

# Siberian Crane Memorandum of Understanding

## NATIONAL REPORT (2007-2010)

### INDIA

#### GENERAL INFORMATION

Range State: India
Agency or institution responsible for the preparation of this report: <b>Ministry of Environment &amp; Forests, Government of India</b>
List any other agencies, institutions, or NGOs that have provided input: <b>Wildlife Institute of India, Keoladeo Ghana National Park (KGNP, Bombay Natural History Society (BNHS), Wildlife Protection Society of India &amp; International Crane Foundation.</b>
Memorandum in effect in Range States since (dd/mm/yyyy):
This report was last updated: (dd/mm/yyyy): <b>03.05.2010</b>
Designated Focal Point (and full contact details): <b>Additional Director General (Wildlife), Ministry of Environment &amp; Forests, Parayavaran Bhavan, CGO Complex, Lodi Road, New Delhi 110 003, India.</b>

#### INSTRUCTIONS FOR COMPLETION:

The purpose of completing the national report is to provide information on your country's implementation of the Siberian Crane MoU including, as far as possible, contributions of cooperating non-governmental partners. Implementation will be assessed in terms of the six objectives of the Conservation Plan (CP). The reporting template is divided into these six main objectives, and asks specific questions in relation to the activities that need to be carried out to fulfil those objectives.

Please answer all questions as fully and as accurately as possible. It may seem time-consuming, but once you have completed the first report, the next time will be much easier because you can simply revise your existing report.

Comment boxes are provided next to most of the questions to explain what information needs to be provided. Text boxes can be expanded to accommodate longer answers or to explain and provide additional information, beyond what is requested. Details of future plans are especially encouraged. Wherever possible, please try to indicate the source of information used to answer a particular question, if a published reference is available. Remember that you are sharing information with other countries about your progress, so that it may be of benefit to them. At the same time, you may find it useful to look at other countries' reports to get ideas for Siberian Crane conservation that might be adapted to your context.

Please submit the completed report to the CMS Secretariat ([cms@un.int](mailto:cms@un.int)) by email, as a Word attachment. Feel free to attach additional material (published reports, maps etc) to this template and send them separately by e-mail or by post.

#### **OBJECTIVE I: REDUCE MORTALITY**

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

1.1.1. What are the main identified threats *in the Siberian Crane nesting and wintering grounds and along migration routes* in your country? Please use the text box to describe them in detail, including their root causes.

### DIRECT THREATS

- Poaching / Capture

**Siberian Cranes are not migrating to any wetland in India and therefore, no poaching or capture is taking place.**

- Poisoning (including lead poisoning)

**No poisoning of Siberian Crane since they do not migrate to wetlands in India, though other migratory birds do encounter some amount of agriculture based pesticides poisoning in non protected wetlands.**

- Power lines

**Only the resident Sarus Crane and migratory Demoiselle Cranes have been recorded to be impacted by power lines.**

### DISTURBANCE (by otherwise legal activities)

- Hunting

**Hunting is not permitted in any wetlands in India. However, some amount of illegal trapping and hunting for subsistence use of wetland birds does take place in wetlands outside protected area network.**

- Fishing

**Fishing is not permitted in any protected wetlands in India. However, fishing rights are leased out to fisheries cooperatives in wetlands outside the protected area network and subsistence level of illegal fishing does take place in some protected wetlands.**

- Tourism

**Tourism in wetland protected areas is permitted in the tourism zones only. In non protected wetlands tourism does take place extensively and certain amount of disturbance to resident and migratory waterfowl have been recorded.**

- Agriculture

**In non protected wetlands seasonal agriculture does take place. Migratory waterfowls including cranes migrate from protected wetlands to the surrounding agricultural landscape and occasionally fall victims to agricultural pesticide poisoning. Some amount of farmers in tolerance to resident sarus crane and migratory Demoiselle crane have also been recorded in northern (Uttar Pradesh, Rajasthan and Madhya Pradesh) and north western states (Gujarat) of India.**

