



The Last Call to Save Indian Bustard in Kutch, Gujarat, India

**The Corbett Foundation report highlighting the status,
current challenges and threats to the Indian Bustard**

October 2012



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Devesh Gadhavi, Kedar Gore and Harendra Singh Bargali

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Acknowledgement

The report *The Last Call to Save Indian Bustard in Kutch, Gujarat, India* is a compilation of our on-site observations, references of several scientific publications, interactions with the villagers in the area, and meetings and consultations with the Forest Department, Kutch West Division over a period of one year. We would like to duly acknowledge the support and guidance extended by our Chairman, Mr. Dilip Khatau, and the Board of Trustees at all stages of the report compilation. We would like to specially thank Dr. M. K. Ranjitsinh for sharing his valuable expertise about the Kutch ecosystem, Mr. Nirmal Ghosh for his critical review of the report, Mr. Bittu Sahgal and Mr. Keshav Varma for their suggestions and advice.

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Summary

The Corbett Foundation (TCF), a non-profit non-governmental organisation dedicated to the cause of wildlife conservation, through the Kutch Ecological Research Centre – the Foundation’s division in Kutch – would like to bring to the notice of the Government of Gujarat the plight of the critically endangered Indian Bustard *Ardeotis nigriceps* in Abdasa taluka of Kutch district in the State of Gujarat.



Plate-1: Indian Bustard (male) in Kunathiya, Abdasa, Kutch

In Indian Bustard *A. nigriceps*, popularly known as the Great Indian Bustard (GIB), is one of the critically endangered birds in the world. Though the former range of this bird extended to parts of Pakistan, today a major population survives only in India. An estimated less than 300 individuals are reported to be surviving sporadically in different parts of the country. The GIB is categorized as ‘critically endangered’ under the IUCN Red List and listed in Schedule I of the Indian Wildlife (Protection) Act, 1972. GIBs are birds of grassland and semi-arid habitat. Their habitat is under anthropogenic pressure from industrialization and conversion to agricultural fields. In most of their former ranges, GIBs have been wiped out due to the loss of habitat (A R Rahmani 2006; Rahmani & Manakadan 1990). As of today, small and fragmented populations of GIBs are found in certain parts of Indian states viz. Rajasthan, Gujarat, Maharashtra, Andhra Pradesh, Uttar Pradesh, Karnataka and Madhya Pradesh.

An important breeding population of over 30 birds (Dutta et al. 2010) exists in the district of Kutch, Gujarat. Abdasa taluka of Kutch has the perfect habitat required by the Bustards. Abdasa is the only taluka in Gujarat where one can see three different species of Bustards – Indian Bustard *A. nigriceps*, Lesser Florican *Sypheotides indica* and MacQueen’s Bustard *Chlamydotis macqueenii*.

However, in the past few years, the breeding grounds of Bustards in Abdasa taluka of Kutch, once considered quite safe in Gujarat, have been lost to industrial infrastructure and conversion to agricultural fields. Several hectares of ‘Waste Land’ (*kharabo* - as categorized in the Government records) that is actually good Bustard habitat has been encroached upon by local farmers for agricultural purposes. Unknowingly, the habitat of these rare birds is being taken away from them.

This report identifies the current threats to GIBs in Kutch and recommends measures for their long term survival. The Corbett Foundation highly appreciates the protection given by the Government of Gujarat to Asiatic Lions *Panthera leo persica*. We are hopeful that the determination shown in the case of the lions by the Government of Gujarat will also be extended to the protection of GIB in particular. The only intervention needed is to protect GIB habitat in Abdasa which will ensure long term survival and conservation of Bustards in the State.

Introduction

Owing to its unique landscape and undisturbed vast deserts, the Kutch region, has been a well-known abode for its biodiversity. The area is unique in having three species of Bustards viz. Indian Bustard *A. nigriceps*, Lesser Florican *S. indica* and MacQueen’s Bustard *C. macqueenii*. First two species breed in the area and the latter is a winter migrant.

Current Status and Threats to GIB in India

More than three decades ago, 1260 individuals of GIB were known to be thriving in the western parts of India (Dharmakumarsinhji 1957, 1971). That population came down to 745 individuals in 1978 (R. S. Dharmakumarsinhji 1978). In 2001, the numbers further dwindled to 600 birds (Birdlife International 2001). The situation continued to worsen and the numbers of GIBs decreased to less than 300 individuals in 2008 (A R Rahmani 2006; Guideline for the GIB recovery programme MoEF,

Govt. of India 2011). The loss of about 300 individuals in just seven years is an alarming situation and demands immediate action for its conservation. In 2011, International Union for Conservation of Nature (IUCN) declared GIB as 'Critically Endangered' species of the world from its previous category of 'Endangered'.

At present the highest number of GIB (100-125) are found in districts of Bikaner, Jaisalmer and Barmer in the state of Rajasthan (Dutta et al. 2010). This area is more of a wintering ground for the bustards, though few birds breed in this area. As the area shares its boundary with Pakistan, a number of birds migrate to Pakistan in search of a breeding ground. Due to the political boundaries, ineffective law enforcement, and human persecution for its alleged aphrodisiac value, the species is facing immense threat of extinction not only in Pakistan but also in India. GIBs have been hunted as game birds (Hume and Marshall 1878; Ali 1927; Rahmani 1989) and continue to be hunted in neighboring Pakistan (Khan et al. 2008) (Dutta et al. 2010). Low intensity poaching still persists within India as well (Dutta et al. 2010). As per the research conducted during 2001 to 2004, total 63 birds had migrated Cholistan desert of Pakistan, out of which total 49 were killed by local poachers (Khan et al. 2008).

The bird is also facing another critical threat of loss of habitat due to encroachment resulting from the expansion of agricultural fields, and alteration of the habitat for urbanization and industrial infrastructure. These result into the habitat loss for the birds, which lead to the decrease, dispersal or migration in the population. In addition, increasing infrastructural development like high-tension electrical wires and windmills coupled with vehicular disturbance, within the GIB habitats increases the chances of fatal bird strikes. GIBs are known to abandon nests due to human disturbance (Rao and Javed 2005).

The last two decades have seen a drastic reduction in the range occupancy and population size of the GIB in India. For instance, within the state of Gujarat, GIB was recorded from Surendranagar, Jamnagar, Bhavnagar, Rajkot, Kheda, Amreli, and Kutch districts, but currently a single population survives in Kutch with rare transients reported in Bhavnagar, Jamnagar, and Surendranagar districts (Dutta et al. 2010). Most of the population has disappeared from its former ranges due to the

alteration of habitat. In India, owing to the above threats Indian Bustards are facing high chances of extinction in the near future.

India has declared 13 sanctuaries for the protection of this bird. One of these, the Kutch Bustard Sanctuary (2 sq. km), is located near Lala village in Abdasa taluka, Kutch. However, a major breeding population of GIB thrives outside the protected area in Abdasa taluka. Currently, the wildlife of Abdasa area of Kutch is under extreme anthropogenic pressures.

To ensure and show commitment to protect the species from extinction in Abdasa Taluka it is extremely essential to stop and remove the encroachment from the important areas for GIB. Such restored land should be then managed for Indian Bustard conservation. The situation is grim and it is perhaps the last call for NGOs, conservationists, ecologists, bird watchers and the State and Central Governments to come together for the protection of Indian Bustard in Kutch.



Plate-2: Indian Bustard (three) in Dhufi Village Area

Habitat of Kutch



Plate-3: Shrinking Habitat of Indian Bustard in Naliya area

Kutch is a district of the state of Gujarat, located between the latitude 23.13° - 24.68° N and longitude 68.10° - 71.80° E on the West coast of India. It covers an area of about 45,612 sq km, and has length and width extensions of 320 and 170 kms, respectively. It is bound by the Great Rann of Kutch on the North with Pakistan beyond it, whereas on the East by the Little Rann of Kutch, on the South by the Gulf of Kutch and on the West by the Arabian Sea. This region has a typical geography like range of hills and isolated peaks by rugged and deeply cut river-beds, well tilled valleys and tracts of rich pasture land (Ali, 1945).

This region is an amazing blend of habitats like saline deserts, mud flats, mountains, undulating hilly terrain, grasslands, scrub forests, thorny forest and coast line. The Gulf of Kutch is a very unique place in having some endangered marine life. Thus the uniqueness of Kutch can be defined rightly as a strata being surrounded by some diversified areas in terms of both, landscape as well as flora-fauna.

The loss of biodiversity in grasslands and semi-deserts is many times more than that of the forested areas due to the change in the land use practices. Hence, grasslands and semi-deserts with a number of threatened species are rapidly disappearing ecosystem (Bawa et al. 2004). Very few pristine semi-desert and grassland habitats are found in India, some of which are located in Kutch. These are classified as

“Desert Kachchh (Kutch)” biogeographic region. They are unique and occupy very less geographic area as compared to the other biogeographic regions of India. The Rann of Kutch has resulted due to the geological uplifts of land above the sea while the grasslands have been formed due to the drying of previously irrigated and fertile region by earthquake (Maury et al. 2003).



Plate-4: Dry River Bed of Abdasa Taluka

Abdasa taluka is located on the western boundary of the Kutch district. It covers an area of 2398.3 sq. km. and comprises of 165 villages. Habitats in this taluka include grasslands, mangroves, salt pans and creeks. It has an important protected area, the Kutch Bustard Sanctuary.

The Abdasa taluka mainly consists of grasslands, gradually mixed up with undulating rolling hills. Once upon a time, *Acacia nilotica* was considered as one of the dominant plant species of this region. Till today, good numbers of this species can be found in this region.

