

### Introduction and background

The flagship species of Indian grasslands – Great Indian Bustard (GIB) has been recently uplisted from endangered to critically endangered category because of its rapidly declining population and habitat loss (BirdLife International 2011, Dutta *et al*, 2010). This species can be saved from extinction only with support and participation of the local people. For ages, the people residing in bustard habitat have co-existed with the birds and there are clear signs of revival of this sustainable relationship. In Maharashtra Great Indian Bustard was recorded from various parts such as Nanded, Aurangabad, Ahmednagar and Pune. Nannaj, Mardi, Akolekati, Vadala and adjoining area are the only places in Maharashtra where the population of GIB has been found continuously over the last three decades.

A rapid status survey of the GIB in Wardha, Chandrapur, Warora and Yeotmal districts of Vidarbha regions was undertaken in September 1975, pursuant to the directive from Government of India for occurrence of bustards, to assess the habitat of GIB in Maharashtra and to recommend improvisation measures for the study of ecology of some endangered species of wildlife and their habitats carried out by BNHS with support of U.S. Fish and Wildlife Service. In 1979, State Government of Maharashtra declared 7818.47 sq. km. area as Bustard Sanctuary, under Section 18 of Wildlife (Protection) Act, 1972. The area is spread across three talukas each of

Ahmednagar (Newasa, Shrigonda and Karjat) and Solapur (Mohol, Karmala and Madha). Part of North Solapur was included afterwards. Successful increase in bustard population has been attributed to effective protection by Forest Department. Bustard population increased from 8-10 (1981) to 20-22 (1983) due to effective habitat protection by Forest Department. Areas under Drought Prone Areas Programme (DPAP), District Rural Development Agency (DRDA) and Employee Guarantee Scheme (EGS) were found suitable for GIB conservation.

Study carried out by Dr. A.R. Rahmani, Project Coordinator ENVIS Centre and Director, BNHS in 1981-84, 1991-94 and 2003-04 suggested that instead of having a large unmanageable area, the Sanctuary can be divided into guarded walled grassland plots of 100 ha each and provided with strict vigilance. The existing plots of core area at Nannaj and adjoining areas constitute 636 ha, with intervening private land, some revenue land and village roads. If 434 ha land is purchased by the Forest Department near core area only, a compact block of nearly 1070 ha would be available for bustard protection. And remaining areas can be managed as buffer zone where all the activities such as traditional farming can be allowed.

The Great Indian Bustard Sanctuary, Nannaj, Maharashtra has been declared as an Important Bird Area (IBA) in 2004 because of holding the considerable population of this



Great Indian Bustard is regularly seen at Nannaj Bustard area where a residential project "Dreamland" was planned. Top:
Bustards seen in 2007. Above: Bustards seen in 2010
(Photo: Nature Conservation Circle, Solapur)

endangered bird. An illegal construction activity observed near core area of Nannaj bustard area lead to a ban on sale deed activities in entire area under Sanctuary in year 2007. The area under Sanctuary covers hundreds of villages and many cities in more than 8400 sq km of land including both, private as well as government undertakings.

In the meeting of 2007, Standing Committee of National Board for Wildlife has again suggested central government to realign the area under Sanctuary excluding villages and private areas for better management. Mumbai High Court put a ban on all the real estate and land acquisition activities in Solapur city as well as the surrounding villages of the bustard Sanctuary till the realignment of the Sanctuary area. It was initially decided by National Board for Wildlife to keep 347 sq km area under protection but later on changed to 1222 sq km.

This pending decision affected the functioning of revenue, irrigation, town planning, land selling and overall administration process of Solapur district. Even local leaders were helpless on conservation issues as they did not wish to go against the villagers and lead to negative awareness about the GIB conservation. It was found that sometimes developmental activities were given green signal

by the forest department while sometime it was stopped in between as local people as well as concerned authorities from Sanctuary area were unaware about the exact area to be retained under the proposed rationalization of boundaries.