- Other forms of disturbance

**Vermin birds like crows and predators like stray dogs have been recorded to predate on crane eggs and chicks. After significant decline of vultures, the population of vermin and subsidized predators like stray dogs are on the increase in the agricultural landscape of India and are expected to pose a greater problem in future.**

## **HABITAT DEGRADATION**

- Water diversion

**Water diversion from riverine wetland protected areas and non protected wetlands for agriculture and drinking water purpose have been a major problem for wetlands in India.**

- Wetlands drainage and conversion

**While conversion and drainage of protected wetlands have not been a problem, seasonal unprotected wetlands are gradually being converted for agricultural purposes or for urban settlement and industry. The problems are more frequently encountered in the gangetic floodplain.**

- Oil and gas development

**Hydrocarbon exploration has been a recent phenomenon in India. However, no detailed analysis of their impacts on wetlands and their fauna and flora have been studied.**

- Pollutants

**Non point sourced agricultural run off based, industrial effluent, urban sewage based pollutants have been a major problem for both protected and non protected wetlands. The State Pollution Control Boards and National Pollution Control Board monitors and prevents such pollutions and even closes down pollutant industries in the vicinity of wetland protected areas.**

- Other threats (please specify and describe)

**Illegal encroachment for human habitation, livestock grazing and livelihood dependency based removal of aquatic vegetations are the other threats to wetland habitats in India.**

1.1.2. Describe a few “best practice” approaches for conservation and management of the Siberian Crane to minimize key threats to Siberian Cranes and their habitats in your country.

**Even though Siberian Cranes do not migrate for wintering in India in general and to the Keoladeo Ghana National Park (KGNP) in particular, the KGNP is managed as a National Park, Ramsar Site and a World Heritage Site with a enabling management plan. Community involved tourism management as well as interpretation programme are the best practice examples for wetland management at the KGNP. The UN Foundation is supporting a large scale project through UNESCO for management actions of the KGNP for maintaining its ecological characteristics.**

1.1.3. Has your country taken any measures to ban or modify hunting season or regulations as needed in local areas to minimize these threats to the Siberian Crane?

- YES    NO    NOT APPLICABLE

If yes, please describe these measures in detail.

Past activities

Future plans

1.1.4. Has any **illegal hunting/poaching/trapping of birds** been known to occur in the Siberian Crane habitats in your country?

YES  NO

If yes, describe the measures being taken to deal with this problem and any difficulties encountered in this regard.

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

1.2.1. Does your country have legislation to prohibit hunting and trade in the Siberian Crane, their eggs, parts and products and to protect habitats important for the Siberian Crane (and other species)?  YES  NO

If yes, please list the relevant legislative documents. If no, please see question 1.2.3

**India has placed the Siberian Crane in the Schedule 1 of the Wildlife (Protection) Act, 1972 by which capture, hunting or any other disturbance to the species and its protected environment are not permitted.**

1.2.2. Describe efforts among federal/state/provincial agencies to cooperate on law enforcement to ensure compatible application of laws across and between jurisdictions (within country or through bilateral/multilateral agreements).

**India has signed an Indo-Russia bilateral agreement for protecting migratory waterfowls between the two countries as also the CMS flyway agreement.**

1.2.3. Has your country conducted any reviews or harmonisation of local and national legislation to address any gaps or inconsistencies in relation to Siberian Crane conservation?

YES  NO  NOT APPLICABLE (no gaps or inconsistencies exist)

If yes, please list any amendments made in legislative documents during the reporting period and future plans in this regard.

Past activities

Future plans

1.2.4. Please indicate any continuing weak points in the practical application and enforcement of existing legislation. Include recommendations on how the local and/or national legislation could be improved and better enforced to conserve the Siberian Crane and its important habitats.

**Wetland habitats being in the Common Property Resource regime often a strict no take approach of protection of wetlands in India has been a problem. To circumvent**

**this problem as well as to protect the unique features and focal flora and fauna of wetland protected areas, the Wildlife (Protection) Act, 1972 in India has included the provision of setting up of conservation reserves and community reserves wherein a participatory mode of resource use and management is feasible.**

## **OBJECTIVE II: MONITORING AND RESEARCH**

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

2.1.1. What is the estimated number of Siberian Cranes in your country? Please include the basis (i.e. source of information) for this estimate.

