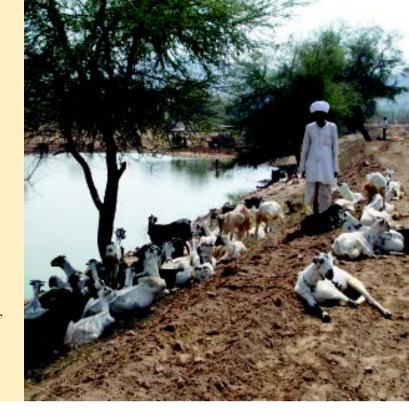
# Conserving Orans for sustainable livelihoods

# Aman Singh and Aditya Gupta

Orans are a source of food fodder, water and fuel to the livestock communities living in the foothills of Aravallis. Local communities, with the support of KRAPAVIS, an NGO continue to uphold the beneficial practice of preserving Orans.



eena ki Dhani, located in Alwar district of Rajasthan, is a fairly large tribal village with an approximate population of 1000 people spread across 100 households. Majority are farmers or pastoralists. The major crops grown are bajra, maize, jowar, til, chola onion, wheat, mustard, gram and barley. Due to the high involvement of many villagers in livestock farming there is a huge number of domestic animals kept by families in village. There are cows, buffaloes, sheep, goats and camels. The number of buffaloes and goats – more than a thousand each – deserves special mention.

Located in the hills surrounding the village of Meena ki Dhanni is Adaawal ki Devbani, also popularly called as *Orans*. The total area covered by the *Oran* is close to 150 hectares The *Oran* is rich in bio diversity. There are roughly 3420 trees reported to be currently growing in the *Oran*. Nearly 15 species of trees like dhak, kadamb, keekar are widespread in this *Oran* and are used by the villagers for the food, fodder for livestock, fuel and medicines. Wildlife like sambhar, nilgai, wild pigs and peacocks form part of the *Oran*. A few species like the leopard and the tiger, which used to roam these woods a few decades ago, have now disappeared.

Traditionally the upkeep of *Oran* was the responsibility of village institution called Thain. With the disintegration of Thain, modern institutions like village panchayat have displayed little interest in the management of *Orans*. Increasingly it is found that local population have been excluded from the management of their resources, thus, leading to its degeneration.

Krishi Avam Paristhitiki Vikas Sansthan (KRAPAVIS), a Rajasthan-based voluntary organisation (NGO), founded in 1992, concerned with these issues has been working on community centered revival of *Orans*. KRAPAVIS has been working at three levels – at the community level in reviving *Orans*, at the individual level in addressing their livelihood issues and at the policy level,

to bring in changes in State policies with regard to *Oran* management. KRAPAVIS has been working towards restoring 100 *Orans* encompassing 2000 hectares, covering 100 villages of Alwar, Jaipur and Dausa districts of Rajasthan.

### **Conserving Oran**

In Meena ki Dhani, people were first organised into 'van samiti'. A number of meetings were organised to educate the village members about the benefits of conserving the *Oran* and the Devbani.

People participated enthusiastically in the oran conservation programme. They first attempted to rehabilitate water storage structures. Utilising traditional water-harvesting techniques in conjunction with modern scientific expertise, water storage structures (talabs) were renovated using local material. In some places new talabs were constructed. Prior to that, geological analysis was done to decide the strategic placement of talabs. The place was also decided based on the fact that there was enough runoff contributing to it. Talabs were constructed using local materials like clay, stone/ rock, grasses and buffalo dung - which serve to keep them affordable and replicable. Pipes were laid down to agriculture fields for irrigation. Water availability and water efficiency are continuously monitored.

### **Protecting livelihoods**

Agriculture in this region totally dependent on rainfall. Moreover, as the topography is undulating, agriculture fields are prone to soil erosion leading to loss of soil as well as water. There are other problems in agriculture such as unavailability of traditional seeds and high use of chemical fertilizers and pesticides. Use of chemicals besides affecting the soil has also been a causes of food poisoning in the animals fed on the agricultural waste.

To address the issue of soil erosion, structures like 'Tak' gully plugging, Medbandhi/ field bunding were taken up on the farming lands. Trenching, field levelling were the other activities taken up.

Orans are local micro bio-diversity reserves harboring the shrine of a local goddess or deity. Found in the foothills of the Aravalli ranges, most *Orans* have sources of water, either small springs or rivulets running through them or a variety of ponds and nadis in their midst. These can cover fairly extensive areas across interspersed habitation. These local forests vary in size from a hundred to five hundred bhighas (about hundred hectares).

To curb the use of chemicals, farmers were motivated to practice traditional methods of cultivation which are nature friendly. Afforestation is also carried out in the land near the johads. Tree plantation has been undertaken to increase the number and variety of trees and also arrest soil erosion.

