siberian Crane Festival in Salekhard; regular publishing of information in newspapers and magazines and broadcasting on TV programmes; conducting reintroduction programmes in the Kunovat River Basin, Astrakhan SNR in Russia and in Fereydoon Kenar in Iran; preparation of the "Flight of Hope" project with financial support from oil and gas companies (ITERA and "Petroresurs").

42. Among implementation challenges Ms. Shilina cited the insufficient participation of other international organizations in the Flight of Hope Project and inadequate financing of this project. Priorities for the next three years were the continuation of the Siberian Crane monitoring programme including air and ground surveys and questionnaires; realization of the Flight of Hope Project; continuation of the reintroduction programme in breeding and wintering grounds and also in migration stopover sites. A positive lesson learned

for Russia was the good contacts and cooperation between colleagues from governmental organizations and NGO's of Russia, Kazakhstan and Uzbekistan.

- 43. Participants expressed thanks and commented on Russia's report. Mr. Sadeghi Zadegan, Iran, expressed doubts that increasing the fine for killing Siberian Cranes would have been effective. He noted that a similar measure was not working in Iran because people did not have the money to pay the fines anyway. If they could not pay, they should have gone to jail but that was not feasible due to humanitarian reasons. Dr. Sorokin was sure that for Russia such measures were very important because in the past the fine was low and no criminal charges were filed. Now the fine is high and involves criminal charges and the real threat of going to jail.
- 44. Dr. Sorokin reported on the presumed killing of two Siberian Cranes in West Siberia. On 19 May a pair of Siberian Cranes landed near Kondinskoye village in Khanty-Mansyisk (near the Konda-Alymka site) and stayed there for several days near a lake. The people in the village were very excited since they all knew Siberian Cranes, which is considered a sacred bird that brings happiness to whoever sees it . After several days these two birds disappeared, and it is suspected that they were shot. People admitted being at the site where they practiced shooting at empty cans. Based on their behavior around people, the Russia colleagues wondered if these might be the two 3-year old Siberian Cranes that were released near Kunovat in 2009. The birds in Kondinskoye looked similar to these two birds. They had contact with people but it is not known where they spent the winter. Their plumage condition was very good. The released birds had three bands each. These birds did not have bands, although they could have been lost. Their origin remains unknown. Dr. Sorokin added that he discussed this case with the Prosecutor General and was assured that the criminals will be found.
- 45. Mr. Eldar Rustamov, Turkmenistan, passed regards to the participants from Mr. Djumamurad Saparmuradov, Deputy Minister of Nature Protection, who could not attend the meeting. He then reported on the annual census of cranes along the flyways and wintering grounds. Monitoring was conducted in sites with suitable habitat for the Siberian Crane, especially in the Kelif and Meana-Chaacha Wildlife Refuges where Siberian Cranes were sighted in the past. Activities also included public awareness raising by involving the Birdwatcher Club of the Turkmen State University and students in the annual Crane Celebration events and monitoring of IBAs; the distribution of posters about two WCASN sites in Turkmenistan in Turkmen language; production and broadcasting of the film "Durnaly is Crane Paradise", which features the first WCASN designated site in Turkmenistan; reports on

CP implementation on the website of the Ministry of Nature Protection, distribution of the Crane Working Group of Eurasia (CWGE) Newsletters, the CWGE proceedings as well as the book "Important Bird Areas of Turkmenistan" that was published in three languages in 2009 in Ashgabat.

- 46. In terms of implementation challenges, Turkmenistan mentioned the lengthy procedure for approving all nature conservation actions at different administrative levels; uncontrolled hunting and poaching; poor crane monitoring during their irregular visits at the wintering grounds and administrative difficulties to get clearance to visit important sites for Siberian Cranes located in the state border area. Priorities for the next three years in Turkmenistan included the nomination of another site to the WCASN, "Tallymerjen & Kelif-Zeyit"; increasing public awareness among different groups including hunters; continuing the annual surveys and counts in the areas with the highest concentration of Eurasian Cranes at sites where sightings of Siberian Crane are most likely to be seen, as well as at sites in the southern part of Turkmenistan on the border with Iran; and participation in the Flight of Hope Project initiated by Russia.
- 47. As lessons learned, Turkmenistan mentioned that involving student musical groups in Crane Celebrations and other events had been very successful and that public awareness activities raised the interest of hunters in monitoring, training as well as sharing and collecting information. The effectiveness of the various events in the country increased through the participation of the Deputy Minister of Nature Protection.
- 48. Mr. Maxim Mitropolskiy, Uzbekistan, reported on public awareness campaigns. These included the successful organization of Crane Celebrations, education activities within WCASN, and trainings for hunters. A pair of Siberian Cranes from OCBC has been received at the Tashkent Zoo for education purposes; and a network of observers had been created to obtain more information about Siberian Crane sightings. There were four Siberian Crane sightings during the last three years but three of them were not confirmed; the fourth observation was made by a professional ornithologist at Aydarkyul, which is a Ramsar site. Annual monitoring was conducted during the migration season and at the wintering ground of Eurasian Cranes in Amudaria Valley, especially during the extremely cold winter in 2008. Another implementation highlight is Uzbekistan's participation in the Flight of Hope Project initiated by Russia.
- 49. Uzbekistan's priorities for the next three years include the nomination of Talimarjan in the WCASN, increase of public awareness among hunters through the implementation of a grant from the Mohamed bin-Zayed Conservation Fund; participation in the Flight of Hope Project together with Russia, Kazakhstan and

Turkmenistan; and continued monitoring of wintering Eurasian Cranes in the Amurdaria Valley.

50. Mr. Geer Scheres, CBCC, gave a brief introduction about their work. CBCC had undertaken intensive fundraising, which has resulted in support for the Oka Crane Breeding Center and the Flight of Hope Project.

51. Comments and recommendations were made and taken into account to revise the Overview Report and the Conservation Plans. Important highlights included needs to: assess the Conservation Plans for important gaps; look for ways to improve performance and not just focus on acquiring additional resources; be more strategic in addressing key threats and consider focusing on specific locations; improve enforcement of legislation; specify the locations and timing for monitoring more precisely in order to make best use of capacities; put the database on-line and make it more user-friendly and accessible; monitor birds post-release; maintain protection status initiated under SCWP and assess and improve protection in the other seven countries; transfer awareness programs to other key areas; continue to improve likelihoods of local people; increase allocations of funds by governments.

# Agenda Item 7: Future implementation and further development of the MoU and Conservation Plans

## Agenda Item 7.1: Responding to hunting along the Siberian Crane flyways and its impact on waterbird populations

52. Mr. Crawford Prentice, International Advisor, reported on the results of a consultancy arrangement between CMS and ICF aimed to conduct a review on sustainable waterbird harvesting practices and to propose options for a strategy to develop sustainable hunting practices for waterbirds in Western/Central Asia (document UNEP/CMS/SC-7/8). The Range States were asked to consider and refine these options as part of the Conservation Plans for the Siberian Crane. Mr. Prentice also identified a few actions addressing hunting for their possible inclusion in the Conservation Plans: prioritize hunting in Western and Central Asia as the main threat; identify specific national and regional actions that help establishing frameworks for sustainable hunting; identify hunting organisations and other partners for collaborative actions; identify demonstration sites in "hotspots" where projects can be developed or continued.

53. The Chair thanked Mr. Prentice and invited the Range States to comment. Dr. Sorokin noted that areas where hunting is a problem could be identified. There was a need to build on the SCWP outputs in areas where this project was not very effective. He also noted the sensitivities of local people to outsiders, who were

telling them to change their traditional practices. He shared the good news that a new initiative was about to be launched and an expedition was expected to take place in July-August 2010 with support of the Upper House of Parliament. The expedition was expected to focus on the Red Data Book and involve Kazakhstan, where hunting was affecting birds migrating to and from Russia. It was also possible to involve other countries such as Azerbaijan. He expressed his hope that these ideas will materialize. Dr. Bragin, Kazakhstan, informed that Kazakhstan's government was trying to tackle hunting problems. Training programmes were in the pipeline with the help of Finnish goose specialists. Hunting quotas needed to be based on population and stock estimates. Some of the published figures were questionable. There was a need to develop a sound scientific basis to set realistic quotas. Mr. Sadeghi Zadegan, Iran, proposed to coordinate closely among the different countries in order to ensure species were protected across their range. Mr. Samar Khan, Pakistan, informed that the relevant government agencies were planning to review the laws in view of the international obligations under CMS and CITES. The main challenges included various traditional customs and political problems relating to the war against terrorism. Crane hunting in tribal areas was a traditional sport and not done for subsistence purposes. National and provincial hunting management authorities were cooperating, and hunters found with dead cranes had been arrested and punished. Pakistan was trying to harmonize the law internally in order to meet international obligations. Mr. Rustamov, Turkmenistan, reported on some poaching, although traditionally cranes were considered as sacred birds. Mr. Mitropolskiy, Uzbekistan, informed that relevant governmental agencies were expected to review legislation and consider further penalties and actions as there were some reports on poaching of rare species. Mr. Prentice thanked the participants for the valuable comments and requested them to submit written comments as well.

### Agenda Item 7.2: Challenges of the Siberian Crane reintroduction to West/Central Asia

54. Mr. Sadegh Sadeghi Zadegan, Iran, reported about the challenges of the reintroduction programme in Iran. Ten captive-reared juveniles were released at Fereydoon Kenar. Some started to migrate, others did not. Four of them were marked with PPTs but only one worked throughout the full cycle showing the breeding grounds in West Siberia. The remaining three transmitters stopped working soon after releasing the birds and it was not clear what happened to the birds after the transmission stopped. None of the banded Siberian Cranes returned to Fereydoon Kenar. Potential problems included the health condition of the juveniles (the birds might have been too weak or too tame) and technical problems with the transmitters. It was a huge

effort to rear birds at OCBC and if these birds could not complete their migration or survive in the wild, the viability of the project was under question.

55. Ms. Claire Mirande, ICF, proposed the establishment of a scientific group for discussing the problem. Problems had occurred with delays in obtaining the permits needed to start releasing birds in early winter. There had been some success with bonding wild and released birds, but it is likely that the released birds were not able to keep up with the wild birds during migration. Rearing birds in one place and releasing them in another could also lead to a lack of imprinting of the natal site.

56. Dr. Alexander Sorokin, Russia, reported on the implementation of the Flight of Hope Project and its challenges. In 2006, a test flight from North West Siberia to the Kazakh border was undertaken. The Ultralight aircraft (deltaplanes) turned out to be too powerful. The take off velocity was too high and the chicks could not follow the plane. Some changes were made such as using different engines and reducing the weight of the plane. The next step was to conduct a ground survey on the migration routes from Kunovat River basin to the Eco-center "Jeiran" in Uzbekistan. The routes in Kazakhstan and Uzbekistan were evaluated in 2008 and 2009. In 2008, a ground expedition (11,000 km) went from Southern Siberia (Belozersky Wildlife Refuge, SCWP site) through Kazakhstan with support from E. Bragin and the FHC, to the Eco-center "Jeiran" in the Bukhara Region in Uzbekistan. In 2009, the Uzbekistan part of the Kyzylkum Desert was surveyed together with colleagues from Uzbekistan. Two Siberian Cranes raised at OCBC were brought to the Eco-center "Jeiran" in 2009. A special pen was built for them, they were monitored closely in order to obtain information about how they fed and adapted to the site.

57. The challenges of the Flight of Hope Project included the lack of financing; problems with crossing international borders (customs, CITES, veterinary papers), and special training for the pilots. The team that should fly with the birds had to be organized and this needed funds. The financial crisis hit even the oil companies, which were still supporting the project but on a smaller scale. The migration needed to be completed by mid October due to the weather conditions, so the schedule was very tight and early hatched chicks were needed. In the past chicks were already available in early-mid April but that was now happening a month later, which was a problem. As Kazakhstan and the Russian Federation were about to sign a no-custom treaty, at least crossing the Russian-Kazakh border was expected to become easier.

### Agenda Item 7.3: Updating reporting and information management

58. Mr. Douglas Hykle, CMS Secretariat, asked Ms. Ilyashenko to inform about reporting and information

management and asked Signatories to give some feedback on the reporting mechanism (document UNEP/CMS/SC-6/7 + Annex). Ms. Ilyashenko noted that it was easy to compile the overview report on MOU implementation by using the national report template approved by the MOS7 in Almaty. This template was much better than previous ones and provided for short and clear answers. More details could be obtained from the reports, and when preparing the Conservation Plans it was no longer necessary to request Range States to specify details.

59. Participants (Dr. Sorokin, Russia, Dr. Bragin, Kazakhstan, Mr. Samar Khan, Pakistan, and Mr. Purev, Mongolia) proposed to simplify the national report template and to remove duplications. The Chair invited Signatories to submit their proposal to simplify the format in writing.

#### Agenda Item 7.4: Future activities under Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds

60. Ms. Elena Ilyashenko, SCFC, reported on activities under the WCASN (document UNEP/CMS/SC-7/9) and presented the draft WCASN Action Plan (AP) (document UNEP/CMS/SC-7/7), which covered a subset of actions under the overall Conservation Plans. Since the official designation of 10 sites in five countries during the last MOS6 in Kazakhstan in May 2007, only Pakistan submitted nomination documents for two sites: the Thanedar Wala Game Refuge and Taunsa Barrage. Turkmenistan and Russia had encountered administrative obstacles in the nomination process due to a re-organization of the local administration. Uzbekistan had proposed one and Kazakhstan three more sites for inclusion in the shadow list of the WCASN. Since the MOS6 in Kazakhstan, progress was made on improving the protection of a number of WCASN sites. Furthermore, public awareness campaigns were implemented within the framework of the SCWP. All Siberian Crane Range States were involved in the preparation of the "Atlas of Key Sites for the Siberian Crane and Other Waterbirds in Western/Central Asia" in Russian and English languages. This publication was available in printed form and on CD.

- 61. The WCASN Action Plan was focusing on the designated sites in six countries (Iran, India, Kazakhstan, Pakistan, Turkmenistan, and Uzbekistan), on supporting new nominations, and on regional actions to service the site network such as website development, information sharing, fundraising, etc.
- 62. Participants discussed the procedure to nominate sites for WCASN. The Chair proposed that Range States should be reminded to designate sites regularly. He also noted the division between Federal and Provincial government responsibilities and communications.

This is often a bottleneck. Federal agencies imposed obligations. Provincial agencies had management responsibility and were worried about financial implications. Provincial agencies are happy if federal agencies impose obligations and then provide financial support. Azerbaijan requested to simplify the procedure of nomination and the delegate was requested to give specific suggestions on this issue.

### Agenda Item 7.5: Relationship with other processes and initiatives

### Agenda Item 7.5.1: East-Asian – Australasian Flyway Partnership (EAAFP)

63. Mr. Taej Mundkur, Wetlands International, gave a presentation about EAAFP on behalf of Roger Jaensch. He described its structure, objectives and activities such as annual meetings that are used to exchange experiences and build up cooperation on common projects. Some of the activities under EAAFP were relevant for the Siberian Crane. The last meeting had taken place in February 2010 and the next one was scheduled for December 2010 in Cambodia. New sites that might be added to the EAAF site network included Momoge and Zhalong NNRs in China as well as several others in Russia and Mongolia.

64. Mr. Mundkur noted that four Russian sites were already suggested during the implementation of the Asian-Pacific Migratory Bird Strategy. After this initiative has moved under EAAFP in 2007, all governments were asked to reconfirm their sites. Russia designated six sites to this network although official confirmation was still awaited. Dr. Sorokin promised to follow-up with the Russian governmental agencies in order to obtain this confirmation. Mr. Qian, China, commented that the EAAFP had a supportive attitude towards the nature reserves and the Chinese government intended to nominate more sites. Mr. Mundkur noted that all sites mentioned in his presentation were relevant to the Siberian Crane. He encouraged the Chinese government to nominate as many sites as needed to adequately protect waterbirds.

#### Agenda Item 7.5.2: Central Asian Flyway (CAF)

65. Mr. Marco Barbieri, CMS Secretariat, briefly described the geographic scope of the Central Asian Flyway (CAF) initiative, which includes 30 countries. The CAF area overlapped in the Western part (16 countries) with the geographic coverage of the African Eurasian Waterbird Agreement (AEWA). The CAF covered 272 migratory waterbird populations and 182 species that were breeding, migrating and wintering within the region, including 29 globally threatened and near-threatened species.

66. Mr. Barbieri noted that the CAF initiative was not active at the moment. The Secretariat was focusing on

the finalization of the legal and institutional aspects concerning CAF. There has been little progress in the initiative, because the CMS Secretariat lacked capacities to follow-up. The situation was expected to improve with the entry on duty of a Junior Professional Officer (JPO) in October. As the CAF Action Plan fully covered the flyway of the Central and Western Asian flocks of the Siberian Crane, there was scope to consider linking the two instruments. This included the possible development of a single species Action Plan as well as the establishment of a CAF site network.

### Agenda Item 7.5.3: African-Eurasian Waterbird Agreement (AEWA)

67. Mr. Sergey Dereliev, AEWA Secretariat, mentioned the possible synergies between AEWA and the Siberian Crane MOU. Mr. Dereliev highlighted several points:

- 1) The Siberian Crane was one of the critically endangered species covered by AEWA. However, AEWA still had few Contracting Parties among the MOU range states: only Uzbekistan was a Party. Turkmenistan had started a process to join AEWA. An incentive to range states to become Parties to AEWA was the Small Grant Fund of the Agreement, which was providing grants for conservation projects in the range of 25,000 Euros.
- 2) AEWA had already undertaken several activities in the Central Asian region:
- a. Over the last three years, about US\$70,000 had been allocated to Central Asian countries, the Caucasus and Arctic Russia;
- b. The Wings Over Wetlands (WOW) training kit has been translated into Russian;
- c. Though Kazakhstan was not a Party to AEWA, it was a range state of the Lesser White-fronted Geese, which was an important species for AEWA. Norway had already sponsored a workshop on the species in Kazakhstan. Azerbaijan is another important range state of the species and could also benefit from close collaboration with AEWA. There was a great overlap of the flyways of Siberian Cranes and the Lesser White-fronted Goose, which further highlighted the potential of linking the Siberian Crane MOU and AEWA. There were also plans to convene a symposium to develop an adaptive harvest management plan for the Pink-footed Goose.

Mr. Dereliev concluded by asking the Signatories to work closely with AEWA and to seriously consider the great opportunity of creating synergies between the Siberian Crane MOU and the geese initiatives.

68. Mr. Dereliev, AEWA, informed that the AEWA Secretariat would like to support the process of accession to AEWA (e.g., through such actions as Moscow workshop

and bilateral discussions during this meeting, and while visiting Kazakhstan for the Lesser White-fronted Goose workshop). The minimum contributions of AEWA Parties are set at Euro 2,000, raising the minimum from a few hundred. This proposal was put forward by African countries. While the contributions usually are not the reason to delay accession to the agreement, it is often the procedures that are problematic. Mr. Dereliev mentioned that he will be available to provide more information on ratification during his travel in Russia and Kazakhstan. AEWA would like to see more Siberian Crane MoU countries become a Party to AEWA. Funding up to US\$25,000 is available for new Parties. While Kazakhstan, Azerbaijan and Iran would be eligible to join AEWA, the agreement does not cover India, Pakistan, China, and Mongolia. There might be some possibility to extend AEWA to cover CAF, which would then include these other countries as well.

69. Dr. Sorokin, Russia, informed the participants that in spring 2010, an AEWA workshop had taken place in Moscow, and the MNRE was seriously considering cooperating with AEWA more closely, also taking into account the work under the Siberian Crane MOU.

### Agenda Item 7.5.4: World Migratory Bird Day (WMBD)

70. Mr. Florian Keil, AEWA, informed that the World Migratory Bird Day (WMBD) had been organized annually since 2006 after the occurrence of the avian flu. Each year more participants join the initiative, which was becoming increasingly popular and has grown greatly over the last four-five years. More than 100 events in 40 countries were registered on the WMBD website in 2010. WMBD managed to focus attention through the media on specific topics. The event took place every second week of May, generating more than 100 articles in the media. Activities of WMBD also included an international photo competition on critically endangered species. In 2010, the campaign's theme was "Every Species Counts". WMBD was led by AEWA and CMS, other partner organizations included BirdLife International, Wetlands International, EAAF Partnership, and the Rarest Bird Project. The Government of Germany provided funding to the AEWA Secretariat for the organization of the WMBD. CMS supported the campaign, inter by covering costs associated with the distribution of posters and other information materials throughout the world.

### Agenda Item 7.5.5: Integration of MoU with Regional Flyway Programmes

71. Mr. Taej Mundkur, Wetlands International, gave a presentation on the conservation and sustainable management of migratory waterbirds and the wetlands along the flyways of Siberian Cranes. He outlined opportunities for broader collaboration with Wetlands International (WI). Major regional activities of WI in-

clude the International Waterfowl Census, the UNEP/ GEF "Wings Over Wetlands" (WOW) Project, support to the EEAFP, the Wetlands and Livelihood Programme, and the CMS Flyway Working Group. The WOW project produced: 1) Critical Site Network Tool, which combined information on critical sites for waterbirds (including cranes) from various sources such as Wetlands International, BirdLife International, IUCN and other data bases; 2) WOW Flyway Training Kit (www.wow. wetlands.org), which was also translated into Russian; 3) training modules linked to climate change (in collaboration with WWF, Conservation International, Wageningen Cooperative Programme on Wetlands and Climate). Mr. Mundkur also presented the work of the CMS Flyway Working Group, established within the CMS Scientific Council with the initial tasks to: 1) review scientific/technical knowledge on migratory bird flyways and conservation initiatives, and identify major gaps; 2) review existing administrative/management instruments for migratory bird flyways globally; and 3) propose policy options for flyway conservation/ management, which should feed into the Intersessional Process Regarding the Future Shape of CMS. Priorities for Siberian Crane and habitat management were: 1) to strengthen the framework of the CAF and the WCASN as well as to develop a new GEF project proposal for CAF implementation; 2) to strengthen the EAAFP and EAAF Site Network and develop a regional EAAF Flyway project; 3) to recognize arctic wetlands as critically important yet very fragile wetland areas and address threats from oil and gas industry, etc.