The Northern part of Abdasa, adjoining to the Lakhpat taluka is made up of rocky terrain. There are many short undulating hills in this region, which harbour small patches of grasslands. Addition of river tributaries emerging from the surrounding hills provide boon to the ecological life of this region. The central part of Abdasa is famous for its grasslands viz. grasslands of Naliya, Jakhau, Bhanada, etc. Rolling hills having good grass patches in between provide an impeccable habitat as well as an excellent breeding ground to the Indian Bustard. During monsoon the same ground provides shelter as well as breeding place to the threatened Lesser Florican *S.indica*. Many rare avian species like Amur Falcon *Falco amurensis*, Lesser Kestrel *Falco naumanni*, Stoliczka’s Bushchat *Saxicola macrorhyncha*, Cream-coloured Courser *Cursorius cursor*, Macqueen’s Bustards *C.macqueeni*, etc. The Southern part of Abdasa shares its boundary with Bhuj taluka, which has more hilly terrain in comparison to the rest of the Abdasa taluka. More number of ‘Gorad’ *Acacia senegal* can be found in this region. Owing to the availability of some small rivers and the

irrigational support provided by the check dams in this area, good number of agricultural fields can be seen here.

The grasslands of Naliya, Kunathiya and Jakhau areas provide shelter to the three species of Bustards. Probably Kutch district is the only place in the entire State of Gujarat, where three species of Bustards can be found.



Plate-5: Indian Bustard (3 nos.) and MacQueen's Bustard seen together at Kunathiya in January 2012

Habitat preferences of GIB

The GIB is quite a choosy bird with very specific habitat requirements during the three important stages of its life – courtship display, breeding and wintering.

Courtship Display Area

Male prefers to perform their breeding display in an area that has good visibility from a distance. They arrive to such places prior to their breeding season and selection of mate takes place at such grounds. The grasslands near Naliya and Parjau villages are found to be potential display areas. GIBs have preferred these grounds for their courtship display and they have been observed regularly at these sites since last few years.

Breeding Area

Bustard females prefer tall grass areas during the breeding season. Hence, after they select their mates in display areas, the pair moves to the breeding area for mating. Revenue lands of Naliya, Bhanada and Kunathiya are the major breeding grounds of

Indian Bustard. Interestingly, Lesser Florican *S.indica* also breeds in some patches of these areas where mosaic of short-heighted grass exists.

Wintering Area

Once the breeding season is over then birds migrate locally to the nearby areas to spend the winter. TCF has observed that Bustards prefer patches of thorny scrub forest having sufficient bushes to protect it from the cold winds. Revenue lands of Dhufi, Bhanada, Kunathiya, Bita, Dhanawada and Gadhwana are such potential wintering sites for the Bustards. Even during summer they prefer to spend more time in such areas that has moderate amount of vegetation.

Status of Bustard Habitat in Abdasa, Kutch

The habitat used by GIB in Abdasa can be divided into three different types on the basis of its legal status in the Government Land Records.

Forest Land

The ‘Forest Land’ means an area or land that has been allotted to the Forest Department and which is under its governance. Abdasa taluka has total 19563.57 hectares of forest area, excluding mangrove habitat, falling under different categories like Reserved Forests, Non-classified Forests type under Section – 4 of F.C.A and area given to Forest Department as compensation. Out of this area some parts are being used by the Indian Bustard, the details of which are given below.

Table 1: Important Bustard Habitat under governance of FD

S. No.	Range	Village	Area in Hectares
1	Naliya North Range	Dhufi Moti	97.84
2	Naliya North range	Naliya	147.20
3	Naliya North Range	Bita	137.71
4	Naliya North Range	Dhufi Nani	93.25
5	Naliya South Range	Bhanada	608.05
6	Naliya South Range	Kunathiya	137.31
7	Naliya South Range	Kunathiya	99.58
8	Naliya South Range	Parjau	133.83
Total....			1454.77

Revenue land

The Revenue Land is the area which belongs to the State Government's Revenue Department. Much of this area is mentioned as 'Waste Land' of a particular village. However, these 'Waste Lands' are good GIB habitats! The authority to prevent activities like encroachment in such revenue areas normally lies with the Revenue Department, and often the District Magistrate or the District Collector looks into such matters.

In Abdasa, vast intact patches of such revenue lands were available till 2005 but encroachment in this taluka has increased since then, thus fragmenting these areas to a large extent.

The details of some of the potential habitat for bustards under the jurisdiction of the Revenue Department are mentioned in Table 2. To know more details about the same, see Annexure I.

Table 2: Revenue Land preferred by bustards in selected villages of Abdasa

Sr. No	Name of Village	Area in Hectare
1	Kunathiya	339.00
2	Bhachunda	374.14
3	Bitra	373.00
4	Dhufi (Nani)	340
5	Dhufi (Moti)	49.00
Grand Total.....		1475.14

Private land

'Private land' summarizes the areas which are under legal possession of an individual or a family, and in most cases these are private agricultural farms. During the winter season, bustards have been observed in agricultural fields, especially after the harvesting of the crops has been done. They forage in such harvested farms. There are some private farms in the areas that have been identified by TCF as potential sites for the bustard conservation programme.

Problem Statement: Threats to the Bustard Habitat

Industrialization

Industrialization is a major threat to bustards as rapidly increasing industrial infrastructure is snatching away the abode from these birds. Huge areas of Revenue 'Waste Land' have been given away for industrial development and infrastructure in Abdasa in the past decade. This development is responsible for the large-scale fragmentation of the Bustard habitat in Abdasa taluka.



Plate-6: Industrialization near the wintering ground of GIBs

Encroachment



Industrial developments indirectly prompt the locals to encroach on Revenue Land. Several patches of Revenue Land have been encroached and converted overnight for agricultural purposes. The encroachers then claim the ownership over such encroached land in the hope of receiving compensation when such land is given

away for industrial infrastructure by the Government. The Bustard habitat which has been lost such is an irreplaceable factor. As per FCA, if any patch of Forest Land has been given away for any kind of infrastructure development then Forest Department is given compensatory land of the same size elsewhere. On several occasions, the Forest Department receives a cluster of small patches of compensatory land which may be far away from each other. Such fragmented land, though good wildlife habitat, cannot replace the original habitat lost for development. Thus the land compensation policy may not be serve the purpose of being results into the irreplaceable habitat loss.

Encroachment has again become a serious threat for the existence of GIBs in Abdasa. The encroached land being under the jurisdiction of the Revenue Department further complicates the matter. Once the land is encroached and converted into agricultural area, it brings many other threats like spraying of pesticides, disturbance to the bird because of trespassing, poaching, etc. Thus, the chances of the exposure of nest to its natural predators increases, which leads to unsuccessful breeding.



The case of poaching of two Chinkaras (DNA News, Dec. 2011, Annexure XII) in Abdasa where Bustards are thriving and the incidents like the slaughtering of more than 60 flamingos in Little Rann of Kutch (T.O.I, Jan 2012, Annexure XIII) loom as additional threats to this critically endangered species. There are many more anthropogenic activities which could be fatal for the existence of Bustard like uncontrolled grazing of livestock. Thousands of cattle freely graze through the 'Waste Lands' often disturbing the birds. The sheep dogs accompanying the shepherds are known to attack Bustards.



Conservation Solution: A concept of ‘Bustard Corridor’

The existing Kutch Bustard Sanctuary covers an area of 202.86 hectares which is too small for the Bustard population of Abdasa taluka. The Bustards in Abdasa are mostly found outside this small Protected Area in the nearby grasslands. To achieve long-term conservation of Indian Bustards in Kutch, it is necessary to protect its remaining habitat by stopping all commercial activities and removal of existing encroachment from the Revenue Land. TCF proposes that

- 1.** The crucial Bustard habitat that is under Revenue Land category should be transferred to the Forest Department to be declared as protected area for Indian Bustards, and
- 2.** Purchasing of Private Land (identified as critical Bustard habitat), if needed, to add to the protected area for Bustard conservation. The new area thus identified for the conservation of Indian Bustards will act as ‘Priority Bustard Conservation Area’ and will prove to be a landmark conservation initiative in Gujarat and in India.

Out of the total Revenue land of 103462 hectares available in five villages of Abdasa taluka, TCF has identified crucial sites (as referred to in Table 2) which are more often used by Bustards as their breeding ground and wintering ground. These areas are distributed in total five villages viz. Kunathiya, Bhachunda, Bitra, Dhufi (Nani) and Dhufi (Moti). These areas are located adjacent to the forest department plots protected for Bustards in Kunathiya, Dhufi, Bitra and Parjau villages. (Table No. 1)

Immediate transfer of these priority Bustard conservation areas (1475.14 hectares, Table No. 2) to the Forest Department and addition of the same to the existing protected Bustard habitat (1454.77 hectares as mentioned in Table 1) will give Bustards a reasonably suitable habitat, which can be referred to as the ‘Bustard Corridor’.

The Google image of the areas mentioned in Table 1 and 2 is shown in Fig. 1 below.