**There are no Siberian Cranes in India as they have stopped migrating to India.**

Please indicate the population trend:  INCREASING  DECREASING  STABLE

NOT APPLICABLE (no Siberian Cranes in country)

2.1.2. What kind of monitoring has been conducted in known Siberian Crane areas in your country to estimate numbers of Siberian Cranes and determine population trends?

a) Ground survey  YES  NO  NOT APPLICABLE

Past activities

**Ground surveys for monitoring the arrival and departure dates of the wintering Siberian Cranes at the KGNP have been a regular management practice. Even though the Siberian Cranes do not winter at the KGNP, the Protected Area staff still continue the ground survey of the KGNP and the surrounding satellite wetlands to monitor the population trend of other migratory waterfowl. The Research Associate of the International Crane Foundation in association with the Wildlife Protection Society of India conducted and still continuing to conduct ground surveys of cranes and other wetland birds in the Etawah, Mainpuri region which has also been identified as the possible Siberian Crane site network.**

Future plans

**The Ground surveys during the migratory season will be continued in the Siberian Crane site network wetlands as well as other satellite wetlands for monitoring the status of migratory waterfowls and for documenting any possible arrival of Siberian Cranes.**

b) Air survey  YES  NO  NOT APPLICABLE

Past activities

Future plans

c) Counts  YES  NO  NOT APPLICABLE

Past activities

**Annual total count of waterfowls during the migratory seasons is a regular exercise in wetland protected areas in India as well as other key identified wetlands, the results of which are shared with the Asian Waterfowl count programme. The BNHS also monitors all important bird area sites through their IBCN Network.**

Future plans

**The annual bird count programmes will continue to be organized.**

d) Questionnaire or reports from local people  YES  NO  NOT APPLICABLE

Past activities

**Such exercises are taken up by NGOs and University research organizations.**

Future plans

**The same mechanism of networking with NGOs and University will continue.**

2.1.3. What *long-term* monitoring programmes (i.e. of at least 10 years duration) have been initiated or planned for the Siberian Crane in your country?

**The BNHS along with the KGNP have monitored the Siberian Crane population till the year 2001. Currently the KGNP management is conducting the long term monitoring of wetland birds.**

2.1.4. Which of the following methods have been used to determine new migration stopovers, wintering areas, as well as summering areas of juvenile and adult Siberian Cranes?

a) Satellite tracking  YES  NO  NOT APPLICABLE

Past activities

**The BNHS, Aligarh Muslim University along with USGS have been using satellite telemetry on bar headed geese and common cranes to monitor the migration stopovers of select wetland birds into India.**

Future plans

**The BNHS intends to continue the satellite telemetry work as well as bird banding as the mode for monitoring bird migration.**

b) Radio tracking  YES  NO  NOT APPLICABLE

Past activities

**The BNHS bird ringing projects have been monitoring migratory waterfowl using radio tracking in India.**

Future plans

**Such programmes are being planned to be extended to a network of University and other organizations.**

c) Color banding       YES     NO     NOT APPLICABLE

Past activities

**The BNHS bird ringing programme as also several other university bird ringing programmes are continuing this exercise.**

Future plans

**The programme will continue as above.**

d) Questionnaire       YES     NO     NOT APPLICABLE

Past activities

Future plans

e) Surveys               YES     NO     NOT APPLICABLE

Past activities

**University researchers, bird watcher societies, NGOs and wetland protected area management continued to conduct surveys for recording bird migration details.**

Future plans

**This exercise will continue with increasing involvement of civil societies and a network of researchers.**

f) Other reports       YES     NO     NOT APPLICABLE



Past activities

Future plans

g) Other methods (please specify)  YES  NO  NOT APPLICABLE

Past activities

Future plans

2.1.5. Have all reported sightings of the Siberian Crane been investigated?

YES  NO  NOT APPLICABLE (no sightings)

Past activities

**By the BNHS and the KGNP management have continued to investigate any report of migratory bird which have been identified or mis-identified as Siberian Crane.**

Plan for immediate response to future sightings:

**The MoEF, Govt. Of India, the BNHS and the WWF-India as well the International Crane Foundation focal point in India will investigate such reports on an emergency basis.**

2.1.6. Have any studies been carried out on the population dynamics, habitat requirements, and effects of habitat changes and causes of any decline of the Siberian Crane in your country?

