

# Chapter 14

## Role of Local People and Community Conservation in Rajasthan

Neema Pathak and Ashish Kothari

**Abstract** This chapter describes sacred spaces, protected populations of species, catchment and reserve resource forests, village wetlands, grasslands, institutional dynamics of the conservational efforts, and recommendations for conservation of ecosystems and wildlife in Rajasthan. The last few decades have seen considerable decimation by modern hunting and by “development” projects and processes. Community conservation, today in Rajasthan, has been described in the form of continuation of some traditional practices, e.g., *orans* or sacred groves, protection of species like Blackbuck and conservation of migratory species such as Demoiselle Crane and other waterfowls, regeneration and protection of forests in catchment areas linked to decentralized water harvesting, new protection of heronries or other wildlife congregations, conservation of wetlands with wildlife values, and resistance and protest against destructive activity such as mining. The authors have discussed issues related to limitations of such practices, such as the lack of tenurial security. Since many community conservation initiatives are being implemented on the government land and an aggressive policy of industrialization is being pursued, the need for initiatives of identification, documentation, recognition, and respect for such Community Conserved Areas (CCAs) has been stressed upon.

### Introduction

As one traverses the length and breadth of the country, it is quite common to come across numerous signs and sites depicting the peaceful coexistence of humans and the biodiversity. This is partly due to traditions of tolerance toward the wild and partly because of conscious efforts of people living around these sites to protect the

---

N. Pathak • A. Kothari (✉)

Kalpavriksh, Apt No. 5, Shri Dutta Krupa, 908 Deccan Gymkhana, Pune, Maharashtra, India  
e-mail: neema.pb@gmail.com; ashishkothari@vsnl.com

wild for religious reasons, traditions, sustainable use, and ecological value. Yet, most discussions on wildlife and biodiversity conservation focus only on officially designated protected areas. This ignores the fact that the oldest form of conservation in the world is what communities have traditionally practiced. Indeed, the most ancient protected areas are the sites that have been kept away from the majority of human disturbance by communities themselves, as in the case of sacred groves. In addition to the above-mentioned widespread community practices of protecting particular species of plants and animals, water catchment forests, village wetlands, and other elements of nature, there is a significant body of conservation initiatives that needs attention and support.

At the international level, and in many countries, these are now being recognized as indigenous reserves, bio-cultural heritage sites, and community reserves. Collectively, they are referred as Indigenous and Community Conserved Areas (ICCAs). Since, the World Parks Congress of 2003 (at which 4,000 conservation scientists and practitioners gathered), the widespread occurrence of ICCAs is increasingly being realized. At the seventh Conference of Parties of the Convention on Biological Diversity (CBD) in 2004, a programme of work on protected areas was formulated, and this, too, included the recognition of ICCAs as a specific action point for all countries to take up [1].

In India, since the term “indigenous” is not officially recognized, the more commonly used terminology for these initiatives is Community Conserved Areas or CCAs which number in thousands here [2]. Largely “hidden” and ignored by professional conservationist till recently, their spread and contribution to biodiversity and wildlife conservation is now becoming clearer. A number of NGOs have been documenting CCAs of various kinds, and policy pronouncements by the government have indicated support for their recognition and backing.

### **Community Conservation in Rajasthan [3]**

For a variety of reasons, Rajasthan perhaps has one of India’s most widespread traditions of community conservation. There is a need to be careful in using relatively scarce natural resources, such as water and forests, and there were strong cultural traditions espousing respect and tolerance for wildlife by the *Bishnoi* community which were (and remain) inspirational. Rulers through the ages also imposed restrictions on the use of resources. In the recent years, committed government officials and NGOs have also been a catalyst.