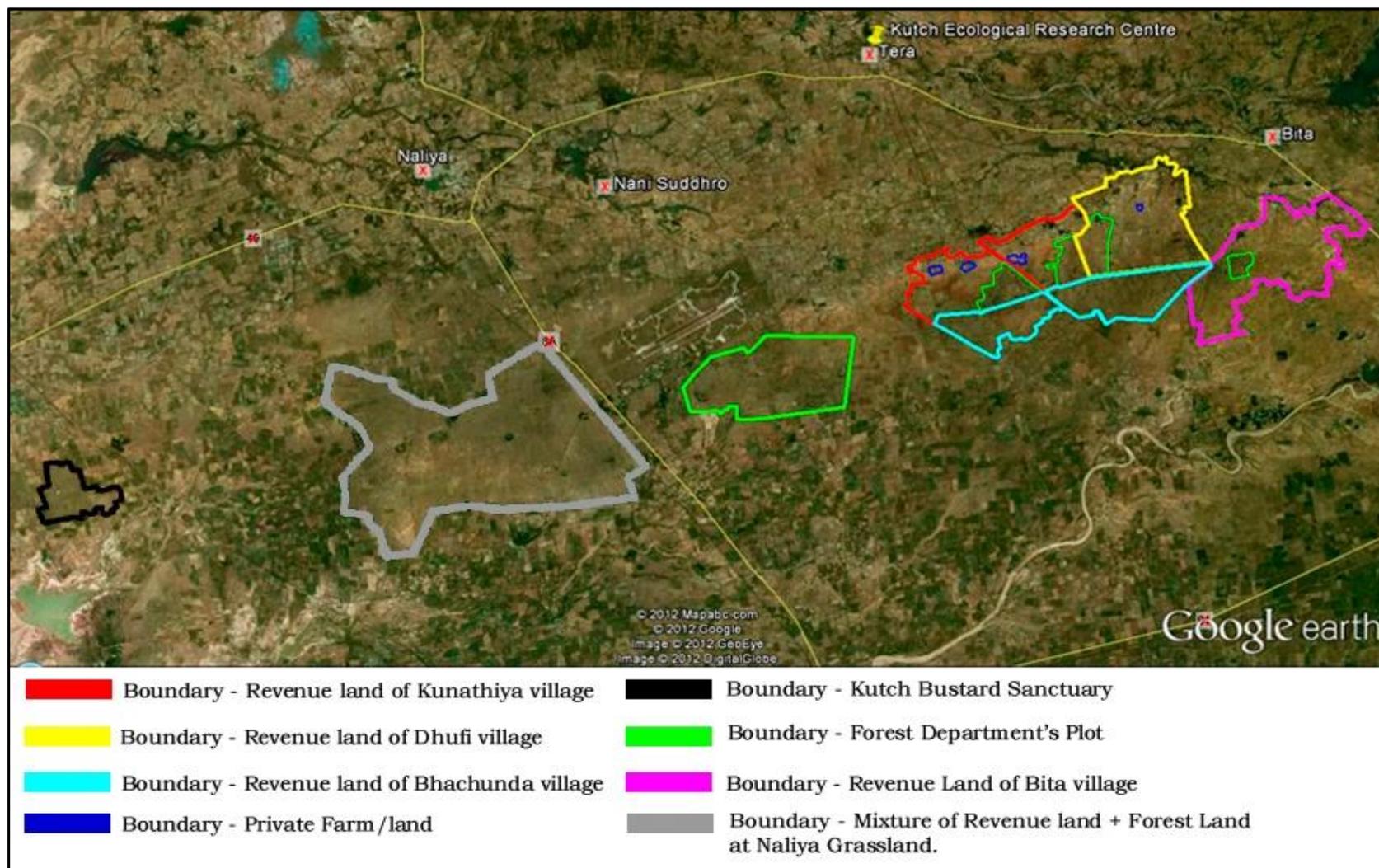


Fig 1: The overall view of the Crucial Bustard Conservation Area – including the Forest & Revenue areas

Proposed Bustard Corridor in Abdasa

The 'Bustard Corridor' identified by TCF in Abdasa is the only area among the total available area of Abdasa that is often being used by Indian Bustards. From the mosaic grassland to the short hillocks, and from the waterholes to the scrub forests, all habitats preferred by GIBs are available in these areas. The 'Bustard Corridor' as identified by TCF is depicted in the Fig. 11 below.

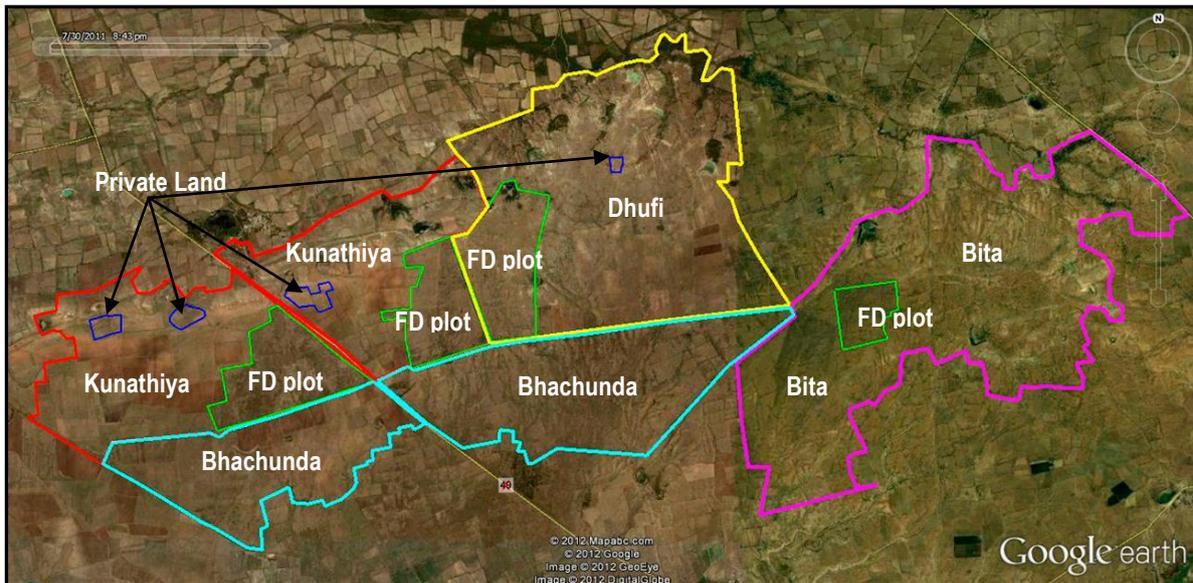


Fig.2: Map showing revenue lands of selected villages

Details of Revenue Lands in the 'Bustard Corridor'

(1) Revenue land of Kunathiya village:

The Revenue Land identified in Kunathiya village (covering 10 survey numbers as mentioned in Annexure I), covers an area of 339 hectares. An area of about 236 hectares of this village is already under governance of the Forest Department (Table No. 1). The identified Revenue area is located in the vicinity of the Forest Department's plots. Thus, if this 339 hectares of Revenue Land is added to the 236 hectares under the governance of Forest Department then the total priority area for Bustard conservation in Kunathiya will be increased to around 575 hectares. The area is quite promising as there are several records of Bustards nesting here.

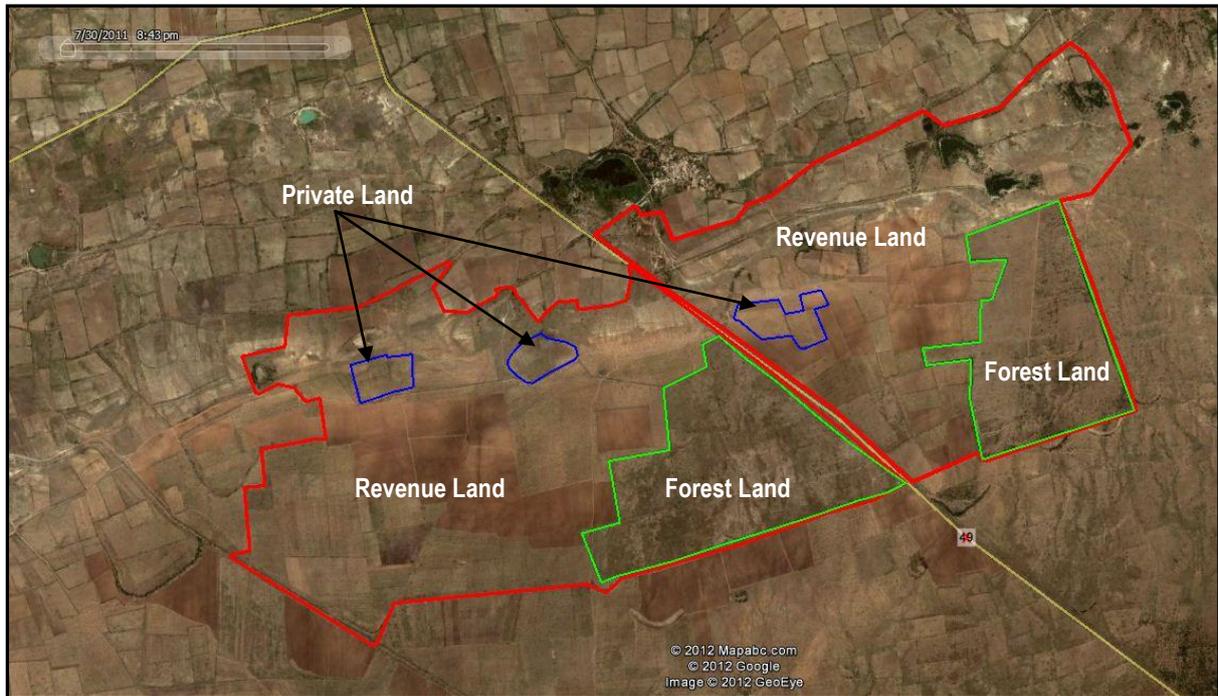


Fig. 3: Map of Revenue Land of Kunathiya village

Importance

This area is a breeding ground for the Lesser Florican *S. indica* and wintering ground of the MacQueen’s Bustard *C.macqueeni*. The revenue land of Kunathiya village is a well-known site for Indian Bustards *A. nigriceps* and it is extremely important to protect this patch. Removal of the existing encroachment and conversion of these Revenue areas into priority Bustard conservation area is a much-needed crucial step.



