



# Safeguarding Commons

FOR NEXT GENERATION

*A Study of Common Property Resources in District Alwar*



SEVA MANDIR

Krishi Avam Paristhitiki Vikas Sansthan (KRAPAVIS) means "organization for the development of ecology and agriculture/livestock". Its mission is the betterment of ecological, agricultural and livestock practices with a view to ensuring sustainable livelihoods for rural pastoral communities in Rajasthan. It has been working since 1992, and so far succeeded in conserving biodiversity and protecting rural livelihoods in hundreds of villages in eastern Rajasthan. KRAPAVIS has been working on different aspects of biodiversity conservation, ethno-veterinary practices, sustainable agriculture, water management, plant nurseries and planting trees, climate change, with particular emphasis to *Orans* (sacred forests) conservation and CPRs (Common Property Resources) management and development of people friendly policies. The approaches adopted include cataloguing, reviving, campaigning and training.

KRAPAVIS has been working to save endemic and endangered species of trees, thus bringing about greater livelihood security for the rural poor, who depend on such trees for livestock feed, traditional medicine, marketable commodities and timber. KRAPAVIS also takes into account the changing nature of pastoralism in these areas and the recent shift towards preference of water buffalo and goats as livestock over cattle, working to ensure that the flora in the *Orans* is better able to meet the needs of the new livestock. Part of the work done

by KRAPAVIS is focused on water conservation within the *Orans*.

KRAPAVIS discovered, through adaptive management approaches and by visiting community conservation projects in other areas, that ecological conservation of the *Orans* was not possible unless the needs of the local communities were also met. KRAPAVIS strongly emphasizes a people-led development process, and has stayed true to this ethos in its approach to *Oran* management, which requires direct involvement of the communities that would be the eventual beneficiaries of its projects.

Strengthening co-existence in wildlife sanctuaries and national park has been another thrust area of KRAPAVIS working. A vital element of KRAPAVIS' work is institution-building. KRAPAVIS also politically promotes the plight of *Orans* in India's civil society. Another important element of KRAPAVIS' work is conducting research and survey on *Orans* and commons in Rajasthan, and developed a database of about 800 *Orans*, so far.

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# Seva Mandir

Seva Mandir is based in Udaipur and works in the southern part of Rajasthan. Our work area encompasses 626 villages and 56 urban settlements of which majority are located in Udaipur district. In total the organization reaches out to around 70,000 households, influencing the lives of approximately 3,60,000 persons. It works in the areas of Natural Resources Development, Education, Health, Women Empowerment and Village Institution Building.

Seva Mandir's mission is to make real the idea of society consisting of free and equal citizens who are able to come together and solve the problems that affect them in their particular contexts. The commitment is to work for a paradigm of development and governance that is democratic and polyarchic. Seva Mandir seeks to institutionalize the idea that development and governance is not only to be left to the State and its formal bodies like the legislature and the bureaucracy, but that citizens and their associations should engage separately and jointly with the State.

The mission briefly, is to construct the conditions in which citizens of plural backgrounds and perspectives can come together and deliberate on how they can work to benefit and empower the least advantaged in society.

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## Glossary of Terms

- *Abadi* : Area reserved from time to time in a village in non- urban area for the residence of the inhabitants thereof or for the purposes ancillary thereto.
- *Allotment of land*: Assigning rights on land for a particular use
- *Baithak Karyawahi Vivaran* Details of meeting held
- *Beed* : Privately owned pastures or grazing areas by individuals
- *Buffer* : Area inside the reserved forestland, which could be partly protected, but remain as private land. Villages reside in this region but with limited forest usufruct rights.
- *Common Property Resources* : Rural common property resources are broadly defined as resources towards which all members of an identifiable community have inalienable user rights
- *De jure Common Property Resources* : A resource is considered a de jure common property resource only when the group of people who have the right to its collective use is well defined, and the rules that govern their use of it are set out clearly and followed universally
- *De facto CPR* : The coverage of CPR was extended to include resources like revenue land not assigned to panchayat or a community of the village, forest land, or even private land in use of the community by convention. The definition also extends to include land left behind after encroachment on which community members have inalienable user rights.
- *Diversion of land* : Land-use from one existing use to another
- *Encroachment of land* : To gain land unlawfully which has property or authority of another
- *Ghee* : Clarified butter that is prepared from Milk
- *Gram Panchayat* : The lowest tier of the Panchayat Raj Institution which can comprise more than one revenue village; it is constituted based on population and population cannot be less than 1000. It is also called village council or Panchayat in short.
- *Gram Sabha* : Body consisting of persons registered in the electoral rolls relating to a village comprised within the area of Panchayat at the village level
- *Inalienable rights*: Rights which cannot be surrendered or transferred to someone else
- *Johad* : Traditional water harvesting structures owned by an individual or a group and usually having heritable usufruct rights
- *Khata Nakal* : Plot wise revenue records of a village showing the ownership and area
- *Khasra* : Plot / Survey no. / Gat no.
- *Maalas* : Hill top plateaus in Alwar district
- *Mahila Mandal* : Name of the Women Committee formed
- *Nallah* : Streams following through the village which can be both perennial and seasonal
- *Nayab Tehsildar* : The deputy of a tehsildar is known as a Naib tehsildar or Nayab Tehsildar
- *Oran*: Sacred forests protected by the community out of religious faith.
- *Panch* : It literally means "assembly" (ayat) of five (panch) wise and respected elders chosen and accepted by the local community
- *Panchayat sami*, Panchayat samiti is a local government body at the tehsil (taluka) level in India. It works for the villages of the tehsil that together are called a Development Block. The Panchayat Samiti is the link between the Gram Panchayat (village council) and the zila parishad (district board).
- *Pastureland* : Land allotted for grazing in a village

- *Patwari* : Lowest official of revenue department posted at the village level
- *Patwarghar* : Office where Patwari sits and revenue records of villages are kept
- *Revenue wasteland* : Lands not under agriculture and which did not provide revenue. This is under the ownership of State/ Revenue department
- *Sadhu* : Sage
- *Samiti* : Committee
- *Sarpanch* : Head of the Gram Panchayat
- *Tapasya* : Meditation and religious worship
- *Tehsil* : Administrative zone in a revenue area which is smaller than the district
- *Tehsildar* : Revenue officer in charge of tehsil
- *Ward Sabha* : Meeting of ward members. A ward is a subdivision of a local authority area, typically used for electoral purposes. Wards are usually named after neighbourhoods, thoroughfares, parishes, landmarks, and geographical features and in some cases historical figures connected to the area.
- *Zamindar* : Aristocrats, typically hereditary, who held enormous tracts of land and held control over the peasants, from whom the zamindars reserved the right to collect tax. They were considered the highest social class of that society.

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## Abbreviations

• BDO	Block Development Officer
• BPL	Below Poverty Line
• CPR	Common Property Resources
• DFO	Divisional Forest Officer
• EDC	Eco Development Committees
• FD	Forest Department
• FMC	Forest Management Committee
• FRA	Forest Rights Act
• GVC	Gram Vikas Committee
• JFM	Joint Forest Management
• KRAPAVIS	Krishi Avam Paristhitiki Vikas Sansthan
• LARR	Land Acquisition, Rehabilitation and Resettlement
• LR	Land Reforms Rules
• MoEF	Ministry of Environment and Forests
• RFO	Range Forest Officer
• RR	National Rehabilitation & Resettlement Policy, 2007
• SC	Scheduled Caste
• ST	Scheduled Tribe



# Genesis of the Project

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## Safeguarding Commons for the Next Generation

This report is for one of the districts - Alwar under the research project "Safeguarding Commons for the Next Generation". The aim of this project was to initiate a comprehensive effort towards research, collaboration, advocacy and networking on the issues of common lands and resources. Under the project, fifteen districts across five states were covered in a course of three years. In the first phase of the research, three districts of Rajasthan namely, Alwar, Jaisalmer and Udaipur were covered. This report presents findings of the study conducted in the Alwar district. The study was conducted by KRPAVIS.

The idea of this research stems out of Seva Mandir's engagement over last three decades with common lands. In many villages, the organization with local communities has been able to overcome the problem of large scale privatization of commons through a process of negotiation and consensus building. These community efforts have yielded sustainable livelihood benefits, ecological benefits and has fostered co-operation within the communities. In its journey, Seva Mandir has come across many organizations and grassroots institutions, outside its working area, which have also been successful in altering distorted property relations of CPRs along with devising appropriate protection and management systems over these.

In 2008, Seva Mandir was appointed as the convener to the sub-group VI under **"the committee on state agrarian relations and the unfinished task of land reforms"** of the Ministry for Rural Development, Government of India. The sub group was constituted to look into the issues of (1) Ensuring access of the poor to common property and forest resources (2) To look into land use aspects, particularly agricultural land, and recommend measures to prevent/minimize conversion of agricultural land for non-agricultural purposes. The sub group, in its methodology had decided to visit the states and hold consultations with them in order to finalize the recommendations for effective implementation of land reforms. Through the study, we could understand the plight of commons in a national perspective. During the fieldwork and after going through various state level consultations, it was observed that on one hand there was a gross lack of clarity within the government, on what constitutes common lands. On the other hand, common lands were found to be shrinking due to allotment, diversion and encroachment. It was also found that in absence of institutional arrangements, remaining commons experience poor upkeep and management.

The scope of this research is -micro-level evidence data collection and consultation at regional and national level with chosen partner agencies. To start with, we have covered Rajasthan in the first phase with the intention of further moving towards other regions of the country, in next two phases.

It was increasingly realized by Seva Mandir that, we should carry forward the momentum generated in our area on the status of commons and go further into

exploring the various field contexts and experiences to develop a better and in-depth understanding of the work that is being done on the commons. Also it was felt important to draw out actionable points that could serve as guidelines for the upkeep and improvement of these vital resources in the future while retaining the spirit of empirical research and exactitude. This could be done if the micro-societies dependent upon commons are studied to find out what distinguishes the cases of better management from the others.

Thus to probe deeper into the questions/issues that we found out during our previous work and the research on commons, we conceptualized the idea of this innovative research initiative. We are grateful to EED, Germany, now known as Bread for the World, for supporting us with this study. Moving one step further, from our previous work, we also pushed the debate towards the future seeking answers towards what constitutes the essentials for effective common property resource management and development. With this aim, a comprehensive effort towards, research, collaboration, advocacy and networking on issues related to common lands and resources was initiated. This research project was titled as "Safeguarding Commons for the Next Generation". The scope of this research is -micro-level evidence data collection and consultation at regional and national level with chosen partner agencies. To start with, we have covered Rajasthan in the first phase with the intention of further moving towards other regions of the country, in next two phases. In the first phase of the research, the study was conducted in Alwar, Jaisalmer and Udaipur district by KRAPAVIS, LPPS and Seva Mandir respectively. In the next two phases 12 more partnerships were established with NGOs in four states - Madhya Pradesh, Orissa, Karnataka and Assam. The research covered western, central, southern and north eastern parts of the country giving study a pan India perspective.

# Research Hypothesis

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As stated earlier the project aims to initiate a comprehensive effort towards research, collaboration, advocacy and networking on issues related to common lands and resources. The broad hypothesis or research questions addressed were

1. What Constitutes CPRs?
2. Are the CPRs Shrinking (Quantity wise) and that- there have been negative trends in Commons as a Land-Use pattern?
3. Is the Pressure on CPRs is increasing (Quality wise)?
4. Decreasing Public Awareness and Apathy about the Impending Ecological crisis as the ecological functions of CPRs are increasingly being ignored?

The research also aimed to look at Management and Development and Law/Policy aspects of commons like

5. How can Commons be rejuvenated?
6. How Efficacious are the various instruments towards development of commons?
7. What are the practices for managing commons in a better way?
8. What are legislative, ownership and policy issues related to commons?

## Methodology

To have a ground focus, two villages were selected after consulting the research partner.-. Micro-level evidence and data collection was done through primary surveys. The de jure<sup>1</sup> vs. de facto<sup>2</sup> ground verification was done through intensive field work with village leaders and elders who could get the difficult facts about illegal encroachments revealed. Documentation of the present situation of the CPRs was done through photography (including vegetation, boundaries, encroachments and water sources). Consultations at village and district level and with chosen partners were held to collect qualitative information. Details regarding the status of CPRs, management and protection systems and the challenges associated with CPRs were documented by the research team.

Available secondary data was collected from Panchayats, Patwaris and District Head Quarter, Alwar. Data concerning the study villages, such as population, land parcel area and different land categories was obtained through land records from both the village Patwari and other

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<sup>1</sup> De jure - this approach says "a resource becomes common property only when the group of people who have the right to its collective use is well defined, and the rules that govern their use of it are set out clearly and followed universally". Thus, this method was used for collection of data on the size of CPRs.

<sup>2</sup> De facto - this approach was adopted for collecting information on use of CPRs. In this approach, the coverage of cprs was extended to include resources like revenue land not assigned to panchayat or a community of the village, forest land, or even private land in use of the community by convention. All such land in practice used as common resources (including common use of private property confined to particular seasons) were treated as CPRs for data collection on benefits accruing to villagers even if they were located outside the boundary of the village.

government offices, such as district office of the government Revenue Department. Other reports, books and periodicals were referred widely as an exercise to review the work done in past.

The management practices for the project have been researched on the basis of a questionnaire developed in reference to the guidelines of Elinor Ostrom<sup>3</sup>. (Please refer to the Annexure for the Questionnaire based on Ostrom's principals). E. Ostrom identifies eight design principles of stable common resource management<sup>4</sup>. These eight principles are:

1. Clearly defined boundaries (effective exclusion of external unentitled parties).
2. Rules regarding the appropriation and provision of common resources are adapted to local conditions.
3. Collective-choice arrangements allow most resource appropriators to participate in the decision-making process.
4. Effective monitoring by monitors who are part of or accountable to the appropriators.
5. There is a scale of graduated sanctions for resource appropriators who violate community rules.
6. Mechanisms of conflict resolution are cheap and of easy access
7. The self-determination of the community is recognized by higher-level authorities.
8. In the case of larger common-pool resources: organization in the form of multiple layers of nested enterprises, with small local CPRs at the base level.

These principals have undergone slight modification by Ostrom and Janssen in *Working Together: Collective Action, the Commons, and Multiple Methods in Practice* (2010), to include a number of additional variables believed to affect the success of self-organized governance systems, including effective communication, internal trust and reciprocity<sup>5</sup>, and the nature of the resource system as a whole<sup>6</sup>.

In order to get a more comprehensive understanding of the CPRs in the villages, some sub-questions have been added. This is also done in order to turn the questionnaire closer to a real conversation, and thereby, simplifying and breaking up the questions into two or more sub-questions. Altering the way of asking, to the perspectives of the interview group(s), such as questions concerning

**Figure 1.1: Map showing location of Alwar**



<sup>3</sup> Elinor Ostrom was awarded the 2009 Nobel Memorial Prize in Economic Sciences, for her analysis of economic governance, specifically concerning the commons. (<http://www.riksbank.se/en/The-Riksbank/Economics-prize>) E. Ostrom holds a Distinguished Professor at Indiana University and is the Arthur F. Bentley Professor of Political Science and Co-Director of the Workshop in Political Theory and Policy Analysis at Indiana University in Bloomington, as well as Research Professor and the Founding Director of the Centre for the Study of Institutional Diversity at Arizona State University in Tempe. (<http://elinorostrom.indiana.edu>)

<sup>4</sup> Ostrom, Elinor, *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, 1990.

<sup>5</sup> A relation of mutual dependence or action or influence.