The following main kinds of initiatives can be discerned:

1. Sacred spaces including forest groves
2. Protected populations of particular species

3. Forest conservation as catchments or for essential resources
4. Village wetlands conserved for waterbirds and regulated water use
5. Grasslands traditionally managed for regulated harvest

### ***Sacred Spaces***

Several kinds of sacred spaces, mostly on forest or pasture land, have characterized the state. *Mandir* or *dev vans* or *banis* have been associated with particular temples and deities, often strictly protected. *Kakar banis* are the forests marking the boundary between two villages, often sanctified by religious belief. Then, there are the *orans*, sacred pastures or woodlands used primarily for grazing, with protected tree species like *khejadi* (*Prosopis cineraria*). One statewide survey by the NGO CECOEDECON [4] listed 690 sacred groves, but it is likely that this is an under-reporting. Studies in a number of them have shown significant biodiversity value, though there has also been serious degradation in recent years.

Pandey and Singh [3] studied the *mandir vans* (*dev vans*) or *banis* of Kota and Udaipur. They divided sacred groves of the southern Aravalli Ranges and Vindhyachal Ranges into three major categories. The first type of sacred groves was developed and managed by tribes and is located in forests, near streams, or on hills. The second type was devoted to Shankara (the Hindu God). These are located in watershed areas. The third type consists of single trees like Banyan (*Ficus benghalensis*) and Peepal (*Ficus religiosa*). In many of these, communities continue to have strong ties with the grove and devise protection and management strategies, while in others, this link has broken down, and relationship is restricted to certain religious activities being held inside sacred groves. These groves are threatened by indifference of the state agencies and, in some instance, by the local people, encroachments, construction activities, and so on.

### ***Protected Populations of Species***

A number of floral and faunal species received special conservation treatment by communities in Rajasthan. Since ancient times, species considered sacred have been protected from all forms of threats including hunting. The *khejadi* tree is zealously protected across the western part of the state. Not surprising, given its high value for communities, it enriches soil nitrogen and provides fodder, and during drought and famine, the bark is mixed with flour for consumption. The story of Blackbuck (*Antelope cervicapra*) and Chinkara or Indian Gazelle (*Gazella bennettii*) protection by *Bishnois* is well known (including their role in getting Salman Khan caught after his infamous hunting episode), so we will not recount it here. Also highlighted in the recent times has been the tale of Khichan, a settlement near Jodhpur that has, for decades, been harboring a wintering population of several thousand Demoiselle



**Fig. 14.1** Demoiselle Cranes at Khichan village – one of the key examples of community conservation in Rajasthan (Courtesy: Dr. Asad R. Rahmani)

Cranes (*Anthropoides virgo*). The cranes (locally called *kuraj*) all congregate in a large enclosed area within the settlement twice a day, to feed on grains spread out for them by the villagers, and then move out to surrounding fields and wetlands for other food (Fig. 14.1). Reportedly, the village (with some contribution from visitors) spends several hundred thousand rupees each season, to provide the grain. A *Kuraj Sanrakshan Vikas Sansthan* has been set up for the purpose [5].

### ***Catchment and Resource Reserve Forests***

The scarcity of water has prompted many villages to conserve forests that cloak catchments of streams and reservoirs. While this has been a traditional practice in some areas, there is an urgent need to revive or create such practices where the catchments have degraded in recent times. In Alwar, for instance, through the initiative of the NGO naming Tarun Bharat Sangh, several hundred villages have ensured their own water security through *johads* (check dams) and other water harvesting measures, and the regeneration and protection of catchment forests to safeguard these measures (Fig. 14.3). Wildlife and biodiversity have benefited immensely. A couple of villages, Bhaonta and Kolyalat, in the upper reaches of the Arvari River,



**Fig. 14.2** Villagers at Bhaonta-Kolyala at the entrance of people’s Wildlife Sanctuary (Dist. Alwar, Rajasthan) (Courtesy: Ashish Kothari)



**Fig. 14.3** Terrain of Bhairondev people’s sanctuary at Bhaonta-Kolyala village of Alwar district in Rajasthan (Courtesy: Farhad Vania)