YES  NO

If yes, please provide a list of on-going and completed studies with references if results are already published.

Past activities

Future plans

2.1.7. Give a list of any other available publications issued during the last reporting period that include baseline information from studies carried out in your country on Siberian Crane populations and their habitats.

Past activities

**Not applicable.**

Future publication plans

## **2.2. Maintain and contribute to the regional databases on the Siberian Crane and its habitats**

2.2.1. Does your country maintain and contribute to the regional database on the Siberian Crane and its habitats?  YES  NO

If yes, please provide details of contributions made to the database.

Past activities

**The Important Bird Area Programme of the BNHS as well as the status report of birds in India by SACON are the two programmes in which attempts have been made to create a database.**

Future plans

**Formalizing the above programmes into a database on birds are on the pipeline.**

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

Describe efforts taken to collaborate with, and complement activities of other agencies to strengthen sample collection for surveillance of avian influenza in migratory waterbirds at network sites and other important crane sites.

Past activities

**The MoEF in collaboration with the Ministry of Health have set up an avian influenza surveillance programme. By setting up a Central laboratory in Bhopal, training veterinarians to collect impacted waterbirds for examining avian influenza and by setting up of a process in which wetland protected area managers can inform any suspected avian influenza to the provincial wildlife and health departments as well as the federal Ministry of Environment & Forests and Ministry of Health.**

Future plans

**The MoEF and Ministry of Health, Government of India are setting in motion a national avian influenza monitoring programmes.**

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

2.4.1. Have research and monitoring activities, such as those described above in Section 2.1., been reviewed and evaluated for their effectiveness?

YES  NO  NOT APPLICABLE

If yes, please describe the result of these reviews in detail.

2.4.2. Have any research results been applied to improve management practices and mitigation of threats to the Siberian Crane?

YES     NO     NOT APPLICABLE

If yes, please describe briefly how the management practices have been improved as a consequence of research results.

### **OBJECTIVE III:    INCREASE NUMBERS AND GENETIC DIVERSITY**

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

3.1.1. How many eggs were finally produced during the reporting period for release programmes?

As part of the response, given below, please describe also any problems you have encountered in trying to produce enough eggs requested for the release programme as well as recommendations for their solution and future plans.

NOT APPLICABLE

Past activities

Future plans

3.1.2. How many chicks were reared for release programmes using:

a) Costume (isolation rearing) technique?

b) Parent rearing technique?

c) Hand rearing technique?

d) Other techniques (please specify)?

Males	Females
Males	Females
Males	Females

NOT APPLICABLE

Please also describe problems you have encountered during the rearing of chicks for release programmes. What decisions and measures have been undertaken to solve these problems?

3.1.3. Which of the following methods have been used to restore Siberian Crane populations:

- Release costume- or/and parent-reared Siberian Cranes *on breeding grounds*, with/without captive reared Eurasian Cranes.
- Release costume- or/and parent-reared Siberian Cranes *on stopovers along migration routes*, with/without captive reared Eurasian Cranes.
- Release costume- or/and parent-reared Siberian Cranes *on wintering grounds*.
- Other methods (please specify).
- Not applicable

3.1.4. Please describe in more detail the release activities undertaken during the reporting period, as well as the results. What problems, if any, did you encounter during the release programme implementation? What has been (or will be) attempted to resolve these problems?

NOT APPLICABLE

3.1.5. Has monitoring of Siberian Cranes released into the wild on Eurasian Crane staging areas or reared by this species been conducted to determine their migration route and wintering area?

- YES     NO     NOT APPLICABLE

If yes, which of the following methods have been or are being used for these purposes?