72. In concluding agenda item 7.5, Mr. Hykle, CMS Secretariat, noted that AEWA was a well established and well-funded mechanism with a lot of technical advantages and financial incentives for its Parties. He was pleased to see that a number of Siberian Crane MOU Range States could become Party to this agreement. Several other initiatives were also relevant to Siberian Crane conservation, and range states had to evaluate the benefits of becoming closer integrated with these initiatives.

### Agenda Item 8: Future funding of MoU activities

73. Ms. Claire Mirande, ICF, presented the following fundraising priorities: Siberian Crane MOU meetings; the position of the SCFC; SCFC activities including strengthening of the WCASN, regional database maintenance and online publication); and CEPA (Crane Day events and materials, publications, newsletters, website).

74. Ms. Mirande noted that funding was a problem due to the economic crisis, which has increased the competition for limited resources. Countries needed to contribute more to the activities of the Conservation Plans. She called on participants to be creative and to make joint efforts. CMS and ICF were ready

to continue fundraising to support travel of delegates attending future MOU meetings; however Signatories should make efforts to support at least one of their delegates. It might be useful to consider hosting future meetings in conjunction with other flyway initiatives (i.e.. the Crane Working Group under the East Asian-Australasian Flyway Partnership or Central Asia Flyway initiative as it develops).

75. Ms. Mirande informed about the funds received over last three years: a) CBCC supported OCBC operations; b) the Swiss Government supported the MOS7 in Bonn; c) research at Poyang was supported from various sources. Pending funds include: a) the UK Darwin Initiative for climate change adaptation planning at key wetlands in NE China and Eastern Russia (rejected in 2009 with positive comments, was going to be resubmitted in 2010); b) Mohamed bin Zayed Species Conservation Fund proposal for developing collaboration between conservationists and hunters (\$25,000 submitted, \$20,000 approved). Some GEF-5 (PIF) proposals were pending in Eastern Russia and China (sustaining wetland ecosystem services during conditions of water scarcity and climate change in cooperation with SFA, the proposals was expected to be submitted soon) and in West/Central Asia (together with CMS and Wetland International) to develop a PIF proposal on migratory waterbird conservation on the flyway level linking the Central Asia Flyway (CAF) and WCASN for Siberian Cranes and other migratory waterbirds. Those possible grants required matching funding and countries needed to allocate portions of their GEF STAR allocations, other cash, or in-kind contributions. Potential sources for matching funds included Trust for Mutual Understanding (supports CWGE to address spring hunting); hunting organizations (CIC, FACE); Food and Agriculture Organization; US Fish & Wildlife Service (Critically Endangered Species Fund - NE China); some Embassies, for example, Finnish Embassy in Teheran; private sector and insurance and oil companies that had made donations in the past. It was suggested to add fundraising to the capacity building programme on both regional and national levels.

76. Ms. Mirande made reference to the discussion on the concept of an International Trust Fund (ITF), which was unanimously endorsed by the range states and cooperating organizations at the MOS6 in Kazakhstan in 2007. The ITF was expected to promote priority conservation actions and outcomes as identified in the Conservation Plans, and to help raise the profile for this long-term international effort. Potential funds for the ITF could come from multiple sources such as governmental and non-governmental organisations, private sector and other donors. The ITF could attract donors that might otherwise not support ICF and other signatories with targeted fund-raising efforts. Some donors might prefer supporting International Government Or-

ganizations (IGO) rather than a Non-governmental Organizations (NGOs) such as ICF. Questions concerning the viability and the capacities of establishing such an ITF in the current economic climate remained.

### Agenda Item 9: Conservation Plan (2010-2012) development

77. Participants split into three flyway working groups, one for the Eastern Population (China, Mongolia), one for Western Asian flock (Azerbaijan, Iran, Kazakhstan, Russia), and one for Central Asian flock (India, Pakistan, Russia, Turkmenistan, and Uzbekistan; Afghanistan was not present and it was foreseen to consult with this country later). Ms. Ilyashenko, SCFC, had provided draft Conservation Plans for each flyway group (document UNEP/CMS/SC-6/6). The flyway groups were asked to identify future activities and priorities, focusing on activities that were achievable and were expected to produce measurable outcomes. Special attention was to be given to cross-cutting issues such as financing, monitoring, WCASN, Flyway Focal Point, management plans, involvement of all stakeholders, etc.

78. Each working group was expected to revise the respective draft flyway conservation plans and to present a summary of key decisions at the second day of the meeting. In the meantime, the CMS Secretariat (Mr. Hykle, Mr. Barbieri), ICF (Mr. Archibald, Ms. Mirande), WI (Mr. Mundkur) and CBCC (Mr. Scheres) discussed opportunities for fundraising. At the end of the session the film "White Crane: Dance in the Sky" was displayed, which had been produced by the international oil company "Petro Resource" (Sweden, Canada, and Russia) in 2009. The film dealt with the release of Siberian Cranes in Astrakhan and was broadcasted on Astrakhan Regional TV in 2009.

### Conservation Plan 2010-2012 development – Flyway Working Group reports

79. Before the presentations by the flyway working groups, participants discussed the general development of the Conservation Plans. Mr. Hykle, CMS Secretariat, proposed that countries should identify specific areas or threats that they needed to focus on in terms of monitoring and surveys (e.g., they should identify the type and scale of survey needed). This would allow countries to use limited resources more efficiently. He suggested building on the results of the last three years. Ms. Mirande, ICF, added that there is only limited capacity for the implementation of management plans and that there is a need to discuss how to improve this situation. For each country, key actions should be identified to address threats regardless of the funds that would be needed to implement them. The Conservation Plans should consist of concise, feasible, and measurable actions. There was a need to include these detailed actions now because after the meeting it will

be more difficult to obtain the necessary information from all range states. The Conservation Plans could be used as the basis to approach national governments for funds. Actions should be as specific as possible. At the same time a balance between specific actions and general recommendations would be needed. The Chair, India, proposed to prepare a prioritized wish list for the Conservation Plan. National governments should be able to implement the first priorities with their own resources while the following priorities would increasingly depend on additional resources through fundraising. Dr. Sorokin, Russia, commented that it is difficult to fill in specific actions for three years. Instead, general expressions would be more useful for governments. When it is difficult to report on the implementation of too specific activities on the wish list, this would affect the credibility. If priorities were to be expressed for the plans, they could be used to discuss them with MNRE to get funding, but they should not be too detailed. He also proposed that after completing the first draft, the Conservation Plan should be sent to the countries for a more detailed elaboration. Mr. Mundkur, Wetlands International, proposed to start with a wish list for what needs to be done, what is feasible, and what are the next steps. There is a need to keep the goal of Siberian Crane conservation in focus and to set ambitious objectives. Priorities should be identified quickly in order to mobilize the funds needed.

### Priority actions of the Signatories and cooperating organisations

80. The Chair proposed to spend another 45 minutes on the elaboration of the Conservation Plans (e.g., on hunting priorities). He then asked the Signatories to prioritize four or five actions from their overall wish list of actions (See the Executive Summary for detailed list of priority actions).

81. Mr. Hykle suggested that it would be most straightforward to produce an executive summary of the priorities discussed at the MOS7. The executive summary could be prepared prior to the full meeting report in order not to lose the momentum of the meeting.

#### Financing

82. Ms. Mirande, ICF, presented the result of the discussion about fundraising with the CMS Secretariat, ICF, WI, and CBCC. For the previous six years there had been some funding flexibility through the SCWP, which had, however, come to conclusion. CMS only had very limited resources. Some short term funding needed to be raised in order to be able to keep the SCFC position.

83. The separate International Trust Fund has been discussed for the last three years. While a trust fund within the UN system would be cumbersome, especially if the sums were small, it could be established as a budget line on the CMS budget. Some countries

were keen to channel their voluntary contributions for the conservation work on the Siberian Crane through CMS. As an alternative, ICF would be able to establish a dedicated fund to manage contributions.

### Agenda Item 10: Next meeting of the Signatories

84. The Chair asked the Signatories to consider the desirability of continuing to hold stand-alone MOS meetings in the future and the possibilities for financial or in-kind support to hold such meetings. Mr. Hykle noted that four of the range states (Iran, India, Russia, and Kazakhstan) had already hosted a MOS in the past. The possibility of combining the MOS with other meetings was discussed. Initially, Signatories had met annually, then moved to a two year cycle, and most recently to a three years period, which was agreed to be the maximum interval. Therefore, the next meeting, MoS8, was expected to be scheduled in 2013.

85. China expressed its interest in hosting MOS8 in combination with a scientific meeting focusing on the accomplishments of the SCWP and the importance of Poyang Lake. The precise timing and the different options had to be discussed. The possibility of holding a scientific or technical meeting back-to-back with EAAFP meetings also deserved to be explored. Mr. Hykle invited the Signatories to consider hosting the Eighth Meeting and to make pledges for financial or in-kind support to the meeting. The CMS Secretariat will send out letters to all signatories (states and organisations).

86. Mr. Sadeghi Zadegan, Iran, thanked the Swiss Government, CMS and ICF for their support to the organization of the present meeting. He expressed regret that the meeting scheduled to take place in Iran in March was cancelled when all arrangements were in place because of problems with a single visa. He recalled that there had been visa problem in 2001 for an Iranian delegate but the meeting had gone ahead. He considered the incident closed and thought it was time to look ahead.

### Agenda Item 11: WCASN Dedication Ceremony for newly nominated sites

87. Ms. Elena Ilyashenko, SCFC, informed the meeting that as of 12 June 2010 ten sites had been officially designated in the WCASN by five countries: Iran, India, Kazakhstan, Turkmenistan, and Uzbekistan. Four sites were proposed for a shadow list of WCASN: three in Kazakhstan (Turgai Irgiz, Sarykopa and Tengiz Kurgaljino) and one in Uzbekistan (Talimarjan Reservoir). She provided details for each site, including the criteria under which it had been chosen, its location, historic importance for Siberian Cranes and current importance for other species, such as Eurasian and Demoiselle Cranes, Greater Flamingo, Dalmatian Pelican, Lesser White-fronted Goose, and White-tailed Eagles.

88. Mr. Mundkur, Wetlands International, speaking in his capacity as Chair of the WCASN Nomination Review Working Group (RWG), reminded participants about the administrative structure of WCASN. He referred to the WCASN Guidelines (document UNEP/CMS/SC-6/8 + Annex). The RWG had been established at MOS6 in Almaty and there was a need to confirm membership for 2010-2012. Mr. Mundkur gave an overview on the tasks of the WCASN Committee and its WCASN RWG. To strengthen WCASN activities, priority actions (on the basis of the three-year conservation plan), a annual planning, and on-line reporting had to be developed and implemented.

89. Mr. Mundkur presented a brief report of the RWG concerning the sites newly nominated for inclusion in the WCASN. Pakistan had submitted all necessary documents and had completed the sites information lists for both nominated sites – Taunsa Barrage and Thanedar Wala Game Refuge. Some further technical information was sought from the Focal Point of Pakistan. The RWG had recommended to the WCASN Committee that the two sites from Pakistan meet the technical criteria for designation. Pakistan was requested to provide a scale map and photographs of the Taunsa Barrage to the Secretariat for records and publicity purposes.

90. Dr. Sorokin, Russia, speaking in his capacity as Chair of the WCASN Committee, reported that the Committee had formally approved the two sites in Pakistan that were recommended by the WCASN RWG. He reported also that the Committee in the period between MOS6 and MOS7 had limited activities and could take on more work. He wished that the nomination and acceptance procedures would move more quickly. With regard to the confirmation of membership in the WCASN Committee and the WCASN RWG, he suggested that the group simply carries on as before and that the work could be done by email.

91. Ms. Ilyashenko presented information about the review of the nominations for the two proposed sites in Pakistan. Both are Ramsar sites, potential Siberian Crane stop-over sites, and both had problems with traditional hunting of cranes. Mr. Barbieri then called the key people to the podium for the ceremony of the site designation: the Chair of the WCASN Committee (Dr. Alexander Sorokin), the Chair of the MOS7 (Mr. B.C. Choudhury), and the CMS Executive Secretary (Ms. Elizabeth Mrema). Mr. Barbieri opened the Ceremony and Dr. Sorokin, Mr. Choudhury, and Ms. Mrema handed certificates to Mr. Samar Khan, the official representative of Pakistan.

# Agenda Item 12: Conclusions: Discussion of meeting outcomes and confirmation of next steps

92. Ms. Claire Mirande, ICF, summarized the conclusions of the meeting and the key activities for range states, CMS, ICF, WI, and CBCC. The deadline for the completion of Conservation Plans was set on 15 July for countries and on 1 September for ICF/CMS. Elena Ilyashenko will try to post the Conservation Plans on the website by 15 October. Priorities per country were summarized in a PowerPoint presentation.

#### Agenda Item 13: Any other business

93. Participants discussed a statement drafted by ICF on behalf of the range states on the situation at Poyang Lake. The participants accepted the statement by recognizing that it does not represent the view of the Chinese Government and that the Chinese representatives did not associate with endorsing the statement.

94. Dr. Archibald, ICF, informed about a publication by Dr. Carey Krajewski proposing that the Siberian Crane should be listed in its own genus as Leucogeranus leucogeranus. He noted that this emphasizes the taxonomic uniqueness and ancient lineage of the Siberian Crane.

95. Mr. Geer Scheres, CBCC, invited all participants to visit the Weltvogelpark Walsrode near Hannover and to attend a two-day meeting on crane captive breeding and trade on 14-15 June.

#### **Agenda Item 14: Closure of the meeting**

96. There being no other business, the Chair concluded by saying that the meeting had considered all issues effectively. He thanked the CMS Secretariat and ICF for the logistical and substantive preparations, all participants for their active attendance and valuable contributions, and the interpreters for their efforts. He also expressed the hope that the Conservation Plans will set up the MOU activities for the next three years and that all activities will be implemented and not only stay a wish list. He thanked the range states for electing him the Chair of the meeting. Claire Mirande, ICF, warmly thanked the hardworking and skilled staff and interns at the CMS Secretariat and the interpreters. Ms. Elizabeth Mrema, CMS Executive Secretary, thanked Germany, Switzerland, ICF, GEF, Wetlands International, the range states, CMS staff, and the interpreters. She highlighted the important work that is done to improve the status of the Siberian Crane and the need to realize promises and to move to the next priorities. This is not always easy because funding is a challenge but she pointed out that the Secretariat is committed to assist in finding sufficient resources, including in kind and staff time. She agreed to the statement from Iran and suggested to forget the past and move on. The meeting was declared closed at 16.47 on Saturday, 12 June 2010.

#### Annex 1

















#### Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane

### The Seventh Meeting of the Signatories of the Mamorandum Bonn, Germany 10-12 June 2010

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#### Annex 2















Federal Office for the Environment Switzerland

#### Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane

### The Seventh Meeting of the Signatories of the Mamorandum Bonn, Germany 10-12 June 2010

#### **Agenda**

- 1. Welcoming remarks (CMS Secretariat)
- 2. Election of officers
- 3. Adoption of the agenda and meeting schedule
- 4. Opening statements
- 5. Report of the Secretariat
  - 5.1. Status of signatures
  - 5.2. List of designated competent authorities and focal points
- 6. Review of MoU and Conservation Plans' implementation
  - 6.1. Conservation status of Siberian Cranes within the agreement area
  - 6.2. Overview of the UNEP/GEF Siberian Crane Wetlands Project achievements and lessons learned
  - 6.3. Status of MoU implementation
- 7. Future implementation and further development of the MoU and Conservation Plans
  - 7.1. Responding to hunting along the Siberian Crane flyways and its impact on waterbird populations
  - 7.2. Challenges of the Siberian Crane reintroduction to West/Central Asia
  - 7.3. Updating reporting and information management
  - 7.4. Future activities under Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds (WCASN)
  - 7.5. Relationship with other processes and initiatives
    - 7.5.1. East-Asian Australasian Flyway Partnership
    - 7.5.2. Central Asian Flyway
    - 7.5.3. African-Eurasian Waterbird Agreement
    - 7.5.4. World Migratory Bird Day
    - 7.5.5. Integration of MoU with Regional Flyway Programmes
- 8. Future funding of MoU activities
- 9. Conservation Plan (2007-10) development
- 10. Next meeting of the Signatories
- 11. WCASN Dedication ceremony of newly nominated sites
- 12. Conclusions: Discussion of meeting outcomes and confirmation of next steps
- 13. Any other business
- 14. Closure of the meeting















Federal Office for the Environment Switzerland

### Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane

### The Seventh Meeting of the Signatories of the Mamorandum Bonn, Germany 10-12 June 2010

#### **List of Documents**

Symbol	Agenda Item(s)	Title of Document	
Conference Documents			
UNEP/CMS/SC-7/1/Rev.2	3.0	Provisional Agenda (as at 29 March 2010)	
UNEP/CMS/SC-7/2/Rev.2	3.0	Provisional Annotated Agenda and Meeting Schedule	
UNEP/CMS/SC-7/3	3.0	List of Documents	
UNEP/CMS/SC-7/4/Rev.1	5.0	Report of the Secretariat	
UNEP/CMS/SC-7/5	6.1	Overview Report (Advanced unedited draft as of 7 June 2010)	
UNEP/CMS/SC-7/6/Rev.1	9	Conservation Plan Template for the Western, Central and Eastern Populations of the Siberian Crane (2010-2012) (Eng, Rus)	
UNEP/CMS/SC-7/7	7.4	Draft WCASN Action Plan 2010-2012	
UNEP/CMS/SC-7/8	7.1	Strategic considerations towards promoting sustainable waterbird harvesting practices in Western/Central Asia	
UNEP/CMS/SC-7/9	7.4	Brief Report on WCASN for 2007-2009	
Information Documents			
UNEP/CMS/SC-7/Inf/1	5.1	Full Report of the Sixth Meeting of Siberian Crane Range States Almaty, Kazakhstan 15-19 May 2007 (Eng, Rus)	
UNEP/CMS/SC-7/Inf/2	5.1	Status of Signatures to the MoU concerning Conservation Measures for the Siberian Crane	
UNEP/CMS/SC-7/Inf/3	5.1	MoU Concerning Conservation Measures for the Siberian Crane and Conservation Plan	
UNEP/CMS/SC-7/Inf/4	5.1	CMS Convention Text and Appendices	
UNEP/CMS/SC-7/Inf/5	5.2	Provisional List of Administrative and Focal Points (as of February 2010)	
UNEP/CMS/SC-7/Inf/6	5.2	Designated Competent Authority and Focal Point Form	

Symbol	Agenda Item(s)	Title of Document	
Information documents (cont.)			
UNEP/CMS/SC-7/Inf/7.X	6.3.	National Reports of Signatories	
UNEP/CMS/SC-7/Inf/8	6.1	The UNEP/GEF SCWP brochure "Saving Wetlands across Eurasia: Inspired by the Siberian Crane"	
UNEP/CMS/SC-7/Inf/9	6.3	The "Lily of Birds". A Journey to Help the Most Unique and Endangered of Cranes	
UNEP/CMS/SC-7/Inf/10	6.3	Template for the submission of National Reports (2007-2010)	
UNEP/CMS/SC-7/Inf/11	7.4	Site Nomination Guidelines for the Western/Central Asian Site Network for the Siberian Crane and Other Waterbirds (Eng and Rus)	
UNEP/CMS/SC-7/Inf/12	6.2	The UNEP/GEF SCWP Final Report: WINGS ACROSS THE CONTINENT: A Flyway Approach to Conserving the Wetlands Essential for Siberian Cranes and Other Waterbirds	

#### Annex 4















Federal Office for the Environment **Switzerland** 

### Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane

### The Seventh Meeting of the Signatories of the Mamorandum Bonn, Germany 10-12 June 2010

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#### **Part VII: Reference Materials**

# Conservation of Flyway Wetlands in Asia using the Siberian Crane as a Flagship Species: as Overview of the Outcomes of the UNEP/GEF Siberian Crane Wetlands Project<sup>1</sup>

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#### **Abstracts**

The United Nations Environment Programme / Global Environment Facility (UNEP/GEF) Siberian Crane Wetland Project (SCWP) was the first flyway conservation project to be approved by GEF, using the Siberian Crane as a flagship species to inspire efforts at local, national and flyway levels for the conservation of globally significant wetlands. The project aimed to secure the ecological integrity of a network of critical wetlands needed for the survival of the Siberian Crane, migratory waterbirds and other globally significant wetland biodiversity in Asia. This has been accomplished through a wide range of measures based on integrated management and stakeholder participation, for the benefit of local communities and regional economies as well as wetland biodiversity.

This paper reviews the main outcomes of the SCWP at site, national and regional levels. While many details are given in the other papers in these proceedings, this paper provides an overview of accomplishments and lessons learned. Significant results were obtained in

the areas of site protection and management, enhancing stakeholder participation in wetland management, securing water supplies for wetlands, acquiring information on waterbirds for site management, establishing larger scale waterbird monitoring programmes, securing support for the conservation of individual sites and species through systematic education and awareness programmes, and through building capacity for flyway conservation and site network development.

Regional efforts for the conservation of the Siberian Crane will continue under the Convention on Migratory Species Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane (CMS MOU) for the Siberian Crane, with the support of the International Crane Foundation (ICF), national governments and related initiatives. Measures for the sustainable management of sites and waterbird monitoring have largely been mainstreamed under national agency programmes, supported by improved stakeholder involvement.