Many local people now think that the development of Solapur is affected by policies introduced for GIB conservation and unstable stand of the concerned authorities for development of canals and four lane national highway. For land acquisition people are either reluctant to give their land or demanding high compensation on basis of proposed developmental projects such as National Thermal Power Corporation (NTPC) project at Fatatewadi and airport at Boramani, Solapur district.

Rate of conversion of grassland into croplands has been significantly increased in last couple of years. Value of non agricultural land in Solapur has been boosted due to real estate development. People were not willing to provide the information about GIB due to rumours such as government is going to relocate many villages to increase the area of the Sanctuary.

The current manpower at forest department of Maharashtra is inadequate to monitor the movement and behavior of the bustards, as most of the time is spent in carrying out administrative work. For example - they have to face people for compensation cases of hunting sheep and goats by wolves as well as crop-raiding by blackbucks. In non protected areas the bustard conservation problems are more difficult. The increase in agricultural area, urbanization, mining, growth of villages, changes in agricultural practices, increase in irrigation facilities, etc. are playing crucial role in local extinction of GIB.



Mr. Sujit Narwade, Scientist-In-Charge, ENVIS Centre, welcoming Shri A.K. Adkar, ACF, Wildlife (Pune) division and Dr. Jagdish Patil, District Collector, Solapur (Photo: ENVIS Library)

### **ENVIS Centre raises an alarm**

An alarm was raised by the ENVIS Centre in 2008 and urgent need to involve local people in GIB conservation was discussed (Narwade & Fartade, 2008). Based on the reports from local volunteers, decline in GIB population was observed by ENVIS staff which was also informed to Forest Department of Maharashtra in August 2010. In a recent census carried out by the Forest Department in September 2010 only nine bustards were counted.

## Organization of a workshop

Therefore ENVIS Centre of BNHS took the initiative of organizing a workshop on GIB conservation with the support of Indian Bird Conservation Network (IBCN) and the Forest Department (Wildlife), Pune, in Solapur on 3<sup>rd</sup> March 2011, where various issues regarding GIB conservation were discussed from various angles. The workshop included an interactive session on the expectations of local people in context of bustard conservation, which was arranged under the guidance of Dr. Jagdish Patil, District Collector, Solapur. More than 70 participants including forest department staff, birdwatchers, lawyers, students and teachers from Solapur, Akkalkot, Barshi, Mohol and North Solapur talukas as well as villagers from Nannaj, Mardi and Narotewadi were present at the workshop.

### Participation of local people

In his welcome address, Sujit Narwade, Scientist in-Charge, ENVIS Centre at BNHS, highlighted the need for further participation of local people in GIB conservation. According to him the bustards have been surviving for generations because of support from local people. However, in the current situation the bird needs collective efforts from every Solapurkar. According to local villagers such as Shri Patil from Mardi village, GIB is a very rare bird and unlike Blackbuck, is not harmful to farmers. Villagers

Farmers from Mardi (left) and Nannaj (right) areas of Solapur at the GIB workshop (Photo: ENVIS Library)

regretted the protests made by them in the past against GIB Sanctuary under negative influence. Another villager from Nannaj, Mr. Tatya Kade, who has lost land to the GIB Sanctuary, requested the people to treat GIB as their child and said that if locals are unable to protect the bird, it would be shameful.

# **Rationalization of Sanctuary boundaries**

The vast expanse of the existing GIB Sanctuary in Solapur district, spanning several talukas has been a very controversial issue for long. According to Shri R K Adkar, Assistant Conservator of Forests (Wildlife), Pune issues like rationalization of boundaries of protected areas need involvement of people and considerable time. The Forest Department (Wildlife), Pune is also in favor of reducing the Sanctuary area for its better management. The final decision is yet to come from the Supreme Court, which may come in near future. Participants expressed their concern over the pending decision of rationalization of boundaries of the Sanctuary, because of which locals are facing problems in sale deed activities, as there is confusion over exactly how much area will remain in the proposed Sanctuary boundary. Developmental work such as construction of canals and road widening of national highways has been stalled, affecting livelihood of villagers.