- Satellite tracking

Past activities

Future plans

- Radio tracking

Past activities

Future plans

- Mortality sensors

Past activities

Future plans

Colour banding

Past activities

Future plans

Surveys

Past activities

Future plans

Other reports

Past activities

Future plans

Other methods (please specify)

Please describe briefly the results of monitoring Siberian Cranes released into the wild or reared by Eurasian Cranes. Describe the challenges, recommendations and plans for the future.

3.1.6. Have any genetic studies been conducted to manage the genetic diversity of wild and captive populations of the Siberian Crane?

YES     NO     NOT APPLICABLE

If yes, please list these studies and give references if their results were published.

Past activities

Future plans

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

3.2.1. Have any surveys been conducted to identify relatively safe habitats of the Eurasian Crane populations (i.e. ecologically suitable areas on the breeding grounds, along the

migration route and on the wintering grounds) - for subsequent Siberian Crane (re)introduction there? Please describe results of this work.

YES     NO     NOT APPLICABLE

Past activities

Future plans

3.2.2. If yes, what methods have been used for these purposes?

a) Ground survey

Past activities

Future plans

b) Air survey

Past activities

Future plans

c) Other (please specify)

Past activities

Future plans

3.2.3. Has any research been conducted on potential Siberian Crane release sites?

YES     NO     NOT APPLICABLE

If yes, please describe the research and the results in detail.

Past activities

Future plans

3.2.4. Which of the following methods have been or are being used to determine the migration routes of various populations of Eurasian Cranes wintering within the current and former range of the Siberian Crane:

- a) Satellite tracking  YES  NO  NOT APPLICABLE

Past activities

Future plans

- b) Radio tracking  YES  NO  NOT APPLICABLE

- c) Color banding.  YES  NO  NOT APPLICABLE

Past activities

Future plans

- d) Questionnaire  YES  NO  NOT APPLICABLE

Past activities

Future plans

- e) Surveys  YES  NO  NOT APPLICABLE

Past activities

Future plans

- f) Other methods (please specify)  YES  NO  NOT APPLICABLE

Past activities

Future plans

3.2.5. Which of the following methods have been or are being used to develop safe migration routes for Siberian Cranes using migration routes of Eurasian Cranes:

- Placing captive-produced Siberian Crane eggs into nests of wild Eurasian Cranes

Past activities

Future plans

√ Release of costume- or/and parent-reared Siberian Cranes (with/without captive- reared Eurasian Cranes on the Eurasian Crane staging areas)

Past activities

**Costume reared Siberian Crane from the International Crane Foundation were brought to the Keoladeo Ghana National Park prior to the wintering migration so as to help develop association of wild Siberian Cranes with Costume reared Siberian Cranes prior to their return migration.**

Future plans

**Since no wild Siberian cranes are migrating to the Keoladeo Ghana National Park in India, any attempt to bring Siberian Cranes either through assisted migration or any other means would be considered to be supported by Govt. of India.**

NOT APPLICABLE

#### **OBJECTIVE IV: PROTECT AND MANAGE IMPORTANT HABITATS FOR THE SIBERIAN CRANE**

##### **4.1. Protect and manage important habitats for the Siberian Crane**

4.1.1. Have any local site support groups, site management committees or stakeholder groups been established for the purpose of collaborating in the protection of Siberian Crane sites?

YES    NO    NOT APPLICABLE

If yes, please list them and describe each in more detail.

**The KGNP management authority under the UN Foundation supported project has established special village community groups, students support group for protection and management of the wetland habitats of the Protected Area. A presentation in this regard is enclosed.**

4.1.2. Has your country taken any measures in collaboration with local communities to protect inadequately protected or newly identified important areas for Siberian Crane?