<sup>6</sup> Poteete, Janssen, and Ostrom. *Working Together: Collective Action, the Commons, and Multiple Methods in Practice*. Princeton University Press, 2010. (obtained through: [http://en.wikipedia.org/wiki/Elinor\\_Ostrom#cite\\_note-10](http://en.wikipedia.org/wiki/Elinor_Ostrom#cite_note-10))

dependency and leadership issues proved beneficial for the research, both in order for the interview group(s) to fully understand the aim of the question and in order to bring the, sometimes technical questions, into the village sphere. The aim was to get more natural answers through, enhancing the villagers understanding of the project aims and increased their trust in the project and the researchers. Sometimes, to get a specific answer, a question focus point was approached from several different perspectives and asked in different ways, such as aspect of leadership, encroachment and dependency on the Commons.

# District Overview

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## 1.1 Demography

Alwar district is located in the north-east corner of Rajasthan, bound on the north by Bharatpur district and the Gurgaon and Mahendragarh districts of Haryana, and on the south by Jaipur and Sawai Madhopur districts. There are a variety of castes inhabiting the district. Prominent amongst these are Gujjar, Meo, and Meena, followed by Bhil, Jats, Brahmins, Rajputs, Saini and various schedule castes (like Jatav, Harijan, Koli). Gujjars are largely pastoralists. Given their strong association with animal husbandry, the hamlets of Gujjars are found usually in the hilly parts of the region. Yadavs are another significant member of the rural population with a strong interest in livestock. Rajputs and Jats in contrast to the Gujjar are primarily cultivators. The Jatav an important scheduled caste in the district are primarily engaged in agriculture, with animal husbandry as the secondary occupation. Meenas form the bulk of the scheduled tribe population.

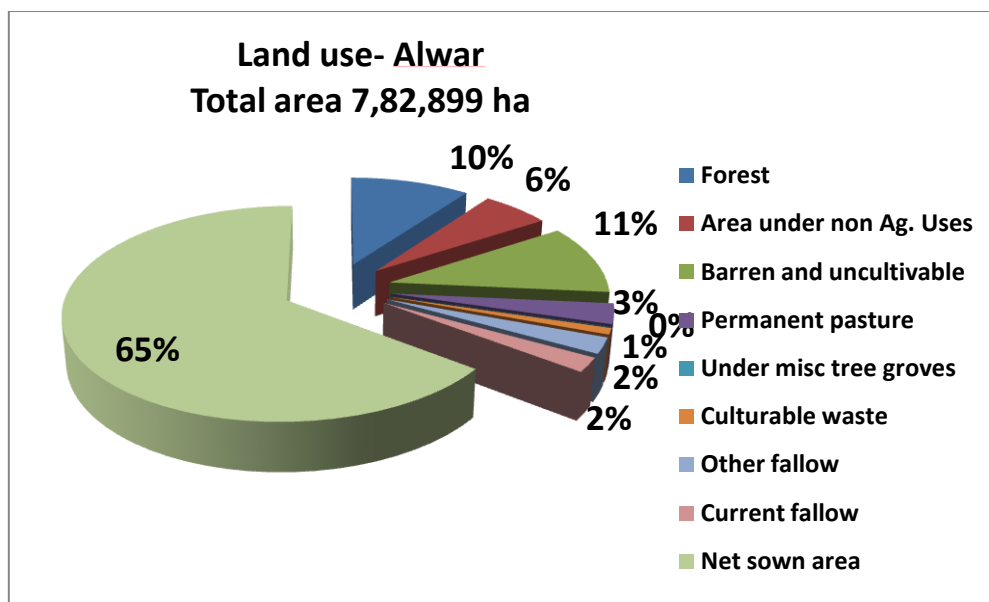
## 1.2 Physical Context

Topographically, Alwar district is characterised by ridges of rocky and precipitous paralleled hills. These chains of hills intersect the district: to the west is a level plain, mostly sandy and dotted with small hills; on the eastern side is a succession of hill ranges parallel till a distance of approximately 24 kms. Of the district's major rivers – the Ruparel, Sabi, Chuhan and Landoha – none are perennial over their entire course. Some of these rivers have been impounded at several sites to provide water for irrigation. Alwar district has a dry climate with a long, hot summer (28-41°C), cold winter (8-23°C) and short monsoon.

Like all districts in Rajasthan, Alwar experiences erratic seasonal rainfall. Average rainfall is 61.16cm but this is generally scattered and uneven, leading to frequent occurrence of both drought and flooding in the region. In response to this underlying uncertainty the region's rural inhabitants employ a variety of subsistence strategies, including agro-pastoralism, rain-fed and irrigated agriculture and more specialised forms of crop rotation, mixed cropping and agro-forestry. The major crops are Bajra (pearl millet), Moong (pulses), Jowar (sorghum) and Gwar (cluster bean) during the Kharif (monsoon crop) season and Gehu (wheat), Jau (barley), Sarso (mustard), Gram (chickpea) and Pyaj (onion) during the Rabi (spring crop) season.

## 1.3 Analysis of the Land Dynamics

The total area of the district is approximately 7,665.37 km<sup>2</sup> (roughly 2.5% of the total area of the state). As per the Census of India 1991, the Land use pattern in Alwar district is as follows



**Figure 1.3: Land Use Pattern in Alwar district**

From the above graph it is clear that, around 35 % of the land available in the district is common land. Further classification of this land and the changes over a period of time can be understood from the following table:

Year/ District	Forest	Area under non- agricultural uses	Barren Uncultivable land	Permanent Pasture and other grazing land	Land under misc. tree crops & groves	Cultivable Waste Land	Fallow lands other than current fallow	Total Area
<b>2006-07</b>	79400	45569	52385	24255	203	7734	19806	782903
<b>1988-99</b>	24218	41749	121290	24469	713	12612	18553	839410
<b>Net Change</b>	<b>55182</b>	<b>3820</b>	<b>-68905</b>	<b>-214</b>	<b>-510</b>	<b>-4878</b>	<b>1253</b>	<b>-56507</b>
<b>% Change</b>	<b>227.86%</b>	<b>9.15 %</b>	<b>-56.81 %</b>	<b>-0.87 %</b>	<b>-71.53%</b>	<b>-38.68 %</b>	<b>6.75 %</b>	<b>-6.73%</b>
<b>2006-07</b>	10.14%	5.82%	6.69%	3.10%	0.03%	0.99%	2.53%	100.00%

# Comparison of De jure vs De facto

## 2.1 Village Short-listing

Three villages were shortlisted, namely Bakhtpura, Kalikhola and Kairwari, by KRPAVIS for the study. The villages are an integral part of a macro watershed 'Umren Development Block' located along the east - north periphery of the well-known Sariska Tiger Reserve, in Alwar district. Detail of Sariska Tiger Reserve (Herrmann & Torri 2009:395), are given in the map below:

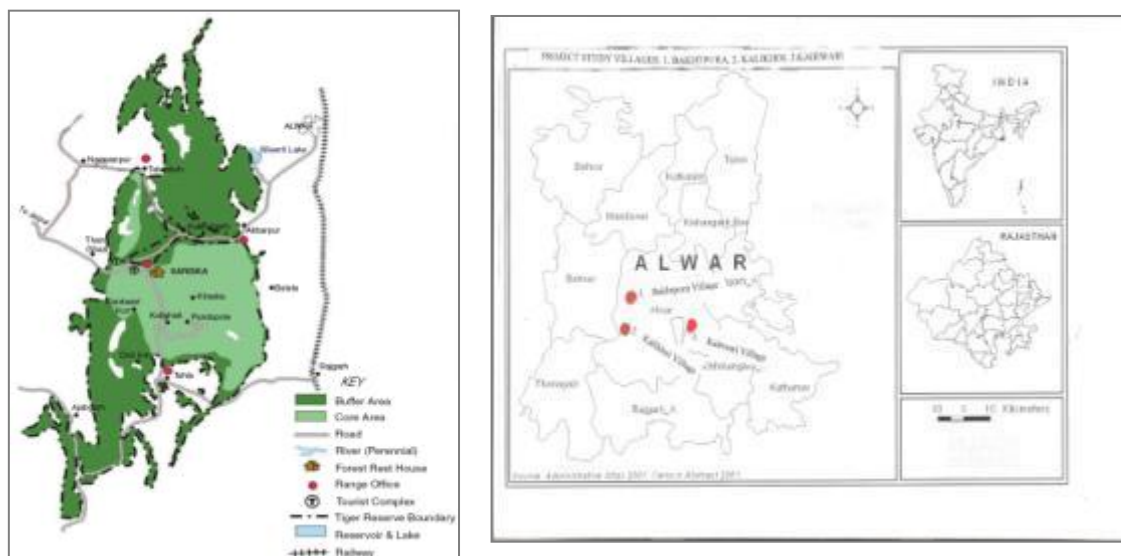


Figure 2.1: Location of study villages

## 2.2 Choice of villages

There are major differences between the buffer, periphery and outside Sariska reserve village in regards to the dependency and use of the resources, relocation and in terms of livelihood pattern. Mainly Gujar & Bairva (SC) pastoralist communities considered socially and economically backward reside in the buffer and periphery of the reserve area. Their main occupation is animal husbandry that occupies an important position in the economies of these villages which are completely dependent on CPRs. The number of animals per household in these two villages is three to four times more than villages outside the forest area.

The population outside the forest villages also practices agriculture in addition to animal husbandry. Also the reason may be two-fold:



1. Inside the reserve forest area, no cultivation is allowed except on a very small area therefore, they have to depend on animal husbandry and dairying.
2. They have been using forest area, as grazing ground therefore raising livestock on pastures is cheapest because they incur no costs on growing, cutting, transporting or preserving fodder.

Also land holding varies between the inside and outside of the reserve area as shown in the table below:

**Table 2.1: Contribution to Income and Assets**

Village	Location In Sariska	% Income from Agriculture	% Income from animal Husbandry practices	Average no. of animal per household	Avg. Land holding (Ha)
<b>Roondh Kalikhhol (Bera)</b>	Core	4.2	95.7	48	0.4
<b>Kalikhhol</b>	Buffer	31.6	68.4	18	0.8
<b>Bakhtpura</b>	Periphery	60.0	30.0	13	2.5
<b>Kairwari</b>	Outside	68.0	32.0	5	2.1

## 2.3 Overview of Surveys and Settlements

After Independence, a series of land reforms were implemented in Alwar. These were characterised by the discontinuity of the *Zamindar* system (intended to enhance tenural security for the rural poor) and the conservation of state lands through the process of nationalisation. Both the Forest Department and the *Panchayat* system that replaced intermediaries under the 1955 Rajasthan Land Tenancy Act were ill-equipped to control village commons (*de jure* and *de facto*). Prior to this, forests had generally been well maintained through coercive local governance, but now such areas fall victim to bureaucratic incompetence, corruption and widespread unchecked resource extraction for industrial concerns.

As per the community, their previous generation was greatly concerned by this trend and lived in constant fear of the Forest Department guards, who would demand bribes (of ghee) or threaten villagers with firearms. As such, they could do little to prevent the depletion of their traditional resource base. Thereafter followed a period of some three decades during which forests became increasingly degraded in the region.

Finally, the pressure from illegal timber contractors started letting off and the attention of Forest Department turned elsewhere. After years of widespread neglect, the people were left with the choice to either protect the remaining forest or give up their traditional livelihoods. They chose the former, bringing together age-old systems of 'ecological prudence' and the new formalized management institutions.

With the legislative emphasis now firmly on wildlife conservation and the Sariska Tiger Reserve increasingly touted as a 'natural' place (Shahabuddin *et al.* 2005) or 'wilderness' (Sehgal 2001), the region's human populations were again placed in the spotlight. Sariska's management plans declared human habitation to be a major threat to the preservation of the Reserve's flora and fauna, in particular the tiger (Government of Rajasthan 2002).

From 1982 onwards, this logic was used to legitimize sustained attempts to relocate settlements situated in Sariska. Till now already a number of villages had been forcibly evicted following a ban on agriculture in the valley introduced during the 1960s. Despite this increased pressure, village relocation from Sariska has not been a smooth process.

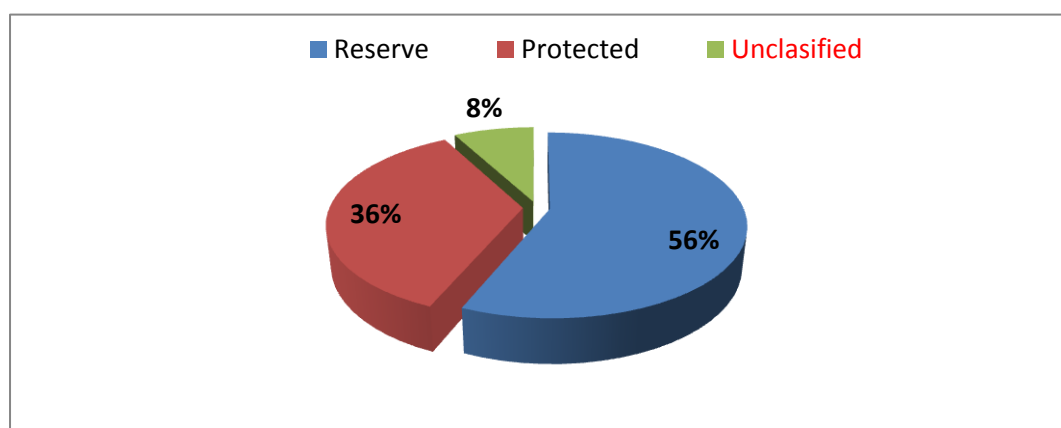
The most immediate threats to the existence of traditional resource management systems are the increasing human and livestock population, which may render traditional institutions such as *Khadu*, *Kankad*, *Dhara*, *Dharadi*, *Johad* entirely ineffectual. Such systems were evolved several generations ago, when total demand on natural resources was considerably less. These systems are based on inherited land tenure – *de facto rights* to a pond or patch of pasture – and as such can persist only so long as there is space enough for new *Johads* and *Dharas*. Moreover, by the community's own admission the shift from cows to small ruminants has resulted in poor floral regeneration, as goats are prone to graze on new seeds and shoots as soon as they appear. Several other problems concern external factors, such as uncertainty over land rights vis-à-vis the Forest Department and the perceived loss of interest in traditional livelihoods by the younger generation resulting from greater access to education.

## **2.4 District Level Situation**

In Alwar district, the early post-Independence period was characterised by continued contestations between rural populations and the state as the latter enclosed or allocated *de jure* common lands for commercial use. The extensive deforestation and disenfranchisement of resource-dependent communities that resulted from this move would lead ultimately to the district's incorporation into a number of national and transnational spheres of governance, among them those strange bed fellows: conservation and development. In a parallel development, *de facto* practice is granted more relevance than *de jure* policies.

Shortly after Independence, a series of land reforms was initiated in Rajasthan and also in Alwar district. At the level of the state, heavy emphasis was placed on industrialisation and agricultural expansion. Vast swathes of land were labelled as Siwai Chak (also called as Revenue Wasteland) and brought under government control (to be leased out later for commercial purposes), while other tracts were allotted to the Forest Department under the Rajasthan Forest Act, 1953.

**Figure 2.2: Type of Forest Areas in Alwar district**



The vast majority of Devbani (also known as Orans) were also 're-classified' during the 1950s; now they fall under either Forest Department land (itself sub-divided into Reserved and Protected) or Revenue Land (wasteland). In neither case do villagers enjoy any formal rights over these resources. Currently, a large amount of forest area comes under the category of protected and reserved forests. Although, while the other forests have been exploited, the 'traditional' use of *Devbani* persists.

## 2.5 Village Details

### 2.5.1 Households

According to the survey, the numbers of households are as follows:

**Table 2.2: Household Details**

S. No.	Village	Location	No. of household
1.	Bakhtpura	On the periphery of Sariska Tiger Reserve	142
2.	Kalikhhol	In the Buffer zone of Sariska	208
3.	Kairwari	Outside the Sariska	137

Kalikhhol, although lying in the buffer area, has the highest number of residents among all three selected villages.

