CHAPTER: 3

A PROFILE OF THE AREA UNDER STUDY
A Profile of the Area Under Study

This chapter is both descriptive and analytical. It attempts to make comparisons, measure differences, and verifies whether significant relationships exist between the chosen variables. And, while doing so it deals with the issues related to rural development, sustainable development and nature of participatory activities adopted both by the society as well as by the state in this region.

The chapter is divided into two sections. Section: 1 analytically discusses the various characteristics of the region under study, at both the macro and micro level. The particular aspects analyzed here are the political history, economy, society, nature of public life, and the state's developmental initiatives in the region under study. In this manner, an attempt is made through this section to introduce the varied aspects, which have and are affecting the lives and livelihoods of the respondents of the present research.

Section: 2 attempts to draw the detailed analytical view of the study area from the individual watershed perspective. Here, the researcher has primarily and solely depended on the understanding acquired while interacting with the watershed department of Rajasthan. The task of introducing the villages and the households interviewed is detailed in chapters 4 and 5 respectively.

SECTION: 1

This section attempts to locate the study area by sketching the basic characteristics of the region's socio-political history, society, physiography, economy and nature of public life as well as various state induced initiatives to ensure sustainable development, at the macro and the micro level.
Historical Background:

As the focus of the study is on four villages within Ajmer district, it seems important to begin this section with the tracing of the various historical factors and processes to enhance our understanding of the district's present development and conditions. It has been adequately proved in a number of academic studies that processes and institutions are shaped by history. Robert Putnam explains this perspective in his well-known study of democracy in Italy,

Whatever other factors may affect their form, institutions have inertia and "robustness". They therefore embody historical trajectories and turning points. History matters because it is "path dependent": what comes first (even if it was in some sense "accidental") conditions what comes later. Individuals may "choose" their institutions, but they do not choose them under circumstances of their own making, and their choices in turn influence the rules within which their successors choose.¹

Here, I have attempted to briefly describe the socio-political history of the region, explaining its origin and development, which in turn directly affects the level of development and nature of participatory activities adopted by the villages, at the aggregate level as well as by households at their individual level.

Rajasthan is popularly known as the land of the Rajputs (locally known as Rajputana), the land of kings (locally known as Rajwara, Raethana), and the region of death (known as Marusthali in local language). However, such highly romanticized descriptions only present a very partial truth about this arid and semi-arid area of northwestern India.²

According to Deryck O. Lodrick, the persistent identification of Rajasthan with Rajputs simply bears an eloquent testimony to the historical importance of the Rajput presence in this part of the country. Even today, this presence, in terms of both absolute number and their percentage in relation to the entire population, remains high, when compared with that in the several other states in northern India. However Rajasthan is always associated with the Rajputs, their courage and ethos.3

Before 1947, the state of Rajasthan consisted of 19 princely states along with the centrally administered territory of Ajmer-Merwara and two chiefships. These 19 princely states maintained their political identity and politico-economic isolation from the rest of India. Therefore, the socio-economic patterns of dominance and development in this state have been largely determined by its own political history, ecological handicaps and socio-cultural values, which have shown a remarkable continuity for nearly a thousand years. However, this has not been the case with Ajmer, the district studied here, as it was under the Mughals and then under the British domination like other parts of India.

The early history of Ajmer is shrouded in mystery.4 It is however, admitted by all that the present district derives its name from the name of the 12th century famous Chauhan king Ajaipal, or Ajairaj. The supreme strategic importance of the position of Ajmer, according to Colonel Tod, “the key of Rajputana”, and the impregnable nature of the

---

3 Ibid.
hill on which the fortress is situated could not but have been early recognized by the kings of Sambhar, whose dominions extended far beyond Ajmer towards west.\textsuperscript{5}

History tells us very clearly that from the twelfth to the nineteenth century, Ajmer was not only the cynosure of all eyes, but adorned the brow of the victor in the race for political supremacy in India. The possession of Ajmer by power is the index to its political predominance in Upper India, so much so that the history of Ajmer is, in one sense, the epitome of the history of India.\textsuperscript{6}

According to Lodrick,

There was little to distinguish the Rajput states of what is now Rajasthan from any of the other Rajput states of northern India. Events at the end of the 12\textsuperscript{th} century, however, drastically altered this situation, as Muslim conquest followed a classic pattern of penetration in the country.\textsuperscript{7}

After defeating Prithviraj Chauhan of Ajmer, Muhammad Ghuri firmly established Muslim power in the heartland of India. Chauhan’s power came to an end in Rajasthan. According to Banerjee,

