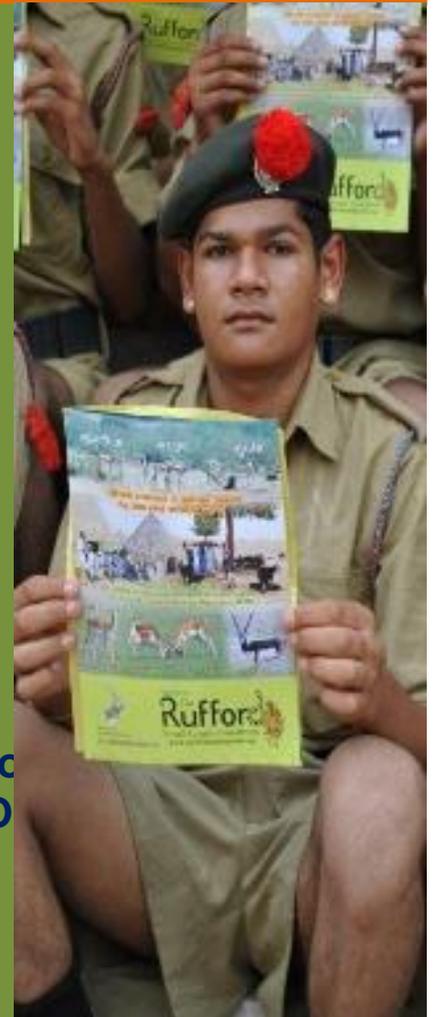


Project Technical Report

Motivation of communities for
wildlife conservation
(Blackbuck) in and outside the
protected areas in Western
Rajasthan

Project Investigator
Dr. HEMSINGH GEHLO



Sponsored by:



Year -2010

SAVE THE BLACKBUCK

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Acknowledgements

It is a pleasure for me to acknowledge the help, which I received during this fieldwork and thereafter in preparing technical report. Execution of this project was made possible due to the financial support by 'Rufford Small Grant Program, UK'. I therefore express sincere gratitude on the behalf of my whole team to RSG especially to Mr. Josh Cole, (Rufford Small Grants Director), and Ms. Jane Raymond (Grant Administrator), for extending help and support throughout the duration of this project.

I am greatly indebted to Dr. H. C. Bohra, Senior Scientist, CAZRI, Jodhpur and Dr. G. R. Jakher (Vice chancellor, Maharaja Gangasinh University, Bikaner), Dr. M. K. Ranjitsinh (Chairman, Wildlife Trust of India) for their encouragement, valuable suggestion, guidance and exposing me to field techniques and procedures. I am grateful to Prof. S.P. Goyal, Prof. Y. V. Jhala Mr. Qumar qurasi, scientist of Wildlife Institute of India, Dehra Dun, Mr. Sunil Parihar (President, Mali Sansthan, Jodhpur), Mr. H.S. Tak (Joint director, Evaluation organization, Rajasthan) for constant help in carrying out the field work. I am gratified to Dr. Shaun Russell (Deputy Director, CAZS Natural Resources, University of Wales, Bangor, UK), Shri Rajpal singh (Member, State Wildlife Board, Rajasthan, Dr. P.M. Dhakhate IFS, Mr. I. R. Choudhary, IFS, Dr. N. S. Rathore (Former Dy. Director, Desert Regional Station, ZSI, Jodhpur) for their constant encouragement and guidance during this difficult field survey.

This work was not possible without the continue support from Rajasthan Forest Department, especially Shri R. N. Mehrotra, CWLW Rajasthan, Shri M. L. Meena, CF Wildlife Jodhpur, Sh. Rajeev Juktawat DCF, Wildlife, Jodhpur district, Shri Ishaq Mugal, DFO Jodhpur, Dr Shrawan singh Rathore for providing closed area or protected area information, mortality detail including poaching cases regarding the Blackbuck in Western part of Rajasthan.

I can't overlook my friends who always supported me during this work so I thanks to Arvind Bhati, Dr. Chandra Prakesh Dadhich, Arind Parihar, Latesh Bhati, Yogesh Gehlot, Dr. Mahesh Parihar, Vinod Bhati, Lovejeet Tak, Dr. Bharat Bhatt, Mukesh Kachhwaha. I owe thanks to Mr. Govind Gehlot, for helping me during the compilation and typing of this difficult job. I shall be failed in my duty if I do not express thankfulness to my wife Divya Gehlot who forgives me for sharing only little time for her care. This study would have not been possible without the unfailing support, I received from Mr Ramesh Chopra, ACF Jodhpur, Mr. Gordhan Ram (Forester, Tal chhaper), Mangilal Bishnoi, Mr. Ramdev Chaudhary, Mr. Janak Singh (Ren-Nagaur), Mr. Mangala Ram Bishnoi, Mr. Nena Ram Deora, Mr. Nena Ram Bishnoi (Surpura), Mr. Sayar Bishnoi (Jajiwala Dhora), Shri Ram Bishnoi, Mr. Deva Ram, Shri Bhanaram, Mr Mukesh Chaudhary (Guda village) at respective study sites and I am thankful to them. In general, I extend my deep appreciation and gratitude to each and every individual who supported or helped me in all possible ways to make this project work successful.

Introduction

The increasing trend of human population has been affecting the antelope numbers and distribution principally through gradual contraction of the grazing and foraging areas. Indian blackbucks were once dispersed locally throughout India wherever conditions were favourable (Jerdon 1874), and their numbers may have approximated four million (Groves 1972). The Thar Desert is a zoologist's paradise with respect to the type of animal habitat and in the nature and man-animal relationship. The arid region of Rajasthan is the best potential habitat for Indian blackbuck (*Antelope cervicapra*) in Rajasthan. In the 1920's blackbucks were so abundant in the western Rajasthan that if a gun was fired, one could joyfully watch the fleeing blackbucks for an hour across the road (Prakash, 1977). As a result of almost continuous hunting and poaching and due to gradual degradation of its preferred natural habitats the present population of the Indian antelope may not be more than 4.6 percent of its earlier strength (Mukherjee, 1976). The blackbuck is a typical Indian animal in respect of its distribution. It is quite abundant in Rajasthan and Gujarat, It also occurs in protected areas. Among the 13 states of India in which Blackbuck is found, the large number is found is Rajasthan (Rahmani 1991) while Schaller (1967) had noted that the principal distribution of the blackbuck in India is limited to Western Rajasthan. Ranjitsinh (1982) estimated between 7600 and 8000 blackbuck in whole of Rajasthan, but according to the census done by Forest Department, in Jodhpur district alone, nearly 10000 are found in Gudabishnoi and dhawa-doli areas (S. Sharma, 1980) however, S.P.Goyal et. al. (1988) reported that the population is not so high. Some workers have conducted studies on behaviour, ecology and distribution of blackbuck of this region (Goyal et. al. 1988; Ghosh et. al. 1984; Sharma, 1981; Groves, 1972; Gehlot H.S, 2006). In the arid part of Rajasthan, the blackbuck is mostly found now inside wildlife sanctuaries only or closed areas, in and around villages inhabited by people of the Bishnoi community. This animal is an object of special veneration for the Bishnoi community of Western Rajasthan. This community zealously protected and still continues to protect blackbuck herds in their areas of habitation despite the damage that the blackbuck causes to their agricultural crops and these people protect the blackbuck with religious fervour, and provide feed and water to these animals during scarcity periods. During the last four decades, pelt trade, poaching, land use changes, escalation of human and livestock population and developmental activities have resulted in transformation of the desert and the wildlife populations are dwindling in this area. Indian Blackbuck (*Antelope cervicapra*) a globally near threatened ungulate had once a wide distribution in Rajasthan but due to increasing human population, mechanized agriculture, by road accident and hunting by local communities their population declined very fast now they occurs