### 2.5.2 Population

According to the Primary Census Data-2001, the population of the villages is as follows

**Table 2.3: Demographic Details**

Village	Total population	Male	% Male literacy	Female	% Female literacy
Bakhtpura	686	359	49.00	327	12.50
Kalikhhol	1156	648	37.3	508	17.1
Kairwari	921	482	51.87	439	19.13

Again, the highest population resides in buffer zone of the reserve i.e. Kalikhhol village.

### 2.5.3 Land statistics

The figures given in the below table describe the distribution of land titles across different land categories:

**Table 2.4: Land Details (Primary Census Data, 2001)**

Village	Total area Ha	Private land		Culturable Waste (Ha)	Area not available for cultivation (Ha)	Forest Ha	Total common land
		Irrigated area (Ha)	Un- irrigated Area (Ha)				
Bakhtpura	346	119	35	14	30	148	192 (55.45%)
Kalikhhol	265	27	123	24	25	66	115 (43.39%)
Kairwari	306	66	211	9	20	0	29 (9.47%)

**Table 2.5: Land Details (Patwari Record -2011)**

Name of Village	Revenue wasteland (Ha)	Barren uncultivated (Ha)	Pasture land (Ha)	Oran and Forest land (Ha)
Kairwari	12.22	8.46	0	3.20
Bakhtpura	11.69	15.85	3.64	158.83

As clearly obvious, there is no clear distinction of Oran lands as a common land category in the census records. Moreover, there are data differences when availability of *de jure* common lands is compared for these two villages in different data sources.

### 2.5.4 Livestock Population

Production of a household consists mostly of milk and milk products (ghee, yogurt, buttermilk and Mava (milk-cake)). Most of these products are used for own consumption, but surplus is sold in the market. Main income is the sale of the male lambs, whereas females are kept for future reproduction. All species (Buffaloes, Goats, Sheep and Cattle) are kept on a system of open range grazing along with stall feeding.

The number of cattle and buffaloes as per our (KRAPAVIS) Livestock Census – given in the table 2.6:

**Table 2.6: Livestock Census**

Village	Animal Population			
	Cow	Buffalo	Goat	Total
Bakhtpura	99	1233	1637	2969
Kalikhhol	168	496	1270	1934
Kairwari	10	200	2200	2410

### 2.5.5 Major Crop

Most of the area is double cropped (Winter/Rabi and Monsoon/ Kharif), with very limited third crop belt (Summer/Jayed) in low lying parts with tube wells.

**Kharif:** Rainy season crops (millets) are grown in foothills and undulating terrain. Traditional and hybrid varieties of *Bajra* (Pearl millet) and high yielding varieties and hybrid of *Jowar* (Sorghum) are important food grains grown in the region. Other crops grown include improved and traditional of *Makka* (Maize); improved and saved varieties of *Til* (Sesame); traditional and saved varieties of *Moong* (green gram) as well as *Chola* (Chickpea) and traditional and improved varieties of *Guar* (cluster bean). Rain fed Cotton crop is also grown in low lying flat lands as it only requires irrigation water at time of sowing, in late April. Thereafter it is treated like a monsoon crop with supplementary irrigation from wells.

**Pic 2.1: A cultivated field with Mustard crop**



**Rabi:** Among the Rabi crops grown are hybrid *Pyaj* (Onion), hybrid *Gehu* (Wheat), improved and saved varieties of *Sarson* (Mustard), traditional *Chana* (Gram) and some hybrid varieties of *Jau* (Barley). Winter wheat is limited to low lying areas with the aid of tube wells and is largely retained for household consumption. Pulses like *Arhar* (Pigeon Pea) and

Gram are grown for household consumption. Mustard is retained for local oil extraction for self consumption, but most of it is sold. Even though this is a winter crop, it is even grown where there is no irrigation.

Some vegetables such as pumpkin and tomatoes are grown too but these are mainly in the backyard. Most of the agricultural product is sold in the local *Anaaj Mandi* (Grain Market) of Alwar. But nowadays farmers also go to Delhi and Jaipur to sell their agricultural produce particularly the green vegetable (chillies, tomato, onion), as they barely lie at a distance of 170 km and 150 km respectively from Alwar.

#### 2.5.6 Crop Area

According to the Agriculture Department, during the year 2010-11, In Kairwari Panchayat, millet farming was done on 681 Ha out of the total 1106 Ha area. The details of crops sown in the Panchayat are:

**Table 2.7: Area under Crop**

Bajra	Jowar	Gwar	Arhar	Kapas (Cotton)
555 Ha	126 Ha	210 Ha	40 Ha	175 Ha

#### 2.5.7 Average Landholding

Land holding varies from one region to the other and even from the Buffer area to outside the reserve. In Kalikhol village located in the buffer zone, the average land holding is 0.8 hectares per house hold whereas it is 2 Ha per household on an average outside the reserve.

#### 2.5.8 Sources of irrigation

The river / stream are seasonal and only flow for two to three months in a year and are important sources of ground water recharge and construction sand. Also there are several *Johads* (rain water harvesting structure) in the villages. The open wells, generally located in the downstream of *Johads* have now run dry.

**Table 2.8: Sources of Irrigation**

Village	Total wells	Dry wells	Still in function
Bakhtpura	26	12	14
Kairwari	47	17	30
Kalikhol	28	15	13

**Tube well:** Less than ten years old, these are largely confined to the low lying parts. They

were initially dug because open wells had dried up, subsequently they have led to further falling of ground water levels.

### 2.5.9 Productivity

As per the Agriculture department, the productivity, during the *Kharif* season of 2010-11, crop-wise is as follows:

**Table 2.9: Productivity of Kharif season Crops (per Ha)**

Name of the crop	Bajra	Jowar	Guar	Arhar	Cotton
Productivity (in Kg.)	1600	767	1000	1000	198

And, the productivity, during the Rabi season of 2010-11, crop wise is as follows:

**Table 2.10: Productivity of Rabi season Crops (per Ha)**

Name of the crop	Mustard	Wheat	Gram	Barley	Taramira (oil seed crop)	Other Vegetables
Productivity (In Kg.)	1250	3800	1100	3300	420	1280

## 2.6 Information Collection Tools

The team carried out field visits in all the villages to get information on the status of common lands from both the larger community and from individual families. Technical visits and inputs were received time to time from; Mr. Vivek Vyas, Mr. Shailendra Tiwari of Seva Mandir and Ms. Pratibha Sisodia, Shri H. C. Gupta and Shri Aman Singh from KRAPAVIS.

This was cross-checked against other data sources like:

- District Census Handbook and Gazetteer
- Related website searches
- Village Institutions: Members of the local community and *Panch/Sarpanch* like Shri Bijendra Singh (*Sarpanch*) Shri Sohan Singh, Shri Dhanuram Prajapat (*Sarpanch*), Smt. Beena Devi, Smt. Narbada Jatav, Smt Dhankori Jatav, Shri Nanayaram Jatav, Shri Raghu Vir Singh
- Forest Department - Mr. Nikhil Ubhaynkar (RFO), Mr. Chaudhary (RFO) and Mr. Kainhaiya from Forest Department

- Revenue Department - Village revenue, maps and records, Dr. Sitaram Veram former B. D. O. Government of Rajasthan, Local *Patwaris* (Kairwari & Bakhtpura) and *Nayab Tehsildar* (Malakhera) from Revenue Department,
- Agriculture Department (information about the yield data of different crops at district level); - Mr. Rahul Kumar (Civil Engineer, Budha), Mr. Dharmendra Bhardwaj from Agriculture Department.
- District Animal Husbandry Department - Dr. A.K. Singh, Deputy Director Livestock Department
- KRAPAVIS: Reports, publications, published articles and records etc.

## 2.7 Map Colouring and Demarcation

During this process the community was engaged in revenue map reading; consensus surveys; process documentation, etc. The most important thing in using map reading was to make participants aware of their lands and their location. Through this process they also became more informed on the vital issues of land use particularly on *de jure* and *de facto* CPRs. The various steps undertaken were:

- Obtained old and most recent land records (*Khata Nakal*, *Khasra* etc) as well as maps from Revenue Department officials (and also from the government website),
- Recorded the current status of all commons/ non-private lands in the village i.e. *Panchayat* (*de jure* Common property resources) pasturelands and Revenue Wasteland (including *Orans/ Devbanis*, Barren and Uncultivable Land the *de facto* Common property resources)
- Map colouring and demarcation of the government land parcels on the maps.
- Conducted field checks of all these parcels across the village with the help of local community.
- Recorded any encroachments, diversions, and allotments found through visual estimate or discussion with the local community.
- Checked vegetation status and state of grazing by visual estimate.

## 2.8 Field Data Collection

**Table 2.11 Bakhtpura: *de jure* v/s *de facto***

Land Category	Total Area of Parcels Surveyed	% of Land Parcels surveyed	Total Area Unoccupied	Total Area of Encroachments	% Area encroached
Revenue Wasteland	12.4	90	3.46	8.94	72%
Pastureland and Forest	156.2	100	145.26	10.94	7%



<b>Land</b>					
<b>Barren and Uncultivable</b>	0.41	100	0.08	0.33	80%
<b>Orans</b>	6.56	100	6	0.56	9%
<b>Total</b>	<b>169.01</b>	<b>97.5</b>	<b>154.8</b>	<b>20.77</b>	<b>42%</b>

In Bakhtpura village, in all 42 % of the common land was found encroached. Land under Barren and uncultivable category and pastureland is very less but the former is highest encroached category. Comparing in terms of area, Revenue wasteland was the most encroached category with 72.09 % of the total area encroached. The forest lands and the pasturelands were highly encroached but due to the vast extent of the forest lands, the encroachments are highlighted only in the maps. On ground, Orans were found to be the least encroachments and that too for a temporary period of time.

**Table 2.12: Kalikhol: *de jure* v/s *de facto***

Land Category	Total Area of Parcels Surveyed	% of Land Parcels surveyed	Total Area Unoccupied	Total Area of Encroachments	% Area encroached
<b>Revenue Wasteland</b>	23.8	100	5.11	18.69	79%
<b>Pastureland</b>	11.03	100	7.25	3.78	34%
<b>Forest Land</b>	63.67	100	58.26	5.41	8%
<b>Barren and Uncultivable</b>	6.92	100	0	6.92	100%
<b>Oran</b>	10	100	10	0	0%
<b>Total</b>	<b>115.42</b>	<b>100</b>	<b>80.62</b>	<b>34.8</b>	<b>44%</b>

In Kalikhol village, in all 42 % of the common land was found encroached. Surprisingly, despite the fact that the Oran is very far from the village, the community is able to protect and manage it very efficiently. Here also the most encroached category is Barren and Uncultivable land followed by Revenue wasteland.

**Table 2.13 Kairwari: *de jure* v/s *de facto***

Land Category	Total Area of Parcels Surveyed	% of Land Parcels surveyed	Total Area Unoccupied	Total Area Encroachments	% Area encroached
<b>Revenue Wasteland</b>	8.11	100	0	8.11	100%
<b>Pastureland/ Oran</b>	3.2	100	2.95	0.25	8%
<b>Forest Land</b>	0	0			NA
<b>Barren and Uncultivable</b>	16.66	80	14.42	2.24	13%
<b>Total</b>	<b>27.97</b>	<b>70</b>	<b>17.37</b>	<b>10.6</b>	<b>40%</b>

Here in Kairwari also, the revenue wasteland was found to be most (rather completely) encroached category for the sole purpose of agriculture. *Orans* (here the *Oran* land also includes legally defined village pastureland category) also were the least encroached.

Village	Village Bakhtpura	Village Kalikhol	Village Kairwari
<b>2.9.1 Revenue Wasteland</b>	<ul style="list-style-type: none"> <li>Out of the total 14 hectares, we collected field data of 12.4 hectares, out of which 8.94 hectares (72.09%), is reportedly encroached upon by the villagers for cultivation. Most of the encroachments are in the form of expansion of the cultivated lands into the nearby revenue wastelands.</li> <li>According to a revenue department letter, 9.22 hectares (out of the total 14 hectares) was applied for regularization/ allotment.</li> </ul>	<ul style="list-style-type: none"> <li>As much as 18.69 hectares (79%) land was reported encroached for cultivation.</li> </ul>	<ul style="list-style-type: none"> <li>During the field survey, 100% of the surveyed 8.11 hectares was reportedly encroached by the villagers for cultivation, by expanding their cultivated lands into the nearby wastelands.</li> </ul>
<b>2.9.2 Barren - Uncultivable</b>	<ul style="list-style-type: none"> <li>This is also called as 'Area not available for cultivation and also includes <i>Abadi</i> (human settlements). In our field survey, 80.48 % of the surveyed area was reportedly encroached for livestock enclosures.</li> </ul>	<ul style="list-style-type: none"> <li>In our field survey, 100 % of the area surveyed was reported encroached for livestock enclosures and cultivation.</li> </ul>	<ul style="list-style-type: none"> <li>Out of the total surveyed land, 13% was reported encroached, particularly for livestock enclosures and house construction.</li> </ul>

<p><b>2.9.3 Forest land</b></p>	<ul style="list-style-type: none"> <li>• There is big chunk of forest land in Bakhtpura village. This has been enclosed as a forest reserve (a part of Sariska) but lying stripped bare – presumably by the local community. Encroachment is a recurrent problem. As much as 10.94 hectares (7%) area was reported encroached.</li> <li>• Cultivators living on the margins of the forest land surreptitiously expand their cultivated lands into the forest area. <i>Guwada</i> (cattle camps/ livestock enclosures) is also seen as a common practice for encroachment. Thus most of the forest land in the villages is over-grazed and denuded as livestock graze freely on the land.</li> </ul>	<ul style="list-style-type: none"> <li>• The village of Kalikhol covers an area of 66 hectares, which is officially categorised as Reserved Forest by virtue of its location within the Tiger Reserve. However, this forest land by and large is used for grazing, fuel wood collection and collecting MFPs/ NTFPs etc. 5.4 hectares (8.49%) area of this land is under encroachment by individuals, particular for cultivation and <i>Gowanda</i> (cattle camps/ livestock enclosures).</li> <li>• This forest area includes hills and the hill top plateaus, called <i>Maalas</i>, are used as pasture by the local communities. Fodder (both grass and leaves) is gathered from the surrounding forest area in accordance with a system known as <i>Dhadder</i>. The foothills are normally encroached for agriculture</li> </ul>	<ul style="list-style-type: none"> <li>• There is no forest land in the village.</li> </ul>
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		operations.	
<b>2.9.4 Oran Land</b>	<ul style="list-style-type: none"> <li>There is an <i>Oran</i> in Bakhtpura known as '<i>Bheru Nathji ki Devbanih</i>'. Area of the <i>Oran</i> is 6.56 Ha. Legal status of this land is also under 'Area not available for cultivation Category'. Encroachment is on a very little portion of 0.56 Ha, which is temporary, mainly for storing fuel wood and dung cakes. The village Bakhtpura in our study area illustrates the difference a community's involvement in an <i>Oran</i> can make.</li> <li>The <i>Oran</i> of this village has been cut into two parts, one that is community controlled and another, which has been enclosed as a forest reserve. The</li> </ul>	<ul style="list-style-type: none"> <li>The main <i>Oran</i> of the village is located a little away from the village (approximately 3 km) near, in a crease of the valley accordance with a system known as is has been that the Reserved forest has department. There is <b>no encroachment</b> reported. There is also a water source within the <i>Oran</i>. At dawn and dusk in winter months, the village men pass through en route to or from the plateau above, where the animals are left to graze; and pray for deity to protect their herds from poor health and</li> </ul>	<ul style="list-style-type: none"> <li><i>Bhrathari ki Devbani</i>, a low lying hillock adjacent to the village Kairwari, listed in revenue records as <i>Rada</i> (CPR) under the category of 'Area not available for cultivation'. The hillock (<i>Oran</i>) has administratively been cut into two equal parts, one that is under the jurisdiction of Kerwawal village and another part fall in Kairwari jurisdiction, (the area of this part is 3.20 Ha. out of which 0.25 has been encroached for livestock enclosures.) It is a good source of fuel wood,</li> </ul>