The subsequent destruction of the Rajput kingdoms eliminated their presence from the Ganges plain. Muslim forces moved to south and west through Malwa along the traditional route to Gujarat, they encircled the Rajput states in the northwest.\textsuperscript{8}

After defeating Prithviraj Chauhan, Ajmer was made a part of the Islamic conquests of Delhi Sultans in India. Lodrick rightly writes that,

\textsuperscript{5} Todd (1978).
\textsuperscript{6} Sarda (1941); 137.
\textsuperscript{7} Lodrick (1994); 6-7.
\textsuperscript{8} Banerjee (1983); 69.
The popular conception of the Rajput as a chivalrous warrior, defending the honor and religion against the Muslim invader in the hills and deserts of Rajasthan is drawn from this period of Indian history.9

Prithviraj Chauhan and his rule and fight to defend the honor of the motherland are still remembered by the locals of the region as well as others with disbelief and pride. Just as it is difficult to believe in the context of the present ongoing incidents that an honest and non-violent person like Gandhi also walked on this earth.

Qutab-ud-din Aibak inherited the Indian conquests of Ghuri in 1206 AD after the death of Balban in 1267 AD, which were regained by Hammir Dev Chauhan of Ranthambor, for a short duration. In 1301 AD, i.e. after Hammer's defeat and death, the district again became a part of the Sultanate. In the last decade of the 15th century, it was in the hands of Mallu Khan. In the 16th century, Akbar made Ajmer the headquarters for his operations in Rajputana and Gujarat. He made it a suba, making Jaipur, Jodhpur, Bikaner and Jaisalmer subordinate to it. According to Lodrick,

It is doubtful that the Rajputs or any other inhabitants of the area at that time shared any sense of belonging to a regional identity, the subah of Ajmer was instituted as a region, and represented the first formal delineation of Rajasthan as a political space.10

Upto 1712 AD the district was under the Mughals and after that it came under British rule. With the passage of the Government of India Act of 1935 Ajmer-Merwara was put under the administrative control of the Home department on April 1, 1937. Ajmer remained under the Central Government as Part 'C' state till 31st October 1956, when it was formally merged with Rajasthan in accordance with the

9 Lodrick (1994); 8.
10 Lodrick (1994); 9.
recommendations of the States Reorganization Commission and became a separate district.¹¹

Ajmer is among the very few regions in India where consciousness of history has been very prominent. The acceptance of subordination, according to MS Jain,

Led to a fundamental change in the vitality of many of the earlier institutions and postulated a transformation of others along with the introduction of some new ones.¹²

He in fact trace a major change from the 19th century onwards, when a substantial change came about in the attitude of the feudal lords towards their people, due to the increasing economic demands of the British political agents. This view is well supported in La Touche’s Revenue Settlement Report of Ajmer-Merwara, 1847 AD. He writes,

The death of Col. Dixon in 1857 closed the era of material improvement; and the era of inflexible realization of the revenue commenced. This policy, which brings to mind Shylock of Merchant of Venice, has not only been detrimental to the people, but has not been financially a success for the administration of the province. A careful study of the last 50 years shows not only that the rigorous enforcement of the revenue demand and the full realization of the revenue due, which is very heavy, has not only left the agriculturists of Ajmer-Merwara steeped in poverty and debt, and has rendered them incapable of tiding over a scarcity.¹³

The state policies and undue interventions do negatively affects the development of the traditional institutions. Arguably ‘superior’ form of institutions, thus set up do not necessarily result in ensuring the developmental character of the older traditional institutions, which were based on the norms of social interaction. However on the positive side, as

¹¹ GOR (1991); lxii.
¹² Jain (1997); 267.
¹³ La Touche, Revenue Settlement Report of Ajmer-Merwara, 1874 AD; 127.
Ajmer was the headquarters of British rule, the development in its infrastructural facilities was relatively better than that in other states of Rajputana.

Presently, the district of Ajmer is located in the center of the state between 25 38' and 26 58' north latitude and 73 54' and 75 22' east longitude. It is bounded on the north by Nagaur district, on the south by Rajsamand district, on the east by Jaipur and Tonk districts and on the west by Pali district. The district is divided into six tehsils namely, Ajmer, Nasirabad, Kishangarh, Beawar, Sarwar, Kekri. Under these tehsils there are eight panchayat samitis. The area under study falls under Ajmer tehsil (Pisangan panchayat samiti) and Beawar tehsil (Jawaja panchayat samiti).