in restricted areas only. Blackbuck is included in the Schedule-I of Wildlife Protection Act, 1972 and is designated as Vulnerable as per Red Data Book of IUCN.

The sportsman term “blackbuck”, which characterizes the animal’s striking sexual dimorphism, is synonymous with the Hindi name kala hiran translated as “black deer” or “blackbuck” (Brander, 1923; Krishnan, 1972). Most Indian languages have different names for the male and the female Indian antelope, for example in the arid part of Rajasthan the buck is known as Kaliyan and the doe as Modiyan (an animal without horns). The male Blackbuck (*Antelope cervicapra*) is particularly attractive and gracefully built with a wonderful pair of divergent, spiralling horns. In the second years a large open spiral is developed. It is believed that the full number of spiral twists is attained with the dark coat about the end of the third year. The spirally twisted horns which occur only in males, rarely exceed 50 cm. In the yearling buck the horns are without spirals. The coat colour in the male at dorsal and lateral parts is blackish-brown with white patches on the muzzle and white rings round the eyes. The under parts of both males and females are always white or pale white. When young, its coat, like that of the does, is a yellowish fawn. After three years old the dorsal coat commences to turn black in male buck. A well grown buck stands about 80 cm at the shoulder and on the average weighs about 40 kg. Its body measures about 100-130 cm.



Adult Male



Adult female

The Project Objectives

To promote various conservation program with message to create awareness among local communities for the better understanding of Blackbuck conservation and restoration its habitat. The major objectives of this study were:

1. Systematic survey in western part of Rajasthan where Blackbuck presents
2. Simultaneously suitable habitat availability will also be documented and parameters note downed
3. Creation of a network of students, researchers and field biologist for conservation awareness
4. Promote awareness about Blackbuck and other Thar wildlife conservation through education
5. Organize exhibitions, workshops, symposia, seminars, audio-visual presentations and lectures
6. Publish books, maps, photographic compilation and produce wildlife and conservation films

Study area:

The western part of Rajasthan is arid region of India. It lies between 24°N and 35.5°N and 70.7°E and 76.2°E. This region covers 12 administrative districts (Barmer, Bikaner, Churu, Jaisalmer, Jalore, Jhunjhunu, Jodhpur, Nagaur, Pali, Sikar, Sri Ganganagar and Hanumangargh) of Rajasthan while The Blackbuck are lived in isolated pockets of Jodhpur, Churu, Nagaur, Shri Ganganagar and Bikaner districts. The present human population of this arid region is 22.57 million and density is 133 people per square kilometre. Along with the human population increase, there is a study increase in the livestock and present density is 145 animals/sq. km. The climatic conditions of the western Rajasthan are typical hot arid characterized by extreme high and low temperatures, during summer and winter, respectively. January is the coldest month and the dry hot summer sets in after mid March which continues up to June, till the onset of the monsoon. Variation in rainfall from year to year is wide and failure of monsoon is quite frequent. The study areas falls under the arid zone where annual rainfall varies between 200 to 400 mm and mainly occurs during the months of July to September. The thorny type of vegetation is the most dominant in western Rajasthan. It consists of three series, namely, (i) *Calligonum polygonoides-Clerodendrum phlomidis* (ii) *Prosopis-Capparis-Ziziphus* and (iii) *Acacia-Capparis*. Over 60 species of mammals have been recorded from this region of desert. Apart from ungulates like Blackbuck (*Antelope cervicapra*), Indian gazelle (*Gazella bennetti*), and nilgai or Bluebull (*Boselaphaus tragocamelus*) other wild animals are wolf (*Canis lupus*), Indian Fox (*Vulpes bengalensis*), Desert fox (*Vulpes vulpes*).

Methodology

To find out the present distribution status of Blackbuck in and outside protected area of western Rajasthan, a total seven districts namely, Jodhpur, Nagaur, Bikaner, Churu, Barmer, Shri Ganganagar and Pali were visited during study period. Every district headquarters were visited to contact forest officials and to make inquiries about Blackbuck population.

A field binoculars and GPS were used throughout the study for observation of the study animal in the field. Photographs of Blackbucks in action were also taken whenever possible using Nikon camera. For the purpose of the present study, a survey was conducted in two phases, road or line transect and through interview a questionnaire survey. Therefore field visits were undertaken to carry out meetings and informal exchanges with the villagers. The questionnaire was dealt with detail of villages and distribution status of Blackbuck .

The proposed project was for a short period of one year. Two field assistant were selected and an orientation program was organized for them during first two month of study period simultaneously four volunteer were also take part in this orientation program. Later on, the six months were spent for survey of Blackbuck and its habitat simultaneously network building among local people, students and volunteers in western part of Rajasthan. Next two months for preparation of awareness material and rest time were spent for campaigning in support of Blackbuck conservation in western part of Rajasthan, which includes awareness programs, village level workshops at different villages and approach to children at school level through essay, drawing and other competitions.

Field Survey

The present project aims to estimate Blackbuck distribution status and aware local communities; we have started a general survey of the study area for present status of Blackbuck in and around closed areas of seven districts in western Rajasthan. The field survey was conducted between October 2009 and March 2010. During this project duration population distribution status along with habitat of Blackbuck were surveyed. Project team has collected information on the distribution of Blackbuck and its preferred habitat in Thar region of Rajasthan during this survey.

The Indian antelope are restricted to limited pockets in Jodhpur, Churu, Nagaur, Shri Ganganagar and Bikaner districts of western Rajasthan; however their few numbers were also noticed from Pali, Jalore and Barmer districts while the abundance of buck in Jodhpur is the highest among other districts of western Rajasthan followed by Churu and Nagaur (Hemsingh and Jakher, 2007 and 2009). The blackbuck thrived in isolated pockets of the western Rajasthan in or around closed areas or sanctuaries

where Bishnois are settled. Their preferred habitat in this range is flat scrubland in the vicinity of water holes. The most of blackbuck population in the area prefers scrublands of the nearby Bishnoi dominated villages.