**Fig. 14.4** Barnakawas villagers with *johad* and conserved forests (Courtesy: Ashish Kothari)

have even declared the Bhairondev Abhyaranya, or people's sanctuary, to protect deer, leopards, and other wildlife that has made a comeback in their catchment forest [6] (Fig. 14.3, 14.4, 14.5, and 14.6). About 80 villages around Arvari have come together to form what they call Arvari *Sansad* (the Arvari Parliament), realizing that water, forests, and wildlife along the river cannot be saved by just a handful of villages. These villages hold regular meetings to discuss issues related to water and wildlife conservation. In the Kailadevi area (buffer zone of the Ranthambhore Tiger Reserve), practices such as *kulhadi bandh panchayat* (ban on using axes inside forests) have helped conserve forest patches that were otherwise getting degraded; unfortunately in recent times, this has been undermined by government imposition of externally funded eco-development committees [7]. Regeneration of forests has also been a key initiative of several dozen villages in the Udaipur area of southern Rajasthan, facilitated by the NGO named Seva Mandir (Personal Communication with Vivek, Seva Mandir, 2010). The community in many of these has also been able to persuade their own members to vacate encroachments on common land, in some cases by providing alternatives. A special annual award, instituted under the Umed Mal Lodha Memorial Trust, is given to the villages with the best natural resource management and conservation record.

Typically these forests are not strictly protected, but are subjected to continued use for grazing or fodder collection, medicinal plant harvesting, and other uses. However, strong regulations in many villages, comprising oral as well as written (as in Bhaonta-Kolyala), have helped to limit the use, therefore allowing considerable wildlife and biodiversity value to flourish.



**Fig. 14.5** Aravalli Hills at Bherodeo Lok-sanchiri Bhanota, Alwar (*Courtesy: Ashish Kothari*)



**Fig. 14.6** Sariska Wildlife Sanctuary (*Courtesy: Ashish Kothari*)

Interestingly, there are many sites where the cultural and spiritual tradition of sacred spaces overlaps with the more “economic” motivation of protecting watersheds. In Kota, Bundi, Jhalawar, and Tonk districts, *dev bani* (god’s grove) was maintained for the belief that the local deity would protect the community’s *talabs* (water body) and other water harvesting structures [3].

### ***Village Wetlands***

Rajasthan has a diversity of ancient water harvesting and storage practices, to which more recent harvesting moves have been added, such as in Alwar district. Some of the surface wetlands are critical for waterbirds and other fauna. An interesting example of protection recently surfaced at Udupuria village, near Kota. Spurred by a local NGO, the Hadoti Naturalists’ Society, villagers have started protecting a recently established colony of Painted Storks (*Mycteria leucocephala*) on their two hectares wetland [8].

### ***Grasslands***

Experts like Asad Rahmani have recorded that traditional pastures (*beed*) managed by pastoralist families or communities have in the past been strongholds of species like the bustards and floricans; some such *beeds* remain intact though increasingly getting threatened (personal communication with Dr. AR Rahmani). The seasonal patterns of grazing or fodder-cutting and leaving the area vacant to regenerate periodically have contributed to this phenomenon. More recently, NGOs like “Seva Mandir” has helped communities to regenerate degraded pastures, primarily for livelihood purposes but at the same time has resulted in greater potential for wildlife conservation.

Another traditional system of conservation by communities is related to *orans*. *Orans* are sacred patches of pasturelands devoted to a deity or temple. Historically, *orans* were developed by local rulers or landlords to protect the common lands of the villages. In the arid regions of Rajasthan, livelihood has traditionally been based on animal husbandry, and protection of such common grazing lands was important to ensure fodder availability. The king or *jagirdar* of the area, therefore, allotted some portion of common lands to a temple. Religious sanctity of the *oran* as well as the fear of the *jagirdar* ensured that *orans* remained protected. *Orans* are important components in the recharge of the aquifers in the desert where every single drop of water is precious. In most *orans*, particularly in western Rajasthan, the dominant tree, *khejadi*, is worshipped for its immense ecological value. Many rules were developed to ensure protection of *orans* such as banning commercial use, restricted lopping (allowed only in times of fodder scarcity), and open to all castes and classes of society. Those failing to obey the rules were punished by making them contribute grains toward the local *chabutara* (a platform meant for feeding birds) and were



also fined a sum of money. *Orans* also provided a space for adjacent villages to discuss socioreligious, economic, and cultural issues and also to resolve personal grievances. It is not surprising; therefore, that Sariska National Park has been carved out of 12 *orans* in that area [5].