**Key words:** Siberian Crane, wetland conservation, flyway, migratory waterbird, site network

#### Introduction

The United Nations Environment Program (UNEP)/ Global Environment Facility (GEF) Siberian Crane Wetland Project (SCWP) has effectively spanned a 10-year period. It was conceived in 1998 at a historic Siberian Crane range state Meeting held in Ramsar, Islamic Republic of Iran, and the place of signing of the Ramsar Convention on Wetlands of International Importance. A one-year Project Development Phase grant was approved and the 6-year project officially ran from April 2003 to March 2009, with a nine month extension completed on 31 December 2009. The International

Crane Foundation (ICF) began collaboration with the Governments of China, Iran, Kazakhstan, and Russia to develop this joint initiative, focusing on the Siberian Crane and a network of globally important wetlands along the species' flyways in Eurasia.

UNEP served as the International Implementing Agency with ICF serving as the International Executing Agency with support for the Convention on Migratory Species (CMS). Total project funding was \$23M with \$10.35 M in UNEP/GEF funding and another \$13M in co-financing. The project also secured an additional \$24 M in leveraged financing.

<sup>&</sup>lt;sup>1</sup>This article was copied with permission from the Project Completion Workshop Proceedings for the UNEP/GEF Siberian Crane Wetlands Project (*http://www.scwp.imfo/proceedings/index.htm*)

#### **Project Design**

The project was designed to operate at three levels including site, national, and flyway levels, all considered essential to successful flyway conservation. This paper provides an overview of the overall results achieved by the project across all levels and geographical areas. The design, implementation and results of specific themes and national interventions are addressed in other papers in these proceedings and a more comprehensive description of the project's approaches and results is described in the project completion report (Harris 2009).

#### Site level

The project addressed threats to 16 key wetlands of international importance that are of critical importance for the conservation of the Siberian Crane and other migratory waterbirds (see **Figure 1**). A range of measures was undertaken at each site in relation to its specific conditions in order to ensure its future ecological integrity. Site activities included strengthening legal protection and enforcement, developing and implementing participatory site management plans, capacity building for site management, environmental education and public awareness programmes and alternative livelihood projects.

#### **National level**

The project undertook specific actions to strengthen the national legislative, policy and planning framework for wetland and waterbird conservation, strengthen capacity for international cooperation, and undertake national activities that support site conservation such as monitoring, training, education and public awareness programmes. These activities were coordinated with other national wetlands projects and programmes and have strengthened mechanisms for integrated wetland management through inter-sectoral collaboration. In China and Russia, coordination flyway monitoring and conservation within the country was also a priority.

#### **Regional level**

The project focused on building capacity for the coordination of flyway networks of wetlands along the East Asian and West/Central Asian flyways for migratory waterbirds, led by sites of importance for the flagship species. These networks have been carefully coordinated with other flyway conservation initiatives -- such as the Asia Pacific Migratory Waterbird Conservation Strategy 2001-2005 and the ensuing East Asian Australasian Flyway Partnership (EAAFP), Central Asian Flyway initiative, Africa – Eurasia Waterbird Agreement under CMS, and the Crane Working Group of Eurasia.

We thus sought to form an integrated programme, contributing significantly towards the implementation of international conventions and in delivering activities under the Conservation Plans of the CMS MOU. The regional component was accompanied by applied field research in support of flyway conservation.

A regional coordination center was established in Moscow, which has linked with the above-mentioned initiatives. The project also strengthened capacity for coordination of the North East Asia Crane Site Network's activities in China and Yakutia, and facilitated an enhanced level of flyway conservation activities in line with existing plans and institutional frameworks

#### **Key Accomplishments**

The project's main achievements are summarized in this section, organised around the project's planned outputs. The other papers in these proceedings provide details of specific outputs and outcomes at the different levels of activity.

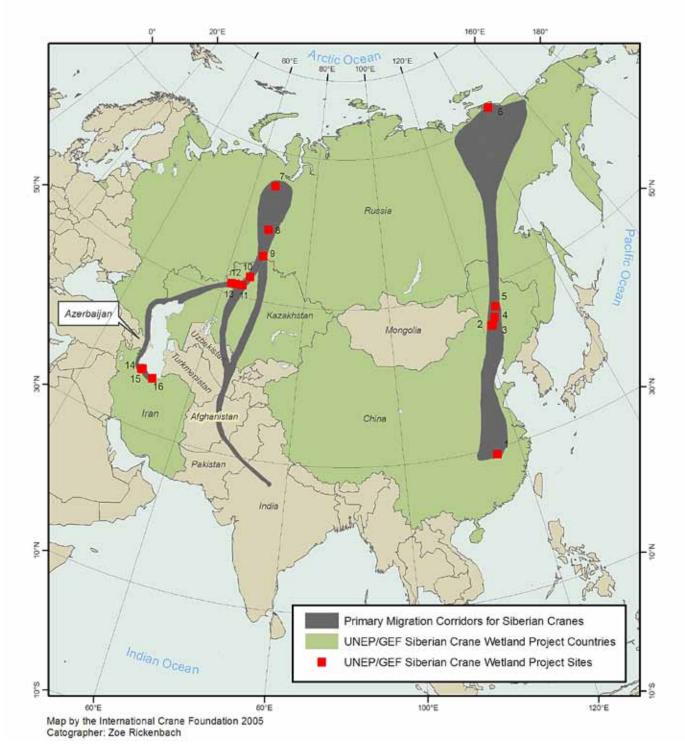
#### **Legal Protection**

Twelve of the 16 project sites have been officially designated as Wetlands of International Importance under the Ramsar Convention and nominations are in preparation for the remaining four sites (see Figure 2). In China, nomination documents have been prepared for Keerqin and Momoge National Nature Reserves; in Russia, nominations are being prepared for Kytalyk and Middle Aldan Resource Reserves in Yakutia. All four project sites in Kazakhstan have been designated as well as the Ural River Delta and adjacent Caspian Sea coast on the Siberian Crane's western migration route. For Iran, the Ramsar Site at Bujagh was extended to cover the whole area of the National Park in December 2009. Naurzum Nature Reserve forms part of the World Heritage Site Saryarka - Steppe and Lakes of Northern Kazakhstan (450,344 ha), which was inscribed on 12 July 2008.

Changes in the national protection status and size of protected areas at SCWP sites during project implementation are summarized in **Tables 1 and 2.** 

The creation of the provincial level Synsko Voykarskyi Natural Park represented an innovative approach to the loss of the Ministry of Agriculture financial and staff support for the Kunovat Nature Reserve by establishing a buffer zone around the reserve and linking management to three new regional reserves created to protect Siberian Cranes (Blagovidov et al., these proceedings).

Overall, the legal protection of flyway wetlands at the project sites was enhanced by over 2.4 million hectares in the four countries with the assistance of the project.

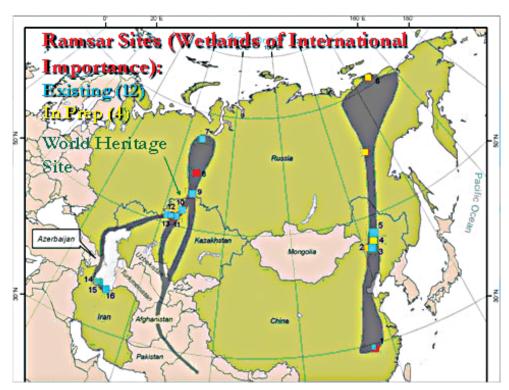


**Figure 1.** The UNEP /GEF Siberian Crane Wetland project focused on two main migration routes of the Siberian Crane in W/C and E Asia. The sites were selected to cover all stages of the migration cycle, including breeding, staging and wintering areas. Map by the International Crane Foundation 2005. Cartographer: Zoe Rickenbach

#### **Management Plans**

Management plans have been developed for most project sites, following the Ramsar Convention's approach to participatory, science-based management (Blagovidov et al., these proceedings; Germogenov, these proceedings; Inyutina and Bragin, these proceedings; Liu et al., these proceedings). National wetland management planning guidelines were developed for Russia

(Minaeva, 2006). The project also contributed significantly to the development of management capacity at the sites through training, technical assistance and provision of equipment. In China, at least 25 training courses were conducted on a variety of technical subjects, also benefiting other Chinese sites in the NE Asia Crane Site Network (now part of the EAAFP waterbird site network).



**Figure 2.** Ramsar Wetlands of International Importance designated under the UNEP/ GEF Siberian Crane Wetland Project

Table 1. Changes in legal status of protected areas at SCWP project sites

Site Name	New or Upgraded Protected Areas		
	Nanjishan Provincial Nature Reserve upgraded to national-level reserve (33,300 ha)		
Poyang Lake Basin, China	Duchang County Nature Reserve upgraded to provincial-level reserve (41,100 ha)		
	HeXi County Nature Reserve established (4,000 ha)		
Fereydoon Kenar, Ezbaran, & Sorkhe Rud Damgahs, Iran	Fereydoon Kenar Non- Shooting Area established (5,427 ha)		
Bujagh / Sefid Rud Delta, Iran	Bujagh Non-shooting Area upgraded to Bujagh National Park (3,276 ha)		
Zharsor and Urkash Lakes, Kazakhstan	Zharsor-Urkash Nature Reserve designated (53,350 ha)		
Kunovat River Basin Wetlands, Russia	Zuravliny Division of Synsko-Voykarsky Natural Park (317,100 ha) established as a buffer around existing Kunovat Zakaznik (147,000 ha)		
	Sobty-Yugansky (217,030 ha), Poluisky (48,260 ha) and Verkne-Poluisky (92,040 ha) regional-level Zakazniks established in adjacent areas		

Table 2. Changes in size of protected areas at SCWP project sites

Site Name	Area ha (2002)	Area ha (2009)
Naurzum Nature Reserve, Kazakhstan	60,694	191,381, plus new buffer zone of 116,726
Kytalyk Resource Reserve, Russia	1,607,000 (plus 1,037,960 ha of contiguous local level reserves)	2,598,590 (plus 1,472,004 ha of contiguous local level reserves)
Bujagh Non-hunting Area / National Park, Iran	2,000	3,276

Improvements in management effectiveness at individual protected areas at the project sites were recorded annually throughout the project using the World Bank/World Wildlife Fund Management Effectiveness Tracking Tool (Stolton et al. 2003). Most sites showed progressive improvements, with a few showing significant gains (especially where major improvements were made in legal protection) and a few made little progress due to significant constraints outside the control of the project. Overall, the project resulted in improvements to the management of over seven million hectares of wetlands.

### **Stakeholder Participation and Sustainable Livelihood Projects**

Stakeholder participation was promoted and established at project sites through the establishment of Site Management Committees and similar mechanisms at other scales (see Harris 2009). Community development pilot projects at Chinese sites have produced positive results at Poyang, Zhalong, Xianghai and Keerqin (see Liu et al., these proceedings) and guidelines on community participation based on this experience have been published with support from the project (Qian et al. 2008).

Progress was made towards establishing the basis for co-management of Fereydoon Kenar Non Shooting Area (Iran) between the Department of Environment and private landowners organised through duck trapper associations (see Neshat, these proceedings). These associations received intensive guidance and capacity building towards more sustainable collective management of the area and its waterfowl resources, and to help diversify income sources. The project also supported a participatory Integrated Pest Management pilot project at Fereydoon Kenar in collaboration with the UNDP/GEF Small Grants Programme, which has resulted in continued significant reductions in pesticide use by the participating farmers.(see Heidari 2003, 2005).

### **Community Based Organisations** (CBOs)

At the project sites in Kazakhstan, new CBOs have been established, officially registered and trained to develop

grant proposals to support their activities (Inyutina, Sabitov and Sabitova, these proceedings). The CBOs have empowered local communities to take action on specific issues such as water management, livelihood development and environmental education. As a result, they are actively involved in organising crane celebrations, producing information awareness materials, networking, providing public services such as internet access, supporting development of sustainable livelihood activities such as ecotourism and felt production, and supporting conservation activities like waterbird monitoring. This provides valuable support to the reserve management authority.

Provincial and local stakeholder support in Russia has supported protected areas and helped resolve land use conflicts. The project mitigated some immediate threats – including the removal of an exploratory oil well inside a protected area at Konda Alymka (West Siberia), and working with an oil company at Momoge (NE China) to monitor and reduce operational impacts on wetlands. In Yakutia, advice was provided on the routing of overhead powerlines and the use of scaring devices to reduce bird mortality from collisions.

To achieve sustainable and systematic management regimes in Iran, considerable effort was directed towards building the capacity of local stakeholders through developing community-based organisations in Fereydoon Kenar. The goal is for these local groups to act as facilitators during the process of empowerment of local communities (Neshat, these proceedings).

### **Inter-sectoral Cooperation and Water Management**

Six years of drought combined with great human needs for water have reduced the water available to sustain wetlands in Northeast China. The project has sought to address this complex problem by developing site water management plans based on hydrological assessments, and aligned towards wetland conservation and restoration goals. These water management plans have now been incorporated into regional long range water distribution plans for the Songliao River Basin, providing a mechanism for secure water supply to meet ecological needs. A meeting in November 2007 gained the

support of relevant agencies and subsequently efforts have been made to work out detailed implementation arrangements for water delivery. Monitoring of water levels and ecological conditions provides feedback on the success of wetland restoration efforts, allowing adjustments to be made.

Water management plans have been developed for Zhalong, Xianghai, Keerqin, and Momoge in China and for Naurzum in Kazakhstan. Hydrological monitoring is continuing at Zhalong (Jiang, these proceedings; Su et al., these proceedings; Tong et al., these proceedings) and other sites to assess progress towards restoration objectives.

In Kazakhstan, a new approach towards water resources management was applied, with the conclusion of a basin agreement between the stakeholders through a Basin Council supported by new legislation on water resources use and changes in the socio-economic situation in stakeholders (Inyutina, Smbayev, Sabitov, and Bragin, these proceedings).

#### **Applied Research**

The project has also conducted applied research and ecological monitoring including an ICF/SCWP study of ecological relationships between water levels, Vallisneria spiralis production and waterbird distribution at Poyang Lake NNR (Burnham et al., these proceedings). This information has been used in the preparation of technical reports relating to a proposed water control structure project at Poyang Lake aimed to hold back water and stabilize water levels in winter. This project would potentially have significant negative impacts on the Siberian Crane and other regional migratory waterbird populations as well as the overall ecological integrity of this dynamic wetland ecosystem.

A similar study has been supported at Xianghai NNR that has been implemented by a local consultant. Geographical Information System (GIS) images have been developed for project sites and incorporated into scientific studies and management planning. Scientific studies in Iran included investigation of duck-trapping at Fereydoon Kenar and participatory Integrated Pest Management pilot projects. Guidelines for the reduction of highly pathogenic avian influenza risks at wetlands of importance for waterbirds were developed through the project's regional programme and included as part of Ramsar Resolution X.21 (Ramsar Convention Secretariat 2008) and published as a SCWP Technical Brief (Prentice 2009).

#### **Waterbird Monitoring**

Capacity for waterbird monitoring was improved through the establishment or strengthening of monitoring programmes at various site levels providing new data on waterbird populations and sites. Highlights include: development of flyway monitoring network in China (Qian et al., these proceedings); development of consistent annual waterbird counts across Poyang Lake Basin, supported by periodic aerial surveys (Yu and Wu, these proceedings); ground and aerial surveys of breeding large waterbirds in NE China (Piao, these proceedings); continuation of long term ground surveys of breeding birds at Kytalyk in Yakutia and development of migration monitoring in South Yakutia (Germogenov, these proceedings); migration surveys of waterbirds in North Kazakhstan with support from Russia (Kovshar et al, these proceedings; Yerokhov et al. 2009); aerial surveys of breeding birds in West Siberia; and regular International Waterbird Census (IWC) counts and development of systematic waterbird monitoring at project sites in Iran.

A Siberian Crane regional database has been established to store and share data and to support publications on the species (see Ilyashenko et al., these proceedings). Training workshops for reserve staff and other users were help in Kazakhstan and China. The database will be maintained by ICF on behalf of the range states.

#### **Training and Capacity Building**

The project has supported numerous short-term training courses for site staff to build capacity (Germogenov, these proceedings; Inyutina and Bragin, these proceedings). These are usually implemented by national consultants, but also some international training providers. Several staff have taken formal university courses supported by the project. Some linkages have been made between sites and local institutes and universities that may provide longer term benefits. Progress on capacity building at sites has been monitored using the World Bank / World Wildlife Fund Protected Area Management Effectiveness Tracking Tool.

### Communications, Education and Public Awareness

Environmental education and awareness programmes sensitized local populations to support conservation measures (Inyutina and Belyi, these proceedings; Inyutina, Sabitova, Salyutina, Smbayev, these proceedings), and across wider regions through formal education, flyway education programmes and media coverage (Gavney Moore and Ilyashenko, these proceedings; Zhang et al., these proceedings). Two websites have been established linked to SCWP activities (www.scwp.info) and for activities linked to the CMS MOU (www.sibeflyway.org). Following the end of the project, the two websites have been merged (www.sibeflyway.org).

Regional public awareness programs and events (i.e.,

World Wetlands Day, World Migratory Bird Day) are an effective tool for flyway networks to support conservation. Creative and effective Crane Festivals have been sponsored and in 2009 they were held at 120 sites in 9 countries and interest is growing. These events have been highly effective at engaging diverse audiences and inspiring action (Gavney Moore and Ilyashenko, these proceedings).

#### **Dissemination of Project Outputs**

The results and lessons learned from this project have been broadly shared through international meetings, publications, electronic media and other means. The results were showcased at the Ramsar Tenth Meeting of the Conference of the Parties (COP) to the Ramsar Convention in South Korea in October 2008 and at the CMS COP 9 Meeting in Rome in December 2009. Presentations have also been made at international scientific conferences and workshops. National level project completion workshops were held in 2009. The final results were presented and the Seventh Meeting of the CMS MOU Signatories (MOS7) held in Bonn from 10-12 June 2010 and plans discussed for the transition of activities under the CMS MOU following project completion.

The Project Completion Workshop represented by these proceedings was held in Harbin China from 14-15 October 2009 along with a special seminar on the Zhalong National Nature Reserve on 17 October 2009. The project's Terminal Report "Safe Flyways for the Siberian Crane: A flyway approach conserves some of Asia's most beautiful wetlands and waterbirds" (Harris, 2009) takes a broad and honest look at the background and development of SCWP, the experiences and practices of the project, lessons learned about flyway and waterbird approaches, and the challenges and commitments ahead (http://www.scwp.info/final\_report.shtml).

Project outputs including national and site level technical reports, fact sheets and technical briefs, and an image database have been archived by ICF and are available through the ICF Library, the project website and on CD.

#### **Project Outcomes**

Overall, the project has increased the security of the network of key wetlands for the Siberian Crane and millions of other waterbirds. Some of the greatest successes were at site level with support from National Executing Agencies. Many site activities have been mainstreamed by national and regional governments for sustainability and there is improved understanding and support for stakeholder participation at many sites. Some national policies, legislation and plans have been strengthened to support the conservation of wetlands and waterbirds, and specifically the Siberian

Crane. Inter-agency cooperation was achieved on river basin management in key regions affected by water shortages for wetlands.

The partners' capacity for international cooperation on flyway conservation was improved. In East Asia, the project supported the development of the North East Asian Crane Site Network under the emerging EAAFP. An important accomplishment at the flyway level was the establishment of the Western/Central Asia Site Network (WCASN) for Siberian Cranes and other Migratory Waterbirds under the CMS MOU for the Siberian Crane. Ten sites from five countries (India, Islamic Republic of Iran, Kazakhstan, Turkmenistan and Uzbekistan) were designated for the WCASN on 18 May 2007 and two sites from Pakistan were designated on 12 June 2010 (see Figure 5 in Part 5 on WCASN). A further 16 sites in six countries were proposed pending government approval and official nomination procedures. An atlas of key sites for the Siberian Crane and other waterbirds in Western/Central Asia has been prepared (Ilyashenko 2010) and small grants were provided in support of Crane Festivals at listed WCASN sites. Activities will be developed and implemented under the CMS MOU Conservation Plans including coordination with the Central Asian Flyway initiative, winter and migration monitoring, and development of strategies to reduce impacts of illegal hunting.

Capacity for international cooperation was also supported by the project, including technical assistance for the accession of Kazakhstan and Iran to CMS, and for the accession of Kazakhstan to the Ramsar Convention.

The results of the SCWP have demonstrated that the Siberian Crane has been a highly effective flagship for biodiversity conservation and an effective umbrella species benefiting a wealth of other species dependent on the same wetland ecosystems including more than 27 globally threatened migratory waterbirds. This critically endangered bird is a strong cultural symbol representing long life and fidelity and serving as a spirit guide. As a migratory species it has served as an effective ambassador, and its dependence on large, open wetlands has helped draw much needed attention to these vulnerable ecosystems.

#### Sustainability

An important measure of the long-term outcomes of SCWP is the sustainability of specific activities. Measures for the sustainable management of sites and waterbird monitoring have largely been mainstreamed under national agency programmes and budgets. Wetland management has been linked to water resource management policies and plans. Site Management Committees have been established and many will be maintained after the project ends. Stronger partnerships have been established to support flyway network

conservation. Exchange of staff and coordinated surveys has increased connections between countries. Regional efforts for the conservation of the Siberian Crane will continue under the CMS MOU on the Siberian Crane, with the support of ICF, national governments and related initiatives.

#### **Lesson Learned**

During the course of the ten years of project design, planning, implementation and review a wide range of lessons have been drawn from SCWP that relate to flyway-scale conservation, more general wetland and waterbird conservation, and operational issues involved in the overall management and implementation of the project. These lessons are described in Harris (2009), Zandri and Prentice (2009) as well as in internal project progress reports to UNEP and GEF. A few key lessons are as follow:

For flyway conservation, long-term projects and long-term commitment are needed. The length of this project (six years plus a nine-month extension) was highly important to achieving successful outcomes. Particularly for developing shared understanding and common objectives, within and among countries, activities need to be spaced over time so that there is ample opportunity for learning, action, evaluation, and adjustment for the next round of activity.