	<p>result of this has been that the Reserved forest has been stripped bare – presumably by the local community – whereas the community controlled forests retains fairly thick stands of trees. In the <i>Oran</i>, a very good '<i>Johade</i> water harvesting structure (water tank) also exists. With the onset of rains in late July, the <i>Johad</i> swells to its maximum.</p>	<p>predation. Should time allow it, they may also visit the mahatma, a resident <i>Sadhu</i> (holy man) who watches over the <i>Devbani</i> in return for food from the villagers.</p>	<p>and grazing for goats. This <i>Oran</i> also serves as catchment to the adjacent <i>Johad</i>. Its drainage has been interrupted by extension of settlements and fields into the <i>Oran</i>. Due to the blockage of drainage, the habitation gets flooded during the rainy season.</p>
<b>2.9.5 Pastureland</b>	<ul style="list-style-type: none"> <li>Negligible area encroached</li> </ul>	<ul style="list-style-type: none"> <li>3.78 hectares (34.27%) Pasture land out of 11.03 Hectares was reported encroached..</li> </ul>	<ul style="list-style-type: none"> <li>Negligible area encroached</li> </ul>

**Table 2.14: Hectarage of Encroachments**

Village	Total Area of Encroachments (Ha)
Bakhtpura	20.7
Kalikhoh	34.8
Kairwari	10.6

## 2.9 Commentary on status of each Common land category

All this was also mapped and marked on the revenue maps of respective villages. The color code combination for the various land categories was kept as follows:

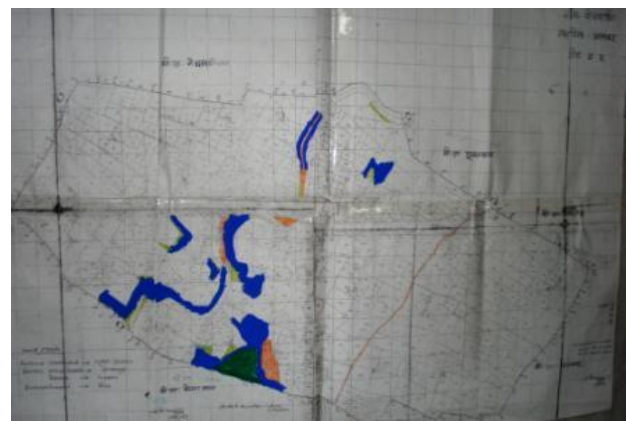
1. Revenue wasteland (unoccupied) – Light Green
2. Barren and Uncultivable land (unoccupied) – Orange
3. Forest (unoccupied) – Dark Green
4. Encroached Common lands (occupied) – Blue
5. Non colored – Settlement and Private agriculture fields.



**Map 2.3 : Bakhtpura village - Common Land Categories**



**Map 2.3: Kalikhol village - Common Land Categories**



**Map 2.3: Kairwari village - Common Land Categories**

## 2.10 Analysis

### 2.10.1 Analysis of Encroachments

- Revenue Wasteland shows highest level of encroachment, as this category of land can be allotted through regularisation.
- Barren Uncultivable land also shows great levels of encroachment, but in most cases the overall area of this category is very less in proportion to the total village land. This land classification cannot be allotted through regularisation but still shows as high as 100% encroachment of the available area in two of the villages. Orans/ Devbani land was least encroached (7-8%) and with best vegetation, as communities have socio-cultural values attached to it and they are directly under communities and management.
- Forestlands also reported some degree of encroachment.
- CPRs encroachment leads to community disintegration
- Community based management systems prove to be efficient management systems for CPRs.

### 2.10.2 Dependency on Common Land Resources

- In Bakhtpura (periphery), the level of dependency on the village CPR, is reported 50% of their income was produced through the commons.
- In Kalikhol (Buffer), the group interviewed agreed that 60-70 % of their yearly income was produced with a direct or indirect contribution from the village commons.
- In Kairwari (Outside), the livelihood is mainly based on agriculture, due to the flat plain lands dominating the area. 75% of the income was generated through farming on private lands. Thus the level of dependency on the village CPR was observed as 25% only.

### 2.10.3 Condition of Vegetation

In Bakhtpura and Kalikhol study villages, Dhok (*Anogeissus pendula*) is the dominant species. Grass species like the Shatavari (*Asparagus racemosus*), Kuri (*Urochola panicoides*), Sava (*Panicum sumatrense*), and certain other wild grasses are found. The tree species found are Babul (*Acacia nilotica*), Ber (*Zizyphus mauritiana*), and shrubs include Aak (*Calotropis procera*), Kair (*Capparis decidua*), Ber (*Zizyphus mauritiana*), Adusa or Bansa (*Justicia adhatoda*) etc. Tree species like Kala Khair (*Acacia catechu*), Hingota (*Balanites egyptiaca*), Neem (*Azadirachta indica*), Peepal (*Ficus religiosa*), Bargad (*Ficus bengalensis*), Gular (*Ficus glomerata*), Salar (*Boswellia serrata*), , Dhak/Khakhra (*Butea monosperma*), Jamun (*Syzygium cumini*), and creepers like Abalakanta, Sadahari and figs are key species. A total number of 404 indigenous and naturalized plant species belonging to 272 genera under 87 families are found in Sariska Tiger Reserve area. According to Champion and Seth, *Anogeissus Pendula* (Dhok) forest is a plant of odaphic climate in tropical dry deciduous forests. It is a gregarious tree species and is often found in pure stands in the middle slopes of the hills. Its leaves are good fodder and this is the principal species growing in the reserve. The vegetation which is being used as fodder by the communities is categorised as;

- Dhok forest (*Anogeissus pendula* forest)
- Salary (*Boswellia serrata* forest)
- Dhak/cheela (*Butea monosperma* forest)
- Khair (*Acacia catechu* forest)
- Thorn (Scrub forest)
- Mixed miscellaneous forest
- Forest along Nallas.

The main niches of vegetation are:

- Hill top plateaus called *Maalas*, where pastures of good quality are found.
- Community protected scrub forests along the foothills.

- Riverbeds and streams, where the riverbeds are also used to collect sand and *Panni/ Sarkanda* (Reed) production for sale in the nearby region.
- Fallow fields in the tract and nearby areas.

In Kairwari, for half a year, the landscape appears barren and brushy, its plains and ridges are dominated by thorny shrubs, sinewy grasses and the occasional stunted *Acacia*. The *Orans* in all the villages looks well vegetated, where as wastelands and forest lands are Scrub types. Barren uncultivable lands are also scrub and sparsely vegetated. Peelu (*Salvadora oleoides*) is also found.



# Best Practices of Management of Commons

## 3.1 District Level Overview

### 3.1.1 Information collection tools

- Rapport Building through Community Meetings: The staff established rapport through village meetings. Their observations, opinions were sought on the various issues through semi-structured interviews, oral histories, focus group discussions and triangulation exercises.
- KRAPAVIS newsletter "*Devbani ri Baat*"
- In depth interviews with government line departments like Forest, Animal Husbandry, Agriculture, Horticulture, Watershed, Revenue, Panchayat Samiti, Gram Panchayat, Patwarghar etc.

### 3.1.2 Inventorization of best practices

1. Forest Resources	Short Description
<b>Kankad Bani</b>	An Intra-village system of demarcation of boundary by villagers
<b>Devbani / Orans</b>	Sacred groves - Forests, protected in the name of some God or Goddess by each of the villages of their own specific needs. The area under an <i>Oran</i> can vary from a few square meters to several hundred hectares.
<b>Rakhtbani</b>	Common forest area/ resource belonging to one village only.
<b>Roondh</b>	Maharaja's land opened for the Public.
<b>Khadu</b>	3-4 families divide the mutual areas as a herd.
<b>Dara</b>	A place into the hands or custody of someone.
<b>Dharadi</b>	Every <i>Gotra</i> has a tree of its own
<b>Van Samiti (Forest Protection Committee)</b>	Committees involving participation of both - the state forest departments and local communities
<b>Eco Development Committee</b>	Rules for forest usage and fines designed by the community
<b>Thain</b>	Traditional Community Decision Making Systems.
Government Initiatives	
<b>Rights and Concessions</b>	Rights for collection of fodder, Bamboo
<b>Critical Tiger Habitat, Demarcation into Core, Buffer and Periphery</b>	Displacement and Conservation Measures
<b>Departmental Works for Forest Improvement</b>	300 villages are dependent upon Sariska

<b>KRAPAVIS Interventions<sup>7</sup></b>	Institutional, Physical, (Plantation), Policy Advocacy, Micro-Planning
<b>Tarun Bharat Sangh</b>	Nursery, Plantation, Water Structures inside the forest land
<b>Oran Forum</b>	Network of individuals interested in <i>Orans</i>
2. Other Land Resources	<b>Short Description</b>
<b>Gochar</b>	Pasture lands
<b>Gora</b>	Cattle stay land
<b>Wastelands</b>	Unculturable Open and barren lands
<b>Migration, Pastoralism,</b>	Semi pastoralists, Traditional migration routes
<b>Beed</b>	Private grazing areas
<b>Rotational Grazing</b>	Rotational Grazing prevents the effects of overgrazing
<b>Local Self Governance and Panchayat Institutions</b>	

## 3.2 Institutions

### 3.2.1 On Forest Lands and Panchayat Lands

**Kankad Bani:** This refers to the forest on the common geographical boundaries of two or three villages i.e. a system of inter-village demarcation, probably for revenue purposes, which served to delineate *de facto* grazing grounds and usufruct areas (for harvesting other important MFPs) for each village in the area. As a demarcation pillar, a local deity was installed, known as 'Kankad Devta'. In the picture, Kankad Devta is seen between Lalpura and Dabli villages. According to members of Bera village, these grazing zones are typically around 120 sq km in area, and the boundaries are still widely recognised by local communities today in more than 53 villages such as Umri, Devri, and Beenak etc.

**Roondhs:** *Roondhs* were being used as the Maharaja's fodder and timber reserves as well as popular sites for *shikar* (hunting). From the month of Karthik (around November) until the summer, villagers were permitted to graze animals and cut grass in the *Roondh* for a small fee (after the Maharaja had taken his share). They were also expected to contribute labour. During this period land tenure, including forest management was dominated by *Zamindars* (intermediaries), who devised local rights and rules. Through coercion, they enforced sanctions on violators and managed to extract labour for harvesting of resources, protection and maintenance activities such as fencing, planting and de-silting ponds. There was a practice of *Daantli daalna* meaning permission to cut grass (now extinct). These areas are still known by names like *Bardod Roondh*, *Kalikhhol Roondh*, *Binak Roondh*, *Sirawas Roondh*, *Mojpur Roondh*, *Jugrawar Roondh* etc.

**Khadu:** An important traditional system of resource use in Sariska villages is *Khadu*. Each family group (defined here as three to four brothers) will bring their buffalo to graze around one particular *Johad* (pond). Family rights to *Johads* are inheritable, and it is universally

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<sup>7</sup> Refer Annexure

known in the village which *Johad* is used by which family. Management of both the watering hole and the grazing land surrounding it is thus the responsibility of one extended family group, thereby reducing the likelihood of 'self-interested' exploitation and instead promoting prudent use of available resources. In the case of the *Khadu* (literally meaning the 'herd') system, the intertwining of ecology and kin-based history encourages conservation through a concern for the welfare of a given family's future generations. This is usually caste based and while internal villages have Gujjars practicing it, in the buffer areas it is evident with other caste groups like Meena, Gujjar, Ahir and Kumhar etc.

**Dara:** *Dara* (literally meaning le Internal villages have Gujjars practicing it, in the buffer areas it is evident with other caste groups like Meena, Gujjar, Ahir and Kumhar etc. These are hillsides above the plateau (where buffalo are unable to graze) from which they are allowed to cut grass. These *daras* may vary in size according to the size of the family and the number of livestock they own. The cut grass is then stored in piles in the courtyards of the village, to be used as fodder during the dry months when water is scarce and buffalo are unable to graze in the plateau. The *Dara* system is largely informal. According to Sitaram Gujjar from Bera village, in the past the boundaries were marked by stones, but since the forest has become less dense conspicuous trees serve this purpose. There are no written rules regarding the *Dara* system; if for some reason a family over-harvests their section, it is down to them to negotiate additional grass from other families, but on the whole this is a rare occurrence. The system affords security from both famines and incursive harvesting by members of neighbouring villages.

**Dharadi:** This refers to religio-cultural symbolism attached to planting of trees. Many *gotras* (clans) have trees as a totem. The people belonging to the '*gotra*' regard their particular tree as sacred and protect it.

**Van Samiti and Mahila Mandal:** Several villages have established a formal *Van Samiti* (forest protection committee) under the guidance of KRPAVIS or an EDC (Eco development Committees) under the guidance of Forest Department. However, in 1998 the concept of development of the *Mahila Mandal*, a separate body for village women, with a written constitution was also introduced. The *Van Samiti* replaced an existing five-man committee which traditionally presided over social issues but which was not overtly concerned with forest protection. Rules for the new institution include, a graduated fining system for crimes related to forest use, such as illicit felling or lopping. As per Ramkiran Gujjar, the old system and the new *Van Samiti* were similar in form and function, but that by giving their association a name they could ensure recognition from the Forest Department. The *Samiti* has been able to amend and create rules when necessary, and to incorporate old practices into the current system. One example is the informal norm that when someone is seen breaking a rule (for example, cutting a tree) they will not be reported immediately and brought in front of the *Samiti*, but rather the villagers will wait until at least three people have witnessed such behaviour from that person before the case is heard. This serves to reduce the incident of confrontation, which could easily damage village trust and

solidarity. Simply put, the new formal *Samiti* structure in the villages has evolved to incorporate informal elements while keeping with similar, older modes of local conservation.

**JFM:** Joint Forest Management has also emerged a system of management in villages like Chandauli, Nadanhedi and Amaratwas and involves:

- Awareness/ Extension/ Training Programme
- Formation/ strengthening of “Village Forest Protection and Management Committees”
- Village Micro Planning

**Community Institution - Thain (for management of Devbanis):** *Thain* historically was a traditional local institution in the village for the upkeep of the *Oran* and CPRs. Comprising a group of five to seven village notables, the *Thain* had an important role in the appointment of the *Sadhu*, also having the power to dispense with his services.

However, today this traditional institution has disintegrated. Modern institutions that have supplanted them, such as the official village Panchayat have shown little interest in the management of *Orans*.

### **3.2.2 On Orans** (Please also refer Annexure 1 and 2 *Orans*)

**Devbani/ Oran:** The *Orans* or sacred groves of Rajasthan, India have long been an essential component of rural livelihoods in this arid region, providing water, fuel, plants of medicinal value and grazing for livestock. The *Devbani* have become important as sources of grazing/ fodder, dry firewood, fruits and other produce of value to rural livelihoods. As with *Khadu* and *Dhara* the age-old rules governing the *Devbani* are informal and are internalised by the community members. These typically include prohibitions on carrying an axe, the removal of green wood and the removal of wood or fodder for sale. Such rules ensure a perennial supply of such resources in times of extreme scarcity. The institution of the *Devbani* is held together by the communities, fear of supernatural punishment to some extent, but also by the force of tradition.