The present distribution of the blackbuck in arid region of Rajasthan indicates their occurrence in only few isolated pockets with one sanctuary Tal chapper and some of closed areas of Jodhpur, Nagaur. There are isolated populations of blackbuck in Bhopalgarh, Luni, Bilara and Osian tehsil of Jodhpur and few villages of Pali, Jalore and Barmer district. In addition, there is other blackbuck population in Ridmalsar of shri Ganganagar district. Out of 22 notified closed areas of western Rajasthan only five namely Guda Bishnoian, Sathin and Dhawa in Jodhpur, Rotu and Jaroda in Nagaur and Tal chhaper sanctuary in Churu district has good numbers of Blackbuck.

Approximately 2100 km road survey was done to get the encounter rate of Blackbuck through road transect. A blackbuck distribution map was prepared which is showing the current status of Blackbuck in western part of Rajasthan (Annexure-I). Simultaneously, project team (two field assistant and four volunteers) was surveyed 19 transects in 05 closed areas and 04 transects in Tal chhaper sanctuary of western Rajasthan. All these transect were done away from roads and human habitation. During present study, the highest population density is however noted from closed areas of Churu district followed by Nagaur districts. The highest population density 38.5 indivi/sq.km was found in Tal chhaper Sanctuary, 15.2 and 14.0 indivi/sq.km were recorded at Jaroda and Rotu closed area of Nagaur district respectively which may be due to availability of good habitat and protection from local people while 9.6 indivi/sq.km at Guda and 7.75 indivi/sq.km was noted at Dhawa closed area of Jodhpur district (Table-1).

Data obtained of different closed areas of western Rajasthan from Forest (Wildlife) Department showed that during 2007-08 about 811 buck in Guda, 401 in Dhawa and 2809 individuals was in Rotu whereas 2010-11 blackbuck reduced in the above three closed area and only 680 in Guda, 386 in Dhawa and 1625 in Rotu as per census data. But Blackbuck population was increasing at Tal chhaper Sanctuary of Churu district during 2007-08 sanctuary has 1780 blackbuck whereas during 2010-11 blackbucks increased up to 2025 individuals (Table-2).

In addition, there are other blackbuck population outside closed area, notably at Lamba, Ramdawas, Rawal, Ramnagar, Hingoli, Surpura, Sevki, Bucheti, Kosana, Mehrana, Rudiya, Mindoli, Birani, Bhawad, Kharda and Jud of Jodhpur district, Bichhpadi and chhakdhani of Nagaur, Doli and Jhakharda of Barmer, Vayad of Pali, Ridmalsar and Rabla of Shri Ganganagar, Nimbli, Kalali, Bhakariwala, Dhureliya, Jetpur, Dudhali, Dungarpur, Nehda, Chingari, Pipaliya ki dhani of pali district in western

Rajasthan (Fig.1).

During present study no particular season was observed for mortality of blackbuck. However, the predators caused the maximum deaths especially by feral dogs. During one year study period 193 different aged blackbucks were reported dead from entire study area. Only one buck was died by natural death out of 193 deaths. The mortality was also caused by road accidents (03%) and unknown (01%) reasons. The feral dogs caused the highest mortality 93% during study period and among them the maximum deaths were of new born fawns in study areas. Even after strong enforcement of Wildlife (Protection) Act by Wildlife Department, the poachers/hunters were responsible for 01% killings or deaths of Blackbuck in arid part of Rajasthan (Fig. 2 & 3). Almost all the species of ungulates are being hunted from most parts of the Western Rajasthan. On many occasions hunters were arrested by local police with the help of local people especially *Bishnois*.

Table 1: Density of Indian antelope (Blackbuck) in some area of western Rajasthan

District	Area/Village	Total number of transect	Density per sq km (Individual per sq km)
Jodhpur	Guda closed area	7	9.60
	Sathin closed area	2	4.33
	Dhawa closed area	6	7.75
Nagaur	Rotu closed area	2	14.0
	Jaroda closed area	2	15.2
Churu	Tal chhaper WLS	4	38.5

Table 2: Census data of Blackbuck population in closed or protected areas of western Rajasthan

Year	Jodhpur			Nagaur		Churu
	Guda	Dhawa	Sathin	Rotu	Jaroda	Tal chhaper sanctuary
2002-03	4237	3714	976	615	842	1638
2003-04	1475	386	446	582	989	1281
2004-05	1885	953	844	645	876	1698
2005-06	1051	725	410	587	802	1680

Figure 2: Month wise mortality of blackbuck in western Rajasthan during project duration