Dr. Jagdish Patil, District Collector, Solapur also said that the issue of reducing the Sanctuary area was misinterpreted. He made a proposal of giving comparatively good land in the benefited zone of Ujani dam of Solapur to those, whose lands may be acquired. Based on his administrative experience he urged the participants to think that government represents them and without their participation GIB Conservation Programme will not become sustainable. He emphasized on the fact that man has encroached the bustard's area and hence it is his responsibility to provide them an alternative habitat. It is



Dr. Jagdish Patil, District Collector, Solapur, a staunch supporter of the idea of community conservation, addressing the workshop participants (Photo: ENVIS Library)

also important to reserve a part of the land for bustard conservation. Another issue that needs to be solved while rationalizing the Sanctuary boundary is that making NA (Non Agriculture) clearance possible to private lands in the vicinity in order to create livelihoods wherever required.

#### Involvement of others

All stakeholders in the region need to be involved. Raju Kasambe, Project Manager, IBA-IBCN Programme of BNHS, highlighted the work of Important Bird Area (IBA) Programme and Indian Bird Conservation Network (IBCN) in networking bird lovers. Bhagavat Mhaske, one of the forest staff based in Nannaj, shared his experience of GIB conservation over the past 25 years. Mr. Balasaheb Lambture, a student representative, expressed the need for a series of workshops to be conducted at regular intervals. Educationists also expressed their support to bustard conservation. Dr. M.M. Fartade, Principal, Shri Shivaji College, Barshi and Dr. V. Metan, Orthopedist and an active Rotarian, Solapur, pledged their support for bustard conservation and to carry forward this message. According to Dr. R.B. Chincholkar, HoD, Mass Communication & Journalism department, Solapur University, the media should be involved in a way that is useful for all, from children to senior citizens. He discussed the importance and scope of media in the mission of conservation. Dr. Pramod Patil of GIB foundation, Pune emphasized on how modifications in farming practices such as use of organic fertilizers, traditional cropping patterns etc. and proper habitat management can help in bustard conservation.

According to Mr. Pratik Talwad from Barshi, representative of a local NGO and other volunteers, it is important to develop good communication network of all bustard lovers of the area. Some local field assistants such as Mr. Sarang Mhamane and Mr. Shivkumar More shared their experiences of assisting researchers working on Wolf, Fox and Blackbuck projects being carried out at GIB Sanctuary, Solapur. Mr. Pankaj Chindarkar reported sighting of GIB in Mangalvedha area which does not come under GIB Sanctuary and emphasized on importance of non protected areas in GIB conservation. Advocate I.B. Patil from Mardi, Adv. Shekhar Tonpe from Nannaj and Adv. Vinod Survase from Solapur informed about how the issue of getting NA (Non Agriculture) clearance due to rationalization of Sanctuary area is affecting real estate business of Solapur. They requested the concerned authorities to resolve the issue urgently without any delay. Mr. Saurabh Deshpande, a student of law, discussed legal aspects of GIB conservation that included understanding details of the Sections and Acts under which GIB has been protected. He explained how hunting has been defined under Section

2 and sub-clause 16 of Wildlife (Protection) Act, 1972, and discussed Sections 18-34 that carry details about the declaration of protected areas.

### Concluding remarks

Finally all participants of the workshop demanded urgent action be taken on rationalization of boundary of GIB Sanctuary in consultation with the local people as they are the actual stakeholders. A demand for lifting the ban on sale deed activities and NA clearance from all non protected areas as soon as possible, was made. Developmental activities shall get clearance on priority basis as it affects the livelihood of the local people. To ensure that these demands are met, continuous dialogue and follow-up was deemed necessary between all local bustard lovers, villagers and Forest Department as well as research institutes such as BNHS.



The board suggests sighting of GIB to be a glimmer of hope for the remaining grassland habitat at Nannaj Bustard area, Solapur (Photo: ENVIS Library)

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