**KRAPAVIS Oran Model:** A community-led revival of *Orans*, KRAPAVIS works on three levels simultaneously:

- At the community level - to engage the people in restoring *Orans* and re-establish *Oran* based livelihoods, have also restored about 100 *Orans*.
- Research & Training - to bring the issue into the national discourse; Listed 1100 *Orans* and created a data base of 305 *Orans*.
- Advocate for policy - change and legislation for bringing recognition to the community's right to control and manage these resources.

KRAPAVIS tries to revive *Orans* through increased tree and grass growth, biodiversity by developing and applying technologies capable of bolstering water retention. KRAPAVIS

maintain a central nursery from which all of the seedlings are distributed to *Orans*. Effort is made towards 'Social sustainability' through the empowerment of local communities to manage their *Orans* using both traditional and modern conservation techniques. To date, KRPAVIS has used this technology to restore around 100 *Orans* in two districts of Rajasthan (Alwar and Jaipur) and two districts of Madhya Pradesh, which has led to improvements in the livelihoods of the associated rural communities, particularly pastoralists as well as increase in groundwater levels. The organization works with the community to develop contextually-sensitive regulation and enforcement systems, and to establish linkages with PRIs (village level institutions) with an emphasis on women's participation.

Also KRPAVIS developed the model of '*Oran Talab*', a unique water conservation device constructed entirely from local materials. These *Oran Talabs* use traditional construction techniques in conjunction with advanced ecosystem modelling (i.e. watershed approach, hydro-techniques etc.) to rehabilitate water sources. They provide optimal solutions to water dispersion for degraded lands in arid and semi-arid regions, ensuring the availability of resources necessary for sustainable pastoralism and conservation in dry-lands.



**Pic 3.2: A Johad inside Oran**

**Orans as sources of water:** Rajasthan is the largest state in India, accounting for 10% of the total area but with access to just 1% of the country's water resources. *Orans* are important

as water sources and also often protect watersheds, springs, aquifers and centuries old man made storages. Most *Orans* have sources of water, either small springs or rivulets running through them or a variety of ponds e.g. *Johad* and *Nadis*, Tank, *Baori* (small well), Well, *Tanka*, *Kund* (traditional small water sources or tanks) etc. Several *Devbanis* like *Garva ji*, *Adaval*, *Talvraksh*, *Kalaka*, *Bharthari*, *Naraini Mata* in Alwar district have a large perennial water spring used for irrigation and other purposes year-round. A further example is *Gopal Das ki Devbani*, which has a very old and architecturally ornate “*Oran talab*” (rain water harvesting structure). *Jugrawar ki Roondh Bani*, *Gujjawas ki Bani*, *Bherunath ji ki Bani* and several other *Orans* likewise have huge ponds/talabs which serve as water harvesting structures for the catchment area of the *Orans* and are usually located to collect maximum run-off and serve important purpose of irrigation and drinking water. *Sidh ka Bani* in Panchudal village of Jaipur district and *Garbaji* at Vijjayapura village have wonderful water *Jal kunds* (water well). Such dependable availability of water has been shown to be a major incentive for communities to use *Orans* in a sustainable manner.

### 3.2.3 On Revenue Land

**Migration/Grazing:** The Gujjars, mostly livestock keepers and considered backward socially & economically, reside in the region and 95 % of their income is received from animal husbandry practices. In Alwar district, the Gujjars habitats are mainly scattered around Sariska in the form of as many as 300-villages/ hamlets (population of about 150,000 and 140,000 cattle heads). In the erstwhile State, fuel and fodder preserves in existence under the local names of '*Chhind*' or '*Roondhs*, *Banis* (*Devbanis*) were open to the Gujjars for grazing. But now the Gujjars have become increasingly dependent upon the forest and range resources. Therefore this involves the movement of livestock within the temperate regions/pastures. During winter they descend from their settlements and move to neighbouring states. Their grazing pattern in brief is:

- a. **Resource Niche:** All species (Buffaloes, Goats, Sheep and Cattle) are kept on a system of open range grazing.
- b. **Seasonality:** Pattern of resource utilization
  - Summer (4 months): Grazing in fallow fields locally, as well as by migrating into neighbouring Haryana, U.P. Movement towards plains (100-150 km) on a small scale.
  - Monsoon (4 months): Plateaus on hill tops and occasionally in patches of saline flat lands where water has collected. Place of grazing either in *Devbani* and surrounding areas.
  - Winter (4 months): Scrub forests (*Oran/ Devbani*) in local foothills and *Maalas* and along river bed with limited stall feeding. Grass harvest after seed fall.

### 3.3 Good Practices on Management of Commons

#### 3.3.1 Bakhtpura

There was a very good and precise understanding within the village community about the boundaries and areas of village common lands. The main CPR in the chosen villages is the *Devbani (Oran)* and is very closely linked to the community, both culturally and in terms of livelihood. The *Devbani* is characterized by temples and a good and diverse tree cover, which is usually either under community control or has come under the reserve forest. Given its religious significance, similar to the *Orans* in Jaisalmer district, the management of usage and access rules and norms are very well respected in the community. But the forest area under Reserve forest has become increasingly degraded.

The boundaries of the commons have had a very long and well known history in Bakhtpura village since the Mughal Empire days. Although the Forest Department has extended the area of the forest that comes under its control over a period of last 15 years, this has only affected the total village commons to a very small degree, as the land simply have shifted category from Revenue Wasteland to Forestland.

Bakhtpura village has an ongoing conflict with the nearby village of Bruha over the grazing on the Bakhtpura CPRs. A short time ago, one member of the Bakhtpura community was beaten up by members of the other village, and this resulted in a major fight between members of the two communities, where both parties used weapons, such as axes, stones and clubs. The police came and arrested some members from both communities and held them for 3-4 days. A settlement was made to follow the traditional grazing rights and boundaries. Also during this year, a group of 20-25 women from a nearby village came very often to cut the trees. The members of the village community stated that it is very difficult for them to control this, and especially to do it without creating a new fight. But at the same time some damage was done to the forest because of this as the neighbouring villages have over exploited their own forest and are now coming to collect forest resources from their protected resource. This change in conduct from the neighbouring village has been a process evolving over the last three years. The first two years they came and did some lumbering on the community forest, they took only little and there was no real reaction from Bakhtpura community. This year they are taking in bulk as they met no resistance earlier. The community was of the opinion that inter-community cohesion was pretty strong and that they have good control over a period of last 25 years on their own village members with regards to withdrawal of wood and grazing and protecting the *Devbani*.

The CPR in Bakhtpura has been managed by two sets of institution systems; one is an old tax collecting system (*Patel*). This position is inherited and is not being used anymore, informally the family or household is still the *Patel* but they hold no power. The other is the *Thain* system through which decision-making takes place and rules for the commons are created. The *Thain* is formed of a committee of 5-6 elder members of the village, and they usually set the fines for rule breaking and decide on the rules and penalties. If someone from the community breaks rules, the villagers sit together and identify the encroachers, remove the encroachment and sometimes give out a fine. Around 20 years ago, there were a pass

system in place, for entering in to the forest for grazing purposes and collection of fuel wood. The amount paid for passing into the area was determined by the number and species of livestock and/or by the number of axes carried into the forest<sup>8</sup>. Thereby, it was a taxing system where the amount paid, was determined by the amount of resource a household took from the CPR.

In 1985 the area was turned into a Tiger Reserve and the village lost majority of their grazing rights in the area, though, they still have the right for grazing within a distance of 3-4 km from the village, in the periphery of the reserve. After '85 a system of fines for breaking the rules in the reserve was set up by the Forest Department, but the amount of fines that are registered are very low. The villagers believe that, the Forest Officials are usually bribed by the trespassers therefore a very low amount of fines are given.

There are some specific social norms in regards to the CPRs in the community; No one is allowed to carry an axe into the *Devbani* and outside the *Devbani*, it is only allowed to do lopping on the trees not to cut the whole tree. Although, the villager indicated that, the accountability in the community towards the norms are not very strong anymore, and said that some of the women are carrying axes into the forest. It was stated that, there are no regular meetings regarding the CPRs and a meeting is basically only held when a prominent person is present. Earlier they used to have monthly meetings, but with the change in the number of people following the social norms, this has decreased. When they do have a meeting, fines and rules are agreed upon, and they usually invite a forest-guard to discuss management efforts on the CPRs. The members of this committee are not elected but shifts and membership are based on the individual's performance.

Regarding the level of dependency on the village CPR, interview group agreed upon, that about 50% of their income was produced through the commons, when the monsoon rains was normal. Around three months of the year, during the summer, they migrate for grazing or for manual labour. Approximately three months during the winter they depend on their private and often irrigated lands for crop residues and agriculture and for about six months during and after the monsoon their livelihood are partially dependent on the village commons.

In times of droughts the village CPR can sustain their livelihood for 2-3 months. Therefore the villagers will migrate with their Buffalos to the *Nogarwa* plains, around 90 km from the village, to graze the livestock. One member of the interview group said that, during the last drought, he lost 50-60% of his livestock as enough fodder was not available. He came back to the village with his remaining buffalos and started using mustard plants, char berries and leaves from a specific tree that grows on the *Devbani* as fodder. Although, the fodder was not good he made it through the drought. He stated that the leaves from the tree are only used under severe famines. One plant, the *Keep-plant* can grow without water for a very long time, and in rocky areas; this plant will also be harvested during a drought. Some special rules come into effect during the drought. Some land is allotted to each household

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<sup>8</sup> It informally agreed upon that, one person with one axe could take a certain amount of wood in one day. The tax for wood was set on this calculation.



from the Barren category for grazing, and no grazing in the forest is allowed for the sake of letting the forest regenerate its vegetation. The villagers indicated that, some households do break the drought-rules, but not often.

### **3.3.2 Kalikhol**

The villagers in the interview showed a good and clear understanding of where the precise areas of community CPR are located. All of the land categories for CPRs have been encroached except the reserve forest and *Devbani*. All the encroaching households, according to the interview group, are paying the fines and penalties for their encroachments. Inside the reserve forest the villagers graze their livestock and collect fuel woods and other NTFP. During the monsoon season, the livestock will be grazed on the top of the hill, and during post-monsoon season the grazing will be on the lower parts and the slopes of the hill. In the post-monsoon season, the land slots available for grazing will be rotated to give the vegetation time to recover.

The community has approximately six months of benefit from the CPR during and after monsoon; where grazing is open to all. First they graze on the plateau of the hills and later they move down on the slopes and foot of the hills. After the monsoons, grass is harvested and dried for fodder use during late winter and summer. The stored grass lasts for about three months. The villagers will migrate with their livestock for 3-4 months during the summer season to find fodder. The interview group agreed upon that about 60-70 % of their yearly income was produced with directly or indirect contribution from the village commons.

The community has a fairly strict set of norms towards their *Devbani* and the forest. It is not allowed to cut any tree and the penalty for doing so is Rs.500 and the money goes to the village committee. There are some management systems that apply for the forest area, but there is no management on any other land category, and all but the forest areas are highly encroached upon. In good monsoons, like the last two years, there are no regulations on the grazing on the village commons. During lesser monsoons there will be some regulation on the CPR, the slots of land available for grazing, in the latter part of the year, will rotate. This is done out for regeneration purposes and is controlled by a village committee that looks after the forest and *Devbani*. When asked, the interview group said that they created the forest committee due to the high dependency that they have on the forest. The village committee has a fairly good authority and accountability in the community, but they are facing problems from outside sources, such as people from the close-by villages and corrupt forest officials. The committee has been steadily losing influence over time. The interview group told that the village forest committee had no "legal tooth" and was not respected by the Forest Department. Due to this the villagers have stopped meeting, as they saw little point.

The villagers stated that they feel the Forest Department is encouraging the illegal timber production and taking bribes on the illegal activities. They said that until about 1975 there was a very dense forest on the hill range which is now degraded. " *(The) Forest Department says, they are the owner (of the forest); but if the King is weak, what can you expect of the people..?*" As per the villagers they have been told by the F.D., that the Forest Right Act

does not apply to the reserve forest and therefore they have no access or user rights to the forest resources.

There have been incidents, when fighting has broken out between Kalikhol villagers and people from other villages and the interview group admitted that, they had almost no control on the outsiders. The problems started around 6-7 years ago, when people came to know that there were no more tigers left in the area. This resulted in outside people losing their fear of the forest, and they started to come and cut the trees. These people are generally coming from the nearby towns as there was no forest left there.

However the villagers also stated that they have no *Gram Panchayat* or *Sabha* and that the local *Panch* tends to rely on meeting with the same few elder members of the village, rarely including a broad social group of the village. Regarding the development work, the villagers stated that the Forest Department does work on some of the forest areas and one patch of land has been enclosed for JFM under the department. The villagers complained that they were not included in the decision making and for the manual work on the JFM, they were never asked. Workers were hired by the Forest Department from outside the village. The NGO "KRAPAVIS" also has done work on the forest by doing plantation and soil and moisture conservation activities.

### **3.3.3 Kairwari**

The livelihood of Kairwari is mainly based on agriculture, due to the flat plain lands dominating the area. 75% of the income was generated through the farming on private land. In the community there are plenty of tube wells and even during low rainfall years, the villagers feel that there is no real water scarcity.

There are three categories of CPRs in the village: The River and the river bed, the hills (Barren and Uncultivable Land), the Pastureland and the local *Devbani*. Although, the river is legally government land, it is used and viewed as village CPR. The hills are only used for grazing other than that the village stated that they get no other biomass from the hills. The pastureland has been heavily encroached upon and much of the wasteland category has been allotted to private land. Additionally, the river is used for water for the livestock. The river bed, adjoining to the private fields, is used for both grazing and for harvesting thatching materials. In the winter season they are harvesting thatching materials, which are dried and thereafter either sold or used for construction purposes for a very good selling price. There is no rotational or closed grazing system on the CPR and it is open to all. Livestock from other villages are not permitted usually. Some of the villagers have tried at *Panchayat* level to change the rules of conduct on grazing and usage of the river bed. They wanted to create a tax on the multipurpose grasses, to raise money for the *Gram Panchayat* and thereby be able to afford new development work in the village. Ultimately this did not succeed, as the leader of the *Panchayat* was against the idea.

The village *Oran* is located on a hill, a little off the village and is small in size (around 8 Ha) and fairly degraded. The lower part of the *Oran* still holds fairly good vegetation but the mid- and upper part are very degraded, with very little tree cover. Additionally, the *Oran* has been encroached upon over the last two years. The villagers have not done any effort to remove the encroachers for the fear of making people from their own community homeless. All of the encroachers are from the village, and the process of encroachment has mainly happened through family expansion and the encroached area has extended in size.

Overall the community has about three months of grazing on the hill in the monsoon and then either on their private land or on the river bed. Thus to sum it, the village has a fairly low dependency on the community common lands, compared with the other surveyed villages in Alwar district, and this is so mainly due to the difference in terrain. The villager stated that the *Gram Sabha* meets every third month and the *Ward Sabha* meets on a monthly basis, although the villagers stated that the leader of the *Ward Panchayat* were cheating and just collecting signatures and recording that there was a meeting. The villager also stated that earlier they had monthly meetings, but not anymore, now they only meet “when required”. When the villagers were asked about the reason for the change in the social norms, they stated that; the younger people have other aspirations compared to their elders and there is increasing problems with alcohol in the community. Gradually the old system of meetings has broken down, and the elders in the village have given up trying to enforce the old system.

### **3.4 Mapping Institutions in the Chosen Villages**

(As per the principles of CPR management by Elinor Ostrom)

**3.4.1 Panchayati Raj Institutions:** Bakhtpura and Kalikhol villages fall under Bakhtpura Gram Panchayat with headquarter at Bakhtpura village where as Kairwari comes under Kerwawal Gram Panchayat with headquarters at Kerwawal village.

**3.4.2 Village Samiti/Gram Sabha:** KRAPAVIS has developed village committee/*Samiti* in every village, and most of the tasks are carried out by them. This committee is an informal body comprised of representative from each caste from the village.