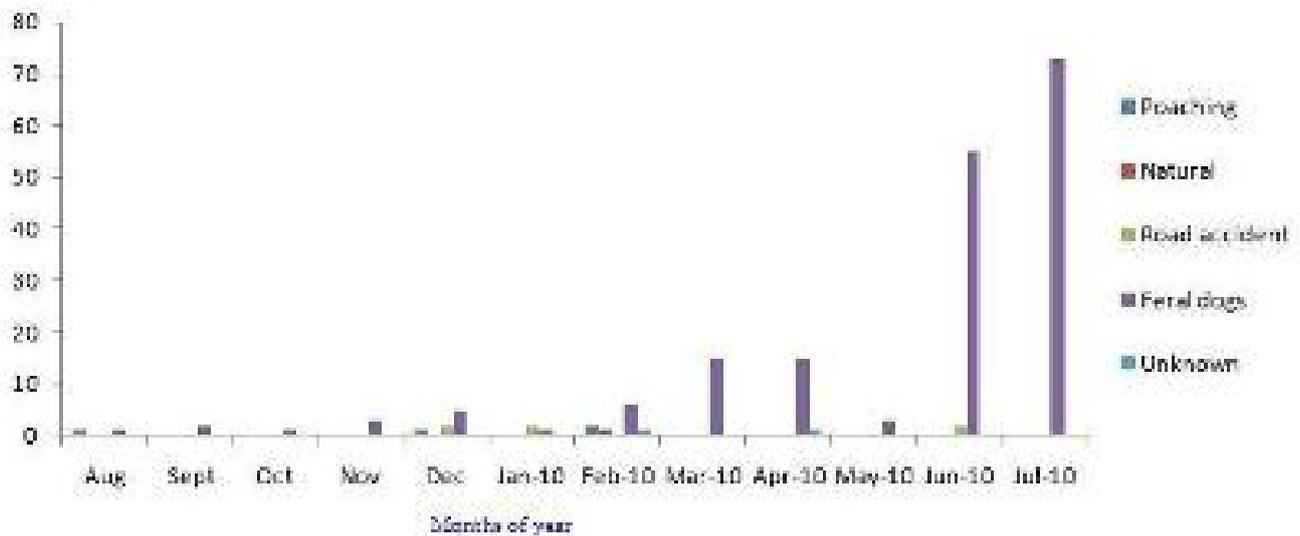
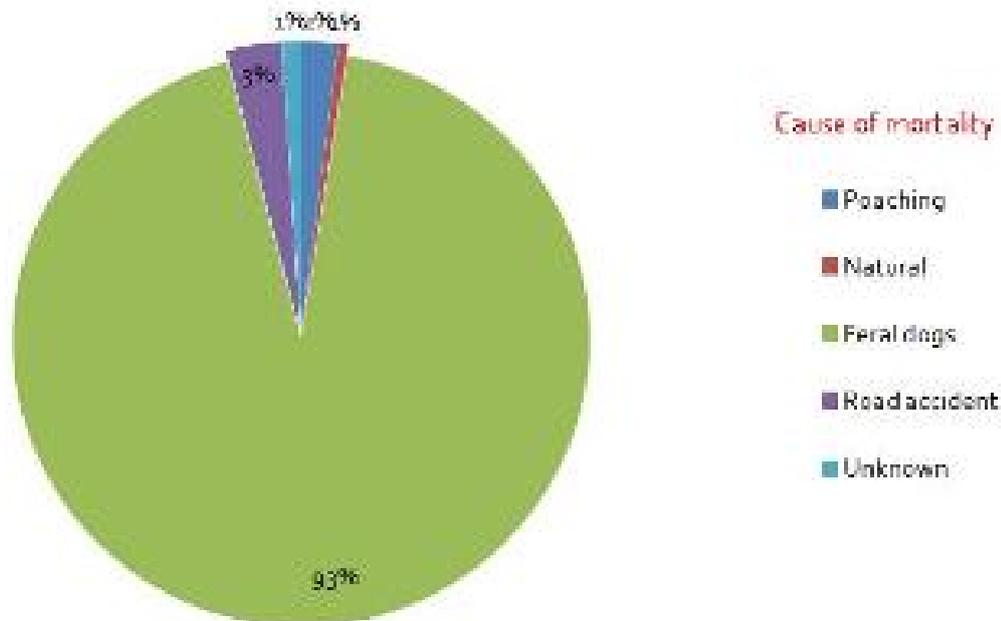


Figure 3: Mortality causes of blackbuck in western Rajasthan



(Data were collected from forest department and the local media report)

Major threats for Blackbuck and its habitat Feral dogs:

The natural predators like wolf, fox and jackal were very less but the feral dogs are main predators of blackbuck in these areas. The feral dogs are important predators of blackbuck in these areas. The feral dogs live in groups, in circle the blackbuck strategically to prey upon it. The killings by feral dogs are very high especially of fawns during breeding period.

Mining: Other destructive activities like open cast mining are very common in Blackbuck habitats especially in Guda area of Jodhpur. While the salt mining is very common around Tal chhaper sanctuary in Churu and Gypsum mining at Barmer district which are destroying the blackbuck habitat.

Encroachment in oran and gauchar: Out of the major reasons for the decline the number of blackbuck in this arid region has been the gradual encroachment by human and their livestock are grazing on the natural habitats like oran and gauchar. There has been a tremendous increase in agricultural activities in earlier uncultivated land of the region and human habitations have spread far and wide.

Spreading road network: Road expansion programs in blackbuck habitat are inviting Blackbuck killing in road accidents. Every year two or three Blackbucks are killing by heavy traffic on road in and around Tal Chhaper Wildlife Sanctuary.

Poaching: Occasionally poacher communities like Bhils or Sanshi, Bawariya, Rajput and Muslims are actively involved in blackbuck poaching for its meat in this arid region of Rajasthan.



Human pressures: All closed areas are surrounded by several villages. Most of the low-income group families in the villages which are depend on the closed area to collect their fuel wood, fodder for their livestock. Exploitation of such forest resources is another threat to the quality of the blackbuck habitat in the closed areas.

Overgrazing: Arid region has a very high number of livestock populations including sheep, goat, cow and buffalo which are fully deepened on scrub land like oran and gaucher where blackbuck exists.

Water scarcity: The Blackbuck drinks regularly. They visits to water hole either once or twice depending on ambient temperature in Rajasthan. But no permanent water body in blackbuck habitats of Thar region. Many death of blackbuck from lack of water was reported in western Rajasthan during hot summer season.



Motivation of communities for wildlife conservation (Blackbuck) through awareness

Community meeting, workshop and conservation programs were organized for local youth, community leaders, farmers, teachers and students to raise awareness, education and communication for better understanding of Blackbuck conservation and its importance in western Rajasthan.

Capacity building of forest staff: We organized workshops for capacity building of forest staff to raise the level of general awareness of forest department staff about their duties and responsibilities, including basic wildlife monitoring by use of GPS. Forest staffs of Jodhpur forest division including foresters, range officers and forest watchers were participated in one day training workshop at Guda and Dhawa wildlife closed area of Jodhpur where blackbuck population is highest.

Rally: School rally programs were organized in collaboration with the local NGO “Sarshti Sansthan”,

Jodhpur. About 325 school children from 03 schools of the Guda village cluster participated in a 4 km rally.

Volunteers from Sarshti NGO distributed wildlife awareness pamphlets along the route of rally.

Essay and drawing competition: In order to create awareness among local school children essay and drawing competitions were conducted at different schools. Team approached government and private schools for raised conservation awareness by drawing wildlife related paintings and exhibited keen interest for blackbuck and other wildlife conservation. The competitions were organized in three categories viz. Sub-Junior (Class nursery to forth), Junior (Class VI to VIII) and Senior (Class IX to XII) at school level.



Sign boards: We were erected signboards on NH 65, 89 and other passing roads of closed area with appeals to keep vehicle speeds down in the wildlife rich area. These sign boards would definitely get a notice by all road users for better awareness and a positive impact for wildlife conservation.

Brochure and Pamphlets: Brochures were distributed during all awareness programs (Rally, Student competition, community leader & local youth meeting, training workshop) in western Rajasthan which was prepared with Blackbuck distribution, habitat, behaviour, life cycle and interaction with local people for blackbuck conservation.

Plantation: Some plantation of tree species like *Prosopis cineraria*, *Maytenus emarginatus*, *Ziziphus nummularia* have also been taken up by the villagers, students in oran and gaucher where habitat were destroyed due to overgrazing. Thus control on the spread of *Prosopis juliflora* and other exotic plants.

Meeting with Community: We organized community meetings at different villages of western Rajasthan for motivation of local people and head persons of community about wildlife conservation. Sarpanch, Pradhan and ward member of villages were approached for Blackbuck conservation.