As majority of the people are also pastoralists, a number of activities were taken up to help them in livestock production – promoting breed improvement and organsing animal health camps; training local people as animal health workers to provide services at the door steps. Widespread scattering of grass seeds has been carried out to increase grass cover for the cattle to graze power.

### Results

Positive changes include an increase in ground-water levels and water retention and improvement in soil quality, increased vegetation cover and the reappearance of locally-extinct species. With water conservation activities, there is a significant increase in the level of the water table. Continued supply of water even after the monsoons has provided assured water supply for irrigation. There is more greenery in the surrounding area – more plants and trees able to survive the harsh summers. Greater volume of grasses



Orans serve as a source of fodder for livestock.

Local communities actively engaged in maintaining water structures in the Oran.



Photo: KRAPAVIS

and shrubs has enabled more animals to graze freely. Local ecosystem is restored and protected. Species like nilgai, rogia and a few varieties of monkeys are among the ones which have reappeared in the last few years.

The initiative has also strengthened the economic opportunities for local communities by establishing 'Van Samiti' and self-help groups (SHGs) for women, dealing with issues such as tree, plant and animal health, breed improvement and fodder management. Minor non-timber forest produce, such as honey, ber (fruit), grasses for basket making and clay for pottery sold in the market, have become a source of income for the women.

The property of the *Oran* is now common to all the villagers – they can graze their cattle, use the water for animals and irrigation but must not cut the trees. There is a strong internal social control system within the different communities of users which enables effective sanction on the violators. There is a mechanism for conflict resolution among resource users and strong stake holdership of resource users which is evident in terms of annual contributions received for maintaining the orans.

"Yadi hamara devbani thik to sab kuch hai; yadi yah thik nahi to chara, pani aur bhojan ke lale." (If our oran is intact we have everything; if not, we suffer from lack of fodder, water and wood" because Oran 'Adaval' is our livelihood)

-People of Meena ki Dhani.

Orans embedding a complementary relationship amongst biodiversity, livestock and agriculture is important to the livelihoods of the resource users, meeting economic, social, cultural and spiritual needs of the community. The people continue to uphold the beneficial practice of preserving the Devabani with the support and guidance of KRAPAVIS.

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# Pastoralists struggle for regaining rights over conserving orans

## T M Radha and Aman Singh

Pastoralism is a way of life for people living in Loj-nathusar village. Located at a distance of 50 kms from Alwar town in Rajasthan this small village comprising of 30 households is a part of the core area of Sariska Tiger Reserve. The village is on the fringe of Dev Narain Oran, which stretches to an area of 150 hectares and is the source of survival for the people as well as the livestock.

Majority of the households in the village belong to Gujjar community, who are basically pastoralists. The number of livestock spread over this area is quite huge – with each household owning goats, cows and buffaloes and some also owning camels. One can find around 1000 goats, 400-500 buffaloes, 200 cows and 50 camels in this area. From ages, these communities have been depending on Orans, a source of food, fodder and fuel.

With the State taking over the control over these *Orans*, the communities lost control over these orans. The neglect of orans have had great impacts on the lives and livelihoods of people. Women had to travel longer distances in search of water, fuel and fodder. Loss of rich biodiversity meant that people had less access to food (ber, kair, sanwa, honey etc) and medicinal sources. All this meant that the lives of the pastoralists became harder.

With the support of KRAPAVIS, an NGO in the area, the Gujjar communities have organised themselves and are working together in conserving the *Orans*. On the other hand, KRAPAVIS

has been raising voice on their behalf in the government circles to bring about a change in the policy.

*Orans*, even to this day, support the lives of these Gujjars for around 8 months period when they have sufficient fodder for the livestock. During those months, the village produces around 18-20 quintals of milk a day which is sold in the nearby market. But during the dry months i.e., April-July, pastoralists can no longer depend on orans for fodder and water. The temperatures rise very high and the forests are dry. People migrate to the nearby villages along with their livestock. They tie up with the local farmers in the area they visit, help them get dung/manure from their livestock and in return get some fodder for the livestock.

The inhabitants of Loj-nathusar village continue to make a decent living depending on the orans which they revere. They recognise its importance and are united in its conservation. But the greatest challenge is to protect the orans from outsiders who come and cut the trees. Local communities feel that they have no control on outsiders who lop the trees with the connivance of local officials. One person from this village represents the local panchayat but one has not been successful in influencing the local panchayat on this issue.

The struggle continues, but with support of agencies like KRAPAVIS, the communities are hopeful and confident that they will be able to succeed. The NGO's effort which has resulted in inclusion of communities in oran management in the State Policy Document is just one example and a hope for the future.

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