Threat

As per the current status, the priority Bustard conservation area of Kunathiya has either been cultivated with cash-crops or has been illegally ploughed. Owing to the recent land use pattern, the Bustard habitat here has declined drastically in the last few years. Hence, preventing further habitat destruction is necessary to ensure the long term conservation of Bustards.

(2) Revenue land of Bhachunda village

The total priority Bustard conservation area in Bhachunda is about 374.14 hectares (covering the 66 survey numbers as mentioned in Annexure I). Though the Forest Department does not have any protected plot in Bhachunda village, the identified area is adjacent to the revenue land of Kunathiya, Dhufi and Bitra villages. All these three villages have Forest Department plots, and hence it is crucial to add up the adjacent area of Bhachunda to the existing area protected for Indian Bustards.

Threat

The rate of encroachment in Kunathiya village is extremely high and Bhachunda being adjacent to Kunathiya, the villagers of Bhachunda too have started encroaching on the village revenue land. The area is an important wintering ground for GIBs. In 2010, there is also a record of successful breeding of an Indian Bustard in the revenue area of Bhachunda.

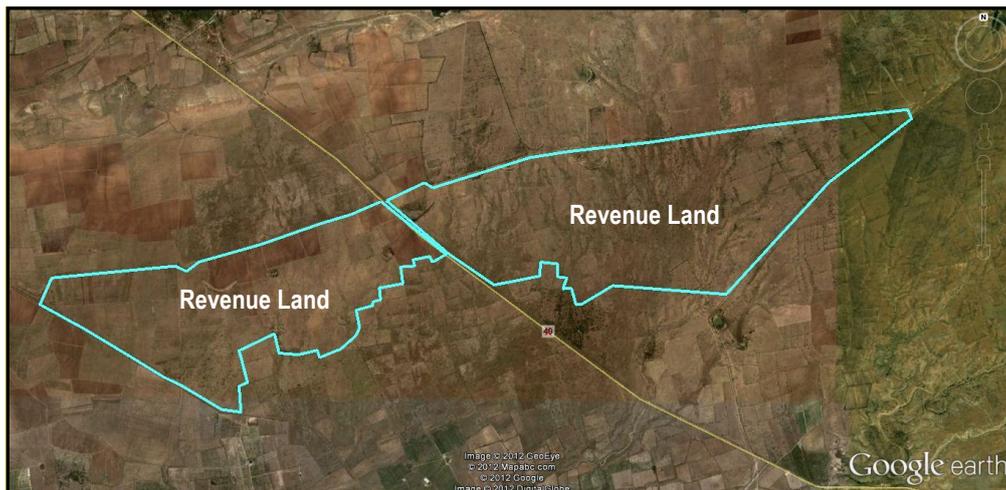


Fig. 4: Revenue land of Bhachunda village

The area is also an important breeding ground for Lesser Florican *S.indica*. Since past several years, they have been coming to this patch during their breeding season. In July 2011, seven males and three females of Lesser Florican *S.indica* were observed in this patch by TCF.

(3) Revenue land of Bita village:

The priority Bustard conservation area of Bita village covers an area of around 373 hectares (covering 16 survey numbers as given in Annexure I). The Forest Department controls an area of about 137.71 hectares in Bita (Table 1).

The Forest Department plot in this area has a plantation of various shrubs which are being used by Bustards to avoid cold winds during winter. At times, two to four Bustards have been observed in this plot by TCF.

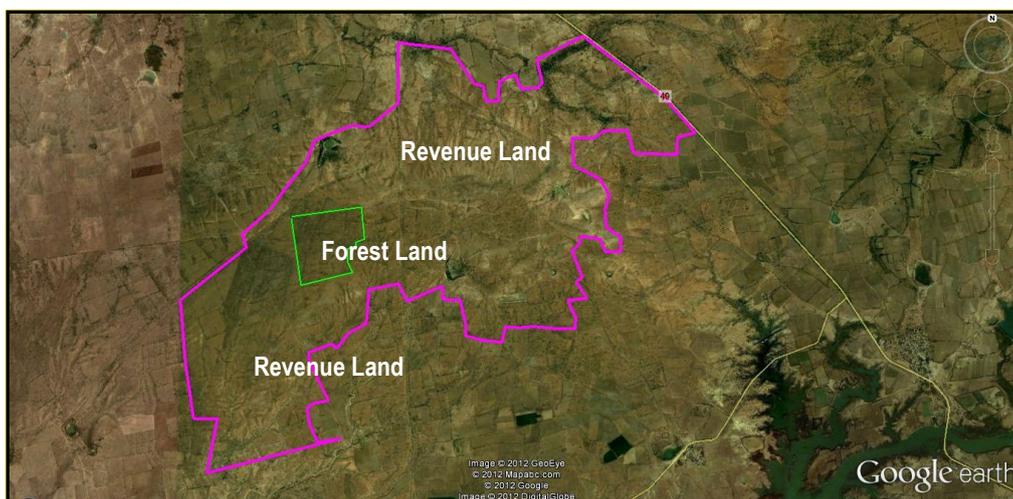


Fig. 5: Revenue land of Bita village



Plate-7: Industrial development near Bita revenue land

Importance

The major portion of this area is having scrub forest with good number of bushes mainly of *Acacia* sp. and *Euphorbia* sp. During winter, GIBs migrate to this patch to avoid intense cold and gushing winds. The maximum sightings of Bustards during winter have been on this patch. This area can be considered as one of the best wintering grounds for GIBs in Abdasa. Hence, it is extremely important to save this area before it is given away for development or encroached.

Threat

The industrial development in the vicinity of priority Bustard conservation area in Bita is seen to be a serious disturbance factor for GIBs. The development is close to the wintering ground of Bustards and TCF has observed Bustards precariously close to the industrial area. The incidence of poaching of Chinkara in December 2011 in this area is a grim reminder of the potential risk the Bustards face, especially during the winter season.

(4) Revenue land of Dhufi village:

The priority Bustard conservation area of Dhufi (Nani) and Dhufi (Moti) – covering 59 survey numbers as mentioned in Annexure I -covers an area of about 389 hectares (Table 2). An area of around 191.09 hectares is already under the governance of the Forest Department.

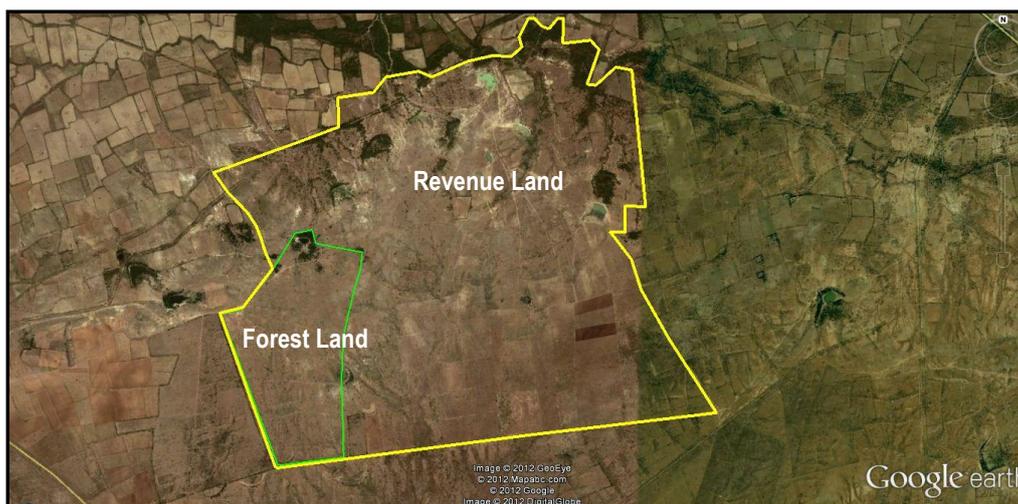


Fig. 6 : Revenue land of Dhufi village

Addition of 389 hectares of revenue area to the existing 191.09 hectares of Forest Department plot will add an area of more than 580.09 hectares to the proposed Bustard Corridor.

The area around Dhufi has vast undisturbed and undulating rolling hills. It is more of mosaic grassland having short grasses, scrubs and few patches of fallow lands which provides an undisturbed habitat to the Bustard. Lesser Florican *S.indica* males doing their courtship display have also been recorded from this area. GIB prefers to use this area as their wintering ground.

Importance

The priority Bustard conservation area of Dhufi villages is a corridor between the two important bustard habitats viz. Kunathiya Revenue land and Bitra Revenue land. The three areas provide a large patch to the Bustard for its survival. Protection of this patch from encroachment and habitat conversion is extremely crucial. This is the second largest patch of grassland after Naliya grassland. There is no other option for the GIBs in the vicinity where they can spend the winter without any disturbance; hence protection of this area is absolutely essential.

Threat

The encroachment had increased in this region which was later on controlled and removed by the District Magistrate of Bhuj. Since then, percentile of encroachment in the area is low. Vehicular disturbance by the villagers, trespassing of individuals, poaching, rise in the number of stray dogs, etc. are the main threats to the Bustards in this area.