In recent times, however, *orans* have suffered due to lack of understanding about their ecological and social value, and hence, an indifferent attitude by the relevant authorities. Politics within *panchayats* (under whose jurisdiction they fall) has also contributed to their degradation. There are few examples, however, where the local people have come forward to revive conservation of *orans*. They have protested encroachments by outsiders as well as members of their own community and have even filed court cases such as Para village in Barmer district [9, 10]. In recent times a group of people and communities engaged in issues related to governance of *orans* have come together to form “*Oran Forum*” to lobby for a more effective management of *orans* in the state [11].

## Institutional Dynamics

It is vital to understand the institutional dynamics that have led to sustained CCAs. The range of management institutions is bewildering, temple authorities managing sacred spaces, forest protection committees specially set up by villages, entire *gram sabhas* (village assemblies) assuming the responsibility for conservation, joint forest management committees established with the support of government, and so on. In most cases there are customary or new rules set by the community on its own or in consultation with NGOs and government agencies. These are often unwritten but not necessarily any less effective than the more formal written rules.

It appears that more successful initiatives have been the ones started by villagers themselves, where a long-term process has been allowed to play itself out initiated by outsiders, especially as part of time-bound projects, the results are mixed. The Sacred Grove Conservation Program launched by the Udaipur forest division in 1992 resulted in some excellent cases of conservation (including the declaration of some new sacred forests). But, there were also notable failures at many sites, and in number of other externally driven projects, community initiatives have simply not sustained after the project period often because of their dependence on external funds and motivators depending on those funds.

## Threats

It would be a major mistake to assume either that CCAs are the panacea for Rajasthan’s wildlife or that they are free of problems. Indeed, they face a series of threats that are common to CCAs in India as a whole. These include:

*Traditional Inequities:* Sociopolitical inequities that characterize traditional society continue to influence decision-making and management, often causing divisions within a community and thereby affecting conservation and distribution of the benefits arising from conservation. In most parts of Rajasthan, the traditional prejudice against women is also very evident from near absence of women in the decision-making process, including those related to community conservation.

*Insecure Tenure:* Since the colonial and Post-Independence takeover of common lands by the state, CCAs mostly contain government lands or a congregate of government, private, and community lands. There is a serious lack of tenurial security over such areas for the local community, often leading to a decrease in commitment for conservation or inability to protect CCAs against outside threats and pressures on which the community has no legal authority.

*Developmental Threats:* With the state and central government keen to take the state to a process of rapid economic growth, many CCAs and their surroundings have been threatened with mining, industrialization, takeover for activities like Special Economic Zones, and so on. This could be the single largest category of threats to CCAs, which in the year 2010 has been very evident from the state government granting permission for mining in the sensitive Aravalli mountains despite a stay order from the court of law [12].

*Lack of Recognition and Support:* Barring a few initiatives such as those by the *Bishnois*, most community conservation efforts remain neglected by the government and by the media. NGOs have increasingly stepped to document and support them, but even their abilities and commitments are limited.

*Governance Indifference:* While there are many references to the sites and species that are being conserved or protected by people, much of this is a de facto status. In most cases these sites fall under the jurisdiction of the local *panchayats* or revenue or forest departments. Indifference from these agencies toward the effective management of these sites, lack of support in times of need, and lack of understanding about the social and ecological importance of these sites lead to a number of plans, schemes, development activities that are directly threatening to these or inaction that indirectly threatens them. At places where the local people and governance structure are very strong, such indifference can sometimes be defeated, but in most situations, it can lead to negative impact on the efforts of the people.

## Recommendations

Community conservation initiatives in Rajasthan, both traditional and new, need urgent support. In particular, the following steps are imperative:

*Documentation:* A full inventory of CCAs and studies on their sociopolitical dynamics, wildlife and biodiversity values, economic and social benefits, and threats is

strongly needed. Such documentation should also include areas which have a high potential and demand from local communities for initiating CCAs or where such initiatives may have existed in the past and have a potential of being revived.