**Due to their complexity, flyway projects require a long start-up time.** SCWP, like other flyway projects, required years for design and preparation before funding could be secured and implementation could begin. Accordingly, there is a special need to re-evaluate logframe indicators, activities and budgets during the project inception phase, as an opportunity to make significant adjustments.

Due to their geographic scope and complexity, flyway projects need to put considerable emphasis into strategies for sustaining conservation impacts after project completion. Threats to migratory waterbirds at the flyway scale require prolonged efforts in terms of monitoring, management and education of diverse audiences. Planning for the sustainability of activities should begin in the early stages of a project. These activities will need to be incorporated into national workplans and budgets. In addition, conservation strategies and actions should be included in resolutions and workplans of multilateral environmental agreements such as CMS, Ramsar, and the EAAFP.

Successful flyway conservation requires diverse components that complement one another. The design for SCWP included site, national, and regional scales of activity. Even within these three levels, diverse types of activities were needed given the array of threats present – interventions at single sites, for ex-

ample, often included research, management planning, community involvement, and public education plus action targeted at one or more specific threats. Careful balancing is needed between targeting resources and effort, and yet involving all players who are important to the outcomes.

This complexity of flyway conservation makes project management and technical oversight correspondingly complex. Ample resources are needed for these management tasks, both within the international executing agency and within the national executing agencies; again, the longer time frame favors successful implementation. Selection of staff with appropriate skills is a crucial step in order for the national project management teams to provide the effective oversight, organisation, and detailed reporting needed for GEF projects.

Phasing of flyway projects provides opportunity to pace the work, to adjust plans between phases, and to respond to early successes or new findings. Due to the scale and diversity of activities envisioned for SCWP, the project was divided into two phases and work at some sites did not start until Phase 2. This allowed project staff at all levels to focus on fewer activities during the early years, while baseline studies and capacity building were underway. This learning was then applied successfully to Phase 2 interventions, which tended to be more efficient and, at some sites, more quickly effective.

While many site level activities may be appropriately undertaken through single-country projects, certain sites or clusters of sites may be critical to the viability of the flyway itself and therefore deserve significant attention in flyway scale projects. Poyang Lake, for example, is the only or the primary wintering destination for several threatened species including the Siberian Crane, Oriental Stork and Swan Goose, and threats to its integrity would have substantial impact on the entire East Asia flyway. Similarly, the wetlands of Songnen Plain in northeast China or the steppe lakes region in northwest Kazakhstan have vital functions as major staging areas at mid points along their migration routes. Where single threats (or the same suite of threats) affect all wetlands in a key portion of the flyway, flyway conservation efforts do need to address these challenges.

Where site level activity is planned in flyway projects, priority should be given to strategies or demonstrations that can be replicated elsewhere, and to supporting similar interventions within multiple countries while ensuring that exchange of staff members and information fosters learning across sites and countries. Although threats are often similar among different countries of the flyway, different contexts (ecological, institutional and cultural) can lead to different challenges or solu-

tions, while exchange leads to new learning opportunities and to flyway level thinking that transcends single country perspectives.

While flyway projects emphasize transboundary and multi-country aspects, flyway-scale activity within countries can be highly important to strengthening flyway protection. Three of the four project countries have long segments of the flyways within their national boundaries, and were able to coordinate monitoring effort at multiple sites to a degree not accomplished previously. For example, China's flyway monitoring involved 18 partner organisations and 158 sites, and found numerous new locations of significance to cranes and other waterbirds. This internal aspect to flyway conservation should not be neglected, especially in countries like China that have many waterbird populations nesting, migrating and wintering all within the nation's boundaries.

Conservation solutions need to involve diverse stakeholders who have very different priorities and needs. In building such involvement and enlarging alliances, care is needed in communicating about conservation threats and conflicts in order to engage multiple players in the solutions. Zhalong is a good example, where important accomplishments resulted from SCWP, yet considerably more work is needed to restore the marsh successfully. The project found it best to emphasize positive achievements and clearly express the needed improvements as positive opportunities – in other words, honest assessment of continuing challenges can be communicated in large part by promoting the positive, achievable remedies.

Given the diverse audiences who must be involved

#### in solutions to waterbird and wetland conservation, communications must be a vital component.

The resources (staff and funding) needed for effective communications in Phase 1 of SCWP was under-estimated, and adjusted in Phase 2. For multi-country projects where language differences exist, communication must be an even higher priority. Professional communications staff or partners should be engaged, but technical staff also need to allocate time for writing and editing. A Communications Strategy, at regional and national levels, should be created at the beginning of the project to guide activity and periodically revised. Communications need to rely on diverse media to be effective, given the diversity of audiences to be reached. Therefore communication tools need to be adapted to suit message, audience, and local circumstances.

The detailed reports also provide additional guidance on the importance of fostering national level support to enable success, the importance of provincial and local leadership at project sites, and the added value of contributions provided by inspired community members and through partnerships between international and national consultants.

Flyway conservation is never a finished task. The distances birds travel across human-dominated land-scapes and the growing intensity of development, growing numbers of peoples and growing needs for water, all mean threats and crises will continue. Flyway conservation is a process that depends upon highly diverse, but interlocking activities at site, national, and international levels. SCWP created a vibrant process on all these fronts, and multiple ways to respond to future needs (Harris, 2009).

#### References

Blagovidov A, Ermakov A, Klimov Yu. 2009. Optimization of the Protected Area System around Kunovat Federal Zakaznik in Yamalo-Nenetsky Autonomous Region, Russian Federation – An Example of Successful Cooperation with Local Administration. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.

Burnham J, Barzen J, Li F, Zeng N. 2009. Long Term Ecological Monitoring and its Application at Poyang Lake, People's Republic of China. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.

**Gavney Moore S, Ilyashenko E.** 2009. Regional Flyway Education Programs: Increasing Public Awareness of Crane Conservation along the Crane Flyways of Eurasia and North

America. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.

**Germogenov N.** 2009. Monitoring of Siberian Crane Flyways in Yakutia. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.

**Harris J.** 2009. Safe Flyways for the Siberian Crane. A flyway approach conserves some of Asia's most beautiful wetlands and waterbirds. International Crane Foundation, Baraboo, USA. 99 pp.

**Heidari H.** 2003. Farmer Field Schools slash pesticide use and exposure in Iran. Pesticide News 59: 12-14.

**Heidari H.** 2005. Sustainable Agroecosystem Management in Paddy Fields Fereydoon Kenar Non-Shooting Area. Plants

- Pests and Diseases Research Unit, Ministry of Agriculture Jihad, Iran. (Booklet).
- Inyutina V, Belyi A. 2009. Systematic Approach to Development of a Sustainable Environmental Education Programme at Key Wetlands in Northern Kazakhstan. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/ Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Inyutina V., Bragin Y. 2009. Conservation of Flyway Wetlands In Northern Kazakhstan: Improvement of Conservation Status, Establishment of New Protected Areas And Strengthening of Management Capacity. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Inyutina V, Sabitov R, Sabitova T. 2009. Capacity Building for Local NGOs and Alternative Livelihoods Programme for Key Wetlands in Kostanay Region, Kazakhstan. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Inyutina V, Sabitova T, Salyutina E, Smbayev I. 2009.

  A New Approach to Ecological Information Dissemination for the Public at Large at the Local Level in Kazakhstan. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Inyutina V, Smbaev I, Sabitov R, Bragin Y. 2009. Solution of Hydrological Problems at Naurzum Lake System through Integrated Water Resources Management. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/ Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Ilyashenko E, Mirande C, Sorokin A, Archibald G. 2009.

  The Current Status of the Siberian Crane Grus leucogeranus (abstract) In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- **Ilyashenko EI (Editor).** 2010. Atlas of the Siberian Crane Sites in Western/Central Asia. International Crane Foundation, Baraboo, Wisconsin. 116 pp.
- **Jiang J.** 2009. Recommendations on the ecological water needs for the wetlands of national nature reserves in Songnen Plain, NE China. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF

- Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Kovshar A, Salemgareyev A, Rosenfeld S, Kellomaki E, Bragin Y, Inyutina V, Yerokhov S. 2009. Collaborative Flyway Monitoring and Capacity Building for Future Waterbird Monitoring in Northern Kazakhstan. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Liu J, Qian F, Zhao L, Luo Y. 2009. Integrating Community Development with Management of Grasslands and Wetlands at the Keerqin Nature Reserve, Inner Mongolia, China. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- **Minaeva TY.** 2006. Developing wetland management plan (field guide). Moscow: 2006, 24 pp. (bibl. 28+17).
- Neshat SN. 2009. Community Participation and Development of Local Environment Programmes through Community-Based Organisations at Fereydoon Kenar, Iran. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Piao R. 2009. Census of Breeding Cranes in Songnen Plain in Northeast China. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- **Prentice C.** 2009. Practical advice for reducing avian influenza risks at wetlands of importance to waterbirds. SCWP Technical Brief, International Crane Foundation. www.scwp.info.
- **Protected Areas Management Effectiveness Information Module** (integrated with the World Database on Protected Areas website): http://www.wdpa.org/ME/Default.aspx .
- Qian F, Jiang H, Wu Z, Li X et al. 2009. Waterbirds Monitoring Along Flyway of Siberian Crane in China. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- **Qian F., Liu J., Jiang H.** 2008. Community Participation in Wetland Management. China's Science and Technology Publishing House. Beijing. (in Chinese).
- **Ramsar Convention Secretariat,** 2008. Ramsar Resolution X.21. Guidance on responding to the continued spread of highly pathogenic avian influenza (Section 2 of the Annex). http://www.ramsar.org/res/key\_res\_x\_index\_e.htm.

- **Stolton S, Hockings M, Dudley N, MacKinnon K, Whitten T.** 2003. Reporting Progress at Protected Area Sites. A simple site-level tracking tool developed for the World Bank and WWF. World Bank and WWF.
- Su L, Harris J, Zhang G, Tong S, Li F, Yang X, Zhang Y. 2009. The Ecological Monitoring Program at Zhalong, a Tool for Guiding Restoration of the Wetland. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Tong S., Lü X, Zhang M,Cao B, Yao Y. 2009. Water Management and Water Supply Restoration Design for Zhalong Wetlands. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- **Yerokhov S, Inyutina V, Salemgereyev A.** 2009. Consolidated analysis: main monitoring results of seasonal migration of the Siberian Crane and other waterbirds on the project sites and surrounding areas of Kostanay Region, North-Western Kazakhstan, in 2005-2008. SCWP National Coordination Unit, Astana, Kazakhstan.

- Yu C, Wu Y. 2009. Aerial and Ground Surveys of Wintering Waterbirds in Poyang Lake Basin. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- Zhang J, Han J, Hu Y, Garland J. 2009. A Flyway Approach to Education Based on Local Perspectives on Resource Needs and Protection. In: Prentice C. (Editor). Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.
- **Zandri, E. & Prentice, C.** 2009. The Experience of UNEP GEF and Partners in Flyway Conservation. UNEP GEF Portfolio Evolution and Outlook. UNEP GEF Biodiversity Issue Paper BD/001. Nairobi: UNEP.

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# Strategic Considerations Towards Ensuring Sustainable Waterbird Harvesting Practices in Western/Central Asia

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### **Summary**

The Siberian Crane and other globally threatened water-bird species, and the regional populations of migratory waterbirds have been seriously impacted by illegal and unsustainable hunting activities in Western/Central Asia. The widespread occurrence of such uncontrolled practices represents a major obstacle for any attempts to increase the wild population or to reintroduce the Siberian Crane in this region. Political instability and war remain significant constraints to effective responses in some parts of the region, while management capacity is also often constrained in the transitional economies of most of the region. Information on waterbird harvesting is sparse and incomplete, therefore there is a weak basis for science-based management of hunting activities.

On the other hand, good experience and guidelines exist from other nearby regions to support efforts in Western/Central Asia. Many of these approaches can be relatively easily transferred, if the political will and adequate resources exist. National reports to the CMS MOU on the Siberian Crane have provided indications of the levels of support available from signatory countries, and discussions with international hunting and conservation organisations in June 2010 showed support in principle for development of initiatives in this region. There are examples of good practice within the region (see section 1.4) that can be further developed, including a review on Developing Sustainable Wildlife Management Laws in Western and Central Asia covering 10 countries supported by the Food and Agriculture Organisation of the United Nations (FAO) and International Council for Game & Wildlife Conservation (CIC) now supports the Wildlife Initiative for Central Asia and the Caucasus (WICAC).

This document advocates a regional response to encourage the adoption of sustainable waterbird harvesting practices in Western/Central Asia. This goal implies compliance with the guidance of related multilateral environmental agreements on the sustainable use of biodiversity and the promotion of related conservation measures such as species protection, habitat conservation, stakeholder participation and environmental education. In the context of waterbird conservation and CMS, it should also include a strong emphasis on the phasing out of lead shot, which has been demonstrated to be a significant threat to health of some waterbird species, including the Siberian Crane.

The implementation of such a strategy requires a broad partnership at multiple levels, which would take time and resources to develop. It is therefore proposed that priority should be given to focused efforts that will contribute towards securing the protection of the Siberian Crane. Agreed actions should be included in the Conservation Plans for the CMS MOU on the Siberian Crane. This focused approach, continuing the use of the Siberian Crane as a flagship species, is more likely to make headway through gaining the sympathy and understanding of hunting communities. In turn, this may help to demonstrate approaches that are of wider value in bringing about sustainable waterbird hunting practices.

The first response should be baseline national assessments of waterbird harvesting, using a standardized approach involving a stakeholder consultation process. It is suggested that these may be piloted in key areas that are hotspots for hunting related conservation issues first.

At the same time, a regional Code of Practice for Responsible Hunters should be developed through a process of consultation with stakeholders, which can be adapted by each country. A consultative approach is required to achieve buy in from key stakeholders.

Secondly, meetings should be organised to discuss priority hunting issues with relevant stakeholders and experts. This should address the management of spring hunting in certain regions as a priority. Perhaps within the context of the FAO/CIC led "Wildlife Initiative for Central Asia and the Caucasus" (WICAC), an international conference should be planned to present best practice on sustainable hunting and waterbird management to raise awareness among policy-makers and develop a regional harvest management framework.

Demonstration projects should be developed for key localities or sub-regions that are of international importance for migratory waterbirds and threatened species, where hunting is a major conservation issue, and as far as possible, where initiatives can build on past experience and existing capacity. These should incorporate targeted education and awareness programmes focusing on hunters. Awareness programmes should convey the key message that hunters are an essential part of the solution. Capacity building should be conducted for hunting organisations that are able to contribute effectively towards more sustainable practices, including participation in conservation programmes.

Individual project concepts should be developed based on an assessment of critical threats and opportunities (i.e., sites; people, types of hunting, times of hunting, and social/economic/cultural driving factors) and based on consideration of wider hunting issues (i.e., environmental impacts, governance, economics, and social aspects). Priorities should be linked to Siberian Crane conservation with wider implications considered. These individual projects can be used to approach donors. These should vary in size and scope, including:

- Regional or national project support for conducting national assessments to establish baseline surveys for migratory waterbird harvesting( especially in areas of particular importance for Siberian Cranes and other globally threatened birds) and to identify trends and design response measures. Response measures would include reform of legislation, enforcement, policies, institutional frameworks, capacity building, education and awareness-raising, etc.
- Regional education and awareness-raising campaigns targeting hunters and related stakeholders, ideally in partnership with hunting organisations in order to achieve mutually beneficial goals. These should develop and publicise codes of practice and use mass media according to targeted communications plans. Awareness programmes should include the environmental impacts of using lead shot and promote the use of available alternatives. An ICF project to support hunter education in Afghanistan, Kazakhstan, Pakistan, Russia and Uzbekistan will start in late 2010.
- Meeting of the Crane Working Group of Eurasia on management of spring hunting linked to consultations with stakeholders.
- International conference on sustainable hunting to present best practice examples and raise awareness, possibly in the context of the FAO/CIC led Wildlife Initiative for Central Asia and the Caucasus (WICAC).
- Demonstration activities at key sites involving community participation, development and aware-

ness-raising. Criteria for site selection would include importance to Siberian Cranes, presence of major waterbird concentrations including threatened species, significant hunting/harvesting issues, and the possibility to build on existing experience and capacity for greater effectiveness. This is likely one of the most effective and sustainable approaches, together with the following point.

• Sustained long term support for small scale grassroots projects at specific sites where community education and participation is critical, especially where serious constraints exist for the implementation of larger international technical assistance projects.

Recognition that hunters are an essential part of the solution is key to success. Hunters have common interests, especially in habitat conservation and maintenance of waterbird populations, and can support conservation efforts through increased political leverage and financial contributions, as demonstrated in North America and some EU countries.

Sustainable hunting practices should recognize the environmental damage arising from the use of lead shot and promote the use of non-toxic shot alternatives in line with the AEWA and CAF Action Plans.

Projects should aim to achieve benefits for local communities, ecosystems and wildlife beyond the Siberian Crane and other primary concerns for greater sustainability. Integration of projects with existing programmes or initiatives is also likely to assist their sustainability. As recognized in The Hague Action Statement (see section 2.2), there are many potential synergies between CMS/AEWA-led species conservation initiatives. In the case of the Siberian Crane, this includes the Single Species Action Plans for the Lesser White-fronted Goose, Slender-billed Curlew, Sociable Lapwing, etc.

It should be recognized that addressing unsustainable hunting practices across this region is a long term prospect; although more localized successes could be expected in the short term through targeted efforts.

## PURPOSE AND SCOPE OF THIS DOCUMENT

This document aims to provide an overview of the conservation challenges currently provided by unsustainable waterbird harvesting practices, especially in Western/Central Asia. It indicates available experience and tools that could potentially be applied towards addressing this issue and suggests options for moving forward within the framework of the Conservation Plans under the CMS MOU on the Siberian Crane and for possible development of new initiatives.

The focus is on promoting sustainable waterbird harvesting (hunting and trapping) through systematic national programmes and interventions at "hotspots" where unsustainable practices are having a major impact, supported by regional technical assistance.

This document focuses on conservation issues related to waterbird harvesting and not other types of hunting (for other bird groups such as passerines, or mammals) although it is expected that such groups may benefit from improvements to national programmes on wildlife exploitation.

The main geographical emphasis is on Western/Central Asia in view of the hunting mortality problems already identified in this region for the Siberian Crane in particular, representing a major obstacle to increasing the wild population and to reintroduction efforts. However, it is recognized that practices in East Asia may also present significant conservation issues, such as spring hunting across Siberia.

Section 1 describes the need for a regional strategy on sustainable waterbird harvesting in Western/Central Asia. Section 2 provides a review of the policies and recommendations under the multilateral environmental agreements. Section 3 summarises guidelines and best practices under other initiatives that could be applied to managing sustainable waterbird harvesting in this region. Section 4 then proposes an approach for Western/Central Asia including a regional strategy, organisation of meetings to discuss priority hunting issues with relevant stakeholder and experts, development of demonstration projects and key sites ("hotspots" for hunting-related conservation issues), and lays out several project concepts for seeking funding support.

#### **DEFINITIONS**

Sustainable Use: The definition of sustainable utilisation (hunting in this case) given in the Convention on Biological Diversity (CBD) is - "the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations"

Sustainable hunting: The use of wild game species and their habitats in a way and at a rate that does not lead to the long-term decline of biodiversity. Such use maintains its potential to meet the needs and aspirations of present and future generations, as well as maintaining hunting itself as an accepted social, economic and cultural activity (based on the definition of "Sustainable Use" in Article 2 of the Convention on Biological Diversity (CBD)). When hunting is conducted in such a

sustainable manner, it can positively contribute to the conservation of wild populations and their habitats and also benefit society.

Hunting: The pursuit and/or take of wild game species by all methods permitted by law... Motivations for this activity include consumption (use of meat, hides, furs and/or trophies), recreation, and/or management of game populations.

Game: Game species include all wild avian and terrestrial mammal species for which hunting is legally permitted. (Source: European Charter on Hunting and Biodiversity, 2007).

Sustainable hunting of migratory birds: the hunting of migratory birds that neither causes nor contributes to population declines or major changes in the behaviour or distribution of hunted species and which respects the rights of all users of the environment. (Sustainable Hunting Project, 2007).

# 1. THE NEED FOR A REGIONAL STRATEGY ON SUSTAINABLE WATERBIRD HARVESTING

# 1.1 Hunting as a Mortality Factor for the Siberian Crane

The text of the CMS Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane recognizes the threat posed by hunting to the conservation of the Siberian Crane and states that the signatories agree to work together to provide strict protection for the species, implement the provisions of the Conservation Plans and facilitate exchange of scientific, technical and legal information needed to coordinate conservation measures.

The foreword to the Report of the Sixth Meeting of Siberian Crane range states (Conservation Measures for the Siberian Crane, Fourth Edition, 2008) summarizes the issue as follows:

Differences in conservation status of the Siberian crane populations of the Eastern, Western and Central Flyways engender varied conservation responses: In the Eastern Flyway, the main focus remains in-situ conservation, defensive measures against threats to habitats caused by rapid economic development, and improving information on the status and distribution of the species. In the Western and Central Flyways, the main focus is on preparing the way for restoration efforts. This involves controlling the factors that have caused population declines, most notably through the education of hunters and enforcement of relevant species protection laws, coupled with improving protection of the key sites throughout the migration cycle.

For all of the above, continued international cooperation through an effective mechanism recognized by the governments of the range states remains essential.

The Overview Report for the CMS MOS7 states: Siberian Cranes are strictly protected on their breeding grounds in Russia and on their wintering grounds in India. However, hunting along the migration route is considered to be the primary factor responsible for the demise of the Central Asian flock. Widespread legal hunting in Afghanistan and Pakistan and illegal hunting in Kazakhstan, Russia, Uzbekistan, and Turkmenistan are attributed to poor awareness among local people and poor living conditions.