The Way Forward

In absence of sufficient Protected Areas, the GIBs in Abdasa are surviving mostly in the Revenue areas where jurisdictional limits are in the control of the District Magistrate or District Collector and not with the Forest Department. This has become the biggest hindrance for the long-term conservation of GIBs in Abdasa. Such operational difficulties result into lack of enforcement, which has resulted into habitat loss for Bustards. To achieve long-term conservation of GIBs in Kutch, it is necessary to offer immediate protection to its remaining habitat on the Revenue Land.

TCF recommends the immediate transfer of the Revenue Land (referred to as the priority bustard conservation area) of 1475.14 hectares in Kunathiya, Bhachunda, Dhufi (Moti), Dhufi (Nani) and Bita villages to the Forest Department for managing it as a Protected Area for Indian Bustards. These areas together with the bustard habitat of 1454.77 hectares already under Forest Department's jurisdiction, will give bustards a reasonably suitable habitat for long-term conservation. In addition, efforts should be made to purchase the private land wherever and merge it with the Protected Area for Indian Bustards. The new area thus protected for GIBs and other Bustards will serve as a 'Bustard Corridor', covering 2929.91 hectares (approx. 29 sq km), will prove to be a landmark and unique conservation initiative in Gujarat that can act as a model for Bustard conservation in other States as well.

Suggestions for the long-term conservation of Indian Bustards in Gujarat

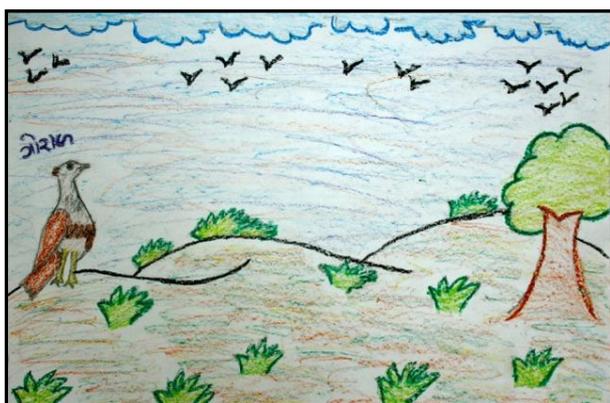
1. Enhanced protection given to Indian Bustards in the State would add another feather in the cap of the Government of Gujarat; the other initiatives being the protection given to the Asiatic Lion and the Asiatic Wild Ass.
2. Revenue Land highlighted as 'Priority Bustard Conservation Areas' should be transferred from the Revenue Department to the Forest Department immediately.
3. Restoration of Bustard habitat in the Revenue Land should be undertaken where necessary.
4. During the breeding season of Bustards, anthropogenic disturbances should be controlled by the Forest Department to ensure safe and successful breeding of this critical endangered species henceforth.
5. A campaign like 'Save Indian Bustard' started by the The Corbett Foundation should be made popular in the local villages, to encourage local communities towards Bustard conservation.
6. The State Government should highlight the Indian Bustard as the 'Pride of Gujarat.' Bird/ornithological tourism is a major industry sector worldwide. Modest eco-tourism initiatives, involving local communities, could help in the long-term conservation of this species.

TCF's initiatives towards conservation of bustards



The Corbett Foundation has been working in more than 80 villages of Abdasa taluka since the last decade. Our projects like the Rural Medical Outreach Programme, Cattle Care and Breed Improvement Programme, Grassland Restoration Project, Rainwater Harvesting Project, Environment Awareness Programme

and Wildlife Conservation Programme have built up a strong bond of connection with the local communities. We have also been successful in diverting the communities toward conservation of nature by our bird & animal rescue work. Our activities have gained good support from the villagers, especially the school going children. Nature Education Camps, Nature Trails, Bird Nest Box Distribution, Drawing Competitions and celebration of days' like World Environment Day, World Wetlands Day, etc. have gained enormous participants from the nearby villages. TCF has prepared a poster emphasizing on wildlife of Kutch, we have donated such posters to numerous schools during our awareness programs.



Since last few years, TCF has observed severe threat of habitat loss to the Indian Bustard in Abdasa Taluka. To curb this threat, TCF spreads awareness among the villagers by conducting various programmes and activities under our 'Save Indian Bustard Campaign'. TCF has specifically targeted

and included villages, which are located in the vicinity of Bustard habitat, to be a part of this campaign.

Online Petition to Save Indian Bustard

To highlight the critical issue of the habitat loss faced by the Indian Bustard and to request the official authorities to take some concrete steps for the protection of Bustard habitat in Abdasa, TCF filed an online petition in February 2012. More than 4500 people have joined TCF's campaign on Change.org appealing to the Chief Minister of Gujarat to save the Indian Bustards from extinction by protecting their habitat. Efforts are on to get more people to sign this petition online.

The screenshot displays the Change.org interface for the 'Save the Indian Bustard Campaign'. The top navigation bar includes the Change.org logo, 'Start a Petition', 'Browse Petitions', and a search bar. The user profile 'Devesh Gadhi' is visible in the top right. The campaign title 'Save the Indian Bustard Campaign' is prominently displayed. A 'Signatures' progress bar indicates that 4,410 out of 5,000 signatures have been collected. The petition is addressed to the 'Hon'ble Chief Minister of Gujarat (Mr. Narendra Modi)'. The 'Created By' section identifies Kedar Gore from Mumbai, India. A sidebar on the left provides an 'INVITE YOUR FRIENDS' section with a search bar and a list of friends who have not yet signed. Below the campaign title is a detailed image of an Indian Bustard with text explaining its endangered status and the need for habitat protection in Kutch. At the bottom, there are buttons for 'About this Petition', 'Petition Letter', and 'Petition Updates', followed by a text area for the petitioner's message.

A screenshot image showing online view of the petition

Annexure – I : Details of the selected survey numbers.

Sr. No	Name of Village	Survey Number	Size in Hectares
1	Kunathiya	84	23
		88	35
		89	29
		94	42
		95	39
		96	35
		97	31
		98	54
		99	33
		100	18
		Total....	339
2	Bhachunda	346/2	21
		347	19
		348	2
		350	18
		351	7
		356	28
		357/1	7
		357/2	15
		357/3	6
		366/1	0.97
		366/2	5
		366/3	6
		369/2	11
		369/3	1
		369/4	6
		369/5	2
		370/1	2
		370/2	6
		370/3	8
		370/4	3
		370/5	1
		373/1	2
		373/2	4
		373/4	0.16
		374/1	2
		375/1	8
		376/1	8
		376/6	0.24
		377/1	6
		378/1	4
		378/5	2
		380/1	3
		380/2	0.80
		381/1	2
381/2	15		
381/3	6		
381/5	0.16		
382/1	0.84		
382/7	0.29		
382/8	0.01		
383/1	9		
383/5	2		
384/1	0.08		

2	Bhachunda	385/4	0.32
		389/1	18
		390/1	0.16
		391/1	18
		392/1	13
		393/1	1
		393/2	10
		393/3	3
		393/4	14
		393/5	0.16
		393/6	0.18
		393/7	0.56
		393/8	0.32
		395/1	7
		395/2	9
		395/3	0.24
		418	5
		419	5
		424/1	8
		424/3	9
424/4	0.32		
425/1	0.97		
425/6	0.36		
Total....		374.14	
3	Bitra	609/1	14
		609/2	5
		620	11
		621	18
		622	39
		623	27
		625	30
		626	16
		627	19
		628	18
		629	5
		630	17
		632	21
		633	17
		634	18
		647	98
		648	110 (G)
649	195 (G)		
Total....		Total 678 : 373 (Revenue) + 305 (Gauchar)	
4	Dhufi (Nani)	86	4
		87	3
		88/1	1
		88/2	1
		89/1	1
		250	4
		251	7
		252	3
		287	7
		291	9
		293	3
		294/1	5
317	3		

4	Dhufi (Nani)	319	8
		320	2
		321	3
		322	2
		325	8
		326	6
		327	6
		328	4
		329	5
		330	5
		331	5
		332	7
		333	6
		334	12
		335	13
		336	11
		337	13
		338	6
		339	8
		340	8
		341	8
		342	8
		343	4
		344	6
		345	8
		346	8
		347	8
		348	8
		349	8
		350	7
351	8		
352	8		
353	8		
354	8		
355	10		
356	8		
357	8		
358	16		
359	4		
		290	149 (G)
Total....			Total 489 (340 Revenue + 149 Gauchar)
5	Dhufi (Moti)	487	5
		488	4
		489/2	7
		490	10
		491	10
		492	6
		493	7
		485	36 (G)
Total....			Total 85 (49 Revenue + 36 Gauchar)

Note : All the data shown in above tables are as per the Government Land Record No. 8A of respective village dated, 22.02.2012.

Annexure – II : Letter of Shri. Jairam Ramesh to Shri. Narendra Modi, CM - Gujarat.

जयराज रमेश
JAIRAM RAMESH



DO No. J-59, M/S/10000/10
राज्य अंत्री (स्वतंत्र प्रभार)
पर्यावरण एवं वन
शासन सरकार
नई दिल्ली-110003
MINISTER OF STATE (INDEPENDENT CHARGE)
ENVIRONMENT & FORESTS
GOVERNMENT OF INDIA
NEW DELHI - 110 003

9th June 2010

Dear Shri Narendra Modi . . .

**Subject: Serious threat to the endangered Great Indian
Bustard in Gujarat**

You are aware that the Great Indian Bustard (GIB) is a highly endangered species, and the grasslands of Kutch in Gujarat are one of the last remaining pockets that hold promise for recovery of this species. Ornithologists consider the conservation of the Indian Bustard as equally important to that of Lions and Tigers. In fact, the great Salim Ali proposed in 1960s that the GIB be adopted as India's National Bird.