SOCIETY OF THE REGION:

One of the significant features of Rajasthan's population has been that its decennial growth in the entire twentieth century was higher than that of the country as a whole, as shown in table 3.1.1.

---

14 GOR (1991); lxiii.
TABLE 3.1.1
DECENNIAL GROWTH OF POPULATION

<table>
<thead>
<tr>
<th>Year</th>
<th>Rajasthan</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911</td>
<td>6.70</td>
<td>5.75</td>
</tr>
<tr>
<td>1921</td>
<td>-6.29</td>
<td>-0.31</td>
</tr>
<tr>
<td>1931</td>
<td>14.14</td>
<td>11.00</td>
</tr>
<tr>
<td>1941</td>
<td>18.01</td>
<td>14.22</td>
</tr>
<tr>
<td>1951</td>
<td>15.20</td>
<td>13.31</td>
</tr>
<tr>
<td>1961</td>
<td>26.20</td>
<td>21.63</td>
</tr>
<tr>
<td>1971</td>
<td>27.83</td>
<td>24.82</td>
</tr>
<tr>
<td>1981</td>
<td>32.44</td>
<td>24.99</td>
</tr>
<tr>
<td>1991</td>
<td>28.44</td>
<td>23.50</td>
</tr>
</tbody>
</table>


Population growth rates for Rajasthan after independence has been, on average 5 percentage points higher than the national average. The share of the rural population according to Vidya Sagar,

During 1961 – 1991 has declined from 84 per cent to 77 per cent. The bulk of growth in the rural population during 1971 – 1991 was in the arid western and northern regions. The main explanation for such high growth in these areas is the colonization in the Indira Gandhi Nahar area and falling death rates with stable birth rates.¹⁵

According to the 1991 Census findings, Ajmer ranked eighth in terms of the size of its population in Rajasthan. It experienced a 3.93 percent increase in the size of its population between 1981 and 1991. Ajmer reported the lowest decadal growth especially in the urban areas, in the state. The following table explains it still further.

**TABLE 3.1.2**


<table>
<thead>
<tr>
<th>Growth Rate in Areas</th>
<th>AJMER</th>
<th>RAJASTH -AN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Areas</td>
<td>24.48</td>
<td>25.46</td>
</tr>
<tr>
<td>Urban Areas</td>
<td>14.14</td>
<td>39.62</td>
</tr>
<tr>
<td>Total</td>
<td>20.05</td>
<td>28.44</td>
</tr>
</tbody>
</table>


Rajasthan's society is basically secular. The state does not have a history of communal violence. According to Mayaram, since the Middle Ages the people of Ajmer have been living in complete communal harmony. During the partition at the time of independence, except for Bharatpur and Alwar most of the other parts of the state remained unaffected by the communal fire that had engulfed the entire nation. In
Rajasthan as a whole, communalism and communal violence is of recent origin. What happened in 1989-1990,

Was not very different from what takes place in Merrut or Ahmedabad-----where persons pull the strings of local politics from somewhere else.\textsuperscript{16}

The district of Ajmer is inhabited by all the principal religious communities found in India. However, my area of study is primarily inhabited by the Hindus as well as by few Muslim families. The district's population is predominantly Hindu, while Muslims are reported to be the second largest community. The Hindus, who form about the two thirds of the population, are divided into several sects: Vaishnavas, Shaivas, Jains and others.

In most Indian villages, the basic unit of social organization is the caste system. In the villages under study, not only the Hindus, but also members from the Muslim community living along with the Hindus, are also treated as "castes" for many purposes, as emerged from conversations with the local people. Although, in these villages, the customs and norms relating to the caste system are changing in accordance with the collective perceptions and decisions of its respective members, however the basic frame that holds the caste system is firmly placed as ever.

Caste is the DNA of Indian society, according to J Ramesh. Caste plays an important role in defining the social stratification of society. Each person's last name denotes his \ her caste or sub-caste group. However, as Dr Subrata Mitra points out,

The caste system in India is not confined only to the Hindus. All important communities, including Muslims, Christians and Sikhs have some sort of caste scheme. These schemes

\textsuperscript{16} Mayaram, Sahil (1997), Resisting regimes: Myth, memory and the shaping of Muslim identities (Delhi: Oxford University Press).
are patterned after the Hindu system, since most of them originally came from Hindu stock.\textsuperscript{17}

This was also clearly visible in the villages studied.