YES    NO    NOT APPLICABLE

Past activities

**In unprotected wetlands in the state of Uttar Pradesh, NGOs and surrounding village communities have been brought into an organized 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 that have been identified at Important Bird Areas (IBAs) have been placed with signages for assisting protection of these wetlands through community participation.**



Future plans

**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 landuse tenure.**

4.1.3. Have any management plans been developed for Siberian Crane sites?

YES    NO    IN PREPARATION

Please describe in more detail any progress made to date, including activities undertaken on the ground

Past activities

**A detailed management plan for the KGNP have been developed that specifies protection, habitat management, avifauna population estimation, hydrology management and intervention, tourism management, research and monitoring and such other activities. Using the UNESCO WCPA framework management effectiveness of the KGNP has been evaluated and under a new project supported by the UN Foundation and implemented by UNESCO have been made operational.**

Future plans

**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. A presentation on which is attached.**

4.1.4. Have any applied research studies been conducted in the Siberian Crane sites in support of site management?

YES    NO    NOT APPLICABLE

If yes, please describe how the results have been applied to site management:

Past activities

**Status of the satellite wetlands around KGNP, ecological studies on associated crane species, assessment of hydrological budget, socio-economic dependency status, status of invasive species, understanding migration patterns of select wetland birds are some of the major research studies carried out in the Protected Area.**

Future plans

**The KGNP has organized annual research review meetings and has identified a range of applied research to be taken up by identified institutions.**

4.1.5. Have any environmental impact assessments been conducted in relation to human development activities affecting important Siberian Crane habitats, including possible impacts of climate change?

YES    NO    NOT APPLICABLE

If yes, please provide details

Past activities

Future plans

4.1.6. Are water levels monitored at Siberian Crane sites?

YES    NO    NOT APPLICABLE

If yes, please provide references for monitoring plans or procedures and any results.

**In addition to the meteorological data and monitoring of annual release of water to the KGNP research studies on hydrological budget have been supported. A major research output that specifies the methodology and monitoring plan are being followed. The reference is a Ph.D. thesis “Singh Ritu, 2007 – Assessment of Hydrological Functions and Water Budget of Keoladeo National Park Watershed” submitted to FRI Deemed University from the Wildlife Institute of India.**

4.1.7. Have training and other capacity building activities been undertaken at important sites for Siberian Cranes? .

YES    NO    NOT APPLICABLE

Past activities

**In addition to research biologists on research methodology, veterinarians for care and management, frontline park staff on day to day monitoring activities and satellite wetland monitoring the surrounding village communities have been trained to identified wetland birds and report any sightings of Siberian Crane in and around KGNP.**

Future plans

**The same kind of capacity building exercise will continue.**

4.1.8. What is being done to protect important habitats for the Siberian Crane *outside* of established protected areas?

Past activities

**Identification of such wetlands as Important Bird Areas to be considered for inclusion in the network of Protected Areas in the province they are located and/or declaration of such areas as national important wetlands sites.**

Future plans

**Facilitate and support the provincial government to develop proposals for inclusion of such wetlands in the PA network, designation of the IBAs and examine if these wetlands can be declared as Ramsar Sites.**

## **OBJECTIVE V: INCREASE PUBLIC AWARENESS AND ECOLOGICAL EDUCATION**

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

5.1.1. Please describe measures taken in your country to publicize Siberian Crane conservation efforts.

Please list TV or radio programmes, magazines, newsletters, collections of papers, websites, etc where information about Siberian Crane conservation efforts was publicized.

#### **MASS MEDIA:**

Past activities <b>Nothing new have been added since the last MoU meeting.</b>
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Future plans
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5.1.2. Please describe education and information materials that your country has developed, produced and disseminated for public awareness and to support education and information programmes.

#### **MATERIALS:**

Past activities <b>A world class interpretation centre with focus on the historical migration of Siberian Crane into KGNP and its present situation have been established by the WWF-India in the KGNP with supports from Swarski.</b>  <b>A water school have been initiated by the WWF-India targeting the surrounding school children for imparting the importance of water and its role on wetland habitat management.</b>
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Future plans <b>Innovating approaches are being developed to be included into the school curriculum so as to institutionalize the education awareness programme.</b>
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### **5.2. Community involvement**

5.2.1. Please list education and information programmes and public events that your country has conducted for target groups of local people (especially for hunters) on protection of the Siberian Crane and its critical habitats during the reporting period. Provide details on their outputs and effectiveness.