Conservationists and researchers working in Kutch have brought to my attention the opening of areas in Abdasa grasslands in Naliya (Kutch), a prime breeding ground for the GIB, for agriculture. A researcher also forwarded a photograph that clearly shows the marking of a new agricultural plot.

I am writing to request you to immediately intervene and prevent the diversion of revenue gauchar land to agriculture, and to ensure that the district officials support the Naliya conservation initiatives. If we do not intervene, the possibility of the GIB going extinct in Gujarat is very real and high.

I am confident that I can count on your support in this regard. *Any assistance needed from GOI will be extended.*
With warm regards,

Yours sincerely,

Jairam Ramesh
(Jairam Ramesh)

Shri Narendra Modi
Chief Minister
Government of Gujarat

Annexure – III : Petition Letter to Shri. Narendra Modi, CM – Gujarat.

Shri. Narendra Modi
Hon'ble Chief Minister of Gujarat
1st Block, 5th Floor,
New Sachivalaya,
Gandhinagar 382010
Gujarat, India

Respected Sir,

The Corbett Foundation would like to draw your kind and urgent attention to a serious matter concerning the conservation of critically endangered Indian Bustards (*Ardeotis nigriceps*) in Kutch.

Sir, the semi arid grasslands of Kutch in Gujarat are one of the few abodes of the critically endangered Indian Bustard, also known as the Great Indian Bustard. Though Kutch has been known for its second highest breeding population of this species, severe pressures of habitat loss due to industrialisation and agricultural encroachment over the past few years has resulted in a drastic population decline of this majestic bird. The population estimates reveal an estimated population of around 30 birds in Kutch out of the total of less than 300 birds surviving in India today. The Indian Bustard shares its habitat with other species of the bustard family – MacQueen's Bustard (*Chlamydotis macqueeni*) and Lesser Florican (*Spheotides indica*), both vulnerable and endangered, respectively, as per the IUCN Red List.

All these 30-odd Indian Bustards survive in the Abdasa taluka of the Kutch district. India has declared 13 sanctuaries for the protection of this bird. One of these, the Kutch Bustard Sanctuary spread over a mere 2 sq km, is located near Lala village near Naliya in Abdasa taluka. However, a major breeding population of Indian Bustards thrives outside the protected area, in Abdasa taluka. The areas outside this notified Protected Area serve as the breeding, display and wintering areas of these birds. Apart from the reasons of habitat loss as mentioned above, constant threat from uncontrolled cattle grazing over its potential habitat is taking these birds closer to extinction. The Indian Bustard is included in Schedule I of the Wildlife (Protection) Act of India.

It is extremely essential to remove the existing encroachment and stop further encroachment from the important areas for Indian Bustard. Industrial projects should not be sanctioned on the land used by the Indian Bustards. Quite a few areas used by the Indian Bustards falls in the category of revenue land. These areas should be protected for the future survival of these majestic birds in Kutch.

Sir, we would like to draw your urgent attention to this issue and request your immediate corrective steps to protect the Indian Bustard habitat in Abdasa at all costs from your Government.

This might be LAST call to save this magnificent species from being extinct in Gujarat. Therefore, your urgent action is solicited.

Thank you.

Sincerely,

दखल >>

महाराष्ट्रातल्या राजभवन परिसरात साक्षात मोरांनाही भटक्या कुत्र्यांच्या हल्ल्याचे बळी व्हावे लागले, तिथे इतर पक्ष्यांची रानावनातल्या अधिवासात काय स्थिती असेल, याची कल्पना येऊ शकते. ज्याचा राष्ट्रीय पक्ष्याचा किताब मिळता मिळता हुकला, त्या माळढोक या पक्ष्यावर गुजरातच्या उद्योगनगरीत आलेलं संकट बरंच काही सांगून जातं. गवताळ प्रदेश हाच अधिवास असलेल्या माळढोकांना कच्छच्या माळरानावरही असंच भटक्या कुत्र्यांच्या हल्ल्याला सामोरं जावं लागलं आहे.

देशभरात सध्या माळढोकांची संख्या जेमतेम तीनशेवर आली आहे. महाराष्ट्रातलं सोलापूर, रेहेकुरी हे माळढोकसाठी ओळखलं जातं. राजस्थानातल्या डेझर्ट नॅशनल पार्कमध्ये सर्वाधिक माळढोक आहेत, त्यानंतरचा क्रमांक कच्छचा लागतो. पण बेबंद औद्योगिकीकरण आणि माळरानांवर झालेली अतिक्रमणं, त्यातून निर्माण झालेला असमतोल यातून माळढोक पक्ष्यांचे अधिवास नष्ट होत आहेत. कॉर्बेट फाऊन्डेशन या संस्थेने कच्छमधील माळढोक वाचवण्याकडे गुजरात सरकारचं लक्ष वेधण्याचा आटोकाट प्रयत्न चालवला आहे.

कच्छचं वैशिष्ट्य म्हणजे या पक्ष्यांसाठी दोन चौरस किलोमीटरचंच क्षेत्र उपलब्ध असूनही सभोवतीच्या गवताळ प्रदेशामुळे त्यांच्या पैदाशीला पोषक वातावरण इथे आजवर राहिलं. माळढोक पक्षी फारसा उडत नाही. त्यामुळे मादीला आकर्षित करताना त्याचा श्रृंगार हा माळरानावरची बाकदार चाल किंवा अंगभूत वैशिष्ट्यांमधूनच असतो. त्यातून मादीने आपला सुयोग्य वर निश्चित केल्यावर ती मादी प्रसूतीसाठी जवळचाच प्रदेश शोधते आणि उंच गवतात तिला स्वसंरक्षण लाभतं. अड्यातून पिल्लं आल्यावर थंडीत जवळच्याच परिसरात काटेरी झाडाझुडपांमध्ये हे पक्षी स्थलांतर करतात. या तिन्ही प्रकारच्या माळरानांसाठी कच्छ, जवळचा अब्दासा तालुका, नलिया, परजाऊचा गवताळ प्रदेश हे सुयोग्य अधिवास आजवर राहिले. पण गेल्या काही वर्षात मुळात या प्रदेशाच्या गवताळपणावरच संकट येऊ लागलं. वधूने वराची निवड करायची, तर दूर अंतरावर दृष्टी जाईल, असं मोकळं माळरान हवं. वाढतं औद्योगिकीकरण आणि अतिक्रमित शेतीमुळे बदललेल्या सखल भागांमुळे या दृश्यमानतेमध्येच अडथळे येऊ लागले. साहजिकच त्यांच्या प्रजननावर परिणाम होऊन वर्षभरात इथली संख्या ३०हून खाली आल्याचं निरीक्षण आहे.

सरकारी व्याख्यांमध्ये पडिक किंवा टाकाऊ जमीन किंवा वेस्टलँड अशा शब्दप्रयोगांखाली त्या जमिनीच्या वेगळ्या वैशिष्ट्यांकडे लक्ष दिलं जात नाही. इथेही तेच घडलं. पडिक जमिनी म्हणून महसूल विभागाने वेगवेगळ्या उद्योगांना आवतण दिलं. सिमेन्ट उद्योग आले, भल्यामोठ्या पवनचक्क्या आल्या. दुसरीकडे शेतीनेही गवताळ प्रदेशांचा चेहरामोहरा बदलून टाकला. खरंतर माळढोकांचं अस्तित्व शेतीला उपकारक. शेतीवर येणारी टोळधाड, कीटक खाण्यात माळढोकांचा वाटा. पण इथे शेतीनेच त्यांच्या घराट्यांवर धाड टाकली. साहजिकच भटके कुत्रे, गुरचराई हे धोकेही आलेच. अलीकडच्या काळात तर अतिउत्साही हौशी छायाचित्रकारांच्या झुंडींनाही घाबरून माळढोक लांब पळतात. माळढोकांवरचं हे संकट म्हणजे पर्यावरणाच्या असमतोलाचाच दाखला आहे. त्यावर उपाय शोधण्यासाठी कॉर्बेट फाऊन्डेशनने लोकसहकार्य घेण्याचे प्रयत्न चालविले आहेत.

- समीर कर्वे



माळढोकांवर संकट

Forest dept wants to expand Indian bustard sanctuary area

ADAM HALLIDAY
AHMEDABAD, FEBRUARY 9

AFTER discovering that critically endangered Great Indian Bustards are being spotted outside the 2.03-sq km Kutch Bustard Sanctuary near Naliya in Abdasa taluka, forest officials have asked the revenue department to bring an additional 37 sq km land under the protected area.

District's Chief Conservator of Forests (CCF) D K Sharma said the department has also asked the Ministry of Environment and Forests to set up an eco-fragile zone as a buffer to the sanctuary while having earlier requesting the revenue department to stop allotting land-use change permission, mostly for farming, in the area.

Sharma, who recalls the trio of requests to have been made about two months ago, said the department has not noticed a decline in the bird's 30-odd population in the sanctuary. He believes it remains stable. "The bird census is progressing now, and we will be able to know where the population stands once the results are out," he said.

The CCF contends the International Union for the Conservation of Nature's (IUCN's) "critically endangered" classification of the species is probably because of the decline in its overall population — it is found in Rajasthan, Andhra Pradesh, Maharashtra, Uttar Pradesh, Madhya Pradesh, Karnataka and Sindh in Pakistan.

Meanwhile, birders from across the country continue to circulate

a "Save the Indian Bustard Campaign" on the internet; the online petition addressed to Chief Minister Narendra Modi has gained over 1,600 signatories, from a little over a hundred on Sunday evening.