Recommendations for conservation of Blackbuck in arid part of Rajasthan

- Eradicate feral dogs, Grazing of livestock and other activities be strictly stopped by law in natural habitats of Blackbuck especially in protected areas and sanctuaries.
- The fast increase of the exotic *Prosopis juliflora* would convert the habitat to one with tree shrub cover and less suitable to the blackbuck as they reduce the total productivity of grass. So, spreading of this exotic plant should be controlled because high density of this plant helps feral dogs.
- Establishment of wildlife reserves, such as the Gajner and Tal chhappar sanctuaries and the Dawa - Doli and Guda-bishnoiyan wildlife reserves have proved their worth as successful breeding grounds of the blackbuck
- Strictly stop destructive activities like open cast mining in Blackbuck habitats especially in Guda area of Jodhpur.
- There should be strictly control on poaching and Encourage public support and awareness for wildlife conservation

It is not too late to save the Blackbuck (*Antelope cervicapra*) if such a conservation strategy is implemented immediately.

Future Plan

In next phase of the project the following task will be taken up, if further grant is provided by the funding agency.

- Identify the key areas of conservation for blackbuck and protect them from all kinds of human interference that would result in habitat destruction and Habitat restoration programme will be conducted by help of State Government agencies with the co-operation of the local people and NGOs.
- A detailed project will be submitted to the Rajasthan state Forest Department for blackbuck dominated area Guda and Dhawa of Jodhpur to establishment of Community Reserve under wildlife protection Act 1972.
- More awareness program will be organized with the help of local community people.
- A policy plan will be submitted to Mines and Forest Department to strictly stop destructive activities like open cast mining in Blackbuck habitats.
- A proposal will be submit to Ministry of Environment and Forest, Government of India or any funding agency for control feral dog population in Blackbuck abundant areas.

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Project Team

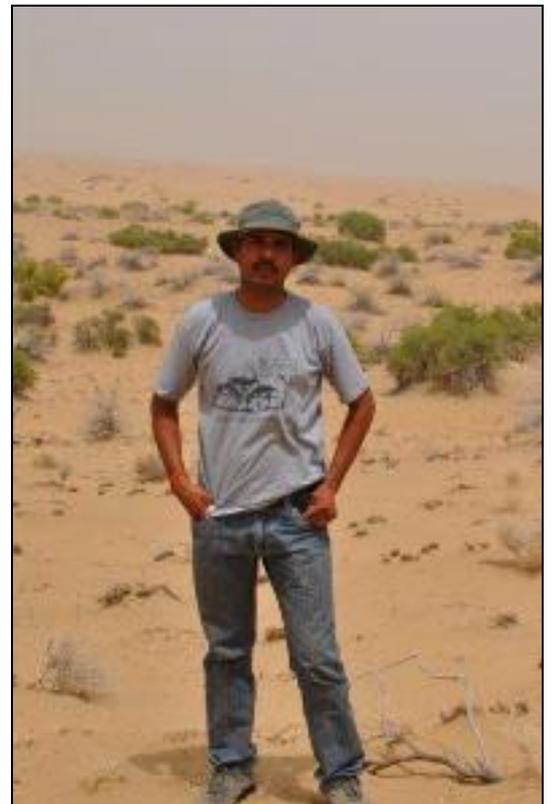
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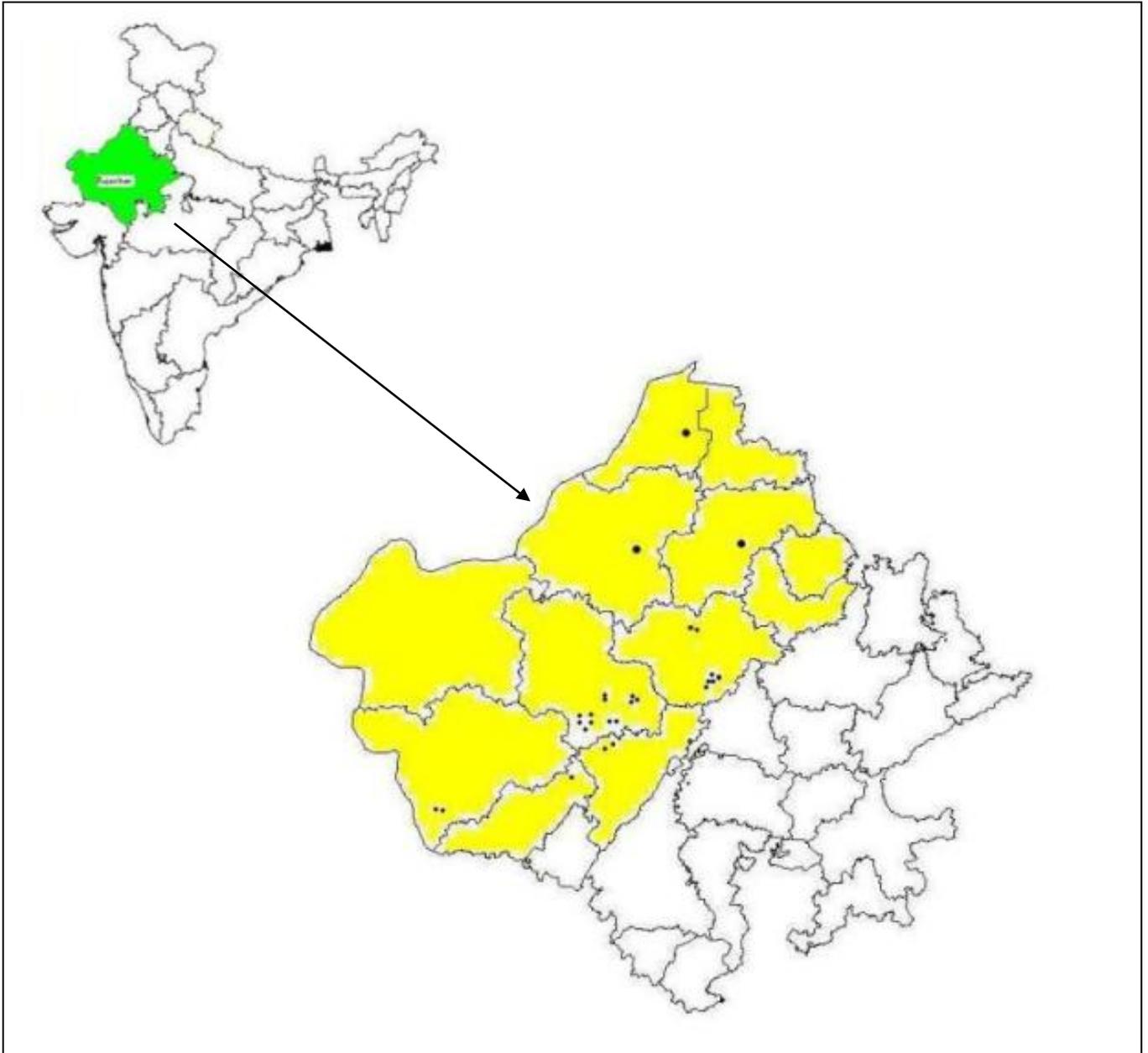
Dr. Hemsingh Gehlot, Investigator of this project is working in the Thar Landscape on endangered fauna since 2003. His doctoral work was on the “Eco-behavioural study of Blackbuck (*Antelope cervicapra*) and Chinkara (*Gazella bennetti*) of the Thar Desert” from J. N. Vyas University Jodhpur, Rajasthan. He has been monitoring the Thar ungulate population in Rajasthan and he interact the local people and starts working with them for the wildlife conservation during doctoral work.