#### **EVENTS:**

Past activities
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Future plans

**A scholarship programme for the school students from villages surrounding the KGNP have been initiated to create future ambassadors and promoters of crane conservation in this important National Park and the State of Rajasthan (see attached presentation).**

5.2.2. Which of the following target groups have been involved in education and awareness programmes described above?

- General public
- Local government
- Hunters
- Local communities
- Indigenous groups
- Tourists
- Media
- Teachers
- Students
- Schoolchildren
- Frontier-guards
- Scientists
- Businesses
- Donors
- Other (describe):
- None of the above

5.2.3. Please make an objective assessment of the effectiveness of these education and information programmes and public events.

**Based on the 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.**

5.2.4. Describe other initiatives already undertaken or planned by your country to involve *local communities*, in particular, in the planning and implementation of Siberian Crane conservation programmes (eg. community-based protection areas).

Past activities

**The concept of conservation reserves and community reserves are being popularized.**

Future plans

**Several NGOs including the BNHS, WWF-India and Kalpavriksh are identifying and promoting establishment of community reserves and conservation reserves.**

5.2.5. Describe initiatives already undertaken or planned to involve and encourage the cooperation of *government agencies*, *NGOs* and the *private sector* in Siberian Crane conservation programmes.

Past activities  
**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, WPSI and government institutions such as SACON, WII for Siberian Crane and other waterfowl conservation programmes.**

Future plans  
**The above mentioned collaborations will continue.**

5.2.6. Have any community learning / information centres focusing specifically on the Siberian Crane and its wetland habitats been established in your country?

YES    NO    NOT APPLICABLE

If yes, please give details

Past activities

Future plans

### 5.3. Sustainable livelihood opportunities

5.3.1. Describe initiatives already undertaken or planned to identify and facilitate sustainable livelihoods (including income-generating activities) for local communities related to the management of Siberian Crane sites.

Past activities  
**In KGNP, cycle rickshaw pullers and local youths have been trained as park guides to provide additional livelihood supporting income.**

Future plans  
**The mentioned programmes will continue.**

## OBJECTIVE VI: ENHANCE NATIONAL AND INTERNATIONAL COOPERATION

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

6.1.1. What is the national lead agency responsible in your country for coordinating Siberian Crane conservation and management policy? Please provide contact information for your country's designated administrative and technical focal points with responsibility for liaising with counterparts in other countries, the SCFC and co-operating organizations.

**Lead Agency and Administrative Focal Point: Additional Director General (Wildlife), Ministry of Environment & Forests, Government of India, Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi 110 003; Tel: +91-11-24363247; Fax: +91-11-24364790; Email: [mb.lal@nic.in](mailto:mb.lal@nic.in).**

**Technical Focal Point: Wildlife Institute of India, PO Box 18, Chandrabani, Dehradun, 248001; Tel: +91-135-2640112-2640115; Fax: +91-135-2640117**

6.1.2. Are the roles and responsibilities of all government agencies related to the conservation and management of Siberian Cranes and their habitats clearly defined?

YES    NO

Please describe them in more detail, and indicate any need for clarification.

**The Government of India, Ministry of Environment & Forests responsible for developing policy framework, national programmes and supporting funding mechanisms implements the programmes through the provincial forest and wildlife departments. All wildlife and their habitat management responsibilities are implemented through the provisions of the Wildlife (Protection) Act, 1972 and related Forest Conservation Act and Environmental Protection Act. There are special species specific national projects or schemes through which provincial governments are supported by the federal government for implementing the management actions plans based on approved plans developed following frameworks of guidelines.**

6.1.3. Has your country participated in any *international* projects or/and programmes, directly with other countries, for cooperative management of Siberian Crane populations?

YES    NO    NOT APPLICABLE

If yes, please list projects and/or programmes in which your country participates and provide details .

**The Government of India had participated on a bilateral agreement with the Russian Government and International Crane Foundation for facilitating and re-establishing the population of Siberian Crane migrating from Russia to KGNP in India.**

6.1.4. Identify your country's priority *international* research and monitoring needs for the Siberian Crane (ie work requiring international collaboration)

**Possible re-establishment of a migrating Siberian Crane population from Russia to India either through assisted migration or through establishment of a captive reared population at the KGNP and assisting them for their migration to the breeding grounds.**

6.1.5. Has your country established a national crane working group or been involved in the activities of any regional or international crane working groups?