The threats in the Western Asian flock closely parallel those in the Central Asian flock. Hunting along the migration route is considered to be a significant factor responsible for the demise of this flock. After the collapse of the former-USSR, uncontrolled hunting might have resulted in losses of Siberian Cranes in Azerbaijan and in other areas along the west side of the Caspian Sea.

At the wintering grounds in Fereydoon Kenar, toward the end of each season, when duck-netting becomes unprofitable, the trapping area is opened up to hunting with guns in a massive "shoot-out". There is a potential threat that Siberian Cranes could be shot accidentally. In 2001, the Department of Environment designated a Non-Shooting Area for all of Fereydoon Kenar and the end-of-season shoot-out became strongly forbidden. However, outside such areas, there is a possibility that cranes might be shot as waterfowl shooting is prevalent across the entire South Caspian lowlands. (See Overview Report: http://www.cms.int/species/siberian\_crane/sib\_7th\_meeting.htm)

The national reports to the CMS MOS6 and MOS7 provide more detail on the nature of the threats posed by hunting to the Siberian Crane and other migratory waterbirds, actions taken and planned responses. From this, it can be inferred that hunting is a general threat to the species throughout its range in Western and Central Asia, where numbers are so low that even isolated cases are significant. However, the actual situation varies significantly within and between countries with a number of key areas (outside protected areas) being of particular conservation concern: the South Caspian lowlands of Iran, migration routes and staging areas in Afghanistan and Pakistan, Azerbaijan, Russia (Dagestan) and northern Kazakhstan. These are shown very approximately in Figure 1 below.

Observations in Turkmenistan and Uzbekistan have shown that very often Siberian Cranes were sighted in flocks of Eurasian and Demoiselle Cranes. This makes Siberian Cranes very vulnerable, because the main threat for the Central Asian population is traditional hunting along the flyways especially in Afghanistan and Pakistan. Crane hunting was formerly widespread in these countries but has recently been outlawed in all areas. However, hunting is difficult to control especially in tribal areas. Following the collapse of the USSR, hunting escalated in Kazakhstan and Uzbekistan. Probably shooting was the primary cause of the attrition of the Siberian Crane along central flyway.

Siberian Cranes were never numerous at the main wintering site of the Western flock at Fereydoon Kenar in Iran. A maximum of 9-14 birds spent the winter here during the 1970s and 1980s. Due to various factors such as the space demands of the cranes, natural mortality, illegal hunting, and habitat destruction, the population has dwindled. Also affecting the western flock, the collapse of the USSR precipitated a period of economic strife in Azerbaijan. Hunting regulations were not enforced and it is probable that many Siberian Cranes were shot during their passage over Azerbai-

jan and other areas along their long migration route. (Ilyashenko et al., 2009).

National reports and discussions during the CMS MOS7 on the Siberian Crane MOU (10-12 June 2010, Bonn, Germany) generally confirmed the situation described above, providing further information (see: http://www.cms.int/species/siberian\_crane/sib\_7th\_meeting.htm). This noted that despite legal protection in all countries, illegal hunting (poaching) is relatively widespread along the flyways in West/Central Asia including Russia, Turkmenistan and Uzbekistan. As an example, the Russian representatives reported on a shocking case of illegal shooting of an unusually tame pair of Siberian Cranes at a village near the breeding grounds in Khanty Mansysk Autonomous Region on 19 May 2010.

In Pakistan, poaching/live capture is considered a major threat to crane species. Individual provinces have their own laws and penalties and traditional customs are practised in tribal areas. The federal government has banned the shooting and hunting of cranes all over Pakistan and is reviewing laws in relation to international obligations under CMS and CITES. Crane hunting is still carried out in tribal areas as a traditional sport, and is difficult to control, especially due to current political instability and risk of terrorism in such areas. However, work with communities can be successful, as demonstrated for the Markhor Ibex in Baluchistan.

In Afghanistan, a Presidential decree is in place banning all hunting, but with major challenges in enforcement. Hunting of birds is a traditional activity among communities, and poaching and associated disturbance remains a major threat to all three species of cranes migrating through Afghanistan, mainly during the migration seasons at stopover points. Poisoning is also a problem. Local hunters use various chemicals to anesthetize birds for easy capture. Illegal bird markets exist in major cities.

A related issue is lead poisoning as a result of ingesting lead shot while feeding in wetlands. As an example, in some Yakutian districts where intensive hunting has been confined to the same lakes for a long time, up to 200 lead shots per square meter of sediments have been recorded. Lead shot pellets were found in stomachs of eight bird species including the Siberian Crane and Bewick's Swan. In some Yakutian districts shots were detected in 30% of sampled birds. The effects are passed up the food chain, killing birds of prey that feed on ducks, especially White-tailed Eagles and Golden Eagles (Degtyarev, 2008).

For the eastern population, hunting threats appear less significant overall in comparison to other threats, but with the main causes of mortality identified in Yakutia as poaching, and lead poisoning. Past problems with poaching and poisoning in China have been brought largely under control, but continued monitoring and

enforcement remain important.

Further information is provided in the Conservation Plans for each of the three populations, where progress from 2004-2007 is summarized and priorities for 2007-2009 identified under 1.1 Determine and monitor all prevailing threats of all types to the Siberian Crane and its habitats; and 1.2 Strengthen and improve legislation and enforcement for crane protection; with additional relevant information included in other sections such as on education and awareness and protection and management of habitats.

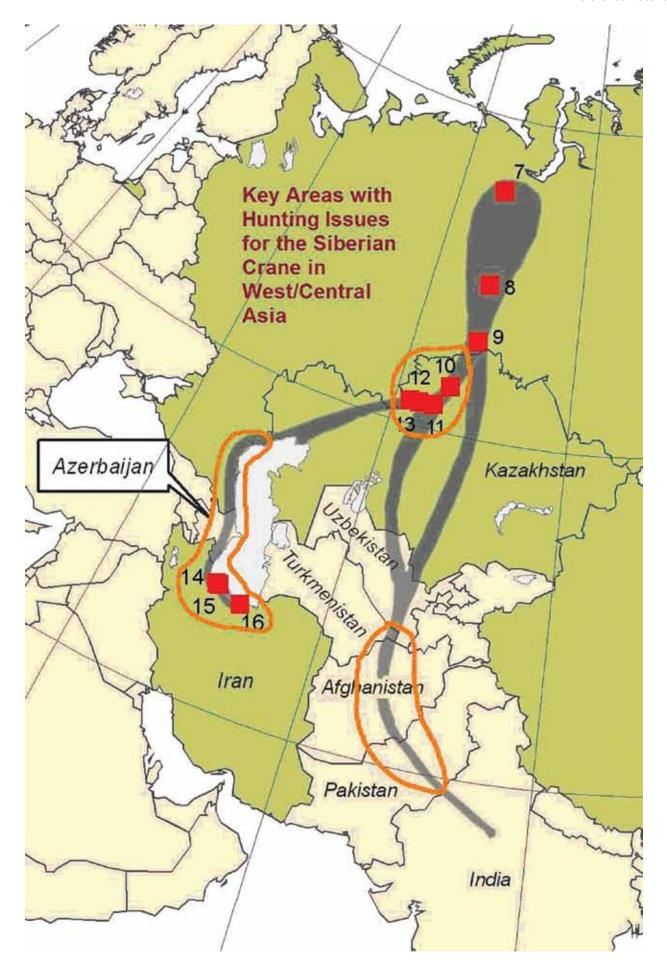
# 1.2. Hunting as a Conservation Issue for Waterbird Populations in Western/Central Asia

While this document supports a response to hunting as a threat to the Siberian Crane under the CMS MOU, it is important to recognize the wider issue as it affects many other migratory waterbirds using the same flyways. In this regard hunting offers an opportunity to achieve effective conservation through those who hunt waterfowl and therefore have a vested interest in their conservation. The range of the Siberian Crane overlaps three major waterbird flyways recognized by CMS – the African-Eurasian Waterbird Flyway, the Central Asian Flyway (CAF), and the East Asian-Australasian Flyway (see **Figure 2**).

The Central Asian Flyway covers at least 279 migratory waterbird populations of 182 species, including 29 globally threatened and near-threatened species (CAF Action Plan) that breed, migrate and spend the non-breeding (winter period) within the region, including species that are vulnerable to illegal hunting mortality such as the Critically Endangered Siberian Crane, Sociable Lapwing and Slender-billed Curlew, Endangered Red-breasted Goose, etc).

Of the 182 species covered by the CAF Action Plan, 17 and 103 are included in Appendix I and II respectively of the Convention on Migratory Species (CMS). Besides geographical overlap there is also a substantial overlap in species between CAF and AEWA. Out of the 279 migratory waterbird populations in the CAF, over 50% (145 populations) are covered by the CMS African-Eurasian Waterbird Agreement (AEWA). AEWA covers 522 populations of 255 species of migratory waterbirds.

The East Asia-Australasian Flyway is home to over 50 million migratory waterbirds - including shorebirds, Anatidae (ducks, geese and swans) and cranes - from over 250 different populations, including 28 globally threatened species. There are currently 700 sites recognised as internationally important to migratory waterbirds along the flyway, many of which are located adjacent to human settlement and vulnerable to rapid



**Figure 1.** Key areas with hunting issues for the Siberian Crane in West/Central Asia (Base map drawn by Zoe Rickenbach, International Crane Foundation). Orange polygons show the areas of greatest concern, while illegal hunting (poaching) risks still occur elsewhere along the flyways

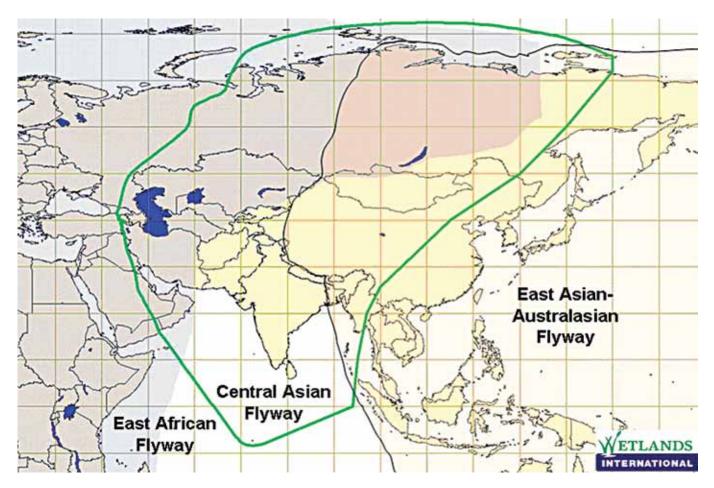


Figure 2. Major waterbird flyways covering Eurasia (Source: Wetlands International)

social and economic development pressures.

The regular population estimates and status reviews for all waterbird populations world-wide indicate that:

- 40% of waterbird populations for which trend data are available at the global level are decreasing,
- 34% are stable,
- 17% are increasing
- 4% have become extinct

Although not all waterbirds are migratory the trends for just the migratory populations are very likely to be similar. In Asia as a whole, 62% of waterbird populations are in decline or have become extinct and only 10% show an increasing trend (Wetlands International, 2006). While the declines are the result of various factors, especially habitat loss and degradation, illegal taking and unsustainable harvesting have contributed.

In addition, 16% of waterbird species in Europe, Africa, the Middle East and Central Asia are classified as globally threatened or near-threatened, and 23% of waterbird species in the Asia-Pacific region. (BirdLife International, 2008).

# **1.3 Unsustainable Waterbird** Harvesting

Regional waterbird populations in West/Central Asia are significantly affected by hunting practices. These impacts include unsustainable methods used for legally hunted species, and illegal hunting practices including killing of globally threatened and other nationally protected species. While there are many information gaps due to a widespread lack of systematically collected data and related research, population trends for a number of waterbird species are cause for conservation concern and a number of threatened species are at risk from hunting. For example, it is thought that hunting in this region is a significant threat to the Critically Endangered Siberian Crane, Slender-billed Curlew and Sociable Lapwing, and to the Endangered Red-breasted Goose and Vulnerable Lesser White-fronted Goose. Eurasian and Demoiselle Cranes are also known to be hunted and trapped in significant numbers in this re-

Sustainable use objectives under the AEWA and the CAF Action Plans aim at improved coordination of waterbird harvesting throughout the entire flyway of a species but this is difficult to achieve in reality, as in most countries in this region no harvesting (bag) statistics are in place and thus knowledge about the

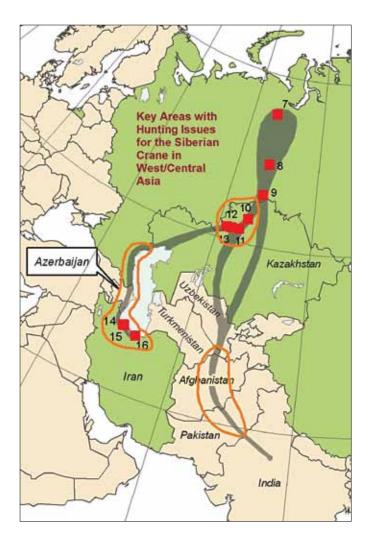
total numbers of waterbirds taken from a population are not known. Thus, the overall effects of taking on populations are not fully known, and in many cases it is not clear whether or not extensive hunting is causing population declines. There are a few threatened or endangered species that have been well studied, and for which relevant information is available. In addition to the Siberian Crane, a good example is the Lesser White-fronted Goose Anser erythropus, for which recent intensive research has shown that increased adult mortality caused by hunting in the staging and wintering grounds, particularly in Central Asia, is almost certainly the main reason for the decline of the species, and a real threat for its survival (Jones et al. 2008).

# 1.4 Actions Reported under the CMS MOU to Manage Conservation Threats from Hunting

This section acknowledges that a range of actions are being implemented by Siberian Crane range states and interested organisations to manage the conservation threats arising from hunting activities. These have been described in the national reports to the CMS MOU, most recently at the Seventh Meeting in June 2010. The various types of action undertaken are indicated, highlighting practices that provide a basis for future efforts.

Securing protection through collaboration with local communities was a priority activity for the countries involved in the UNEP/GEF SCWP implementation (China, Iran, Kazakhstan and Russia). Management committees involving local stakeholders were established at all project sites to improve management and protection of wetlands and waterbirds, especially for Siberian Cranes and their habitats. In Iran a Non-Shooting Area (in Fereydoon Kenar) was established in collaboration with duck trappers and Department of Environment. This was the first such co-management approach in the country, and in addition the end of season "shoot-out" was phased out in cooperation with the local people.

Mass media have been utilized by all range states to publicize the Siberian Crane and related conservation issues. The UNEP/GEF Siberian Crane Wetlands Proj-



#### Legend:

- 7: Kunovat, Russia awareness raising
- **9:** Armizon, Russia hunting permits & Siberian Crane reporting
- **10-13:** Kostanay, Kazakhstan hunter education on rare bird identification
- **16:** Fereydoonkenar, Iran capacity building for trapper associations

**Afghanistan** - education & surveys, esp. in Amu Darya region

**Pakistan** - community education, captive breeding, etc, in tribal areas

**Figure 3.** Examples of existing work related to addressing hunting issues. The numbered points represent UNEP/GEF Siberian Crane Wetland Project (SCWP) sites. Activities at these sites are described in the project's final report, available at: http://www.scwp.info/documents/SCWP\_final\_low\_spreads.pdf

ect supported education activities for WCASN sites in Kazakhstan, Iran, Turkmenistan and Uzbekistan. In Uzbekistan a round table Presentation of Termez as wintering site of the Western/Central Asian Site Network was organised for different target groups: including frontier guards and hunters. In 2007 leaflets were prepared including "Save the Cranes" with pictures of Siberian Crane and other crane species, "Identification of Siberian Crane" (pictures showing the difference between Siberian Crane, White Stork and Great White Egret), and "Flight of Hope" project.

Afghanistan faces many significant challenges including political instability, conflict, poverty, dependence on external aid and low literacy levels. Against this, some progress has been achieved at local level with limited external assistance in the field of conservation education along migration routes and key sites. It is recognized that the incorporation of environment and conservation into the education curriculum is a key tool for public education. Awareness materials such as pamphlets and brochures on crane conservation and posters of Siberian cranes have been disseminated among local communities and religious scholars. A poster on Islam and conservation was published with support from ICF and a booklet is in the process of publication. Future public awareness and conservation education efforts should focus on environmental education programmes in schools, mosques and community gathering areas, related to key sites and migration routes of migratory birds. In addition, a crane exhibit is being developed at Kabul Zoo. Overall, the integration of traditional knowledge and religious knowledge into environmental and conservation education has left positive impacts on the public in a few target areas. Follow up is needed to strengthen biodiversity conservation, including surveys to identify key sites, strengthening local groups and developing community based natural resource management.

In Pakistan, the government has banned the shooting and hunting of cranes. However, individual provinces have their own laws and penalties and traditional customs are practised in tribal areas. Crane hunting is still carried out in tribal areas as a traditional sport, and is difficult to control. Recently, Baluchistan Province has taken steps to control hunting /trapping of cranes and the Pakistan Wetlands Programme has provided support to establish check posts to monitor illegal crane

hunting. National and provincial authorities are cooperating on enforcement and there have been arrests and prosecutions of some hunting parties found with cranes. Pakistan is in the process of harmonising its laws to meet international obligations, with almost all provinces undergoing amendments.

In addition to the strengthening of legal controls, work with communities can be successful, as demonstrated for the Markhor Ibex in Baluchistan. In the case of Eurasian and Demoiselle Cranes, efforts are being made to build capacity for community-based captive breeding programmes, in order to reduce demand for wild caught birds. Hunters in Lakki & Bannu areas have succeeded in breeding cranes in captivity. Two Pakistani biologists were sent to the Cracid & Crane Breeding Center in Belgium for training in crane captive breeding & husbandry techniques as part of this programme.

There have also been long term education and awareness raising efforts, including the establishment of School Crane Clubs and Wildlife Clubs in the Northwest Frontier Province (NWFP)\* to promote awareness among the people, and the Crane Conservation and Education Center in the Kurram Valley, NWFP provides a facility for continued efforts.

# 2. POLICIES AND RECOMMENDATIONS OF MULTILATERAL ENVIRONMENTAL AGREEMENTS

Principles and guidelines for the sustainable use of biodiversity have been adopted by global conventions including the Convention on Migratory Species (CMS), Convention on Biological Diversity (CBD), Ramsar Convention on Wetlands (guidance on wise use of wetland resources) and the Convention on Trades in Endangered Species (CITES).

# 2.1 Convention on Migratory Species (CMS) and the Sustainable Use of Biodiversity

CMS Resolution 8.1 on Sustainable Use (see Annex 1) acknowledges the special requirements and fragility of CMS-listed migratory species and the need to engage all countries and peoples in their conservation, including the need to provide full protection to CMS Appendix 1 species. It also recognizes that sustainable use may provide incentives for conservation and restoration because of the social, cultural and economic benefits that people could derive from that use and that, in turn, sustainable use cannot be achieved without effective conservation measures.

This resolution also acknowledges the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity (AAPGs) adopted by the Parties to the Convention on Biological Diversity (CBD), and recognizes that the implementation of the AAPGs by Parties, where appropriate, could contribute to reducing many of the causes of loss of migratory species and lead to better conservation of habitats for migratory species. A Working Group of the CMS Scientific Council is currently following up on the practical application of these guidelines in the CMS context.

CMS Parties are also bound to provide appropriate protection to migratory species listed in CMS Appendix I and to formulate agreements for the conservation and management of species listed in Appendix II.

# 2.2 The CMS Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)

AEWA covers some countries in Western and Central Asia. In Article II of this Agreement, Parties agree, as a fundamental principle, to take co-ordinated measures to maintain migratory waterbird species in a favourable conservation status or to restore them to such a status. To this end, the Parties agree to apply general conservation measures prescribed in Article III of the

Agreement, as well as a number of more specific actions determined in the Action Plan appended to the Agreement. If populations of migratory waterbirds are to be maintained in a favourable conservation status, it is essential that any exploitation of these populations be carried out on a sustainable basis. Article III, paragraph 2 (b) of the Agreement requires that Parties ensure that any use of migratory waterbirds is based on an assessment of the best available knowledge of their ecology, and is sustainable for the species as well as for the ecological systems that support them. In paragraph 4.1.1 of the Action Plan (see **Annex 2**), Parties are required to co-operate to ensure that their hunting legislation implements the principle of sustainable use as envisaged in the Action Plan, taking into account the full geographical range of the waterbird populations concerned and their life history characteristics.

Guidelines developed under AEWA (AEWA Secretariat 2005a) promote the establishment of 'harvest frameworks' at both international and national levels, and identify a series of steps to assist range states in adopting a sustainable approach to the harvesting of waterbirds. These guidelines are discussed further in **Section 3.1.** 

The Hague Action Statement on the conservation of migratory waterbirds and their habitats, land use changes and development cooperation expresses the outcome of discussions by participants to the symposium celebrating AEWA's 15th Anniversary on 14 -15 June 2010, in The Hague, the Netherlands. The Statement identifies new challenges, including to ensure harvesting practices are sustainable. It notes that sustainable hunting does not occur throughout the AEWA region even though it is promoted by national and international hunting organisations as well as by the Agreement itself. Some threatened and declining species are still being harvested (for example, Sociable Lapwing). Waterbird hunting in parts of the AEWA-region is sometimes unsustainable, including intensive harvesting of waterbirds in Sub-Saharan wetlands (and probably elsewhere in Africa). Recommended actions include:

- Identify and eliminate any unsustainable harvesting of migratory waterbirds, including unsustainable spring hunting, especially in Eurasia; and
- Promote practices that ensure that existing community-based harvesting practices are sustainable and share lessons learned with respect to these practices.