Started by the Kutch Ecological Research Centre, a division of The Corbett Foundation in Kutch, the petition says, "A major breeding population of Indian Bustards thrives outside the protected area, in Abdasa taluka. The areas outside this notified Protected Area serve as the breeding, display and wintering areas of these birds."

"The population estimates reveal an estimated population of around 30 birds in Kutch out of the total of less than 300 birds surviving in India today," it says.

Drive to save bustard picks up

But of the 3,130 who signed the online petition, merely 140 people are from Gujarat

DNA Correspondent

Over 3,000 people from across the country have signed a petition spearheaded by The Corbett Foundation to save the Great Indian Bustard. Kutch is the second largest breeding ground for the bird and only 30 are found in Gujarat. Across the country a mere 300 survive.

Incidentally, only 140 people from Gujarat have signed the petition demanding more land for the Great Indian Bustard Sanctuary in Kutch. Of the signatories, majority are from Delhi (2258), followed by Mumbai (411) and Bengaluru (353).

The online campaign is being carried out on Change.org. The petition will then be sent to the chief minister of Gujarat Narendra Modi.

"The sanctuary is made up of only 2 sq km area while the bus-

tards are seen in other areas as well. The problem is that the rest of the area, where these bustards breed come under the revenue department and not the forest department. The former has been giving the land for industrial purpose. It is also being encroached upon by locals," said Kedar Gore, director, The Corbett Foundation.

He said that it is absolutely necessary that an additional 40 to 55 sq km of area is given to these birds, as these are the places where they breed.

"We need to raise our voices now or four to five years from now we may realise that we were terribly late in starting our conservation efforts," said Gore.

An official in the forest department said there is already a proposal in the pipeline to increase the area of the sanctuary. "But it takes time. There are several matters that need to be addressed, including rights of people who live on the land that will eventually be declared as part of the sanctuary," said the official.



DID YOU KNOW?

The Great Indian Bustard is a large bird with a horizontal body and long bare legs

It has an ostrich like appearance and is among the heaviest of the flying birds.

The semi arid grasslands of Kutch in Gujarat are one of the few abodes of the critically endangered Indian Bustard (*Ardeotis nigriceps*), also known as the Great Indian Bustard.

The Indian Bustard shares its habitat with other species of the bustard family - MacQueen's Bustard (*Chlamydotis macqueeni*) and Lesser Florican (*Spheotides indica*), both vulnerable and endangered respectively as per the IUCN Red List.

India has declared 13 sanctuaries for the protection of this bird.

The Indian Bustard is included in Schedule I of the Wildlife (Protection) Act of India.

Sakaal Times Thursday, March 8, 2012

BUSTARDS IN KUTCH FIGHT FOR SURVIVAL

MRITYUNJAY BOSE
bureaus@sakaalimes.com

Mumbai: The 30-odd Great Indian Bustards (GIB) surviving in the wild in Gujarat's Kutch region is perhaps facing the last big battle.

If urgent attention is not given by the Ministry of Environment and Forests (MoEF) and Gujarat Government, this group may be extinct in near future. GIBs are "critically endangered" as per the Red List of the Switzerland-based International Union of Conservation of Nature's (IUCN). Rapid industrialization and encroachment are the major problems that the GIBs face. "The situation is bad," worries Kedar Gore, the Director of The Corbett Foundation, which is doing their best to save this spe-



Dangerously Cornered

The Kutch Bustard Sanctuary, situated close to Lala village, covers an area of just 2 sq km, which is an extremely small patch for a population of around 30-odd bustards surviving in Abdasa taluka of Kutch. It is also covered by more than 100 windmills on one side and by cultivated lands on the remaining sides.

cies. The largest group of GIB are found in Rajasthan - however, the population of Kutch too is very important.

Gore said that though Kutch has been known for its second highest breeding population for this species, severe pressures of habitat

loss due to unplanned industrialisation and agricultural encroachment over the past few years has resulted in a drastic decline in the population of this majestic bird. "The population estimates reveal an estimated population of around 30 birds in Kutch out of the total population of less than 300 birds surviving in the wild today," he said.

Industrialisation is a major threat to the bustard, especially in the case of Abdasa taluka. Rapidly increasing industries are taking away the habitat of these birds.

In addition, land is also encroached and converted into agricultural area, and this brings many other threats like spraying of pesticides, disturbance to the bird because of the trespassing by farmers, chances of poaching, etc.

Annexure – VIII : Important Press Note on Indian Bustard

http://zeenews.india.com/news/sci-tech/conservationists-want-3-000-hct-land-for-bustard-conservation_679682.html

Eco News (Zee News)

Conservationists want 3,000-hct land for Bustard conservation

Last Updated: Monday, January 10, 2011, 19:31

754 0

Tags: Conservationists, Bustard

Ahmedabad: Conservationists want about 3,000 hectares of revenue land near the Bustard Sanctuary in Kutch district to be converted into forest land to save the endangered Great Indian Bustard.

"We have written to the revenue department to convert the revenue land adjoining the Bustard Sanctuary (in Naliya taluka of Kutch) to forest land which could be used for conservation of the Great Indian Bustard (GIB). We are yet to get any reply from revenue department with regard to the letter," Chief Conservator of Forests, Kutch D K Sharma said.

District Forest officer (DFO), in charge of the Bustard Sanctuary, D T Vasavda said that they have asked for the 3,000 hectare grassland, as it is a prime breeding ground for the GIB, an endangered species listed in Schedule I of the Wild Life Protection Act. "The land which we have asked for is in Naliya and was previously with the Gujarat Energy Development Agency (GEDA), which had done plantation in some part, but most of it is still grassland," Vasavada said.

He said declaring the grassland as protected area would help in conservation of the GIB which is a shy creature and hard to spot. Also, the conservation was essential as GIB lays only one egg at a time during the breeding season in June-July.

Union Environment Minister Jairam Ramesh had also written to the Gujarat Chief Minister Narendra Modi to convert the revenue land to forest land for conservation of the GIB and thereby prevent its extinction from Gujarat. The letter from Ramesh to the Gujarat CM for conservation of GIB has given a boost to our efforts to get the grassland from the revenue department," Vasavada said, adding he was hopeful of a positive outcome.

Ramesh had said in the letter to Modi in June last year that conservationist and researchers working in Kutch have brought to his attention the opening of area in Abdasa grassland in Naliya, a prime breeding ground for GIB, for agriculture. "I am writing to request you to immediately intervene and prevent the diversion of revenue gauchar land to agriculture, and to ensure that the district officials support the Naliya conservation activities," Ramesh wrote.

"If we do not intervene, the possibility of the GIB going extinct in Gujarat is very high and real," the Union Minister had said. According to Vasavada there are 47 GIB, as per last census of 2007, in the

Bustard Sanctuary. The sanctuary that was notified in 1992 is currently spread over 202 hectares of land.

Indian Bustard (*Ardeotis nigriceps*) is found in India and the adjoining regions of Pakistan. It is a large bird with a horizontal body and long bare legs giving it an ostrich like appearance. This bird is among the heaviest of the flying birds. In India, they are found in Rajasthan and Gujarat.

The Desert National Park (DNP), Rajasthan is the biggest of GIB sanctuaries. The second main protected hotspot of their survival is the Bustard Sanctuary in Naliya, Kutch. Listed in Schedule-I of the Wildlife Protection Act 1972 (India), the GIB is classified as 'endangered' on the International Union for Conservation of Nature (IUCN) Red List 2002.

PTI

First Published: Monday, January 10, 2011, 19:31

Annexure – IX : Important Press Note on Indian Bustard

http://articles.timesofindia.indiatimes.com/2012-01-04/ahmedabad/30588404_1_great-indian-bustard-kutch-grassland

Fatal wires, dogs threat to Great Indian Bustard

Jan 4, 2012, 04.26AM IST

AHMEDABAD: The rapid infrastructure development taking place in Kutch is not the only threat to the Great Indian Bustard (GIB) and the conservation efforts to protect them. The domestic and stray animals are also affecting the conservation efforts, say findings of the study - published as guidelines by the Union ministry of environment and forests for the Great Indian Bustard recovery programme. Kutch has a population of around 50 GIBs in the area.

The guidelines said that bird collisions with high tension electric wires, fast moving vehicles and other human structures continues in the industrial development zones near bustard areas. Such deaths have been repeatedly reported from Kutch and Solapur in Maharashtra. Confirming the reports of birds dying due to collision with high tension wires, Sutirtha Dutta, a doctoral researcher at the Wildlife Institute of India, said, "I have heard from local people of Kutch about the death of one GIB in 2008, and from the range officer of Karmala (Maharashtra) about the death of one more, few years back. But these numbers are underestimated."

He said it was very difficult to find dead birds in the wild since they get eaten by scavengers. Dutta has been conducting bustard surveys across the species range, and particularly an intensive research in Kutch.

The GIB landscapes and breeding sites have undergone rapid infrastructural development to make way for new intensive agricultural practices which has increased the chances of bird mortality. Death of every single bird due to human cause is a huge loss and another step forward towards the species extinction, said Dutta.

He added that the bustards prefer undisturbed grassland habitats for breeding. "But I have seen the bustards being chased off by domestic dogs, who have reached the interiors of grasslands with recent settling of farmers in Kutch," he said.

To conserve the bustards, the study recommends minimizing nesting failure and human caused loss of adult birds. Thus threats like infrastructure, dogs and other forms of human disturbances are extremely hazardous in breeding grounds.