Caste is a source of social identification for the people of India, providing a sense of belonging in a multi-cultural society, in a manner that no other source of identity could; and, it is increasingly used as a resource for promoting vested interests. In the backward regions, the agrarian movements of the pre-independence period were organized and launched by the caste predominating and forming the bulk of the population in that region. Moreover, every caste group has its own caste panchayat, and these panchayats enjoy respect and an absolute degree of approval as well as strict adherence from their community members.\textsuperscript{18} Indeed, the trend of forming caste based associations with characteristics of a pressure group began in Rajasthan, probably with the re-modeling of the Rajput's "Kshatriya Mahasabha, which was initially founded in 1888 to institute social reforms within the community and to cope with the immediate prospects of land reforms", after independence.\textsuperscript{19} Today, caste groups have become powerful pressure groups affecting the policies of the state, not only in Ajmer but also in many other parts of our country, especially Bihar and Uttar Pradesh.

However in Rajasthan, according to KL Sharma,\textsuperscript{20} caste was never a rigid social system in practice, when compared with that in the other states. In Rajasthan, the feudal mode of social relations (which continued till the eve of independence) dominated the caste hierarchy. In order to establish their dominance, the Rajput rulers while accepting the

\textsuperscript{17} Mitra, Subrata K. (1994), "Caste, Democracy and the Politics of Community formation in India", in (ed) Searle-Chatterjee, Mary and Sharma, Contextualising Caste (U K: Blackwell Publishers); 55-56.

\textsuperscript{18} Narain and Mathur (1990).

\textsuperscript{19} Rudolph and Rudolph (1984), Essays on Rajputana: Reflections on history, culture and administration (Delhi: Concept Publishers).

“classical pantheon of Hinduism” and respecting the Brahmin purohits, kept the brahmanical purity-pollution rituals subordinated to the task of ruling, unlike in other parts of India. People in general emulated the cultural norms and ritual forms, as adopted by their princes and jagirdars. The dominance of the folk culture and beliefs, and constant military warfare further resulted in the loosening of the ritual bonds of Hindu religious orthodoxy. Thus, the caste system was determined by the feudal mode of production, in terms of their actual functioning.

Although Ajmer got out of the feudal hold, at the macro (political) level much earlier than other parts of Rajasthan, the nature and structure of the caste system at the village level remained largely untouched by the Muslims as well as by the British. In the villages, the day to day control and nature of administration was largely left with the local feudal lords, many of whom were Rajputs. For instance, till the present district was created, the villages studied here in the Andheri Deori Watershed were under the control of Kharwa Thakur, who functioned under the changing political masters of the region. A Rathor Rajput of the Sakta family descended from Rao Jodha held Kharwa. The founder of the estate of the fifteen villages Sakht Singh rendered valuable services to Akbar in the campaign against Bengal. Likewise, the villages studied under Mangliawaas Watershed were under the Pisangan estate held by a Rathor Rajput of the Jodhwat family. The estate consisted of eleven villages.

Feudalism blurred the distinction between caste and class, with its system of land grants and taxes. The pattern of feudalism in the nineteen Rajput ruled princely states was not uniform. However, the condition of the lower caste was bleak, as they were economically dependent on either the twice-born castes (like the Rajputs, Brahmins, Vaishyas) or on

---

22 Sarda (1941).
23 This information was gathered from the conversations with the elderly people of the villages studied, here.
various functionary castes. According to PC Mathur and I Narain the lower castes like

The Balias did not have to face the rigors of untouchability to the same extent, as did their counterparts in other parts of the country, although, here also several sumptuary restrictions on ornamentation (including, the prohibition of the use of silver and gold as body decorations) were imposed.24

The challenge mounted by the lower castes to the continuation of these kinds of societal restrictions, even after the formation of the state of Rajasthan---have resulted in several widely cited, oppressive and exploitative incidents, further widening the gulf between the lower and the upper caste groups in the region under study.

In the villages, social untouchability is still commonly practised and is accepted as a norm, although it is a legally punishable crime in India. In the villages under study, this discrimination is restricted to inter-caste dining and marriages. Such discriminatory behavior has never been questioned or challenged by either of the caste groups, but accepts it as it is. The lower castes like the Raigars, Harijans and Bhils do feel humiliated, but the caste system is an institution, which they cannot alter to their liking. Moreover, they have more crucial matters to attend to like earning their livelihoods, saving provisions for the foreseeable future (as they as well as rest of Indians are not supported by any social security scheme), educating their children, etc. The significant point noticed in all these four villages is that today they are not solely dependent on the upper castes in the village to earn their livelihoods or to lead a life within their area in the village with the emergence of new employment opportunities. A parallel class structure is strongly surfacing and existing alongside the one based on caste. The emergence

24 Narain and Mathur (1990); 34.
of classes has occurred at two levels viz. within the caste and cutting across the boundaries of caste. The basis of new class position is the achievements of the individual in terms of economic and political status.