The Action Statement also addresses the need to protect migratory bird species under pressure. Recommended Actions include:

- Secure adequate resources for the implementation of AEWA Single Species Action Plans (SSAPs) and strengthen linkages and the implementation of actions to benefit multiple SSAPs;
- Promote closer cooperation between range states of the species covered by SSAPs, such as
- the Black-tailed Godwit and Lesser White-fronted Goose;
- Promote the use of SSAPs for species that cause damage to agriculture or fisheries, in line with the AEWA Action Plan; and extend the recently initiated adaptive management approach for the Svalbard Pink-footed Goose to other relevant species.

These recommendations encourage collaboration between the Siberian Crane MOU and other groups involved in implementing SSAPs under AEWA such as for the Lesser White-fronted Goose, Slender-billed Curlew and Sociable Lapwing (among others). For further details, please see:

http://www.unep-aewa.org/meetings/symposium/docs/the\_hague\_action\_statement.pdf

### 2.3 Central Asian Flyway Action Plan

The Meeting to conclude and endorse the proposed Central Asian Flyway Action Plan to Conserve Migratory Waterbirds and their Habitats took place in New Delhi, India, from 10-12 June 2005. This was the second official meeting of the Central Asian Flyway (CAF) range states since they first met in Tashkent, Uzbekistan, in 2001, to discuss a draft action plan for the CAF and various legal and institutional options to support an action plan's implementation. The New Delhi meeting finalized the draft Action Plan's text. Wetlands International in consultation with the CMS Secretariat revised the Action Plan to incorporate technical comments received from the range states following the New Delhi Meeting. While the text remains to be officially adopted by the range states, the CMS Secretariat notes in the document that range states, interested organisations and experts may wish to draw from the principles and actions reflected in the Action Plan as a basis to prioritise their on-going work to conserve the migratory waterbirds and habitats of the Central Asian Flyway. CMS will also work actively with the range states, other interested States, international organisations and Wetlands International to support the Action Plan's interim implementation at the flyway level.

Section 4 of the Action Plan deals with managing human activities, under which 4.1 Harvesting / Hunting lists 12 action points for range states to implement. Section 4.2 Livelihood Support Activities also relates to the sustainable use of migratory waterbirds, through action points relating to the management of traditional uses, and evaluation of the costs, benefits and other consequences of uses of waterbird resources (see **Annex 3**).

# 2.4 Convention on Biological Diversity (CBD)

National Biodiversity Strategies and Action Plans developed within the CBD framework provide an important basis for national policies on biodiversity conservation and sustainable use.

CBD Decision VII/12 on Sustainable Use (Article 10) adopted the Addis Ababa Principles and Guidelines (AAPGs) on the Sustainable Use of Biodiversity and invited Parties to the Convention, other Governments and relevant organisations to initiate a process for the implementation of the AAPGs, inter alia (Secretariat of the CBD, 2004).

#### 2.5 Ramsar Convention on Wetlands

The Ramsar Convention provides extensive guidance on the interpretation and implementation of its requirement for the "Wise Use" of wetlands in numerous Resolutions (most recently in Resolution IX.1) and technical documents. While this is constantly evolving, Handbook #1 on the Wise Use of Wetlands (Ramsar Convention Secretariat, 2007) provides a conceptual framework for the wise use of wetlands and the maintenance of their ecological character, which lie at the very heart of the Ramsar Convention. An updated definition of "wise use" is given as follows:

"Wise use of wetlands is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development"

It is noted that this is consistent with CBD's overarching "ecosystem approach". In addition, the *Addis Ababa Principles and Guidelines for the sustainable use of biodiversity*, adopted by CBD in 2004 (CBD COP7 decision VI/12), focus attention on the sustainable use of components of biological diversity. These guidelines cover a similar range of implementation interventions at similar levels of detail to the original Ramsar Wise Use Guidance and "toolkit".

Ramsar guidance on community participation in wetland management (Wise Use Handbook #5 - Ramsar Convention Secretariat, 2007) is among the most relevant of the Wise Use provisions in relation to the sustainable harvesting of waterbirds, based on guidelines adopted by Resolution VII.8 Guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands.

# 2.6 Convention on International Trade in Endangered Species (CITES)

CITES Resolution Conf. 13.2 (Rev. CoP14) on the Sustainable use of biodiversity: Addis Ababa Principles and Guidelines http://www.cites.org/eng/res/13/13-02R14.shtml urges the Parties to make use of the Principles and Guidelines for the Sustainable Use of Biodiversity, also taking into account scientific, trade and enforcement considerations determined by national circumstances; to share experiences on sustainable use at the national level; and to take effective measures at policy and institutional level to ensure synergy between their implementation of CITES and CBD at the national level inter alia.

CITES listing of species affected by international trade is generally reflected in national species protection legislation.

# 2.7 Regional Policy Frameworks in Western/Central Asia

There are no comprehensive regional efforts specifically to promote sustainable hunting practices in Western/Central Asia, although cooperation on the environment exists through various mechanisms including the Caspian Convention and Caspian Environment Programme (see http://www.caspianenvironment.org/newsite/index.htm), and the United Nations Economic Commission for Europe (UNECE) led Environment Strategy for Countries of Eastern Europe, Caucasus and Central Asia (see: http://www.oecd.org/dataoecd/55/13/35958166.pdf)

The five Central Asian countries signed an Agreement of Cooperation in the field of Environmental Protection and Sustainable Environmental Management (1998) and developed the basis for joint actions including a Regional Environment Centre. Interstate Sustainable Development Commission Meetings were held with the participation of donor organisations, organisational issues solved and regional priorities on sustainable development identified. This has resulted in a UNEP-led Regional Environmental Action Plan for Central Asia (see: http://www.rrcap.unep.org/centralasia/)

These mechanisms provide opportunities for sharing information and developing international cooperation on environmental issues as well as a framework for international agencies (e.g. UN and EU agencies) to support activities that contribute towards solving targeted environmental problems in the region.

### 3. GUIDELINES AND BEST PRACTICE

This section presents some of the most useful and relevant experience from other regions that could be applied to West/Central Asia. It is not comprehensive, but highlights some approaches and tools that could be of particular value.

#### 3.1 AEWA Guidelines

Guidelines on the Sustainable Harvest of Migratory Waterbirds have been published by AEWA (AEWA Secretariat, 2005), based on the principles and guidance of CMS, as well as the Convention on Biological Diversity, and the Ramsar Convention. These guidelines promote the establishment of 'harvest frameworks' at both international and national levels, and a series of steps to assist Range States in adopting a sustainable approach to the harvesting of waterbirds.

The principle feature of the guidelines is a series of steps to guide Parties towards implementing a sustainable harvest framework. To ensure that any harvest of migratory waterbirds is sustainable, each country should take the following steps:

- Step 1: Conduct baseline assessment of the scale of hunting of waterbirds
- Step 2: Commit to and support international harvest management
- Step 3: Introduce or revise systems to manage harvests at the national level
- Step 4: Adjust harvest frameworks to address national objectives
- Step 5: Set the nation's hunting regulations [or revise them]
- Step 6: Introduce procedures to maintain high standards amongst hunters
- Step 7: Minimise the negative impacts of hunting
- Step 8: Introduce, where possible, the monitoring of hunting harvests
- Step 9: Raise awareness of the value of hunting and of sustainable practices amongst hunters and non-hunters.

This process is equally applicable to West/Central Asia and further details are available in the guidelines themselves. Here it is noted that while some steps need to be taken in sequence, others can be implemented in parallel (e.g. Step 9 on awareness raising and education of hunters to raise standards), and the actual needs of each country will vary with its specific circumstances. At this stage, particular emphasis should be given to the first two steps (see Section 4).

# 3.2 The flyway Approach to the Conservation and Wise Use of Waterbirds and Wetlands: A Training Kit

Launched in May 2010 by the Wings Over Wetlands project (see: www.wingsoverwetlands.org), the Flyway Training Kit is designed to build capacity to plan, implement, monitor and engage in effective flyway-scale conservation of migratory waterbirds and wetland habitats in Africa and Eurasia.

The result of a broad collaborative effort among many donors, partners and training institutes across the African-Eurasian region, the Flyway Training Kit will be available in English, French, Arabic and Russian. The package includes three modules with comprehensive text, case studies and exercises supported by ready-to-use presentations, as well as accompanying CDs with a range of additional material. The kit is designed to assist in targeted trainings that can be customized by topic as they relate to flyway conservation, wetland management and migratory waterbird conservation.

Module two on Applying the Flyway Approach to Conservation includes a section (2.3) on principles of wise of migratory waterbird populations and preconditions for applying wise use principles. This includes information on waterbird taking, sustainable taking, hunting thresholds and quotes, hunting seasons, harvesting models, wise use principle and harvesting, preconditions for applying wise use principles for waterbirds, wise use principles under AEWA, some case studies, and trade.

This comprehensive educational resource can easily be applied towards the purpose of building capacity for sustainable harvesting of waterbirds in the West/Central Asia region, both within the scope of AEWA and beyond.

# PRINCIPLES FOR WISE USE OF MIGRATORY WATERBIRD POPULATIONS AND PRECONDITIONS FOR APPLYING WISE USE PRINCIPLES – KEY POINTS

- 1. Taking of waterbirds, in whatever way, should not cause population decline
- 2. Sustainable hunting of migratory birds neither causes nor contributes to population declines or major changes in behaviour or distribution of hunted species
- 3. Birds should not be hunted at breeding or moult sites or on spring migration.
- 4. Ramsar and AEWA have developed wise use principles and guidelines. The AEWA guidelines on sustainable harvest of migratory waterbirds should be considered by the CMS MOU Signatories.
- 5. Capacity-building and awareness are important in promoting wise use.
- 6. Hunters are key stakeholders for the conservation and sustainable use of waterbirds.
- 7. It is necessary to monitor and regulate trade in migratory waterbirds

Adapted from: Boere & Dodman (2010)

# 3.3 EU Sustainable Hunting Initiative

There has been a lot of controversy over the compatibility of hunting with certain requirements of the EU Birds Directive. The controversy is often fed by differing interpretations of those requirements.

Consequently, the European Commission recognised the need to start a new dialogue with a view to developing co-operation between governmental and non-governmental organisations concerned with the conservation and wise and sustainable use of wild birds. A 'Sustainable Hunting Initiative' was launched by the Commission in 2001 aiming at improved understanding of the legal and technical aspects of the Directive's provisions on hunting as well as developing a programme of scientific, conservation and awareness raising measures to promote sustainable hunting under the directive. See: http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/index\_en.htm#huntingguide

In order to develop such a dialogue a series of ten measures was proposed. These have broadly the main aims to improve the legal and technical interpretation of the directive's provisions relating to hunting, to develop a programme of scientific, conservation and training/awareness measures, and to draw a charter on Sustainable Hunting within the framework of the Birds Directive. The ten proposed measures included the following.

#### Legal framework for hunting management

The EU Birds (Directive 2009/147/EC on the conservation of wild birds) and Habitats Directive (Directive 92/43/EEC) fully recognise the legitimacy of hunting as a form of sustainable use. They do limit this activity to certain species and provide rules governing their exploitation. This includes a requirement that migratory bird species are not hunted during their return migration to their breeding grounds. These controls on hunting are intended to ensure a balance between the activity and the long-term interest of maintaining healthy and viable populations of huntable species. This provides the legal framework for the management of hunting, while member states fix the actual dates for national hunting seasons.

### **Guide on hunting under the EU Birds Directive**

The first outcome of the EU Sustainable Hunting initiative was the publication in 2004 by the Commission of a Guide on Hunting under the Birds Directive, which provides clear guidance on how Member States should be reflecting the principles laid down in the directive in their national measures for regulating hunting. See:

http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/docs/hunting\_guide\_en.pdf

## Management Plans for Huntable Species with Unfavourable Conservation Status

The "Birds Directive" allows for certain species to be hunted, which are listed in Annex II of the Directive. Since the adoption of the Directive in 1979, regular monitoring reports from BirdLife International are indicating that certain huntable species are considered to have an unfavourable conservation status. The Commission is therefore supporting the preparation of management plans for several species listed in Annex II. These can be downloaded from the same website:

http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/managt\_plans\_en.htm

Sustainable Hunting Agreement

In 2004, the key partners – BirdLife International and FACE (the Federation of Associations for Hunting and Conservation of the EU) – have reached an agreement on ten points which will enable hunting to continue within a well-regulated framework, whilst fully respecting the provisions of the Directive. See:

http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/charter\_en.htm

### **European Charter on Hunting and Biodiversity**

The annual meeting of the Parties (Standing Committee) to the Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979), adopted the European Charter on Hunting and Biodiversity in November 2007. The Committee recommends Contract-

ing Parties to the Convention to take into consideration the European Charter on Hunting and Biodiversity and apply its principles in the elaboration and implementation of their hunting policies so as to ensure that hunting is carried out in a sustainable way.

This charter is meant to reinforce the implementation and coherence of global and European biodiversity instruments such as the Convention on Biological Diversity and the European Community's Birds and Habitats Directives, and is fully supportive of the EC's Sustainable Hunting Initiative.

See: https://wcd.coe.int/com.instranet.InstraServlet? command=com.instranet.CmdBlobGet&InstranetImag e=1294516&SecMode=1&DocId=1436274&Usage=2

and a simpler version produced by FACE: http://www.face.eu/Documents/Charter.EN.FIN.pdf

## PRINCIPLES OF THE EUROPEAN CHARTER ON HUNTING AND BIODIVERSITY

**Principle 1** – Favour multi-level governance that maximises benefit for conservation and society

**Principle 2** – Ensure that regulations are understandable and respected

**Principle 3** – Ensure that harvest is ecologically sustainable

**Principle 4** – Maintain wild populations of indigenous species with adaptive gene pools

**Principle 5** – Maintain environments that support healthy and robust populations of harvestable species

**Principle 6** – Encourage use to provide economic incentives for conservation

**Principle 7** – Ensure that harvest is properly utilised and wastage avoided

**Principle 8** – Empower local stakeholders and hold them accountable

**Principle 9** – Competence and responsibility are desirable among users of wild resources

**Principle 10** – Minimise avoidable suffering by animals

**Principle 11** – Encourage cooperation between all stakeholders in management of harvested species, associated species and their habitats

**Principle 12** – Encourage acceptance by society of sustainable, consumptive use as a conservation tool

## Support for the Natura 2000 Conservation Network

The European Commission launched an awareness-raising programme on Natura 2000 - the Natura 2000 Networking Initiative, continued as the Natura 2000 Networking Programme. This programme aims to promote awareness and understanding of Natura 2000 sites. Within this initiative, a dedicated awareness-raising programme on Natura 2000 among hunters was supported by the Commission. For more details on this initiative, see www.facenatura2000.net.

#### **European Bag Statistics Scheme**

The European Commission is supporting an improved bag statistics scheme in Europe, this is being developed by FACE with some cooperation with BirdLife International, and several bodies such as the European Environment Agency. The overall objective is to ensure a coordinated scheme for the collection of hunting bag statistics, along with their scientific interpretation and proper use. This initiative was formally launched in 2006. See: <a href="http://www.artemis-face.eu/">http://www.artemis-face.eu/</a>. Early results have shown that bag data schemes exist in all EU countries and many other European Countries. However the schemes in place necessarily differ to take into account local hunting laws and culture.

Overall, the EU Sustainable Hunting Initiative builds on considerable existing capacity, through national and federated European organisations concerned with hunting and conservation. With EU enlargement, considerable challenges remain in terms of harmonization of legislation and practices, but a strong legal framework exists, backed by sound scientific information over much (not all) of the region. Aside from this developing legal-scientific framework for hunting management, progress has been made in recent years in developing partnerships between conservation and hunting organisations, a good lesson for other regions.

### 3.4 The Sustainable Hunting Project

The Sustainable Hunting Project - "Building Capacity for Sustainable Hunting of Migratory Birds in Mediterranean Third Countries" (2004-2007) was established to tackle the complex underlying issues leading to unsustainable and often indiscriminate hunting of migratory birds. Funded by the EU LIFE-Third Countries Fund, it was implemented by a partnership of Bird-Life International, AEWA, the Society of the Protection of Nature in Lebanon (SPNL, BirdLife in Lebanon) and Association "Les Amis des Oiseaux" (AAO, BirdLife in Tunisia). The project goal was "to strengthen the management of bird hunting in selected North African and Middle Eastern countries of the Mediterranean region to reduce excessive, indiscriminate and illegal hunting of migratory birds, promote more sustainable hunting

practices and enhance the compliance of international and regional agreements on the conservation of migratory birds".

The Project worked through a series of regional initiatives and model collaborative projects involving government, hunting and conservation groups. Tunisia and Lebanon were chosen as the focal countries in North Africa and in the Middle East respectively, in order to demonstrate the range of activities aimed at achieving sustainable hunting which could be replicated in other countries. Quantitative information on hunting methods was extremely limited before the project, and it still remains difficult to ascertain the true scale of illegal hunting. In a four-month period in 2005, SPNL researchers estimated that 1,780 storks, cranes and pelicans and 3,640 raptors were shot or trapped in the main hunting localities in Lebanon.

The Project reviewed current bird hunting, its management and impact, socio-economic and cultural importance, potential alternatives, and 'best practice' for hunting of migratory birds in region and published a series of synthesis reviews that will act as a resource for national governments and other interested stakeholders. It also developed a comprehensive set of *Guidelines* for decision makers, and a *Code of Practice for Responsible Hunting* for hunters, both of which were published in English and Arabic. AAO worked with the national federation of hunters' associations to include the Code of Practice, together with the annual hunting decree, in a hunter's guide in pocket format which is issued to all registered hunters and law enforcement bodies in Tunisia.

The project's educational activities aimed to promote responsible behaviour among hunters, and improve general public awareness of migratory birds. There was a special focus on school children, to educate the next generation of potential hunters. SPNL produced a comprehensive educational program for school children, which included full interactive resources for teachers (in both English and Arabic). In early 2007, AAO launched a project targeting young people involved in the trapping of thousands of migratory birds in the oases of southern Tunisia with a broad public awareness campaign during the spring migration period.

Governments in the region have agreed to strengthen national compliance with relevant international agreements and conventions. Lasting partnerships have been established between governments, hunters' organisations and conservation NGOs, ensuring that progress on sustainable hunting will continue after the project. BirdLife International intends that the achievements of the Sustainable Hunting Project will be used as tools to build on in future flyway regional projects in the region, such as the Soaring Bird and Wings Over Wetlands projects. The project has provided a platform at both regional and national levels for continuing to

improve the management of bird hunting in the region, and to promote more sustainable hunting practices.

The main outputs are available from the project website at http://www.BirdLife.org/action/change/sustainable\_hunting/

#### including:

- Eight national reports on migratory bird hunting from the eight project countries, which provided the first upto-date information on hunting in many countries;
- Seven regional synthesis reports on key topics relevant to the conservation of migratory birds and the management of hunting;
- Regional "Guidelines for moving Towards Sustainable Hunting of Migratory Birds in MTC countries" which will serve as a model document for hunting management in the region over the coming years;
- "Code of Practice for Responsible Hunting of Migratory Birds in MTC Countries" which provides a quick summary of best practice for hunters;
- Regional Action Plan for moving towards responsible hunting and the conservation of migratory birds in the Southern and Eastern Mediterranean region (2008-2013);
- Awareness raising materials on globally threatened birds and the threat of hunting;
- School education programme to educate the next generation of potential hunters.

The project's systematic approach and regional outputs developed through a consultative process provide a good model for other regions, although hunting organisation partners should be included in management bodies. While the general format and structure of the regional action plan and guidelines can be replicated for another region such as West/Central Asia, the actual content needs to be carefully tailored to the specific issues, legal, administrative and institutional frameworks and other factors through consultation with relevant stakeholders within each country to be of practical value. In this regard, the partnerships formed between government authorities, hunters and conservation bodies are of great importance. Finally, it is clear that these mechanisms and tools need to be accompanied by practical actions on the ground to achieve sustainable changes in hunting practices.

# 3.5 Assessment of Bird Hunting along the Adriatic Flyway

This assessment of Bird Hunting along the Adriatic Flyway was conducted within the framework of the project Protection of Priority Wetlands for Bird Migration (Adriatic Flyway) in the Dinaric Arc Ecoregion through Integrated Site and River Basin Management, jointly implemented by WWF MedPo and EuroNatur, financially supported by the MAVA Foundation. The assessment covered the European countries of Albania, Bosnia-Herzegovina, Croatia, Montenegro, Slovenia and Serbia (Schneider-Jacoby and Spangenberg, 2010).

Each year, far more than two million birds are shot along the Adriatic Flyway. Assumed reasons for that are intensive hunting activities by more than 200,000 hunters plus many poachers and tourist hunters, inadequate legal frameworks concerning bird hunting in most countries as well as insufficient control of the existing laws in the countries located along the Adriatic Flyway. The only exception is Slovenia. The main aim of the assessment was to analyse the current legal frameworks as well as the actual situation concerning bird hunting in all countries located along the Adriatic Flyway, in order to verify the above assumption and to gain a clear picture about the respective standards in each country.

As a first step, the following measures were assessed in each country, rating the situation on a 1 to 5 scale

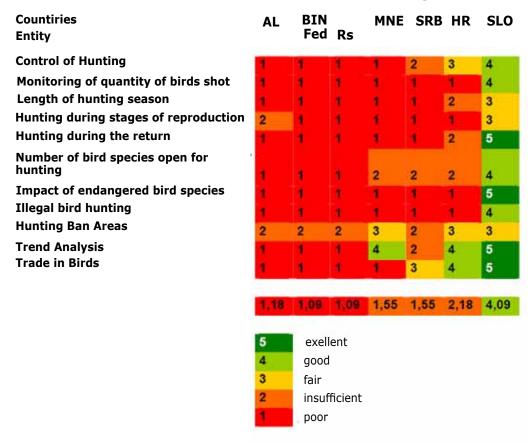
with 1 being the lowest and 5 the highest rating:

- 1. Control of hunting
- 2. Monitoring of quantity of birds shot
- 3. Length of hunting season
- 4. Hunting during stages of reproduction
- 5. Hunting during the return
- 6. Birds open for hunting
- 7. Impact of hunting on endangered species
- 8. Illegal Hunting
- 9. Hunting Ban Areas
- 10. Trend
- 11. Trade in Birds

The results from these rankings were summed up and divided through the amount of criteria (11). This led to an overall ranking (see **Table 1**), showing that the only country along the Adriatic Flyway corridor which has good standards in bird hunting is Slovenia (total rating 4), which implemented the EU Bird Directive in an exemplary manner and protects all migrating birds. In Slovenia, according to the recent hunting law, only six bird species are still open for hunting.