**3.4.3 Mahila Mandals/SHGs:** Under KRAPAVIS project activities, each village has established a *Mahila Mandal* (women's group) providing the opportunity for women of the village to manage their own affairs and for savings and credit.

**3.4.4 Krishi Seva Kendra:** There is one *Krishi Seva Kendra* in the project area. It provides free soil testing facilities, subsidy on gypsum for land reclamation, mini kit scheme and technical advice to the farmers.

**3.4.5 Government Institutions like Veterinary Hospital, Health dispensary:** There is one veterinary dispensary located at Bakhtpura village, works under Animal Husbandry

Department. There is also a dispensary in Bakhtpura village under the Health Department, but there is no dispensary in Kairwari village. Bakhtpura village has school up to the secondary standard where as in Kalikhol and Kairwari the education facility is only up to middle standard.

**3.4.6 Van Samiti:** About fifteen years ago, villagers of Bakhtpura formed an informal committee known as *Van Samiti* (Forest Protection Committee) that takes care of protecting the forests in the vicinity of the village.

**3.4.7 Kanjihod:** When KRAPAVIS started agriculture land development work in Bakhtpura and Kalikhol villages, one of the major issues was the damage caused by grazing of domestic cattle let loose by farmers. The elders of the village pondered over this issue for a possible solution and as a result the institution of '*Kanjihod*' was conceived and subsequently various rules and regulations regarding this self-regulatory system were finalized. ('*Kanjihod*' is a process of stocking fodder for the animals). As a result, this village institution has run smoothly for last three years.

### 3.5 Output of the District Level Workshop

The findings were shared in a workshop with different officials from the government departments (Animal Husbandry, Agriculture, Horticulture, Watershed, Revenue etc), concerned Panchayat Samiti members, representatives of communities, Sarpanch, Panch and members from the local voluntary organizations.

### 3.6 Findings and Recommendations

Although a lot of efforts have been made to document the existing ('indigenous') modes of sustainable resource use in the hope that such systems can be replicated elsewhere, however there are still substantial threats to the existence of traditional resource management systems. These threats are in the form of increasing human and livestock population, which may render traditional systems entirely ineffectual. These systems based on inherited land tenure – *de facto* rights to a forest or patch of pasture or pond had evolved several generations ago, when demands on the natural resources were considerably less. Therefore these systems as such can persist only so long as there is space enough for new *daras*, grazing etc. Moreover, by the community's own admission, the shift from cows to small ruminants has resulted in poor floral regeneration, as goats are prone to grazing on seeds and young shoots as soon as they appear. Other external factors include uncertainty over land rights vis-à-vis the Forest Department and the gradual loss of interest in traditional livelihood practices by the younger generation due to greater access to education.

*"Orans are islands of good forests and repositories of rich biodiversity. These Orans are excellent examples of people's religious faith linked with conservation."*

KRAPAVIS's research into *Orans* suggests that these have a potential to provide a permanent solution to water scarcity and degradation in the area. This data has been

used by KRAPAVIS to engage in a dialogue at State level through a network called the “Oran Forum”. One of the achievements of this advocacy as pointed out by KRAPAVIS is visible in the recently published Rajasthan State Forest Policy 2010, which includes the local population in the management of Orans. As pointed out *“Orans are islands of good forests and repositories of rich biodiversity. These Orans are excellent examples of people’s religious faith linked with conservation.”*

# Implementation of Land Laws

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## 4.1 Literature Review

### 4.1.1 Legislative History of the Region

In 1901 the 'Roondh' and 'Bani' Departments of Alwar State were abolished and a new line department called the Forest Department was established under the Revenue Branch. Its objectives were to increase revenue and expand State control over the wastelands, which, it was believed that time, were not being adequately exploited. As time passed, however, the demands of revenue generation saw the onus shift from reclamation of wastelands to the enclosure of forests, 21 of which (including Sariska) were enclosed by the 1930s. These were then leased out for a variety of purposes (e.g. timber and fuel felling, bamboo plantation, charcoal production, stone quarrying, lac cultivation (Alwar State Government 1905, 1911)), or else reserved for *shikar* (hunting). The new Forest Regulation Act, 1921 reclassified the State's forests and empowered the Inspector-General, Forests to declare any tract of forest as reserved (Alwar State Government 1923), and it was this regulation, coupled with the increasing criminalisation of (liability to pay fines or give in to rent seeking behaviour) or taxation on forest use by rural communities, that spurred the widespread agrarian protests. Following the exile of Jai Singh in 1933, forest, hunting and grazing rules were relaxed and State claims to common lands were strictly curtailed. After its powers were thus circumscribed, the Forest Department consolidated its position by placing increased emphasis on scientific forestry and efficient working plans. At the same time, reforms affecting the *Shikar* department (now known as the *Akhet*) saw the two become more closely aligned, culminating in their unification and reconstitution shortly after Independence as the Wildlife Preservation and Zoo Department. The title is revealing as Johari (2003:88-89) argues, during this period "*Shikar*" regimes increasingly intersected with evolving articulations of wildlife conservation. The enactment of the Rajasthan Wild Animals and Birds Protection Act, 1951, a mandate for sanctuary-making, marked the legislative beginning of the new culture of wildlife conservation."

It was under the aforementioned Act that Sariska was notified as a Reserve in 1955 and as a Wildlife Sanctuary in 1959. The site had enjoyed some level of protection since Alwar's founding in the 18<sup>th</sup> century, first as a *Roondh* and later from the late 19<sup>th</sup> century, as a *Shikargah* (hunting place) (Johari 2003). Thereafter, the Sariska valley was closed and then assigned for plantation schemes as part of an attempt to improve the condition of the forests and thus bolster revenue (Alwar State Government 1909), a project that, like its predecessors, entailed the forcible eviction of many hundreds of inhabitants from the area. (Johari 2003). Paradoxically, the removal of villages meant repeated budget deficits, as the now sparse population contributed little in the form of agricultural income and grazing fees. However, the imposition of the Sariska Valley Toll in 1917 and the region's continued prominence as a *shikar* destination ensured that some revenue was still realised.

In 1978 the Sariska area was declared as a Project Tiger Reserve. This period onwards regulation on usage of resources was imposed to curb withdrawal. Departmental commercial felling of Dhok (*Anogeissus pendula*) and Bamboos was stopped by the department. Restrictions on grazing outside traditionally known area were strictly enforced in comparison to earlier times. (Ref. Sariska Relocation Plan)

#### **4.1.2 Land Laws for Alwar**

As per the following literature review, following land laws and circulars were analysed for Alwar District.

- Rajasthan Land Revenue Act
- Rajasthan Land Revenue (Allotment of Wasteland for Bio-fuel) Rules, 2007.
- Forest Rights Act 2006, and Wild Life (Protection) Amendment Act (WLPA),
- Biological Diversity Act 2002
- Management Plan of Sariska Tiger Reserve
- Villages Relocation Plan in Sariska

### **4.2 District Level Situation on Issues Related to Land**

#### **4.2.1 Laws not implemented properly**

The recent laws 'Forest Rights Act (FRA) 2006' and the Wild Life Amendment Act (WLPA) 2006 have not been implemented properly. Many of villages from forest fringe areas in the district are being relocated, while many relocated families have been facing issues such as lack of secure title to the lands given to them and lack of basic facilities. Many of them have reportedly threatened to go back to their original villages unless these issues are sorted out. The issues with resettlement from the Sariska Tiger Reserve are as follows:

**Lack of Adequate and Proper Documentation:** The first observation one makes is that there is not much documentation available at the village level. Wherever the family's signatures have been obtained on stamp paper there is no copy given to the villages. In one of the villages, Umri where 23 people have given consent to be relocated opting for option II, there are only two documents given to them pertaining to the minutes of the meeting by the forest department held with the villagers. The language and the words are usually drafted by the Forest officials and the villagers are asked to put in their thumb impression. It was also reported in the conversation that often after the discussion, the villagers are asked to sign on blank papers.

The other visible violation is no involvement of Gram Sabha at any stage. The District level committee has been formed with 17 members with only EDC presidents as members. No

Gram Panchayat members are involved. A sub-committee of 8 members has been formed at the district level which has one representative of the ward and EDC president. There is no consent resolutions obtained from the Gram Sabhas.

**Improper and Enforced Choices:** In violation of the forest rights act 2006 provisions; the families have been forced to choose options for resettlement from the Sariska Tiger Reserve. During a meeting held on 28/08/2008, the Villagers were given only two options of cash or land. They were not informed about the FRA 2006 under which they still have the option of continuing on their land with development facilities to be made available to them. One of the minutes of the meeting signed by the DFO, Sariska dated 28/08/2008 states that families who have not given consent, a cut-off date has to be urgently determined and a day was fixed as 30/09/2008 by which all families have to give their consent to either option 1 or 2. People who do not give in their consent by the cut-off date will not be given time for any more options and will be automatically considered under option 1. It is also mentioned in the letter that since limited land options are available, option II will be provided on first come first serve basis for 100 families of Kankwadi village and others who have opted for option II will be considered under option I with cash compensation. Contrary to the requirements, the relevant section of the minutes is produced in English, specially the package section and the definition of family, which is beyond comprehension for the residents of the villagers. Two Panchayats have given evidences to KRAPAVIS in writing that no consultation process was undertaken and no consent obtained. Also no legislation or advisory issued by the central government has mentioned any cut off dates for giving consent for resettlement. WLPA as well as the FRA clearly states that it has to be voluntary and consent has to be obtained. Petition of the relocated villagers under section 7 and 8 of Forest Rights Act has been sent by registered to the Chief Secretary, Government of Rajasthan on November 17, 2011, though there has been no response till now. It is uncertain if forest rights procedure can now be initiated in this village. Theoretically villagers can claim recognition of the same rights in the relocated village which they enjoyed traditionally in their earlier village. However, in a place where the situation, problems and needs are so drastically different and there are barely any forest lands that can be used, it seems difficult to achieve settlement of rights to correct the 'historical injustice'.

**Land Acquisition:** There is acquisition of land of Sariska revenue villages (e.g. Dabli and Deovri villages) and as per KRIPAVIS; this is in contravention of FRA 2006 as well as the Rehabilitation and Resettlement 2007 policy of the Government of India. The Forest Rights Act 2006 clearly requires the need for forests right to be clearly defined before any relocation is initiated and the RR 2007 (National Rehabilitation & Resettlement Policy, 2007) rules and the LARR (The Land Acquisition, Rehabilitation and Resettlement Bill), 2011 mention the need for such a process to be completed. Thus there are three legal instruments – Forest Rights Act, 2006; the Central and State Rehabilitation & Resettlement policies/guidelines and LARR, 2011 which have not been implemented in such a case.



**Discrepancies in Compensation Distribution:** The other discrepancy exists in the instalment of package which is to be given to families who have given consent. The people who will be opting for option 1 will be given 1.4 lakhs as first instalment and 5.6 lakhs after they have shown proof that they have purchased land and 3 lakhs will be deposited in their bank account. For option II first instalment is Rs 50,000, Second instalment is 50,000 and third and fourth instalment is 1 lakh and 50,000 respectively. This is a total of 3.5 lakhs. As per the Central government notification 35% of the package is for land and 30% for settlement of rights. There is no mention of the 30% of the amount (Rs 3 lakhs) and it is being said in the letter that Rights have been settled by the collector order in 1999. Thus the government does not account for the entitlement to the 3 Lakhs compensation under settlement of rights in violation of the R& R package offered. Also the letter mentions that DFO has been authorized to sign on the land distribution letter (*avantan patra*) but no such document has been handed to the villagers who have been allotted land under option II.

**Lack of Viable Sources of Livelihood and Provisions after Relocation:** The place of relocation usually doesn't have conditions or environment remotely similar to the earlier village. It was observed that the villagers from Umri were relocated into a village in the plains where there was no sign of forest cover or common grazing grounds. Such decisions show lack of consideration about the needs of the traditionally pastoralists and forest dependant people. Such relocation expects the villagers to survive an abrupt transition from pastoralism to agriculture without any kind of help or support from the government agencies. Despite constant requests for almost 2 years, it has not been possible to get electricity connection in the 6-7 bore-wells that have been constructed to irrigate fields. Forest Department had always been completely aware of its responsibility for getting electricity for the bore-well construction (it is mentioned in the *Baithak Karyawahi Vivaran* that FD would facilitate this provision). All villagers claim that Rs. 1 lakh was deducted from their relocation package for this facility. Yet, there has been no progress in this matter. And the villagers remain stuck in a trap, not able to continue pastoralism in the traditional manner and not being able to settle into agriculture either.

Access to basic facilities such as drinking water, road schools will be made available contingent on their resettlement. In some villages, after relocation the old people have not been receiving any pension whereas earlier (in Umri) they used to receive a pension of Rs. 400. There is no school facility and health facilities even though it had been promised.

**Conservation Measures:** The villagers pointed out that the department is only concerned with tigers and not interested in forest development and conservation. They also pointed to issues like invasive species taking over the forest thereby disturbing the food chain and fodder availability. Villagers also felt that there was heavy pressure from outsiders for felling trees who had nexus with the department.

## **4.2.2 Laws Implemented with a Distortion**

### **(Laws that have inherent flaws in them which prevent implementation)**

The LR (91) of the Rajasthan Land Revenue Act is implemented with a distortion because usually an encroacher gets the encroached piece of revenue land 10 years after regularization if penalized under LR 91. Therefore the violators proactively tend to seek filing of an LR 91 case against them in order to have proof of their encroachment on Revenue land. In Bakhtpura village, 9.22 hectares revenue land was offered for regularization/allotment by the Revenue Department letter (Ref letter no. 595, dated 8.10.2001).

## **4.2.3 Laws Not implemented At All**

The Biological Diversity Act 2002 has not been implemented at all. CPRs like *Orans* are repositories of genetic diversity, often representing the only patches of primary jungle in the otherwise denuded surroundings, it has been suggested that they be reclassified en masse either as Biodiversity Heritage Sites (in accordance with Section 37). However, it is crucial to remember that *Orans* are also vital for livelihoods as sources of water, fuel-wood and grazing. As such the inclusion of *Orans* in either of the aforementioned categories is not a viable option, as the legislation for both Biodiversity Heritage Sites and Ecologically Sensitive Zones prohibits interference from humans and livestock. For this reason, a new land revenue classification for *Orans* is essential.

## **4.2.4 Facilitating or Disruptive Laws**

The Government of Rajasthan passed rules under its powers conferred by Section 261 of the Land Revenue Act of 1956 to create a new law called "The Rajasthan Land Revenue (Allotment of wasteland for Bio-fuel plantation and Bio-fuel-based industrial and processing units) Rules, 2007". Given the fact that major portion of the CPRs is listed under revenue wastelands, it is important that the advantages of conserving their present status be weighed carefully against the possible benefits that might accrue should they be converted into bio-fuel plantations. Prima facie there are good reasons to believe that on counts of protecting local livelihoods as well as biodiversity the conversion of these community lands into bio-fuel plantations is an unwise step and disruptive law.

## **4.3 Total Cases Registered in 2011 in District**

### **4.3.1 Patwari's Case List**

As many as 11 cases were reported in Kalikhol village under LR (91). In Bakhtpura village, 13 cases have been registered. In Kairwari, no case has been registered during 2009, 10 and even in 2011.

#### 4.3.2 Forest Cases under Forest conservation Act, FIR

Details of the cases from the related Forest Range i.e. Akbarpur areas during the year 2007-08, are as follows (as per the Range Forest officer). In the study villages, only 5 cases were registered, as per the local Forester.