The above analysis does not deny the significance of the caste system in the context of the Indian society. It would be a mistake to romanticize the relative absence of caste related divisions in the context of Indian society, to harp on the mythical construct of the community, which is so easily presumed by local activists as well as by students, especially in analyzing the management of natural resources through community action. Here, a more cautious approach is needed to recognize the fact that the lower caste groups have traditionally lived outside or on the periphery of the main villages and the village related activities, while offering the upper castes like Jats, Brahmin, Baniya or Rajput a variety of services. Even if, therefore the Raigars and other sections of the lower caste group in the villages studied are not routinely subjected to violent oppression, it does not imply that they are or will hold the same social status as held by the upper castes in the village.

Similarly it would be unwarranted to see caste only as a negative force. Dr. Mitra 25 explains the three different views of caste in India—viz. the essentialist view, the secular modernist view and the instrumental view of caste—to suggest that caste may help in the formation of the nation and the state. The Indian state’s adherence to the secular modernist perception of caste, which views “caste as synonymous with underdevelopment, hierarchy and prejudice ---- to be abolished altogether”, has led to the adoption of policies of positive discrimination, which are though are positively beneficial for the lower caste groups. However, the members of these groups still feel unequal and humiliated. These policies have given boost to opportunistic trends in our society. P Sainath writes,

The dalits of Rajasthan and elsewhere, who are changing their names and surnames to escape their caste tags. At the same time, some upper castes (who are not already included in the OBCs category) are adopting fake identities to usurp jobs reserved for those groups.26

Dr. Subrata Mitra rightly argues that

The continuation of an essentialist (or a secular modernist) perception of caste serves only to drive a wedge between the state and society. It gives rise to the stigma, which prevents law, bureaucracy and media from doing those things that would help transform castes into social organizations available for the creation of a plural and multi-cultural nation.27

Madhav Gadgil28 shows the 'positive role' of caste in conservation, after historically analyzing the functioning of various societies in India. The elderly residents in these villages fully endorse this argument, that before the abolition of the Biswadari and Zamindari System in Rajasthan in the year 1959 the socio-economic organization of the village(s) was based on the functionary caste system, which was responsible for the prudent use of the natural resources. M Gadgil suggests that

The emergence of the Hindu caste society was a response to the saturation of the capacity of land to support the human population at the level of technology then prevalent and the consequent strong competition for the resources of the land.29

He further explains, that

Sainath, P. (1999), "A Dalit by any other name...", The Hindu, Oct. 17; ii.
Mitra (1994); 49.
Ibid., 1910.
There were members of only one caste each of carpenter, potter, barber etc. in any group of village. And within each such caste, the competition was regulated through the device of each household of artisan/service castes having the exclusive rights of dealing with a specific set of households.\(^{30}\)

However, the prudent use of natural resources under this system does not imply that the different caste groups shared the available resources equitably. In Rajasthan, according to Edward Haynes's study,\(^{31}\) the combination of harsh arid environmental conditions and the historical pattern of elite domination of access to scarce resources determined the pattern of resources sharing (which was widely agreed upon by the various sections in the society), until the middle of the 20\(^{th}\) century.

In most of the villages under study, the lower caste groups are accepted by the upper castes as active participants in village level activities. They are not given orders to implement as in the feudal era, but are now consulted on issues of mutual concern. However, the upper castes are still not ready to accept the lower caste groups in the leadership role, (unless these state backed reservation are applicable) representing the entire village, at the gram panchayat level. All the four villages under study enjoyed a good degree of harmony, coherence and stability at the societal level. The villagers trust each other, even across caste identities, more than they would trust an outsider.

To conclude this discussion, today caste plays an important role in relation to marriages, occupational pursuits and commensal relationships. However, caste based identities are significant, though not the sole determining factor in enhancing / hampering collective action.