More detailed conclusions were made, but the general approach is perhaps of most potential interest, showing how structured assessment based on questionnaire surveys and interviews can provide an overview of the hunting situation for a region or subregion.

Table 1. Evaluation on the State of Bird Hunting



Source: Schneider-Jacoby and Spangenberg (2010)

# 3.6 Hunting and Waterfowl Management in North America

Waterbird hunting is generally practised according to a regulatory and management framework based on scientific data on waterbird population trends and harvesting rates. International coordination between Canada, the United States and Mexico is provided through the North American Waterfowl Management Plan http://www.nawmp.ca/. The North American Waterfowl Management Plan is an international action plan to conserve migratory birds throughout the continent. The Plan's goal is to return waterfowl populations to their 1970s levels by conserving wetland and upland habitat. The Plan is a partnership of federal, provincial/ state and municipal governments, non-governmental organisations, private companies and many individuals, all working towards achieving better wetland habitat for the benefit of migratory birds, other wetland-associated species and people. The Plan's unique combination of biology, landscape conservation and partnerships comprise its exemplary conservation legacy. Plan projects are international in scope, but implemented at regional levels. These projects contribute to the protection of habitat and wildlife species across the North American landscape. In fact, the North American Waterfowl Management Plan is considered one of the most successful conservation initiatives in the world.

Hunters play a significant role in habitat conservation, especially through organisations such as "Ducks Unlimited" and funds generated through the "Duck Stamps" scheme for hunting licences. Please see the following websites for further information.

US Fish and Wildlife Service http://www.fws.gov/hunting/

Ducks Unlimited http://www.ducks.org/

Ducks Unlimited Canada http://www.ducks.ca/

# 3.7 Developing Sustainable Wildlife Management Laws in Western and Central Asia

In 2006, the FAO and CIC organised a workshop on Policy and Institutions for Sustainable Use and Conservation of Wildlife Resources in Western and Central Asia. One of the key findings was the general "weakness of wildlife management policy and legislation" in the region. Consequently, one of the main recommendations was that countries in the region should undertake an urgent review of existing legislation followed by improvements or the development of new legislation where needed. The workshop also urged that in

reviewing and improving legislation, attention should be given to regional and global trends and international best practices, and where desired, assistance should be requested from competent international organisations.

A study on Developing Sustainable Wildlife Management Laws in Western and Central Asia (Morgera et al., undated; Morgera & Wingard 2009) flowed directly from the recommendations of this workshop, to assist countries in the region start the process of legal review and legislative reform. The overall purpose of the study was to give an overview of legislative design principles and international best practices for sustainable wildlife management and hunting for the region. It comprised a set of conceptual recommendations and design principles on how to develop effective legislation, taking into account discernible trends in existing national legislation and relevant international legal instruments.

The study had two objectives. The first was to distil a set of region-specific messages on how to draft effective legislation on hunting and wildlife management—in other words, a set of principles that policy makers, wildlife managers and legal drafters in the region should focus on when embarking on legislative reforms in the hunting and wildlife management sector. The principles should take into account regional and national specificities while reflecting international best practices.

The second objective was to analyse hunting and wild-life conservation laws and the linkages with key related legislation, in particular, forestry and land laws, as well as laws governing related service sectors such as ecotourism. From the analysis, the study then focuses on a set of country-specific recommendations for legislative reform, institutional coordination and enforcement.

A first draft of this study was discussed during the workshop *Review and validation of FAO/CIC draft legislative study on Developing Sustainable Wildlife Management Laws in Western and Central Asia* (Antalya, Turkey, 12-16 May 2008), and comments were reflected in the final version of the study.

The study covered the following countries: Armenia, Georgia and Turkey (in Western Asia), and Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan, the Russian Federation and Uzbekistan (in Central Asia). The common thread through most of these countries is their shared Soviet political and legal heritage of wild-life management and related difficulties in adjusting to the change in government and economy after the collapse of the Soviet Union. At the risk of generalizing, in the former Soviet times wildlife management had its place in the government structure of these countries. However imperfect some practices may have been, there was nevertheless a system in place to manage wildlife resources. This included the conduct of surveys, the determination of quotas, documentation of

harvest numbers and trade statistics, the control of gun ownership and ammunition, and finally a regulatory framework for the issuance of hunting permits.

It is now increasingly clear that while the laws in the region are grounded in certain commonly acknowledged management principles —including the concepts of sustainable development, endangered species, habitat protection, hunting seasons and quotas, among others—the reality seems to be that the countries are facing challenges in effectively ensuring sustainable wildlife management. The litany of related problems includes illegal trade in wildlife and wildlife products, funding constraints mean infrequent and inadequate population surveys, records of actual harvest and trade values are either incomplete or do not exist, guns and ammunition are more readily available, and a lack of enforcement allows poaching to continue at unsustainable rates. Little documentation, however, is available to provide certain and updated information on the status of wildlife in the region. Since the collapse of the Soviet Union, the institutions responsible for managing wildlife have found themselves either without funds or with so little that practical management is no longer feasible.

While significant losses in wildlife populations have occurred and problems still exist, indications are that management has improved since the early days of political and economic transition. Most countries are coming to terms with the new market-oriented economic conditions, establishing ties with international organisations interested in wildlife conservation and management, developing and refining legal frameworks, and signing international conventions specific to wildlife management. Some countries are also experimenting with forms of community involvement in wildlife management.

With some exceptions, the status of wildlife and hunting legislation in the region remains outdated, weak, fragmented, unevenly enforced or simply ineffective. Whereas the international legal framework is clear, and many of the countries covered are already party to the majority of relevant legal instruments, how such legal instruments and international best practices are to be coherently reflected in domestic legislation represents a challenge. As many countries in the region are either about to, or already in the process of, reviewing their wildlife legislation, there is a window of opportunity to introduce international best practices and sound legislative principles into the process. The FAO/CIC study provided guidance on the applicable international legal framework, and on that basis elaborated principles for the review and design of effective wildlife management legislation in the countries covered.

The next stage in the initiative is a joint CIC-FACE workshop on *Successful Practices to Improve Community Involvement in Wildlife Management* planned for September 2010, supported by the Ministry of Agriculture of the Czech Republic and Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).

# 3.8 Developing Sustainable Wildlife Management Laws in Western and Central Asia

HUNT is an interdisciplinary international research project, financed by the EU's 7th Framework program for three-years, looking into the wider meaning of hunting in the 21st century. Using hunting as a lens, HUNT aims to explore general aspects of the relationship between humans and nature, seeking ways to reconcile conflicts between people over hunting practices. See: http://fp7hunt.net/Home.aspx

The goal of the project Hunting for sustainability is to assess the social, cultural, economic and ecological functions and impacts of hunting across a broad range of contexts in Europe and Africa.

HUNT seeks to understand what influences value systems and attitudes to hunting, how these attitudes influence and determine individual and societal behaviour in hunting, and finally, how this hunting behaviour influences biodiversity.

The specific objectives of this Medium-scale Focused Research Collaborative Project are to:

- Investigate the meanings attributed to hunting by different social groups in different localities.
- Analyse how institutional arrangements and institutional change influence hunting.
- Assess the economic importance of hunting and alternative forms of land use at different spatial scales.
- Consider which species are hunted, what harvesting strategies are employed and build models to quantify sustainability of these strategies..
- Examine how game management influences various aspects of wider biodiversity.
- Integrate the findings from the social, cultural, economic and ecological values and impacts of hunting into the European policy context and its wider global application.
- Establish communication concerning the design and implications of the project results with key stakeholders and policy makers, and to disseminate these findings to a wider public.
- Develop fora for the implementation of methodologies for the reconciliation of conflicts between key stakeholders over hunting practices.

The project's work programme (#4) on Biodiversity and Hunting will explore the impact of hunting on harvested species and also the cascading impacts of hunting on wider biodiversity, using novel techniques developed from fisheries to integrate management and biological dynamics into a single modeling framework. These operating model approaches aim to support the management process by explicitly modeling not just biological processes and the interaction between individual hunters and prey, but also the process of monitoring the system, devising management strategies and then their implementation in the real world.

It is early to assess the potential applications of this work as the project is just starting, but its analyses are likely to be very informative in understanding the impacts of hunting on biodiversity as well as the sociological, economic and cultural aspects of hunting.

### 4. PROPOSED APPROACH FOR WEST / CENTRAL ASIA

### 4.1 Regional Strategy

Waterbird hunting in West / Central Asia is widespread, often deeply rooted in tradition and culture, linked to livelihoods and socio-economic conditions in many cases, and mostly carried out on an individual basis. These factors combine to indicate that a long term, systematic approach is required to provide the education, organisation and management needed to achieve more sustainable hunting practices on a wide scale. Experience and guidelines from other regions provide a solid basis for developing such an approach, which should be implemented by national governments with the support of all stakeholders and technical assistance from non-governmental organisations.

The long term goal of the regional strategy would be **to establish sustainable waterbird hunting practices in all countries.** This goal implies compliance with the guidance of related multilateral environmental agreements (CMS, CBD, CITES and Ramsar Conventions, inter alia) on the sustainable use of biodiversity and the promotion of related conservation measures such as species protection, habitat conservation, stakeholder participation and environmental education. In the context of waterbird conservation and CMS, it should also include a strong emphasis on the phasing out of lead shot, which has been demonstrated to be a significant threat to health of some waterbird species, including the Siberian Crane.

The implementation of such a strategy requires a broad partnership at multiple levels, which would take time and resources to develop. It is therefore proposed that priority should be given to focused efforts that will contribute towards securing the protection of the Siberian Crane. Agreed actions should be included in the Conservation Plans for the CMS MOU on the Siberian Crane. This focused approach, continuing the use of the Siberian Crane as a flagship species, is more likely to make headway through gaining the sympathy and understanding of hunting communities. In turn, this may help to demonstrate approaches that are of wider value in bringing about sustainable waterbird hunting practices.

The first two steps of the AEWA guidelines on sustainable waterbird harvesting provide a logical starting point for countries (see **section 3.1**), perhaps through pilot testing in regions of significance for the Siberian Crane:

## Step 1: Conduct a baseline assessment of the scale of hunting of waterbirds

The numbers of each population of migratory waterbirds harvested within the West/Central Asian region (overlapping AEWA and CAF regions) are incompletely (or poorly) known. Further guidance on baseline assessment of the scale of hunting of waterbirds needs to be developed. This information is vitally important and is needed to:

- · consider the sustainability of hunting harvests;
- introduce protection measures where they are needed to conserve threatened or vulnerable species;
- assess the socio-economic importance of waterbird hunting;
- contribute to an assessment of trade in migratory waterbirds (see AEWA Guidelines No.6: Guidelines on regulating trade in migratory waterbirds).
- >> It is therefore recommended that countries carry out baseline surveys of waterbird harvesting, especially in areas of particular importance for Siberian Cranes and other globally threatened birds. Surveys should include areas outside national protected area systems where waterbird hunting is prevalent.
- >> National assessments should consider the points listed for the Assessment of Bird Hunting along the Adriatic Flyway (see section 3.5), such as: measures for the control of hunting, monitoring of quantity of birds shot, length of hunting seasons, hunting during stages of reproduction, hunting during the return migration (spring hunting), legal huntable species, impact of hunting on endangered species, illegal hunting, hunting bans, trends and trade in birds.
- >>It is recommended that countries assess national laws related to waterbird hunting and to consider gaps in legislation. More importantly, they should assess the effectiveness of enforcement practices and seek to improve them where necessary.
- >> International organisations should assist with the design of survey methodologies to ensure that these are comparable between countries.
- >> Baseline surveys should be linked to other project interventions as far as possible, especially in areas where hunting is a recognized conservation issue, or where community participation goals are being pursued.

## Step 2: Commit to and support international harvest management

Any international harvest framework should be based on clear and unambiguous objectives for harvest management, these being related to the conservation status of particular waterbird populations. Analysis of the best available monitoring data for waterbirds (see AEWA Guidelines No.9: Guidelines for a waterbird

monitoring protocol) and hunting harvests would allow informed judgement about sustainable levels of hunting harvest.

The harvest framework should address the following:

- which species may and may not be hunted;
- policies to be adopted to protect endangered 'lookalike' species (e.g. Greater and Lesser White-fronted Goose, Slender-billed Curlew and other Numenius species):
- the seasons when hunting may occur;
- the maximum length of the seasons;
- whether bag limits would be appropriate;
- wise and unwise hunting practices, resulting in a code of practice to ensure that high standards are maintained (note this could be adapted from existing codes of practice for other regions see Bibliography for examples).

After appropriate consultation, a harvest framework would be adopted as the goal for range states to aim for in setting their own harvest regulations. Such frameworks should be synergistic with existing treaties and conventions.

- >> Assessment of current national waterbird harvesting frameworks should be conducted in relation to the above-listed issues in order to identify priorities for national action.
- >> The assessment will also allow common regional positions to be developed on the action needed based on scientific assessments of species conservation status, and the current status of national frameworks.
- >> Stakeholder consultation processes should be followed to conduct these assessments in order to obtain a complete and balanced view of the issues.
- >> International organisations should assist in developing standardized approaches for the assessments so that results are comparable between countries (see the example of the Adriatic Flyway in Section 3)
- >> A regional Code of Practice for Responsible Hunters should be developed to promote high standards among hunters, which can be adapted by each country in consultation with stakeholders, and distributed (for example, with annual hunting licences). See Bibliography section on Codes of Practice for examples.

# 4.2 Organise meetings to discuss priority hunting issues with relevant stakeholders and experts

Spring hunting is generally banned in Europe and North America on the basis that hunting kills at this time of year impact the breeding populations of birds. Yet it has been identified as an issue of particular conservation concern in parts of Siberia in Russia and other countries within this region. For instance, in Chita region (Far Eastern Russia), waterbird populations have recently suffered a serious drought and numbers of breeding birds have declined significantly. Under such conditions, disturbance impacts and additional mortality from spring hunting can have a serious impact on populations. There is a need to raise awareness amongst hunters and policy-makers towards a science-based approach to waterbird management, which will benefit hunters, waterbird populations and wetland ecosystems in the long term.

- >> The annual meeting of the Crane Working Group of Eurasia should discuss the management of spring hunting
- >> Meeting(s) should be organised to discuss spring hunting with key stakeholders from different regions of Siberia / Central Asia
- >> Perhaps within the context of the FAO/CIC led Wildlife Initiative for Central Asia and the Caucasus (WICAC), an international conference should be planned to present best practice on sustainable hunting and waterbird management to raise awareness among policy-makers and develop a regional harvest framework. Presentations at other international meetings should also be planned.

# 4.3 Demonstration projects at key sites

Demonstration projects should be developed in partnership with hunting organisations for key localities or sub-regions that are of international importance for migratory waterbirds and threatened species, where hunting is a major conservation issue, and as far as possible, where initiatives can build on past experience and existing capacity. These should incorporate targeted education and awareness programmes focusing on hunters. Awareness programmes should convey the key message that hunters are an essential part of the solution.

Capacity building should be conducted for local and national hunting organisations that are able to contribute effectively towards more sustainable practices, including participation in conservation programmes and developing collaboration between hunting organisations, government agencies, protected area managers and other stakeholders.

Experience should be transferred both within the W/C Asian region and with other regions.

### **4.4 Project Concepts**

- >> Project concepts should be developed to support the implementation of various actions that can be used to approach donors. These should vary in size and scope, including:
  - Regional or national project support for conducting national assessments to establish baseline surveys for migratory waterbird harvesting( especially in areas of particular importance for Siberian Cranes and other globally threatened birds) and to identify trends and design response measures. These would include the assessment issues listed in 4.1 above. Response measures would include improvements to legislation, enforcement, policies, institutional frameworks, capacity building, education and awareness-raising, community participation actions, etc.
  - Regional education and awareness-raising campaigns targeting hunters and related stake-holders, ideally in partnership with hunting organisations in order to achieve mutually beneficial goals. These should publicise codes of practice and use mass media according to targeted communications plans. Awareness programmes should include the environmental impacts of using lead shot and the alternatives available. An ICF project to support hunter education in Afghanistan, Kazakhstan, Pakistan, Russia and Uzbekistan will start in late 2010.
  - Meeting of the Crane Working Group of Eurasia on management of spring hunting, linked to consultations with stakeholders.
  - International conference on sustainable hunting to present best practice examples and raise awareness, possibly in the context of the FAO/CIC led Wildlife Initiative for Central Asia and the Caucasus (WICAC).
  - Demonstration activities at key sites involving community participation, development and awareness raising. Criteria for site selection would include importance to Siberian Cranes, presence of major

waterbird concentrations including threatened species, significant hunting/harvesting issues, and the possibility to build on existing experience and capacity for greater effectiveness. This is likely one of the most effective and sustainable approaches, together with the following point.

• Sustained long term support for small scale grass-roots projects at specific sites where community education and participation is critical, especially where serious constraints exist for the implementation of larger international technical assistance projects.

The development of projects should consider the following points:

- 1. Identification of critical threats & opportunities
  - a. Sites
  - b. People
  - c. Types of hunting
  - d. Times of hunting
  - e. Driving factors (social, economic, cultural etc)
- 2. Consideration of wider hunting issues
  - a. Environmental Impacts of hunting
  - b. Hunting Governance
  - c. Economics of Hunting
  - d. Social aspects of hunting
- 3. Identify priorities linked to Siberian Crane conservation but with wider implications considered.

Projects should aim to achieve benefits for local communities, ecosystems and wildlife beyond the Siberian Crane and other primary concerns for greater sustainability. Integration of projects with existing programmes or initiatives is also likely to assist their sustainability. As recognized in *The Hague Action Statement* (see **section 2.2**), there are many potential synergies between CMS/AEWA-led species conservation initiatives. In the case of the Siberian Crane, this includes the Single Species Action Plans for the Lesser White-fronted Goose, Slender-billed Curlew, Sociable Lapwing, etc.

## 5. Bibliography on Sustainable Waterbird Harvesting

#### Introduction

This bibliography has been compiled in the course of developing guidance on sustainable waterbird harvesting (within the wider context of sustainable hunting) for the West/Central Asian region under the framework of the CMS MOU on the Siberian Crane. It consists of the following parts:

- 1) Guidelines on sustainable waterbird harvesting
- 2) General references
- 3) Websites for selected organisations concerned with sustainable hunting
- 4) Websites for selected projects concerned with sustainable hunting
- 5) Single species action plans

At this stage, the bibliography does not include national publications on sustainable hunting for MOU Signatories except where these have been published in the international literature.

# **5.1 Guidelines on sustainable waterbird harvesting**

AEWA Secretariat 2005a. AEWA Conservation Guidelines No. 5: Guidelines on sustainable harvest of migratory waterbirds. Technical Series No.19. Prepared by Wetlands International. Adopted by AEWA MoP2 in 2002. Last updated 19-4-2005

http://www.unep-aewa.org/publications/conservation\_guidelines/pdf/cg\_5new.pdf

AEWA Secretariat 2005b. AEWA Conservation Guidelines No.6. Guidelines on regulating trade in migratory waterbirds. Last update 19-4-2005

http://www.unep-aewa.org/publications/conservation\_guidelines/pdf/cg\_6new.pdf

Sustainable Hunting Project, 2007. Regional Action Plan for moving towards responsible hunting and the conservation of migratory birds in the Southern and Eastern Mediterranean Region 2008-2013. BirdLife International, Cambridge, UK.

http://www.BirdLife.org/action/change/sustainable\_hunting/PDFs/SHP\_Regional\_Action\_Plan\_FINAL.pdf

Sustainable Hunting Project, 2007. Guidelines for Moving Towards Sustainable Hunting of Migratory Birds in the Mediterranean Countries of North Africa and the Middle East. BirdLife International, Cambridge, UK.

http://www.BirdLife.org/action/change/sustainable\_hunting/PDFs/SHP\_Guidelines\_FINAL\_Oct\_06.pdf

Guidance document on hunting under Council Directive 79/409/EEC on the conservation of wild birds (the Birds Directive 2008):

http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/docs/hunting\_guide\_en.pdf

Federation of Associations for Hunting and Conservation of the EU. European Charter on Hunting and Biodiversity. http://www.face.eu/Documents/Charter.EN.FIN.pdf

Convention on the Conservation of European Wildlife and Natural Habitats, 2007. European Charter on Hunting and Biodiversity. Final Draft. Document T-PVS (2007) 7 revised.

https://wcd.coe.int/com.instranet.InstraServlet? command=com.instranet.CmdBlobGet&InstranetImag e=1294516&SecMode=1&DocId=1436274&Usage=2

#### **5.2 Codes of Practice for Hunters**

Sustainable Hunting Project, 2006. Code of Practice for Responsible Hunting of Birds in MTC Countries. BirdLife International, Cambridge, UK.

http://www.BirdLife.org/action/change/sustain-able\_hunting/PDFs/SHP\_CodeofPractice\_%20FINAL\_Oct\_06.pdf

The British Association for Shooting and Conservation has produced a comprehensive series of Codes of Conduct for various hunting practices, including a Code of Good Shooting Practice, Wildfowling, and for Sporting Agents and Guides Offering Inland Goose Shooting:

http://www.basc.org.uk/en/codes-of-practice/

### **5.3 General references**

Aarhus (1998). The Convention on Access to Information, Public Participation

Decision-Making, and Access to Justice in Environmental Matters Obtained from

http://www.unece.org/env/pp/documents/cep43e.pdf

AEWA Secretariat. Undated. Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) Annex 3. Action Plan (Version adopted by MOP4)

http://www.unep-aewa.org/documents/agreement\_text/eng/wrd/aewa\_agreement\_text\_2009\_2012\_annex3.doc

**Balmaki, B. & Barati, A.** 2006. Harvesting status of migratory waterfowl in northern Iran: a case study from Gilan Province. Eds. G.C. Boere, C.A. Galbraith & D.A. Stroud. Waterbirds around the World. The Stationery Office, Edinburgh, UK. Pp.868-869. http://www.jncc.gov.uk/PDF/pub07\_waterbirds\_part6.3.8.pdf

**BASC** 1994. Shooting: Countryside Sport and Conservation. A Teacher's Resource Pack. British Association for Shooting and Conservation, Rossett, U.K.