**Table 4.1: Cases Registered**

S. No.	Type of cases	No. of cases
1.	<i>Shakh Tarashi</i> (Lopping)	2
2.	<i>Katai</i> (Tree Felling)	1
3.	<i>Sima</i> (Encroachment)	4
4.	<i>Shikar</i> (Hunting)	8
5.	Grazing	No recording of cases (Fine levied on the spot e.g. for buffalo Rs. 51 and for camel Rs. 101)
6.	Mining	5

#### 4.3.3 Cases filed under Forest Rights Act 2006

No cases have been filed under FRA 2006, so far.

**Table 4.2: Cases registered under Wildlife Protection Act**

S. No: and Date of Case Registration	Name of Culprit	Blame/ Crime	Award
<b>Case 1: 11 May 07</b>	Kalya Babariya	Poaching Panther	4 years jail
<b>Case 2: 28 Nov 07</b>	Heeral Lal Khatik	Selling Skin of Panther	3 years
<b>Case 3: 8 Jan 08</b>	Kalya Babariya	Poaching Baghera (Leopard)	3 years
<b>Case 4: 23 Mar 09</b>	Juhuru, Ramjan, Tayaib, Nuru, and Kalya Babariya	Poaching Panther	5 years each
<b>Case 5: 13 Jan 09</b>	Juhuru, Ramjan and Tayaib	Poaching Panther	5 years each
<b>Case 6: 9 Apr 10</b>	Kalya Babariya	Poaching Panther	5 years
<b>Case 7: 17 Jan 10</b>	Juhuru, Ramjan, Tayaib, Nuru, and Kalya Babariya	Poaching Panther	Not decided
<b>Case 8:</b>	Narain Gihara	Purchasing skin of Panther	5 years
<b>Case 9</b>	Jivandas Kalbelia, Juhuru Mev, Ramjan Mev, Tayaib Mev and Nuru Mev	Poaching Tiger	31 years each

## **4.4 Implementation in the Chosen Villages**

### **4.4.1 Laws Not Implemented Properly**

In Kalikhol and Bakhtpura, the project villages, a boundary demarcation process is being undertaken by Forest and Revenue Department and surrounding areas but people have not been consulted or included in this process. They were also not sure what land records were being used to demarcate land and put up pillars indicating boundaries of the Tiger Reserve. In certain cases several pillars have been put up in the middle of old settlements or agricultural lands and also for areas for which villagers possess legal documents of ownership. Villagers claim that there are official records which show those lands to be belonging to individuals or village commons. Land record situation is very complicated on ground. In some areas land has been allocated to the villagers but the land allocated is sometimes not the same as the land being cultivated because of various reasons. Thus there seem to be much confusion over land ownership in the region and therefore it can be said that the Rajasthan Land Reforms and Acquisition of Land Act, 1963 and the Rajasthan Forest Act, 1953 are not being implemented properly.

### **4.4.2 Laws Implemented with a Distortion**

The communities have been in this landscape from generations. In areas such as Sariska, there is evidence to show that communities have coexisted with wildlife and have practices which aid conservation. There may be practices that are not completely in harmony with tiger conservation but they can be resolved by mutual understanding, constant dialogue and involvement of communities in decision-making processes. During discussions with the communities, some of them have pointed out that they would prefer to continue in their current location if their basic livelihood requirements are allowed to be met from the forest, while a major section of the community has also expressed willingness in being partners in the conservation process. Thus it can be said that there is scope for co-management in the region and options of sustainable management of man-animal conflict resolution possible. But the park management seems to have assumed that co-existence is not possible. The FRA mentions settlement of rights before such relocation exercises are carried out. But it seems that this provision has not been exercised anywhere. However, this is not to say that those who are willing to move should not be moved. Thus Settlement of rights has not been completely done in the Sariska Tiger Reserve.

### **4.4.3 Laws Not Implemented At All**

No processes under the FRA have been initiated as this area falls under the non-tribal (Other Traditional Forest Dwellers) population, and none of the steps as detailed in the act like the constitution of the Forest Rights Committee, Gram Sabha Consultations or consent procedures required under the Act have been carried out by the authorities. During a meeting, the Sariska's DFO, Mr. Sahu initially expressed ignorance about the applicability of the Forest Rights Act (FRA) in Tiger reserves but on being shown the letter issued by Ministry

of Environment and Forests (MoEF) on implementation of FRA in Tiger reserves and Sanctuaries, he stated that the current priority is different and thus rights process cannot be initiated and communities will have to be moved out from the Tiger Reserves.

#### 4.4.4 Facilitating or Disruptive Laws

After the designation of Sariska as a Wildlife Reserve in 1955 and a Tiger Reserve in 1978, the Forest Department restricted access (except allowing worship). There are two consequences to this trend, one being the alienation of local communities dependent upon the forests, and the second being the deterioration of Natural Resources due to mismanagement. The village of Bakhtpura in our study area elucidates the difference a community's involvement in the conservation of an *Oran* can make. The *Oran* of this village has been segmented into two parts, one governed by the community and the other having been enclosed as a Sariska's forest reserve. The results of this dichotomy have been that the reserved forest has been stripped bare, presumably by the local community, whereas the community-controlled forest retains fairly thick vegetation. An explanation towards the causes of alienation could be the loss of the people's faith in the spiritual relevance of *Orans* as well as the consumerist mentality of the private sector. The role of the state in promoting the growth of industry without heeding the concerns of local communities, as well as the relevant lack of economic employment in the rural paradigm, results in people emigrating and hence further weakening the socio-cultural and spiritual ties that bind them. Today the Gujjars, their traditional systems of Nature Resource Conservation and management have seriously deteriorated. Enforced state control over Sariska has had an adverse impact on the livelihoods of the communities and also sidelined them from the management of the forests. Thus these complex causes have undermined local forest management systems.

**Table 4.3: Hectarage as per Study for Land Related Offences**

Village	Hectarage
<b>Bakhtpura</b>	20.7
<b>Kalikhhol</b>	39.7
<b>Kairwari</b>	11.5

#### 4.5 Output of the District Level Workshop

A detail report of the workshop is attached as Annexure three.

#### 4.6 Findings and Recommendations

- Strategies need to be developed at the three tiers of administration i.e. the village level, district level, state as well as at the legal and policy level. A strategy needs to be devised based on what can be resolved at what level. e.g. information material on laws and policies can help villagers understand better why certain changes are happening.

- The villagers need to do long term planning at landscape level under which strategies for CPRs management will have to be developed, possibly through a federation of villages.
- Many of the immediate problems of the villagers can be resolved through implementation of FRA. Villagers would need to pass resolutions in their respective villages for the same through their forest rights committees which are yet to be formed. Alternatively, the FRA process in villages should focus on community rights more than individual rights.
- Civil society initiatives would need to bring to the notice of the government about the irregularities in the process and the ground realities.
- There is an urgent need to provide legal and policy inputs to people as and when required. Lack of information is one of the major reasons for confusion and misunderstandings at the local level, so need to work towards a) developing information briefs for distribution to the villagers, translation of official documents and their distribution and organizing regular consultations with the concerned departments on the new policy prescriptions and their implications. A process of regular dialogue will have to be part of a long term strategy for the area.

## Annexure 1

### Field Descriptions of Community Orans

#### Garva ji ki Devbani

This *Devbani* is located near Lohargazi and falls under Vijayapura Panchayat, Thanagazi tehsil in Alwar district. The *mahatma* (sage) at the *Oran* is Garvaji Maharaj and he is a disciple of Maharaj Ghokarnathji. Vijayapura has a total population of approximately 2200 people with 290 HHs. The *Oran* covers 30-35 bighas and has high diversity of species such as *Gular*, *Kadam*, *Roonjh*, *Dhak*, and *Gugal* and also has a *Johad* (a water harvesting structure). It is said that earlier a *Taili* (one of the castes) resided here whose name was 'Koladi' and therefore this *Johad* is called 'Koladi' after him. The temple within the *Oran* has an idol of two local deities - *Garva Ji* and *Ghokarnath Ji*.

A fair is held twice a year - every six months in Garvaji on new moon night of each spring and fall season (i.e. *falgun ki amavasya* and *badhva ki amavasya*). Villagers have formed a *samiti* for the protection of this forest and Mansingh was elected as its chairman. According to Mansingh Jat, earlier the forest cover was extensive but now it decreased due to reckless cutting of trees and the Bamboos have now become almost extinct here. KRAPAVIS has helped in the construction of a concrete check dam and seven loose boulder check dams. This has increased the water level in the wells near the check dams.

#### Bera Jaipal Ki Devbani Oran (goddess Mahakal), Bera Village

The village of Bera consists of 50 families, comprising entirely of Gujar pastoralists. Typical landholdings are only 2-3 bighas and small ruminants are the dominant form of livestock, although buffalo rearing is also prevalent. The families depend on the *Oran* for animal fodder as well as for fuel wood and various non timber forest produce (NTFP). KRAPAVIS has been involved with this *Oran* since early 1990s, when the village established a formal Van Samiti.

In 1998 this was reconstituted with the introduction of a written constitution and the development of a *Mahila Mandal* (women's committee). Rules for the new institution, chalked out by the community and KRAPAVIS, included the introduction of a penalty system for illegal activities related to forest use, such as illicit felling or lopping. The fine is currently Rs. 501/- if anyone is found to have cut anything from the *Oran*, although the *Samiti* members are able to amend and create rules when necessary and incorporate old practices into current system if desired. The Tree species present in the 60 Ha *Oran* area includes *Gula*, *Acol*, *Jamun*, and *Jiyapota*. The presence of the *Jiyapota* is an important feature of the *Oran* as it is a very rare species found nowhere else in Rajasthan. The botanical name is unknown as is the origin of the tree. It is used for religious purposes (seeds are used in garlands which can be sold commercially), medicinal purposes (stomach/indigestion problems, fertility issues etc.). Villagers have unlimited access to the tree in the month of March when the seeds are ripe. In terms of access for other produce, in

the monsoon livestock are permitted to graze in the *Oran* (around 200-300 ruminants graze per day). When it is good monsoon year, the villagers have fodder availability through the year. In bad monsoon years, fodder is purchased at Rs. 400/- per quintal. In the winter season (before Holi) dry fodder can be collected from the *Oran* and livestock are taken to graze in the forest land. After Holi, the male members of the village migrate for labour.

There is a natural spring in the *Oran* and the spring water is used for livestock. The water table in the village is presently high but it is perceived that there were consistently good monsoons till 10 years ago and now they have become unpredictable and variable. This has been attributed to deforestation and the acknowledgement of this has driven afforestation efforts in the village.

**Mahila Mandal-** There are around 40 women in the village a quarter of which are in the *Mahila Mandal*. The group has been functioning for thirteen years during which membership numbers have fluctuated and at one time there were 15 members. The group meets once a month and Rs. 15/- is collected from each member. Members can avail loan of Rs. 50/-. They have to pay interest on the loan and the money is usually spent on livestock and fodder. The group as a whole have taken bank loans of Rs. 20,000, 40,000 and 50,000 which have been used to buy buffaloes. The interest paid on the loans is 9%. All the women in the village are illiterate which has created problems while introducing new members. The *Mahila Mandal* is consulted by the *Van Samiti* on all issues regarding the village. Members of the group have worked on the anicut, well construction and more recently on the *Johad* which is used by 5-10 families in the village.

### **Chur Chiddh Maharaj**

There is a large temple on the *Oran* with a *mahatma* in residence. There are a large number of folk tales relating to the *Oran*, its misuse and the subsequent consequences. The temple is in close proximity to an anicut (water harvesting structure) that was constructed by the combined efforts of the villagers and KRPAVIS. Next to the temple is a site of previous encroachment. A roof structure was built under the agreement that it would only be there for 5-7 days but the encroachment was held for around 3 months. After this extended time period the encroachment was removed following pressure from the village *samiti* and the *Oran mahatma*. Villagers are granted access to graze on the *Oran* all year round as the grass cover is good. Fodder is collected and taken for stall feeding rather than subjecting the *Oran* to open grazing.

### **Om Nath Baba ki Dev Bani, Kerawal Village**

*Om Nath Baba ki Devbani* is on land classified as revenue wasteland on the outskirts of the Kerawal village and the *Oran* covers an area of 150 Ha. At present, NREGA workers are constructing a water harvesting structure on land within the *Oran*. Around 8-10 years ago,



KRAPAVIS carried out plantation work here. Similarly 3-4 years ago, seed dispersal was also done in the *Oran*. An anicut was also constructed with the involvement of KRAPAVIS but it is now silted. The village *samiti* consists of 80 members but only the senior members of the village tend to attend the meetings while the younger members of the village are less active.

Livestock are permitted to graze on the *Oran* but dry fodder is not collected from the site as the villagers have fewer livestock and the fodder availability from grazing and agricultural residues is sufficient. There are future plans to make another water harvesting structure to link with the one currently being constructed. The water will be used for irrigation, agriculture, and livestock drinking purposes. Within the same village, there is **Tulsi Nath Ji Ka Oran** with a pond *Oran* that remains dry most of the months of the year. To increase the water level of the pond villagers did soil and moisture conservation activities including plantation of the trees around the *Oran* with the help of KRAPAVIS. The failure of plantation efforts for the last 4-5 years was attributed to poor maintenance. To the side of the pond there is a small temple. Close by to the *Oran* there is the encroachment of a local leader.

#### **Dev Narayan Gujjar bas ji ki Devbani**

Dev Narayan Gujjar bas ji ki Devbani covers an area of 100 Ha. There is a large ashram on site with a resident *mahatma*. There are 2 to 3 festivals held annually at the temple. Twenty two villages donated money for the construction of the temple. The control of the *Oran* lies with the *samiti* of one village and it is only this village that is able to access the *Oran* for grazing and no dry fodder is collected from the *Oran*. KRAPAVIS has been involved in soil and moisture conservation activities like the construction of an Anicut, *Johad*, and trenches within the *Oran*. There is a high diversity of tree species. The rare Peelu tree is found in this *Oran*. The fruit from the tree has medicinal uses and there is unrestricted access to the fruit during summer months.

#### **Ghati tala ji ki Devbani, Gujjar Village**

The average land holding in Gujjar village is 5-6 bighas and average livestock ownership is 5-6 cattle-heads. The number of small ruminants in the village is constantly fluctuating. In the recent past there were 800-900 small ruminants but the number has now reduced.

The *Oran* is situated on revenue wasteland. At the base of the *Oran*, land has been allotted to the encroachers which are now used as agricultural land. This land lies between the majority of the *Oran* and a water harvesting structure. Previously water was available at 30-40 feet but now the water table has fallen to 160 feet. There is a small shrine on the site of the *Oran* (by the water harvesting structure) and there are numerous stories linked to the *Oran* and its supernatural powers. In the past, villagers used to gather on a plateau within the *Oran* for annual Mela. . KRAPAVIS carried out plantation work and planted around 4000 plants in the *Oran* around 9 years ago. As a result the biodiversity in the area has improved.

There are more tree and grass species with some grasses providing wild grain as fodder. Before the plantation work, the area was a barren site. Villagers attribute the current good health of the *Oran* to KRAPAVIS interventions in the village. The species of trees planted are being used for medicinal and nutritional purposes and also to graze livestock. Livestock are permitted to graze on the *Oran* for four months during the monsoon and goats also graze here in winter. As a general norm, fodder is not collected from the *Oran* however those villagers with short supply of fodder are permitted to cut grass during the months of November and December.

Abundance of the Pomard bush has increased significantly in recent years in the site. Though it has been present a long time, it has not been valued as a useful species. With increase in quantity, gradually uses for the plant have evolved. Goats have begun to graze on the plant and the seed can be used to make concentrated feed for livestock. Villagers can also use the dried branches for small fires.

All the members of Gujjar village are in the *Samiti*. In meetings the plantation planning was discussed and it was decided what plants the villagers wanted and what the community would contribute. The villagers thus contributed in terms of labour for the physical plantation work. A second *Johad* was also constructed with the help of the Panchayat. On the site of the *Oran* there is also a small quarry extracting rock for the construction needs of the village.