*Legal and Policy Backing:* A clear policy statement from the state government is needed, to recognize and support CCAs and legal backing under relevant laws such as the Wildlife (Protection) Amendment Act, 2006, (“Community Reserves”), the Biological Diversity Act (“Heritage sites”), the Scheduled Tribes and Other Forest-dwellers Rights Act 2006 (“Community Forests”), and the Environment Protection Act 1996 (“Ecologically Sensitive Areas”). Even seemingly unrelated laws such as the *panchayat* legislation, and *Gramdan* Act, could be effective in providing backing. In all cases, however, the legal measures need to be sensitive to local institutional and ecological diversity, rather than impose uniform rules and institutional structures as has been attempted in the Wildlife Act’s provision for community reserves and conservation reserves in many states. If the state can frame appropriate rules under the Biological Diversity Act, the provision for declaring biodiversity heritage sites could be very useful in providing the flexibility needed to cover diverse ground situations. In fact “Community Forestry Resource” under Section 3 (1) i and 5 and Rule 4e of the Forest Rights Act, 2006 mentioned above is an extremely useful space for supporting CCAs which has hardly been used so far. Both state agencies and NGOs need to give much more attention to this provision. However, many communities may desire a supportive role of the department in helping them discharge their authority and responsibilities, particularly when faced with some threats. This needs capacity building among the various line agencies including forest department, to effectively play this role.

*Social Recognition:* Under the current development paradigm, the local communities, their efforts, knowledge systems, and technological innovations remain unappreciated and unrecognized. Decades of lack of recognition and endorsement have instilled a feeling of inferiority among local knowledge holders and innovators. Often the conservation efforts draw attention of the national and global community toward the local communities leading to social recognition of their efforts. Awareness of CCAs among the state’s population, especially its urban citizens, can be provided through the media and other means. Initiatives, such as, the Umed Mal Lodha Trust’s Award can also be very helpful in motivating communities.

*Building Capacity:* Communities today have to face a series of threats and challenges including that of providing livelihoods to its younger generations while sustaining their interest in conservation. Facilitating the building of capacity for this is crucial. A number of initiatives for the above measures are already underway in Rajasthan. But much more needs to be done, if we are to help communities sustain and spread even more widely, the enormously important task of conserving wildlife and biodiversity that they have been performing for centuries.

*Landscape Approach:* It must be kept in mind that these areas do not exist in isolation and are influenced by various social and political forces and land-use practices in the surrounding areas. Allowing resource-intensive activities in the surrounding

areas could put more pressure on the biodiversity of the area to be protected or act in contradiction to conservation objectives. It is extremely important to orient regional planning toward the ecological and cultural dimensions of an area, including community conservation efforts. A community's wish to conserve a certain area needs to be respected and reflected in the regional planning. Even if the community has not overtly opposed any action impacting traditionally conserved sites, utmost attention should be paid before any development activities are taken up here. The example of Arvari *Sansad*, which aims to be the primary decision-making body for the entire basin, becomes very important in this regard. The *sansad* is based on the principle that a holistic landscape approach will need to be taken for the conservation and use of the catchment. Members of the *sansad* believe that decisions made by individual villages are, often, restricted to the interests of their own villages and may not adequately take care of the eco-region as a whole.

*Governance and Decision-Making:* Good governance is increasingly being seen as an important factor in ensuring the success of any conservation effort. Governance is about power, relationships, and accountability. It, thus, has major influence on the achievement of management objectives and the sharing of relevant responsibilities, rights, costs, and benefits. In order to support the existing CCAs in Rajasthan and revive the ones which are coming down under various threats and pressures mentioned above, it is important to identify where such sites exist and organize consultations with those who have a direct relationship or dependence in these. This will help work out an all inclusive, participatory, and locally acceptable system of governance. Such consultations need to be an integral part of any decision-making process related to CCAs. In many areas, local capacities may not be enough to ensure effective management, in these cases capacity building programs would be crucial.