**Begbie, E. (ed.)** 1989. The New Wildfowler. Third Edition. Stanley Paul, London.

**Beintema, N.** 2001. Lead poisoning in waterfowl, International Update Report 2001. Wetlands International – AEME, Wageningen, The Netherlands

**Bhima, R.** 2006. Subsistence use of waterbirds at Lake Chilwa, Malawi. Waterbirds around the world. Eds. G.C. Boere, C.A. Galbraith & D.A. Stroud. The Stationery Office, Edinburgh, UK. pp. 255-256. http://www.jncc.gov.uk/PDF/pub07\_waterbirds\_part3.4.11.pdf

**BirdLife International** 2008. Threatened birds of the world 2008. CD-ROM. BirdLife International, Cambridge, UK.

**Boere, G.C., C.A. Galbraith & D.A. Stroud (eds)**. 2006. Waterbirds around the world. The Stationery Office, Edinburgh, UK. 960pp.

**Brouwer, J.** 2009 The flyway approach to conserving migratory birds. Its necessity and value. Report to UNEP/CMS, Bonn, March 2009. Bennekom, The Netherlands: Brouwer Envir. & Agric. Consultancy.

**Degtyarev, A.G.** 2008. Lead poisoning of birds. Booklet published by Department of Biology Resources of the Ministry of Nature Protection, Sakha Republic (Yakutia), Russia.

**Deplanque G. & Ojey, T.** 2006. The Wetlands International Waterbird Harvest Specialist Group: challenges and objectives. Eds. G.C. Boere, C.A. Galbraith & D.A. Stroud. Waterbirds around the World. The Stationery Office, Edinburgh, UK. Pp.874-875.

**Dodman, T. & G. Boere.** 2010. The flyway approach to the conservation and wise use of waterbirds and wetlands: A training kit. Module 2: Applying the flyway approach to conservation. Section 2.3 principles of wise use of migratory waterbird populations and preconditions for applying wise use principles. Pp.19-30. Wings over Wetlands – the UNEP-GEF African-Eurasian Flyways Project http://www.flywaysproject.org/

Forstner, M., Reimoser, F., Hackel, J., & F. Heckl, (2003). Criteria and Indicators of Sustainable Hunting. Monographien Band 163 (English version of Monograph No. 158 (2001)). Umweltbundesamt GmbH (Federal Environment Agency Ltd.), Austria. Available at http://www.biodiv.at/chm/jagd

**Freese, C.H. (ed.)** 1997. Harvesting Wild Species: Implications for Biodiversity Conservation. Johns Hopkins Press, Baltimore and London.

**Harradine, J. (ed.)** 1992. Wings in Waterfowl Research and Management. Proc. 2nd Meeting IWRB Hunting Research (Wing Studies) Group. Saarbrucken, Germany, 9-10 April 1992. Wetlands International, Slimbridge, U.K.

Ilyashenko, E., Mirande, M., Sorokin, A. and G Archibald. 2009. The current status of the Siberian Crane Grus leucogeranus. In: Prentice C, editor. Conservation of Flyway Wetlands in East and West/Central Asia. Proceedings of the Project Completion Workshop of the UNEP/GEF Siberian Crane Wetland Project, 14-15 October 2009, Harbin, China. Baraboo (Wisconsin), USA: International Crane Foundation.

Jones, T., Martin, K., Barov, B., Nagy, S. (Compilers). 2008. International Single Species Action Plan for the Conservation of the Western Palearctic Population of the Lesser White-fronted Goose Anser erythropus. AEWA Technical Series No.36. Bonn, Germany.

http://www.unep-aewa.org/activities/working\_groups/lwfg/lwfg\_ssap\_130109.pdf

**Kanstrup, N.** 2006. Sustainable harvest of waterbirds: a global review. Waterbirds around the World. Eds. G.C. Boere, C.A. Galbraith & D.A. Stroud. The Stationery Office, Edinburgh, UK. Pp 98-106.

http://www.jncc.gov.uk/PDF/pub07\_waterbirds\_part2.2.7.pdf

**Kirby, J., Davidson, N., Giles, N., Owen, M. and Spray, C.** 2004. Waterbirds and Wetland Recreation Handbook: a review of issues and management practice. Slimbridge, U.K.: Wildfowl and Wetlands Trust.

Laws, T. & Y. Lecocq 1996. The contribution of European hunting organisations in Anatidae conservation. In: M. Birkan, J. van Vessem, P. Havet, J. Madsen, B. Trolliet & M. Lexer, W., F. Reimoser, J. Hackl, F. Heckl & M. Forstner (2005). Criteria and Indicators of Sustainable Hunting – The Austrian Assessment Approach. Wildl. Biol. Pract. 1(2): 163-183.

**Madsen, J.** 1998. Experimental refuges for migratory waterfowl in Danish wetlands. II: Tests of hunting disturbance effects. J. Appl. Ecol. 35: 398-417.

Madsen, J. & A.D. Fox 1995. Impacts of hunting disturbance on waterbirds - a review. Wildlife Biology 1: 193-203.

**Madsen & Fox** (1997), The impact of hunting disturbance on waterfowl populations: The concept of flyway networks of disturbance-free areas. Gibier faune sauvage 14: 201-209.

**Madsen, Pihl & Clausen** (1998), Establishing a reserve network for waterfowl in Denmark: a biological evaluation of needs and consequences. Biological Conservation 85: 241-256.

**Matthews, G.V.T. (ed.)** 1990. Managing Waterfowl Populations. Proc. IWRB Symposium, Astrakhan, 1989. IWRB Special Publication No.12. IWRB, Slimbridge, U.K.

**Morgera, E. & J. Wingard,** 2009. Principles for Developing Sustainable Wildlife Management Laws. FAO, Rome & CIC. 90pp.

http://cic-sustainable-hunting-worldwide.org/projects/Principles\_dev\_sust\_man\_laws.pdf

Morgera, E., Wingard, J. & A. Fodella. Undated. Developing Sustainable Wildlife Management Laws in Western and Central Asia. FAO, Rome & CIC. 180pp. http://cic-sustainable-hunting-worldwide.org/projects/Dev\_sust\_man\_laws\_with\_country\_reports.pdf

**Moser (eds.),** Proceedings of the Anatidae 2000 Conference, Strasbourg, France, 5-9 December 1994. Gibier Faune Sauvage, Game Wildl.13: 1257-1260.

**Nichols, J.D. & F.A. Johnson** 1996. The management of hunting of Anatidae. In: M. Birkan, J. van Vessem, P. Havet, J. Madsen, B. Trolliet & M. Moser (eds.), Proceedings of the Anatidae 2000 Conference, Strasbourg, France, 5-9 December 1994. Gibier Faune Sauvage, Game Wildl. 13: 977-990.

**Pain, D.J. (ed.)** 1992. Lead poisoning in waterfowl. IWRB Special Publication No.16. IWRB, Slimbridge, U.K.

Ramsar Convention Secretariat, 1999. Guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands (Resolution VII.8). http://www.ramsar.org/pdf/res/key\_res\_vii.08e.pdf

Ramsar Convention Secretariat, 2007. Wise use of wetlands: A Conceptual Framework for the wise use of wetlands. Ramsar handbooks for the wise use of wetlands, 3rd edition, vol. 1. Ramsar Convention Secretariat, Gland, Switzerland. http://www.ramsar.org/pdf/lib/lib\_handbooks2006\_e01.pdf

Ramsar Convention Secretariat 2007. Participatory skills: Establishing and strengthening local communities' and indigenous people's participation in the management of wetlands. Ramsar handbooks for the wise use of wetlands, 3rd edition, vol. 5. Ramsar Convention Secretariat, Gland, Switzerland.

http://www.ramsar.org/pdf/lib/lib\_handbooks2006\_e05.pdf

**Schneider-Jacoby, M. and Spangenberg A.** 2010. Bird Hunting along the Adriatic Flyway. An Assessment of Bird Hunting in Albania, Bosnia-Herzegovina, Croatia, Montenegro, Slovenia and Serbia. Euronatur www.euronatur.org

Secretariat of the Convention on Biological Diversity, 2004. The Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity (CBD Guidelines) Montreal: Secretariat of the Convention on Biological Diversity 21 p.

www.cbd.int/doc/publications/addis-gdl-en.pdf

**Secretariat of the Convention on Biological Diversity,** 2004. Decision VII/12 on Sustainable Use (Article 10). http://www.cbd.int/decision/cop/?id=7749

**UN Economic and Social Council** 2003. Environmental Partnerships in the UN ECE Region: Environment Strategy for Countries of Eastern Europe, Caucasus and Central Asia - Strategic Framework. ECE/CEP/105/Rev.1. 27 June 2003.

http://www.oecd.org/dataoecd/55/13/35958166.pdf

**UNEP/CMS Secretariat,** 2006. Central Asian Flyway Action Plan for the Conservation of Migratory Waterbirds and their Habitats. UNEP/Convention on Migratory Species Secretariat, Bonn, Germany.

UNEP/CMS Secretariat, 1999. Conservation measures for the Siberian Crane. 1st edition. CMS Technical Series Publication No. 1. UNEP/Convention on Migratory Species Secretariat, Bonn, Germany.

http://www.cms.int/reports/TECH\_SERIES/Tech-Series1\_SibCrane.pdf

**UNEP/CMS Secretariat, 2002.** Conservation measures for the Siberian Crane. 2nd edition. CMS Technical Series Publication No. 7. UNEP/Convention on Migratory Species Secretariat, Bonn, Germany.

**UNEP/CMS Secretariat,** 2005. Conservation measures for the Siberian Crane. 3rd edition. CMS Technical Series Publication No. 10. UNEP/Convention on Migratory Species Secretariat, Bonn, Germany.

**UNEP/CMS Secretariat,** 2008. Conservation measures for the Siberian Crane. 4th edition. CMS Technical Series Publication No. 16. UNEP/Convention on Migratory Species Secretariat, Bonn, Germany.

http://www.cms.int/publications/TechSeries/Sib-Crane16/siberian\_crane\_TC16.htm

**Wetlands International**, 2006. Waterbird Population Estimates. Fourth Edition. Wetlands International, Wageningen, The Netherlands.

# 5.4 Websites for selected organisations concerned with sustainable hunting

Artemis Centralized Database on Bag Statistics for the EU http://www.artemis-face.eu/

Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) http://www.unep-aewa.org/

British Association for Shooting and Conservation http://www.basc.org.uk/en/

Convention on the Conservation of Migratory Species of Wild Animals http://www.cms.int/

Convention on International Trade in Endangered Species www.cites.org

Ducks Unlimited http://www.ducks.org/

Ducks Unlimited Canada http://www.ducks.ca/

EU Environment – Nature Conservation and Sustainable Hunting

http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/index\_en.htm

EU: Key Concepts document on Period of Reproduction and prenuptial Migration of huntable bird Species in the EU (details for each species)

http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/key\_concepts\_en.htm

Federation of Field Sports Associations of the EU (FACE) http://www.face.eu/index-en.htm

Game & Wildlife Conservation Trust (UK) http://www.gwct.org.uk/

International Council for Game and Wildlife Conservation (CIC) http://www.cic-wildlife.org/

Intergroup Sustainable Hunting

http://www.face.eu/Intergroup/IG.htm

US Fish and Wildlife Service http://www.fws.gov/hunting/

Wetlands International Waterbird Harvest Specialist Group http://www.wetlands.org/Aboutus/Specialistgroups/WaterbirdHarvestSpecialistGroup/tabid/1252/ Default.aspx

# 5.5 Websites for selected projects and programmes concerned with sustainable hunting

BirdLife International Sustainable Hunting Project http://www.BirdLife.org/action/change/sustainable\_hunting/index.html HUNT – Hunting for Sustainability (supported by EU 7th Framework Programme)

http://fp7hunt.net/Home.aspx

EU Life Projects involving hunting

http://ec.europa.eu/environment/life/themes/animalandplants/lists/hunting.htm

EU Life Lesser White-fronted Goose Project (WWF Finland) http://www.wwf.fi/english/finland/lesser\_white\_fronted/

North American Waterfowl Management Plan <a href="http://www.nawmp.ca/">http://www.nawmp.ca/</a>

### **5.6 Single Species Action Plans**

Conservation Action plans for a range of migratory waterbirds can be downloaded from the following websites:

http://www.cms.int/publications/cms\_tech\_series.htm

http://www.unep-aewa.org/publications/technical\_series.htm

### ANNEX 1: CMS Resolution 8.1 on Sustainable Use









Distr: GENERAL

UNEP/CMS/Resolution 8.1\*

ORIGINAL: ENGLISH

#### SUSTAINABLE USE

Adopted by the Conference of the Parties at its Eighth Meeting (Nairobi, 20-25 November 2005)

Aware of the special requirements and fragility of CMS-listed migratory species and the need to engage all countries and peoples in their conservation throughout the world;

Emphasizing that CMS prohibits the taking of Appendix I species except in specific circumstances as specified in Article III, paragraph 5;

Recalling that CMS Article V, paragraph 4 (f) in the Guidelines for Agreements prohibits the taking of migratory species of the order Cetacea where such taking is not permitted for that migratory species under any other multilateral agreement;

Further recalling Resolution 7.9, which reaffirms the interest of CMS to develop strong collaborative arrangements with other biodiversity-related instruments and international organisations;

Acknowledging that sustainable use (both consumptive and non-consumptive) may provide incentives for conservation and restoration because of the social, cultural and economic benefits that people could derive from that use and that, in turn, sustainable use cannot be achieved without effective conservation measures:

Further acknowledging that the Parties to the Convention on Biological Diversity (CBD) adopted the Addis Ababa Principles and Guidelines (AAPGs) and that Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) have initiated studies of the potential roles of the AAPGs in contributing towards implementation of CITES requirements for species included in the CITES Appendices; and

Recognizing that the implementation of the CBD AAPGs by Parties, where appropriate, could contribute to reducing many of the causes of loss of migratory species (e.g., by-catch, unsustainable harvesting, overexploitation, unsustainable hunting and other negative impacts) and lead to better conservation of habitats for migratory species;

<sup>8</sup> Revised version March 2006.

### The Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals

- Instructs the Scientific Council to examine the applicability and usefulness of the AAPGs within
  the context of CMS for improving the conservation status of relevant migratory species listed under the
  CMS Appendices;
- Urges the Scientific Council to liaise with other Conventions, Parties and NGOs to gather and share information on relevant studies on the AAPGs;
- Invites Parties, other Governments, international organizations and other relevant organizations
  to support the aforementioned work, inter alia, by providing appropriate financial assistance and
  relevant data and information; and
- Requests that the Scientific Council reports its findings to the ninth meeting of the Conference of the Parties.

# ANNEX 2: Extracts on Hunting from the AEWA Action Plan

- 4.1.1 Parties shall cooperate to ensure that their hunting legislation implements the principle of sustainable use as envisaged in this Action Plan, taking into account the full geographical range of the waterbird populations concerned and their life history characteristics.
- 4.1.2 The Agreement secretariat shall be kept informed by the Parties of their legislation relating to the hunting of populations...
- 4.1.3 Parties shall cooperate with a view to developing a reliable and harmonized system for the collection of harvest data in order to assess the annual harvest of populations...
- 4.1.4 Parties shall endeavour to phase out the use of lead shot for hunting in wetlands by the year 2000.
- 4.1.5 Parties shall develop and introduce measures to reduce, and as far as possible, eliminate the use of poisoned baits.
- 4.1.6 Parties shall develop and implement measures to reduce, and as far as possible, eliminate illegal taking.
- 4.1.7 Where appropriate, Parties shall encourage hunters, at local, national and international levels, to form clubs or organisations to co-ordinate their activities and to help ensure sustainability.
- 4.1.8 Parties shall, where appropriate, promote the requirement of a proficiency test for hunters, including among other things, bird identification.

#### Reference:

UNEP/AEWA Secretariat. Undated. Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) Annex 3. Action Plan (Version adopted by MOP4)

http://www.unep-aewa.org/documents/agreement\_text/eng/wrd/aewa\_agreement\_text\_2009\_2012\_annex3.doc

# ANNEX 3: Extracts on Hunting from the Central Asian Flyway Action Plan

#### 4 Management of Human Activities

### 4.1 Harvesting/Hunting

- 4.1.1. Range states shall review their national policy and legislation in the field of hunting activities and waterbird protection with a view to implementing international guidelines to encourage harmonization, stricter protection of threatened species and sustainable exploitation of quarry species.
- 4.1.2. Range states shall cooperate to ensure that their relevant legislation implements the principle of sustainable use as envisaged in this Action Plan, taking into account the full geographical range of the waterbird populations concerned and their life history characteristics.
- 4.1.3. Range states shall develop and improve/modify their relevant legislation in terms of sustainable exploitation of quarry species and strict protection of threatened ones.
- 4.1.4. The Secretariat shall be kept informed by the range states of their legislation relating to the harvesting/hunting of populations listed in Table 2. [Status of Biogeographic Populations of Migratory Waterbirds in the Central Asian Flyway Action Plan]
- 4.1.5. Range states shall provide measures for sustainable use in particular for species that are listed in any national/regional Red Data Book/Red Data List even if they are not globally or regionally threatened.
- 4.1.6. Range states shall develop and implement necessary measures to eliminate, or reduce, as far as possible, illegal taking, poaching, and unsustainable hunting practices of populations listed in Table 2, such as use of poisoned baits, mist netting, trapping, explosives, and control gun ownership to deter illegal taking.
- 4.1.7. Range states shall eliminate illegal trade of populations listed in Table 2.
- 4.1.8. Where appropriate, range states shall encourage hunters to organise themselves into associations/ societies (at local, state/provincial, national and international levels) to coordinate their activities and share their responsibilities for sustainable use of migratory waterbirds. Range states shall develop their own local and state/provincial systems to regulate harvesting/hunting in the context of internationally acceptable sustainable use principles22.
- 4.1.9. Range states shall promote the education and training of hunters for the conservation and sustainable use of waterbirds, including through hunting associations and shall endeavour to make mandatory

hunter proficiency tests as a condition for the issue of hunting licences. The proficiency test for hunters should include, among other things, waterbird identification including of target and non-target species.

- 4.1.10. Range states shall reduce as far as possible the lead poisoning in waterbirds by gradual phasing out of lead shot and its replacement by non-toxic shot. They shall endeavour to phase out the use of lead shot for hunting in wetlands by the year 2015.23
- 4.1.11. Range states shall initiate efforts to collect and publish harvest data/hunting statistics on migratory waterbirds, in order to be able to establish the international coordination of sustainable waterbird harvest in the future.
- 4.1.12. Range states shall cooperate with a view to developing a reliable and harmonized flyway wide system for the collection of harvest data in order to assess the annual harvest of populations or, when this is not possible, assess the annual harvest of the species listed in Table 2. They shall provide the Secretariat with estimates of the total annual take for each population or, when this is not possible, assess the annual harvest of the species.

#### Footnotes:

- 22 CBD Decision VI.13 (Sustainable Use) provides guidelines for the sustainable use of species, including migratory species. < www.biodiv.org/decisions/ >.
- 23 Please note that a target for phasing out lead shot was set for the year 2000 for AEWA Contracting Parties. This target would continue to apply to Parties within the existing AEWA Agreement Area if the CAF Action Plan is brought within AEWA. AEWA Resolution 2.2 requests Contracting Parties to enhance their efforts to phase out lead shot and also to report back to the Third Meeting of Parties (October 2005). CAF range states that are outside the AEWA Agreement Area would endeavour to meet the 2015 target.

#### 4.2 Livelihood Support Activities

- 4.2.1. Range states shall support the development of sensitive and appropriate ecotourism at wetlands and other habitats holding concentrations of populations listed in Table 2, where and when such activities do not impact harmfully on the waterbirds and their habitats.
- 4.2.2. Range states shall review and promote traditional uses and, develop management practices that are sustainable in reference to migratory waterbirds and their habitats24.
- 4.2.3. Range states shall endeavour to evaluate the costs, benefits and other consequences that can result from consumptive and non-consumptive use at selected wetlands and other habitats with concentrations of populations listed in Table 2 and, where necessary, seek cooperation from competent international agencies and organisations 25. They shall communicate the results of any such evaluations to the Secretariat.
- 4.2.4. Range states shall give adequate attention to gender issues while developing and implementing alternative livelihood options to manage wetlands and other habitats important to migratory waterbirds.

#### **Footnotes:**

- 24 Ramsar Resolution VIII.14 (New Guidelines for Management Planning for Ramsar Sites and other Wetlands) provides a useful framework for wetland management planning
- < www.ramsar.org/key\_guide\_mgt\_new\_e.htm >.
- 25 CBD Decision VI.13 (Sustainable Use) provides guidelines for the sustainable use of species, including migratory species. < www.biodiv.org/decisions/ >.

#### Reference:

UNEP/CMS Secretariat, 2006. Central Asian Flyway Action Plan for the Conservation of Migratory Waterbirds and their Habitats. UNEP/Convention on Migratory Species Secretariat, Bonn, Germany.