---

\(^{30}\) Ibid., 1910.

for mutual benefit. To cite an instance, the breakup within the Rajput’s Kshatriya Mahasabha to form a new Rajputs association, Bhuswami Sangh—was on the class rather than on caste lines,

As the small Rajput jagirdars, who lacked the income and status, which larger estates could bestow...believed that their feudal and lineage superiors within the caste community had abandoned them.\(^{32}\)

There are other determining factors which can hamper cooperative action like lack of opportunity for individual advancement (on economic and \ or non-economic parameters), ego, jealousy and absence of an active leader—village elder, headman or cultural intermediaries (like teacher, doctor, priest among others).

This unit of social organization in the villages is closely followed by the institution of the joint family. Kolenda, \(^{33}\) by mapping the various measures related with the occurrence of joint family households, concluded that in proportion to the population, there were more rural joint family households in Rajasthan than in any other state.

The villages studied here, conform to this perspective that the joint family tradition is still strong, and is followed among families even today (for details, please see chapters 4 and 5). Child marriages are still very common in the area. The main causes of these marriages being so popular are illiteracy, poverty and the social approval given to them by society.

The people of the villages studied are industrious and possess powers of endurance. The Hindus ---- with the exception of the Rajputs, Jats, some up-country Brahmins, Kayasthas and lower caste groups ---- are vegetarians. Due to economic hardships, even people from the


Muslim community consume a non-vegetarian diet on special occasions only. The daily diet of the people consists of buttermilk, maize, bajra and jowar (in the winter) and wheat (in the summer). Gram also forms a crucial component of their daily dietary intake, which is essentially supplemented by vegetables. People generally take two meals. The habit of drinking and causing nuisance in the village was also found in the villages under study.

In Rajasthan, especially in the rural areas, gender based restrictions are still very strong. These restrictions generally act as the constraining factors to the women's participation and development. These restrictions are manifested in the forms of physical and societal hardships, arising out of feudal discriminatory practices, child marriages, the practice of purdah, denial of public space, illiteracy, lack of control over cash and other resources etc. Attitudes and constraints are changing though slowly.

The women have a significant role to play in the social and the ritual spheres. They generally do not seek outside employment. They work extremely hard on their family owned farms and family run business, besides completely bearing the burden of the entire household work themselves. The work burden is heavily tilted against them. And, the only time they are relatively free is when crops are not standing in the field. They generally spend their free time chatting, relaxing and smoking.

Women have no right to inherit their parental property. A son is preferred over a daughter. Child marriages are still prominent and preferred in this region. However, the level of interest in female education is showing signs of improvement. However, women are not allowed to attend the village level meetings in person. Their grievances or views (which are rarely sought and as rarely expressed) can be conveyed through the male members of their respective households.
Women are the backbone of the workforce in home and in the family run occupations. There is never any paucity of work for them. I saw them as the first to rise and the last to sleep in the family. Still they do not have the right to think about themselves and their lives. The men in their families generally decide everything for them. Thus, although they constitute almost half of the village population I studied, yet their role in society is unequal and remains unappreciated.

To conclude the argument so far, in the villages under study, the caste and gender based identities, to a very large extent (although not solely) determine not only the social relations among people, but also their economic status (particularly in terms of asset ownership, mainly arable land) and the educational opportunities potentially available to them. Ironically, these societal discriminations are well-supported and further enhanced by state's populist and piecemeal policies (like the reservation policy as well as numerous 'welfare' schemes for the poor). The recent announcement relating to the inclusion of the Jat community living in Rajasthan, within the category of OBCs, is yet another step in the same direction. These actions of the state sometimes give a violent and conflictual character to these societal identities like in Bihar. In Rajasthan, however, the degree of politicization of caste by the political parties is not as severe as in many other states, particularly in Uttar Pradesh and Bihar.

**Topography and The Rural Economy of The Region:**

The topography of Rajasthan is dominated by the Aravalli system of hill ranges, dividing the state into two distinct geographical units. Ajmer district is situated in the semi-arid uplands of Eastern Rajasthan. This is the rainier part of the state as compared to the area falling on the
west side of the Aravalli hills. The district has no natural divisions. The boundaries are territorial. 34

The physical conditions in the district vary widely. While in and around Ajmer and Kishangarh plain country is the rule, and hills are the exception, towards Beawar and further in the southwestern part, hill country is the rule and plain is the exception. There are ranges in Ajmer, but they more or less spring immediately from plains and there is little cultivation among them. Generally speaking, the cultivable soil is composed of a mixture of stiff yellow loam and sand, in proportion of one or two. No superficial portion of soil is absolutely clayey and alluvial soils are only found in the beds of artificial tanks. The richest soil in the district is found among the sand hills of Pushkar, where sugarcane can be grown without irrigation. 35