He worked in Corbett, Valmiki and Ranthambore Tiger Reserve under All India Tiger Estimation, a joint project of Project Tiger Directorate, MoEF, Govt. of India and Wildlife Institute of India and almost two year worked with a worldwide NGO WWF-INDIA in Terai Arc Landscape Project, at Ramnagar, Nainital, Uttarakhand. Recently, he also was deployed in the joint project entitled “Habitat Assessment for Cheetah re-introduction in India” of the MoEF, Wildlife Institute of India and Wildlife Trust of India. He investigated the Sanjay Tiger Reserve, Dubri Wildlife sanctuary, Nauradehi WLS, Kuno WLS of Madhya Pradesh state, Guru Ghasidas National Park of Chhatisgarh, Kaimur WLS of UP and the Thar desert of Rajasthan.

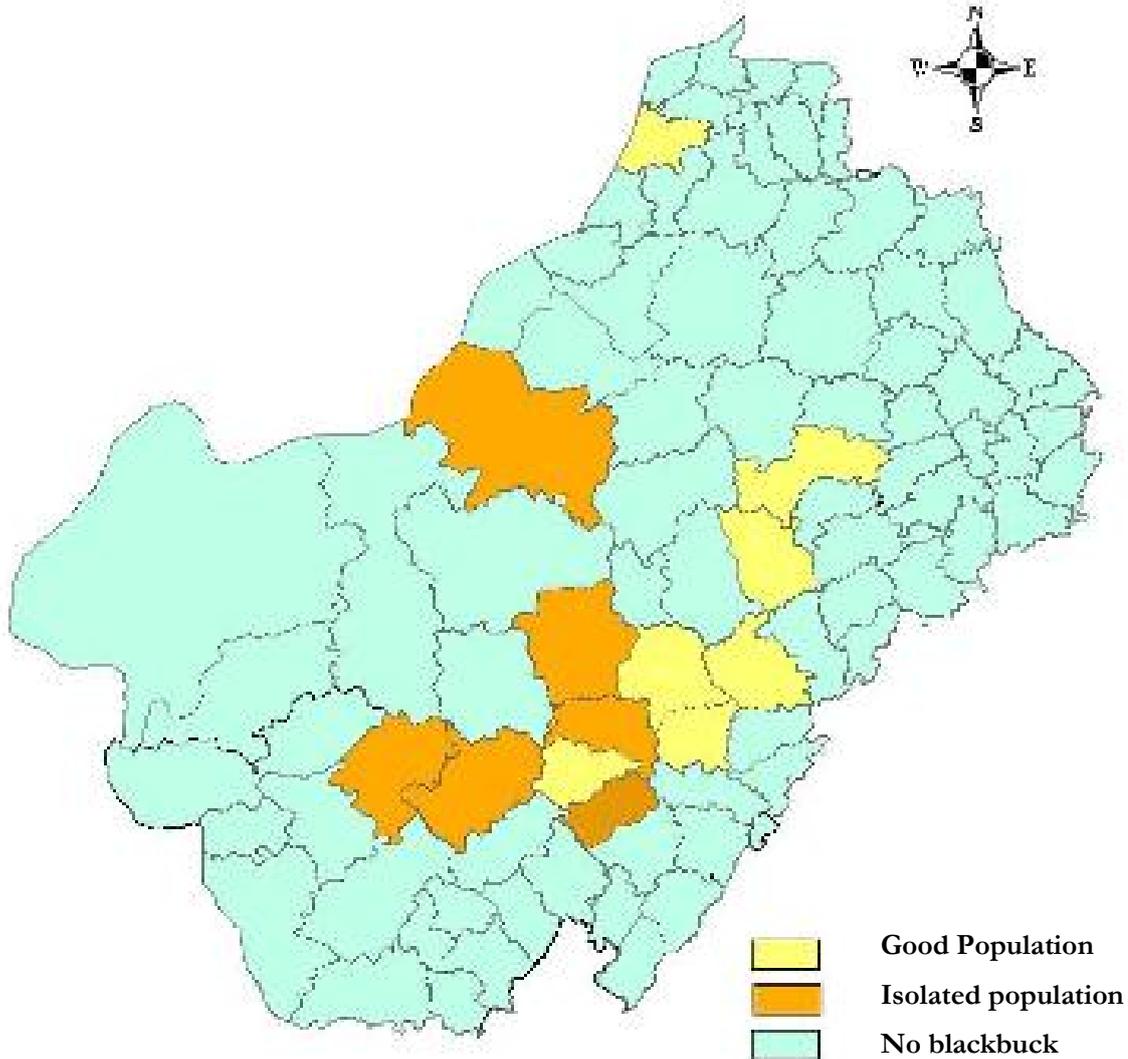




Annexure - i



Distribution of Blackbuck in western Rajasthan



100 0 100 200 Kilometers

Project news in local media:



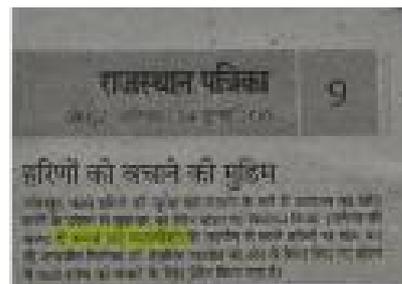
www.danikbhasker.com



www.danikbhasker.com



www.danikbhasker.com



www.rajasthanpatrika.com

Mortality of Blackbuck (*Antelope cervicapra*) in western Rajasthan



Inauguration of awareness material



T-shirt inauguration by Dr. M. K. Ranjit Singh, Member National Board of Wildlife - India and Ashok Kumar, Vice president Wildlife Trust of India



Pamphlet inauguration by Shri Kanhaiyalal, Chief officer I Raj. Engg. NCC and Shri Nepsa, Shri Arvind Bhati at Jodhpur