Interestingly the neighbouring village, which does not have issues with water availability, has had a constant number of small ruminants (around 1500) over recent years unlike this village which shows the consequences that the allotment of land on the *Oran* has had on the village as a whole. The neighbouring village is permitted to graze their livestock on the *Oran*.

#### **Bharatira ji ki Devbani, Indok village**

The *Oran* covers 1100 hectares and is a major tourist destination in the area. Around 15 years ago the *Oran* had a small temple and was surrounded by forest land. As the *Oran* was undergoing transformation, the *Samiti* opposed the initial deforestation but powerful players in the area used their influence to continue it. KRAPAVIS also initially carried out plantations on the *Oran*.

It has continued to grow as a tourist destination and businesses continued to come into the *Oran* and now there is a significant area of shops and tourist infrastructure. With the involvement of the tourist department, concrete paths have been laid. As a result the area around the tourist centre is dirty, polluted, and generally degraded as a result of high numbers of visitors. Due to the size of the *Oran* there is still forest land within the *Oran* and villagers still use this land to graze. The stalls within the *Oran* selling sacks and religious souvenirs are run by people from outside the area, not the villagers. The money that is donated by visitors to the *Oran* falls in the jurisdiction of the village *Samiti* and it tends to be directed back into the *Oran*. KRAPAVIS estimates that there are 8-10 other *Orans* like this in the region (out of 300) but this is the largest.

## Annexure 2

### Brief Workshop Report, By KRAPAVIS Team, Alwar

On 31<sup>st</sup> July 2011, a workshop on common land research project "Safeguarding Commons for the Next Generation" was organized by KRAPAVIS at Alwar (Rajasthan), in collaboration with Seva Mandir Udaipur. The objective of the workshop was to share the research finding with; different officials from the government departments (Animal Husbandry, Agriculture, Horticulture, Watershed, Revenue) concerning Panchayat Samiti members, representatives of Communities, Sarpanchs, Panch; and members from the local voluntary organizations. A total of 35 people participated in the workshop, as follows:

- Agriculture Department – 2
- Animal Husbandry Department – 2
- Watershed Department- 2
- Sarpanch level people- 1
- Panch-7
- Panchayat Samiti Member -1
- Anganwadi worker-1
- Seva Mandir-3
- LPPS-1
- KRAPAVIS-5
- Other local voluntary organizations - 10

In the beginning, Shri Aman Singh of KRAPAVIS gave an overview on the workshop and status of the CPRs in Alwar District. Shri Vivek Vyas of Seva Mandir made a power point presentation on the overview of the research project "SAFEGUARDING COMMONS FOR THE NEXT GENERATION". In his presentation he discussed the definitions of CPRs (Common Property Resources) and De Facto/De Jure Commons etc. He highlighted the following points, regarding why there was a need for the project:

- To go further into exploring the various physical contexts.
- To draw out actionable points that can serve as guidelines for the upkeep and improvement of these vital resources.
- This might also help one in understanding the wider development dividends of such work in the form of better property relations that have hitherto not been captured.

In continuation to Shri Vivek's presentation, Shri Shailendra Tiwari of Seva Mandir presented his views on the historical evolution of CPRs. He mentioned that the existence of traditional resource management systems evolved several generations ago and demands for natural resources were usually met through these systems. Several other problems concern external factors, such as uncertainty over land rights vis-à-vis the Forest Department. Many of these issues require immediate attention, Shri Shailendra Tiwari emphasized.

In the next session, the study report 'District Level Situation' on CPRs in Alwar district was presented by a team, comprising of Balasahay Tewari and Tara Kasanwal from "Krishi Avam Paristhitiiki Vikas Sansthan" (KRAPAVIS), who worked on this process of in depth

investigation/dialogue with individual farmers/women/pastoralist and communities. KRPAVIS selected three villages namely Bakhtpura, Kalikhol and Kairwari for the study. All the villages are situated in a macro watershed of 'Umren Development Block' located along the east - north periphery of the well-known Sariska Tiger Reserve, in Alwar district of Rajasthan State. The team presentation was supported by power point presentation, maps, field survey format and the draft study report summary. **For more details, the study report may be referred.**

Mr. Suraj Bhan Sharma, Agriculture Officer from Agriculture Department (Government of Rajasthan) gave his feedback and inputs on the data and maps presented by the team. Mr. R.S. Chauhan, Advocate (Retd. Government Official from the Districts Court) congratulated the team and said that gathering such information and maps from government is really a tedious task, which team carried out successfully. The members of the community present i.e. the Panch and Sarpanch also added their views and mentioned that they have been involved in the study at village level. Mr. Narpat Singh of LPPS, another partner of the research project, also shared some of the experiences and difficulties from the Jaisalmer region.

The second session was dedicated to the 'best practice of management of common lands' in project area. A detailed presentation was made by Shri Aman Singh, through power point presentation. He discussed that conservation in Sariska, the study project area, has a long history. Control over natural resources has played a fundamental role in the formation of the state since its founding, as evidenced by the system of *Roondhs* and *Devbanis* or *Orans*. For the best part of the 19<sup>th</sup> century, demarcation of state and community lands followed the *panidhal* (water flow course) system, whereby hill summits were reserved for the state while the slopes were left to common use. In brief, the systems/customary laws employed by the communities for the conservation in Sariska were as follows:

**Oran/ Devbani:** The *Orans* (from Sanskrit *Aranya* – 'forest') are areas of forest and pasture preserved in the name of local gods, goddesses or saints. Like sacred groves found elsewhere in India and the world, *Orans*, which are known locally as *Devbani* (literally, 'god forest'), constitute an ancient form of adaptive resource management. At the heart of every *Devbani* is a deity, whose domain has at some point in time been marked out by a ritual, usually consisting of the pouring of Ganges water or saffron-milk around the grove. Taking care of the shrine is a *Sadhu*, whose own modest needs are met by local communities. The *Sadhu* is an interface between local community concerns and the preservation and wellbeing of the *Orans*. Also implicated historically in the upkeep of the *Oran* is a traditional local institution in the village going by the name of *Thain*. Comprising a group of five to seven village notables, the *Thain* had an important role in the appointment of the *Sadhu*, also having the power to dispense with his services. These checks and balances played an important role in governing the community's interests and those relating to the preservation of the *Oran*.

- In Rajasthan - 25,000 *Orans*
- 1100 major *Orans* -1,00,000 hectares
- In Thar Desert -5,370 sq km
- Area-varied from 10 to 400 hectares
- The biggest is Bhadaria, 15000 Ha, Kundala- 7500, Bankal Devi- 4600 Ha,
- Karni Mata -200 Ha, refuge for rodents
- Sariska is collection of about a 12 *Orans* / Devbanis that together formed a substantial forest tract
- 7.5 millions pastoralists in Raj. who direct/indirectly depends on *Orans*
- 54.4 million livestock, out of which
- 14.3 million are sheep
- Livestock contributes 19% Raj's GDP

Dr. A.K. Singh, the Deputy Director - Livestock Department (Government of Rajasthan) has commented on the above presentation and said that the above systems have been very useful for livestock rearing. But unfortunately, today these are not been encouraged. **For more details, PP Shri Aman Singh's "Best practice of management of common lands" may be referred.**

The last session of the workshop was on the Inventorization of other best examples/ practices in Alwar district. All the participants were divided into two groups; their findings, in brief, group wise presented, are as follows;

#### **Group 1**

**Bans Udyog Samiti Dehlawas-** Shri Jairam, Umrain Panchayat Samiti Member, shared his experience that a Bamboo Cooperative Society formed with 134 members, to grow bamboo for income generation and environment protection, in Dehlawas village of Alwar district. The Bamboo Cooperative Society got 38 bighas of land on lease from the Garvaji *Oran*. Garvaji was a great saint, it is said that he received the power to make miracles happen. He did *tapasya* (meditation and worship) at several places/ villages across Alwar District. And, eventually, all those places got named *Garubaji ki Devbani (Orans)*. We discovered about a dozen *Orans* are after his name in Alwar district. At this site in Dehlawas, he took up his last own residence on the site of the present shrine. The Bamboo Cooperative Society has been working very well here.

**Sarkanda Ghas** - Shri Ghan Shyam, a local NGO representative brought the issue of Sarkanda (Reed), which is grown in his area - Ramgarh block of Alwar district. It is a wild grass and grown along the field bund side, also along river beds and swamps. This grass is interwoven with date-palm leaf to make *Tokri, Indi, Chapatidan* etc. which is a craft work. It is mainly used in building huts with circular shaped roofs of different sizes. Carpets, curtains, house hold articles and furniture are also made from Sarkanda. Farmers also consider it as a good soil erosion preventing plant. Livestock also feed on it as livestock rearing is the main

occupation of the communities in this area, and the livestock mostly depend on open grazing. Its botanical name is *Saccharum spontaneum*.

**Jakhrana Goat breed-** Dr. Ramswaroop Yadav and Dr. Mishra from the Livestock Department (Government of Rajasthan) discussed about the success of Jakhrana Goat breed. Jakhrana is a Village in Tehsil Behror of Alwar situated on Behror- Narnaul Road nearly 14 km from Behror. Jakhrana goat breed is named after the village name and the average daily milk yield is found highest in Jakhrana. Also, the Jakhrana milk has highest fat content.

## Group 2

**Panchudala / Devbani Bhomia ji ki:** Shri Ramjilal, a Community Leader talked about his village *Oran*, a source of the vital assistance to the communities of Panchudala village and locally known as the 'Devbani Bhomia ji ki'. It has unified people religiously, culturally and socially while providing a forum for village-level discussions, festivals and other social events; enabled provision of water for Livestock through the 'Talabs' or rainwater harvesting structures, streams, wells or other water sources present in it, as well as grazing pasture, which in turn enable the animals to provide dairy foods, wool, manure for use as fuel and fertilizer, and manual labour to plough the fields; valuable medicinal herbs and marketable fruits, berries, and other produce such as honey; as well as timber to be used under certain circumstances for fuel or construction materials.

**Encroachment:** Smt. Shushila Devi, an Anganwadi worker of Harsana village shared her story about how her own 15 bigha land and about 20 bigha of pasture lands has been encroached upon by elites of the village. She raised the concern that how important is to initiate a drive against encroachment on CPRs.

**Grazing Land Development by Agriculture Department:** Shri Darmendra Bhardwaj of Agriculture Department (Government of Rajasthan) shared his experiences with the group about the successful work of grazing land development by their department, under watershed development scheme. On the grazing land, in Nangla village located in Ramgarh block of Alwar district, carried out successfully, the following activities in an area of 400-500 Ha :-

- Soil and moisture conservation measures like Bunds, trenches, vegetative barriers and drainage treatment etc.
- Sown *Dhaman* & *Khas-khas* and other local grasses for livestock grazing
- Raised nursery
- Took up planting of multi - uses (fuel-wood, fodder, fruits, fibre and NTFPs) trees species.
- Promotion of agro forestry and horticulture.
- *Sarkanda* (Reed) plantation for stabilizing soil erosion

They have also formed '*Charagah Samiti*' in order to ensure community participation from the initial stage to management and utilization stages.

**Nursery Raising:** Smt. Champa Jatav, Panch of Kalikhol and Smt. Meela Devi discussed that how some SHGs (supported by KRAPAVIS) are growing and transplanting tree saplings into strategic locations on the *Orans*. The tree saplings include, but not limited to, the local plant 'Dhok' which has been selected primarily for its grazing utility. Given the changing livestock composition of Kalikhol village, with a shift in emphasis away from cattle towards water buffalo and goats, the SHGs initiative takes into account these altered needs and sow plants that would best serve as fodder for the livestock. Plants of commercial value such as the *Khajur*, which yields both carbohydrate-rich fruits and leaves for use in broom-making are sown in the nursery. Likewise, a small number of medicinal plants are also included. Soil degradation is checked through the creation of soil erosion checks and loose boulder dams.

Concluding the workshop, Mrs. Pratibha Sisodia of KRAPAVIS delivered vote of thanks to all the participants and research team.

## Annexure 3

### Questionnaire based on Elinor Ostrom's eight principles

- 1) What are the common property resources in the village and how are they used?
  - Are there a clear understanding of the boundaries around the CPR's and boundaries in relation to who have access to the resources (user and/or owner right conflicts)
  - Is there any conflicts over access to the CPR, both internal (village) and external (between villages)
  - Overlap between village and resources location
- 2) Who defines the boundary, rules, sanctions and access right of the CPRs?
  - Leadership, corruption, conflicts and familiarity with changing external environments
  - The homogeneity of identities, social norms and interests within the village
  - Social/economic independence between the different groups
- 3) What are the main purposes of the CPRs in the village? (Grazing, fuel wood, timber. etc.)
  - What is the general level of dependence upon the CPR
  - Fairness in allocation of resources
- 4) What is the role of administrative authorities in protecting the CPRs?
  - In relation to locally constructed rules of access and management
  - The ease of implementing and in enforcing sanctions.
  - The process of implementation and institutional management
- 5) What are the methods applied by villagers for improvement of the CPRs?
  - Level of sanctions
  - Accountability in following the rules/norms
  - Past successful management experience
- 6) Who plays pivotal role in the development of CPRs and what is the level of participation in decision making?
  - Decision making is independent from external governance
  - Accountability of officials towards the community
- 7) What is the source of water in the village and how it is maintained?
- 8) What are the institutions for development activities in the village and what is their role in the same?
  - Levels of aid/compensation from external governance to the community for conservation activities.
  - Local levels of assigning the process, provisions and general self-governance
- 9) What are the coping mechanisms used by the villagers in difficult situations?
  - Change in conduct and management in times of drought and other hard situations.
- 10) What is the cropping season in the village?
  - Relation between harvesting and the regeneration in the resources.



## Annexure 4

### References

- Rajasthan Land Laws, a book Written by Dr. Basantilal Babel (RJS), 1995
- Recognition of Rights and Relocation in relation to Critical Tiger Habitats (CTHs); *Status under Forest Rights Act 2006*, and Wild Life (Protection) Amendment Act (WLPA),
- Legislation Brief, Kalpavriksh 2011
- District Census Handbook and Gazetteer Government of India, 2010
- Management Plan of Sariska Tiger Reserve 2002-12, Forest Department (Government of Rajasthan), 2001
- Villages Relocation Plan in Sariska, Forest Department (Government of Rajasthan), 2010
- Village revenue, maps and records; Government of Rajasthan, 1992-93
- KRAPAVIS: Reports, publications, published articles and records etc.
- Community managed *Orans* for protecting their livelihoods, Strengthening People-led Development, MISEREOR 2010
- Sacred Activism to save *Orans*, Wasteland News, New Delhi - Feb-Apr 2009
- Conserving *Orans* for sustainable livelihood, LEISA India, March 2010
- Embedded conservation, Drynet, Oct 2009
- Villagers struggle to save wildlife sanctuary, Third World Resurgence, Malaysia No. 35
- Indigenous land tenure system In Rajasthan, Forest, Trees and People Newsletter, Sweden November 1993
- *Oran*- A traditional biodiversity management system in Rajasthan, LEISA India, Sept. 2003
- Devbani- *Oran* (in Hindi), KRAPAVIS, 2002
- *Oran*; A traditional Biodiversity Management System in Rajasthan, KRAPAVIS, 2003
- Versha Jal (conserving -rainy water through *Orans* in particular)- in Hindi, KRAPAVIS, 2004
- Devbani Re Baat, a quarterly Newsletter, KRAPAVIS, 20 published issues
- Acts like FRA 2006, WLPA 2006, Biological Diversity Act 2002, etc.
- Rajasthan Land Revenue (Allotment of wasteland for biofuel) Rules, 2007.
- Related website searches