YES    NO    NOT APPLICABLE

Please provide details of past activities and future plans

6.1.6. Has your country undertaken any initiatives (through collaboration with other Range States) to standardise methods, levels of detail and frequency of data collection?

YES  NO

If yes, please describe briefly what methods are proposed.

6.1.7. How often does your country share with other Range States scientific and technical information and expertise of regional interest?

REGULARLY  NOT REGULARLY  NEVER

Details

6.1.8. How often does your country provide data on Siberian Crane sightings and monitoring of the Siberian Crane sites along the western, central and eastern flyways to the database/GIS under the UNEP/GEF Siberian Crane Wetlands Project?

REGULARLY  INFREQUENTLY  NEVER  NOT APPLICABLE

If never or not regularly, please explain what challenges you have encountered.

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

6.2.1. Name any existing approved sites in your country already included in the WCASN-SC.

**Keoladeo Ghana National Park (KGNP), Bharatpur, Rajasthan, India**

6.2.2. List any sites that have been nominated for the WCASN-SC and are undergoing internal review at present.

**Eawah-Mainpuri wetlands in Uttar Pradesh, India.**

6.2.3. List any activities that your country has undertaken in relation to the CMS Central Asian Flyway Initiative that are relevant to Siberian Crane conservation.

Details

**India hosted the Central Asian Flyway 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 Central Asian Flyway action plan.**

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

6.3.1. Please describe any flyway level activities for migratory waterbirds being undertaken by your country that are associated with the Crane and Stork Working Group's goals on Siberian Cranes in East Asia.

NOT APPLICABLE

6.3.2. Has your country undertaken any activities to support the designation of additional sites of importance for Siberian Cranes in East Asia for the EAAFP migratory waterbird site network?

YES  NO  NOT APPLICABLE

Please provide details

### 6.4. Capacity building

6.4.1. Describe your country's needs, in terms of human resources, knowledge and facilities, in order to build capacity to strengthen Siberian Crane conservation measures.

**A network of institutions and organizations capable of providing capacity building training programmes for Siberian Crane and other waterfowl does exist in India, foremost amongst them are the Wildlife Institute of India whose mandate is training, research and coordination of such activities not only in India but also for the South-Asia region. The other institutions who contribute significantly in this direction are the Bombay Natural History Society (BNHS), Salim Ali Centre for Ornithology and Natural History (SACON), WWF-India and a host of Universities who are involved in ornithological research. There may be a need for scientific and managerial exchange programmes between Siberian Crane Research & Management range countries for developing appropriate action plan and strategy for re-establishment of a migrating Siberian Crane population in India.**

6.4.2. Describe any training provided to support the conservation of the Siberian Crane and its habitats (e.g. workshops held, training manuals produced, fellowships, etc.) at site, national and international levels. Indicate your plans for the coming year.

Past activities  
**The Wildlife Institute of India conducts Masters programme, Diploma and Certificate Course in Wildlife Management in which such capacity building components are included. Similar short duration workshops, seminars are also organized by BNHS, SACON and WWF-India.**

Future plans  
**Programmes similar to those explained above will continue.**



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

6.5.1. Has your country submitted any comprehensive project proposals to appropriate agencies for possible funding support?

YES  NO  NOT APPLICABLE

If yes, please provide details

6.5.2. Has your country tried to solicit funds from, or seek partnerships with, other governments, major donor organisations, industry, private sector, foundations or NGOs for Siberian Crane conservation activities?

YES  NO  NOT APPLICABLE

If yes, please provide details

6.5.3. Has your country developed small-scale project proposals to submit to CMS or ICF for their consideration?

YES  NO  NOT APPLICABLE

If yes, please provide details of the proposals and their outcomes (positive / negative).

6.5.4. What funding has your country mobilised for *domestic* implementation of the Siberian Crane conservation activities related to the Siberian Crane MoU? Where possible, indicate the specific monetary values attached to these activities/programmes, as well as future plans.

**The funding support provided to the concerned Protected Areas under the Ministry of Environment & Forests, Government of India's schemes for protected area management or support for specific endangered species programmes.**