There is no perennial river in the district. There are however, a number of small rivers, which flow through the district viz., Banas, Khari, Sagarmati, Saraswati and Rupnagar. All these rivers are mere rivulets in hot weather but become torrents in the rains. The possibility of floods is not great, but not absent altogether. 36 The district also has natural lakes viz., Pushkar and Sargaon. The Hindu kings who ruled Ajmer built artificial lakes like the Anasagar and Vishalsagar. Among the artificial tanks in the district are Foysagar, Phoolsagar, Bisala, and Makreda among many others. Col. Dixon, who has left his mark on the administration of the district, constructed most of these tanks. Dixon built about 290 embankments in Merwara between 1835 – 1846, besides 23 weirs on nadees in Beawar. 37

The district has a hot dry summer and cold bracing winter. The winter extends from December to February. While, the summer season extends from March to the end of the June. The rainy season is

34 GOR (1966).
35 Ibid.
36 Ibid.
37 Jain (1997); 280.
comparatively short in this region and lasts only till mid-September. The maximum temperature was 45 c and the minimum was recorded 2 c at the Ajmer center during 1989. During this period, the mean temperature remained 23.5 c.38

The district’s southern and southeastern parts, which border the comparatively fertile regions of the state, generally receive more rainfall than the western and northwestern parts, which border the desert. About 90 per cent of the annual rainfall is received during the period of June to September. July and August are rainiest months of the district. On an average there are 26 rainy days in a year.39 However, the variation in annual rainfall from year to year is very large. La Touche, who made the first regular settlement of Ajmer Merwara in 1874, observed, “Ajmer Merwara can never rely on two good harvests in succession.”40 Among all the constituent units of the country, Rajasthan with its scanty, low and irregular rainfall is highly susceptible and vulnerable to drought conditions. The couplet current in Rajasthan says41-

 пуэ пугал घड़ केटैं बासिं बाबुडमैं |
 कोटें लाई अधुपुर ठाके जैसलमैं। |

It means the feet of famine are in Poogal (Bikaner); the trunk in Kotra (Marwar); the arms in Barmer. He will be found in Jodhpur if you search for him. In Jaisalmer you will find him for a certainty. The following table gives only a glimpse into the impact of insufficient rains on Rajasthan from 1981 to 1998.

39 Ibid.
40 La Touche (1874); 5.
41 This couplet is very popular among the locals, according to the residents of Mangliawas village.
TABLE 3.1.3

LOSS DUE TO FAMINE / SCARCITY CONDITIONS IN RAJASTHAN

<table>
<thead>
<tr>
<th>Agricultural Year</th>
<th>Districts Affected (number)</th>
<th>Villages Affected (number)</th>
<th>Population Affected (lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985-1986</td>
<td>26</td>
<td>26859</td>
<td>219.80</td>
</tr>
<tr>
<td>1989-1990</td>
<td>25</td>
<td>14024</td>
<td>120.67</td>
</tr>
<tr>
<td>1993-1994</td>
<td>25</td>
<td>22586</td>
<td>246.81</td>
</tr>
<tr>
<td>1997-1998</td>
<td>20</td>
<td>20069</td>
<td>215.07</td>
</tr>
</tbody>
</table>


During my field study, drought like conditions was present. As is well known, drought severely affects the human and the cattle population and well being. There is considerable reduction in employment opportunities as well as scarcity of fodder and water for animals besides other losses.

Agriculture and animal husbandry are the primary occupation of the people of the region. The principal means of irrigation in Ajmer are wells and tanks, which depend primarily upon rainfall for their water supply. The continued apathy of the government towards these indigenous systems of water harvesting and conservation has relegated these systems to the status of "minor" irrigation works. The result has been disastrous causing avoidable water scarcity and severe drought and hitting the rural economy very hard.
The rural economy of Rajasthan as well as that of Ajmer is characterized by three predominating factors. The factors are:

1. Continued predominance of the primary sector in the state domestic product, although the structure of rural economy is undergoing change.

2. Wide fluctuations in agricultural production during the Kharif season.

3. The livelihood security provided by the livestock sector which produces 40 to 70 per cent of the gross value of agricultural output and provides a stable income stream for the rural poor.

In 1959–1960 the district Ajmer had an area of 836774 hectares under plough, of which the twice-cropped area was 204213 hectares. In the same year approximately 11 per cent of the net-cropped area was classified as current fallow. Among other lands not available for cultivation, forests occupied a mere 3.51 per cent of the total area of the district. 14.83 per cent of the total area was classified as barren land. The area under cultivable waste has fluctuated during the period 1956–1957 to 1959–1960. The cultivatable wasteland in the district mostly comprises of pastures and land lying waste due to salinity and gullies etc.