Brochure inauguration by district collector Jodhpur Shri Naveen Mahajan, IAS; Shri Sunil Parihar, Shri Umesh Lela of Marudhar Industries Association of Jodhpur, Rajasthan

वन्यजीव वन्यजो

पेर सफ़ाजो

सोयन इधजो

आइये पर्यावरण एवं वन्यजीवों को बचाने में सहयोग करे

आज सबसे बड़ी समस्या है पर्यावरण, बढ़ती हुई जनसंख्या, बढ़ता हुआ परिकार, इला में सभी समस्याओं की जड़े हैं, गरीबी, बेरोजगारी, पर्यावरण प्रदूषण, घटते घन और विलुप्त हो रहे वन्यजीव तथा पशु-पक्षी । बढ़ती हुई आबादी अन्धाधुंध जंगलों को काट रही है। इन्होंने भी गंदगी निकालकर नदियों, तालाबों, झीलों के जल को प्रदूषित कर रही है। सड़क दुर्घटनाओं में वन्यजीव अकाल मौत को शिकार हो रहे हैं। पॉलीथीन आज हमारी आवश्यकता बन गयी है। विप्लवी पैसा के उत्सर्जन से ओजोन परत में भी छेद हो चुका है। धरती का तापमान बढ़ने से ग्लोबल वार्मिंग का खतरा उत्पन्न हो गया है। मानव अपनी बुद्धिमत्ता एवं आवश्यकताओं की पूर्ति के लिए एवं विकास के लिए प्राकृतिक संसाधनों का उपयोग करता आया है। किन्तु अविश्वसनीय उपयोग से उसने कई जैविक कारकों का भोजन एवं आवास छीना है। इसी कारण कई वन्यजीव प्रजातियाँ लुप्त हो गई हैं। इससे परिसंस्थितिक तंत्र का संतुलन बिगड़ गया है। जो मानव के लिये नुकसानदायक साबित हो रहा है। आज प्राकृतिक संसाधनों का मानव दुरुपयोग कर रहा है। अद्विष्ट ये कब तक चलेगा ? इस धरती पर सभी जीव एक दूसरे के घुंरक हैं। इससे किसी का नष्ट होना प्रकृति के संतुलन में बाधा पैदा करता है। अगर आज हमने महान विचार नहीं किया तो समस्त मानव समुदाय को इसके गंभीर परिणाम भुगताने पड़ेंगे।

राजस्थान के वन्यजीव तैली से विलुप्त हो रहे हैं। उनका कारण वनों का विनाश तो है साथ ही मानव द्वारा मात्र अपनी जीव के स्वाद एवं गृहबोध के लिए वन्यजीवों का शिकार किया जा रहा है। वनों के ह्रास एवं वन्यजीवों के अंधाधुंध शिकार के कारण इनकी संख्या में भारी कमी आई है। समय रहते यदि जीवों का संरक्षण नहीं दिया गया तो वे दिन चूर नहीं जब भारी पीढ़िका वन्यजीवों को साक्षात् न देखकर मात्र पुरखों एवं पित्रों से ही संतान करने की और वन्यजीव एक किंवदन्ती बन जायेंगे। वन्य, पर्यावरण का अविन्न अंग है। इसलिए पर्यावरण में होने वाले हर परिवर्तन का प्रत्यक्ष या अत्यन्त प्रभाव मानव जीवन पर पड़ता है। इसलिए पर्यावरण की जानकारी हर व्यक्ति के लिए आवश्यक है। पर्यावरण की सुरक्षा व संरक्षण किसी एक व्यक्ति, संस्थान या सरकार की जिम्मेदारी नहीं है। इसके लिए प्रत्येक व्यक्ति को पर्यावरण की जानकारी एवं पर्यावरण में सक्रिय भागीदारी लेना आवश्यक है। आइये आज अपने आप से काम करें कि हम पर्यावरण को स्वच्छ एवं सुन्दर बनाने में सदैव तत्पर रहेंगे।

आइये, आज से सकल्प लेते कि

वनों एवं वन्यजीवों का संरक्षण करके अपने राज्य और राष्ट्र के विकास में सहयोग करेंगे।

- > जोरण एवं गोबर भूमि में अतिक्रमण नहीं करेंगे।
- > वन्यजीव बाहुल्य क्षेत्र में काहनी की गति धीरे रखेंगे।
- > आगारा खुली क्षेत्र वन्यजीव बाहुल्य क्षेत्र में जाने से रोकेंगे।
- > वन्यजीवों का शिकार रोकने में वन विभाग का सहयोग करेंगे।
- > पॉलीथीन प्रतिबन्धित है। पॉलीथीन का प्रयोग नहीं करेंगे।
- > यदि वन्यजीव घायल अवस्था में मिले तो उसकी सूचना वन विभाग या पुलिस विभाग को देंगे।

मिल जुल कर ये कसम उठाये,
स्वयं को सक्षम और प्रकृति को बचाये

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सहयोग



Rajasthan Forest Department

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Photo documentation

(i) Different habitat type for Blackbuck in western Rajasthan

Scrub land area for
Blackbuck at Guda Bishnoian
area of Jodhpur district



Recently harvested crop field
area for Blackbuck at Jaroda
area of Nagaur district



Harvested crop field area for
Blackbuck at Rohit area of
Pali district of Rajasthan



(ii) Social structure of Blackbuck and status survey in western Rajasthan

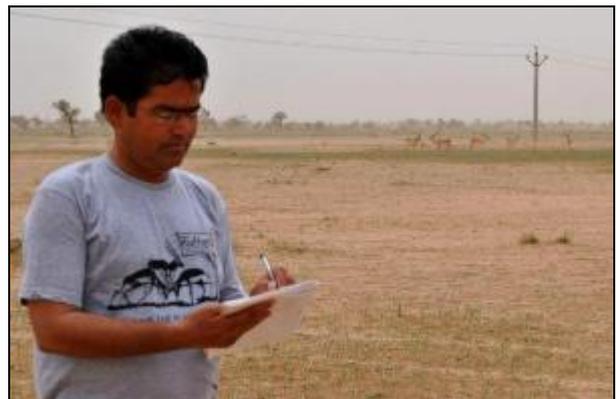
All male herd of Blackbuck in Tal
chhaper wildlife sanctuary at
Churu district