Other Threats:

The appointment of watchmen to protect the eggs from dogs and other interference has been a failure, says the guidelines issued by the Union ministry of environment and forests for the conservation of bustards. The prevalent conservation-incentive schemes in Gujarat and Madhya Pradesh such as announcing reward for preserving eggs and appointing watchmen has in fact kept the birds away from the egg.

The guidelines further states that the land-use pattern near Lala Sanctuary, Kutch has undergone a drastic change over years. This has resulted in a decrease in the number of birds in the area. The forest department has no authority on the surrounding private land which is a major disturbance to the birds.

The study reported a massive encroachment of revenue lands near the core breeding areas of Abdasa. It further states that habitat relationships and seasonal movement pattern of Great Indian Bustard are not reliably known. This indicates a lack of centrally coordinated, scientifically uniform population estimation protocol. The study also points out that although considerable portion of GIB's diet is crops, the impact of pesticides on them has not been examined so far. The guidelines, which have been published, stated that unethical photography during the breeding season often acts as a constant source of disturbance to the bustards.

Incidents of such photography have been reported from Naliya grasslands. Due to the lack of legislative enforcement and protective measures in core breeding areas, such direct threats on Great Indian Bustard population continues unrestricted. A senior Gujarat forest department official said that even wild life photographers and experts can be spotted taking photographs. Since the bustards do not harm humans, the photographers go very close to the bird eventually chasing them away

Annexure – XII Press note on Chinkara Poaching in Kutch.



DAILY NEWS & ANALYSIS: <http://www.dnaindia.com/>

Were Kutch chinkara cubs killed for feast?

DNA / DNA Correspondent / Friday, December 30, 2011 20:27 IST

The two chinkara cubs, whose carcasses were found near Bitta village in Abdasa taluka of Kutch district last Saturday, may have been killed for meat by local people.

Forest officials have sent the remains of the gazelle cubs to the Forensic Science Laboratory for scientific investigation.

Officials said preliminary investigation had indicated that some local people may have killed the cubs of the endangered gazelle species for meat.

"The limbs, heads and some other body parts of the two chinkara cubs were found on the outskirts of Bitta village last Saturday on Christmas eve. One of them was six months old and the other was one year old," said district forest officer, AC Sampat,

He further said that as all body parts of the two cubs had not been found, there was a possibility that the gazelles were killed for their meat, "may be for party purpose."

However, Sampat emphasised that the killing of the cubs had nothing to do with the tourists currently visiting Kutch, where the chinkaras are found in large number at the Narayan Sarovar Sanctuary.

This act, it seems, was the handiwork of some local people. We don't know how the cubs were killed. Dismembered bodies of the cubs were found on the outskirts of Bitta village but they were hunted elsewhere and parts of their bodies were dumped in Bitta," he said.

"We have sent the carcasses for postmortem to Rajkot and have sought the help of forensic experts whose report is awaited," Sampat added. Talking to *DNA* over phone from Bhuj, the district superintendent of police, JN Rajgor, said forest officials are investigating the incident.

"They have demanded a list of mobile numbers active for some specific days near the scene of crime. We have asked the mobile phone companies to make the list available," he said,

The Narayan Sarovar Sanctuary of which chinkaras are a flagship species is said to be the only one of its kind in India. Under the Wildlife Act -1972, there is a provision of a fine up to Rs 10,000 and three years imprisonment for poaching the

animal.

Annexure – XIII Press Note on Flamingo Poaching in Kutch.

Poachers killed the 64 flamingos in several hunting incidents

TNN Jan 10, 2012, 04:57AM IST

Tags: panchayat elections | flamingo poaching | consumption

AHMEDABAD: The nine persons arrested for flamingo poaching are habitual offenders. Investigations by forest officials have revealed that the accused had resorted to poaching on more than one occasion. "The accused have confessed that the 64 lesser flamingos that they had killed, were hunted down in three-four separate incidents," said forest officials.

The forest department officials said that the crime scene was reconstructed on Sunday where the accused showed the forest department how they poached the birds. However, the accused did maintain that they had used the meat for their own consumption during celebrations after the Panchayat elections.

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Officials said that during the investigation it was revealed that while they waited at the nearby farm, they had even cooked the meat of the flamingos and had consumed it. Official said big nets were spread near the sea and once the birds were trapped they were killed with the help of knives. The beak and legs along with wings were left behind in the area, while the torso along with bones was taken away.

Meanwhile on Monday, it was an action packed day for forest officials. The Morbi court on that day rejected the bail application of all the nine accused arrested in a poaching of 64 lesser flamingos from Venasar village in Maliya-Miyana Taluka.

The department on the same day also moved an application for the lie detection test for all accused. After hearing the arguments of the department, the court has decided to take up the hearing on the application on Friday. The accused were produced later in the day and further remand was sought, but the court rejected the application and sent all the nine accused to judicial custody.

References:

- Ali S. (1927). The mogul emperors of India as naturalists and sportsmen. *J Bombay Nat Hist Soc* 32:34–63.
- Ali Salim, 1945. *The birds of Kutch*, Oxford University Press. London.
- Bawa, K. S., John, Kress, W., Nadkarni, Nalini M. and Lele Sharachchandra 2004. Beyond Paradise - Meeting the Challenges in Tropical Biology in The 21st Century *Biotropica* 36(4): 437-446.
- Bhushan B. and Rahmani A. R. (1992). Food And Feeding Behaviour Of The Great Indian Bustard *Ardeotis nigriceps* *J Bombay Nat Hist Soc* 89:27-40.
- BirdLife International (2001). Threatened birds of Asia: the BirdLife International red data book. BirdLife International, Cambridge. (<http://www.iucnredlist.org/details/full/106002767/0>).
- Dharmakumarsinhji R. S. (1971). Study of the great Indian bustard. Final Report. WWF, Moges.
- Dharmakumarsinhji R. S. (1978). Report on the great Indian bustard. ICBP bustard group unpublished circular. Birdlife International, Cambridge.
- Dharmakumarsinhji R. S. (1978b). The changing wildlife of Kathiawar. *J Bombay Nat Hist Soc* 73:632-650.
- Dharmakumarsinhji, K. S. (1957).: Ecological Study of the Great Indian Bustard in Kathiawar Peninsula, Western India. *J. Zool. Sco. India* 9:140-152.
- Dutta, S. et.al, Running out of time? The great Indian bustard *Ardeotis nigriceps* - status, viability, and conservation strategies. *Eur J Wildl Res.* 57:615-625 (2011)
- Government Of India, MoEF, (2012). Guidelines for Preparation of State Action Plan for Bustards' Recovery Programme.
- Hume AO, Marshall CH (1878). *The game birds of India Burma and Ceylon*, vol 1. Bhavna Books and Prints, New Delhi (reprinted in 1995).
- Ishtiaq Farah, Dutta Sutirtha, Yumnam Bibek, Jhala Y V. (2011). Low genetic diversity in the endangered great Indian bustard (*Ardeotis nigriceps*) across India and implications for conservation. *Conserve Genet* (2011) 12:857-863.
- IUCN (2008). 2008 IUCN red list of threatened species. IUCN, Gland. Available at <http://www.redlist.org>. Accessed 24 Nov 2008.
- Khan AA, Khaliq I, Choudhry MJI, Farooq A, Hussain N (2008). Status, threats and conservation of the Great Indian Bustard *Ardeotis nigriceps* (Vigors) in Pakistan. *Curr Sci* 95(8):1079–1082.

- Maurya, D. M., Thakkar, M. G., and Chamyal, L. S., 2003. Quaternary Geology of the Arid Zone of Kachchh: Terra Incognita. *Proc. Indian Natn. Sci. Acad.*, 69A(2): 123-135.
- Rahmani A. R. (1986). Status of great Indian bustard in Rajasthan—I. Technical report 11. Bombay Natural History Society, Mumbai.
- Rahmani A. R. (1989). The great Indian bustard. Final report in the study of ecology of certain endangered species of wildlife and their habitats. Bombay Natural History Society, Mumbai.
- Rahmani A. R., Manakadan R (1986). Movement and flock composition of the great Indian bustard. *J Bombay Nat Hist Soc* 83:17–31.
- Rahmani, A. R. and Manakadan, R. (1990)., The past and present distribution of the Great Indian Bustard *Ardeotis nigriceps* Vigors. *J. Bombay Nat. Hist. Soc.*, 1990, 87, 175–194.
- Rahmani, A. R. (2006). Need to start Project Bustard. Pp 20. Bombay Natural History Society, Mumbai.
- Rao T. K., Javed SMM (2005). The great Indian bustard *Ardeotis nigriceps* (Vigors) in and around the Rollapadu wildlife sanctuary Andhra Pradesh India. *Zoos Print J* 20(11):2053–2058.
- Rao T. K., Javed SMM (2005). The great Indian bustard *Ardeotis nigriceps* (Vigors) in and around the Rollapadu wildlife sanctuary Andhra Pradesh India. *Zoos Print J* 20(11):2053–2058.
- Sandeep B. Munjpara, B. Jethva & C.N. Pandey (2011). Distribution of the Indian Bustard *Ardeotis nigriceps* (Gruiformes: Otididae) in Gujarat State, India. *Journal of Threatened Taxa* 3(9): 2090–2094.
- Singh H. S. (2001). Natural heritage of Gujarat. Gujarat Ecological Education and Research, Gandhinagar.
- Thosar G, Ladkhedkar R, Pimplapure A, Kasambe R (2007). Status and conservation of great Indian bustards in Vidarbha. *Mistnet* 8(3):10–11.
- Tyabji F. H. (1952). The great Indian bustard. *J Bombay Natl Hist Soc* 51:276–277.

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