*Creating Support Structures:* Most conserving communities have expressed a desire for a supralocal supportive body for constant support, guidance, capacity building programs, and as an information and experience sharing forum. This could be in the form of landscape level federations of the CCAs themselves, such as the ones in the state of Orissa [13] or multi-representative bodies created in complete consultation with the concerned communities. Please see Chaps. 3 and 4 from *Faunal Heritage of Rajasthan: Ecology and General Background of Vertebrates*, Vol. 1; B. K. Sharma et al. (eds.), 2013 and Chaps. 15, 17 and 19 from this volume for more relevant details and pictures.

**Acknowledgements** Material for this article has largely been taken from personal observations and documentation of community initiatives by Kalpavriksh members or partners, in particular, case studies and an overview of community-based conservation carried out in the late 1990s, and Pathak, N. (ed) 2009. *Community Conserved Areas in India – A Directory*. Kalpavriksh, Pune/Delhi (<http://www.kalpavriksh.org/community-conserved-areas/cca-directory>). This paper could not have been written but for the chapter on Rajasthan in the above-mentioned directory, by Sandeep Khanwalkar, and write-ups, case studies, and observations of D.N. Pandey, Kanhaya Gujjar, Priya Das, Arun Jindal, Anil K. Nair, Bhubanesh Jain, Aman Singh, and others have been very helpful. The authors are available at ashishkothari@vsnl.com and neema.pb@gmail.com.

## References

1. Pathak N (ed) (2009) Community conserved areas in India—A directory. Kalpavriksh, Pune, <http://www.kalpavriksh.org/community-conserved-areas/cca-directory>
2. For information on CCAs globally, see [www.iccaforum.org](http://www.iccaforum.org), [www.iucn.org/themes/ceesp/Wkg\\_grp/tilcepa/community.htm](http://www.iucn.org/themes/ceesp/Wkg_grp/tilcepa/community.htm), and [www.iucn.org/themes/wcpa/pubs/parks.htm#parks161](http://www.iucn.org/themes/wcpa/pubs/parks.htm#parks161), for the CBD programme of work, see [www.biodiv.org](http://www.biodiv.org); for outputs of the World Parks Congress, see <http://www.iucn.org/themes/wcpa/wpc2003/>
3. Khanwalkar S (2009) Rajasthan: Tales of co-existence. In: Pathak N (ed) Community conserved areas in India—A directory. Kalpavriksh, Pune, pp 573–587
4. CECOEDECON. Undated. Orans: Marubhumi Me Hariyali Ki Chadar, Shil ke Dungri, Chaksu, CECOEDECON
5. Anon (2009) Khichan village, Udaipur. In: Pathak N (ed) Community conserved areas in India—a directory, Kalpavriksh, Pune, pp 623–624
6. Shresth S, Devidas S (2001) Forest revival and water harvesting: Community based conservation at Bhaonta-Kolyala, Rajasthan, India. Kalpavriksh, Pune, and International Institute of Environment and Development, London
7. Das P (2009) A case study of Kailadevi Wildlife Sanctuary, Karauli. In: Pathak N (ed) Community conserved areas in India—A directory. Kalpavriksh, Pune, pp 602–616
8. Nair AK (2009) A case study of Udupuria village pond, Kota. In: Pathak N (ed) Community conserved areas in India—a directory. Kalpavriksh, Pune, pp 621–622
9. Jain B (2005) Oran Hamara Jeevan. SURE, Barmer, Rajasthan
10. Jain B (1995) Oran sanskriti. A seminar organized by Rajasthan study centre, Jaipur, Rajasthan, or [bhuvanesh.india@gmail.com](mailto:bhuvanesh.india@gmail.com)
11. Krishi Avam Paristhitiki Vikas Sansthan (KRAPAVIS), Rajasthan, India. [krapavis\\_oran@rediffmail.com](mailto:krapavis_oran@rediffmail.com)
12. <http://ibnlive.in.com/videos/133454/mining-near-sariska-may-endanger-big-cats.html>
13. Pathak N, Kothari N, Misra S, Rao G (2006) Community Conservation-Survival against all odds. The Hindu Survey of Environment