Mix herd of Blackbuck at outside
of closed area in Jodhpur district

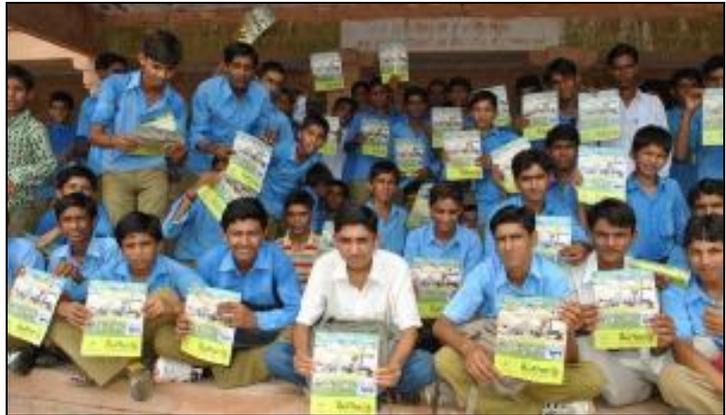


Team member Mr. Gopi kishan
Bishnoi is writing notes during
survey at Bhopalgarh area, Jodhpur



(iii) School level campaign for Blackbuck conservation in western Rajasthan

School student actively showing campaign browser in a school of Guda bishnoi area of Jodhpur, Rajasthan



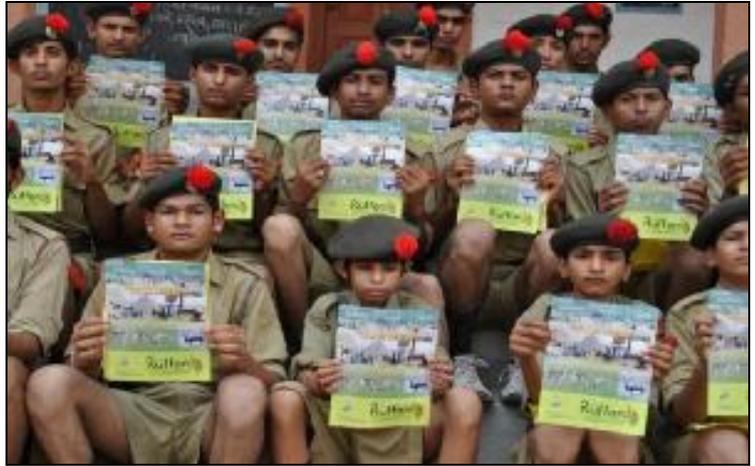
Dr. Hemsingh Gehlot along with Mr. Ramesh Chopra (Assistant conservator of Forest, Jodhpur) and Dr. C. P. Dadhich discussing with school students during **Nature Camp** at Guda area of Jodhpur, Rajasthan



Girl's student reading cautiously campaign browser at a school



NCC cadet illustrate
Blackbuck campaign brochure
in a school



Girls student enthusiastically
showing campaign pamphlet in
a school of Jodhpur division



Shri Bheparam Bishnoi (village
sarpanch) giving a Blackbuck printed
T-shirt as prize to winner student of
Essay competition on Blackbuck
conservation



(iv) Awareness programme with other stakeholders in different village of study area

Shri Bheparam Bishnoi (village sarpanch) giving a Blackbuck printed T-shirt as prize to winner student of Essay competition on Blackbuck conservation



Shri Bheparam Bishnoi (village sarpanch) giving a Blackbuck printed T-shirt as prize to winner student of Essay competition on Blackbuck conservation



Shri Bheparam Bishnoi (village sarpanch) giving a Blackbuck printed T-shirt as prize to winner student of Essay competition on Blackbuck conservation



Discussion with state member of Animal welfare Board of India and handover Campaign brochure to them at Jaipur, Rajasthan



Hand over brochure to Dr. Padma Bohra, Joint Director and Dr. Gorav Sharma, scientist-C at Desert Regional Centre of Zoological Survey of India, Jodhpur



Hand over brochure to Dr. H. C. Bohra, Principal scientist of Animal Nutrition and Forage Division, Central Arid Zone Research Institute of India at Jodhpur



(v) Village wise campaign for Blackbuck conservation in western Rajasthan

Village women watching carefully campaign brochure at at Ren village of Nagaur



Dr. Hemsingh Gehlot is discussing on Blackbuck conservation and hand over campaign leaflet to Village head of Bishnoi village of Jodhpur region.

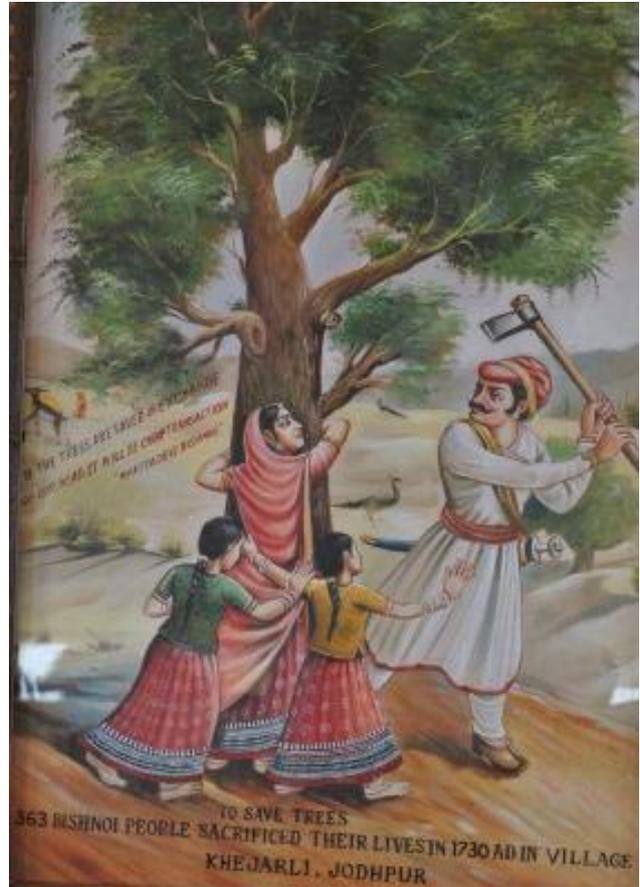
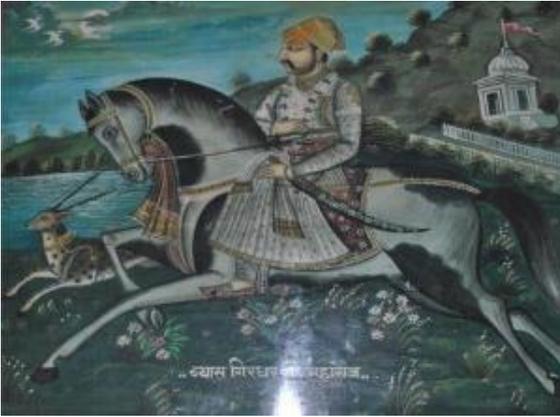


Brochure is showing at their worship place in a village head meeting at Dhawa-Doli area.

The worship place is memory the Blackbuck which was hunted by a poacher



(vi) The local people especially *Bishnoi* hold the blackbuck as blessed and defy its killing





CONSERVE TO SURVIVE