In 1988–1989 the area recorded for the land utilization purposes was 842388 hectares out of the total geographical area 850410 of the district. The following table gives the land use pattern during the year in the district.

---

Sagar (1995); 2678.
GOR (1971) and also refer, GOR (1966).
### TABLE 3.1.4

**LAND USE PATTERN IN AJMER DISTRICT**


<table>
<thead>
<tr>
<th>Classification of the land use</th>
<th>Area (in hectares)</th>
<th>Percentage to total area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forests</td>
<td>46853</td>
<td>5.56</td>
</tr>
<tr>
<td>Land put to non-agricultural use</td>
<td>89154</td>
<td>10.59</td>
</tr>
<tr>
<td>Barren and uncultivated land</td>
<td>53074</td>
<td>6.30</td>
</tr>
<tr>
<td>Other uncultivated land excluding fallow land</td>
<td>81375</td>
<td>9.66</td>
</tr>
<tr>
<td>Culturable waste</td>
<td>77339</td>
<td>9.18</td>
</tr>
<tr>
<td>Fallow land</td>
<td>117449</td>
<td>13.94</td>
</tr>
<tr>
<td>Net area sown</td>
<td>377144</td>
<td>44.77</td>
</tr>
<tr>
<td>Total</td>
<td>842388</td>
<td>100.00</td>
</tr>
</tbody>
</table>


The table above clearly brings reason for cheer and hope. The area under forest cover has increased from 3.51 per cent in 1959 - 1960 to 5.56 per cent in 1988 - 1989. The state as a whole appears to be making good efforts in increasing forest cover as also the double-cropped area. The forest area in the state which accounted for 6.87 per cent of the total reporting area in 1990 – 1991 has increased to 7.38 per cent in 1997 –

Nearly two-thirds of the total cropped area in Rajasthan is under food crops which include cereals, pulses, vegetables, fruits, condiments and spices. Over the years, there has been very little change in the proportion of areas under food crops to the total cropped area, as is evident from the fact that in 1990-1991, the percentage of area under food crops to gross cropped area was 67.26 which increased marginally to 67.56 in 1997-1998. The districts experiencing high intensity of the area under food crops as percent of total cropped area are Dungarpur, Banswara, Udaipur, Ajmer, and Sikar among many others.44

During 1988-1989 the important crops in the order of their production, were wheat, barley, maize and cotton.45 The farmers grow commercial crops. The farmers of the villages I have studied also increasingly harvest flowers, and Pushkar is already well known for its rose cultivation. These kinds of crops increase the household’s income. The table 3.1.5 presents the figures relating to the cropping pattern and level of production in the district during the period.

---

45 Ibid.
### TABLE 3.1.5

**THE CROPPING PATTERN OF THE AJMER DISTRICT**

*(In 1988 – 1989)*

<table>
<thead>
<tr>
<th>Name of the crop</th>
<th>Area (Hect.)</th>
<th>Production (Tones)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bajra</td>
<td>93461</td>
<td>47955</td>
</tr>
<tr>
<td>Jowar</td>
<td>145013</td>
<td>27495</td>
</tr>
<tr>
<td>Wheat</td>
<td>28922</td>
<td>77087</td>
</tr>
<tr>
<td>Maize</td>
<td>39925</td>
<td>26943</td>
</tr>
<tr>
<td>Barley</td>
<td>13760</td>
<td>19333</td>
</tr>
<tr>
<td>Rice</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td>Gram</td>
<td>20665</td>
<td>9745</td>
</tr>
<tr>
<td>Tur</td>
<td>41</td>
<td>8</td>
</tr>
<tr>
<td>Other pulses</td>
<td>28295</td>
<td>11763</td>
</tr>
<tr>
<td>Sesamum</td>
<td>7060</td>
<td>1313</td>
</tr>
<tr>
<td>Rape and Mustard</td>
<td>8725</td>
<td>8603</td>
</tr>
<tr>
<td>Linseed</td>
<td>1951</td>
<td>617</td>
</tr>
<tr>
<td>Groundnut</td>
<td>2597</td>
<td>779</td>
</tr>
<tr>
<td>Cotton</td>
<td>7662</td>
<td>1737</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>67</td>
<td>2853</td>
</tr>
<tr>
<td>Chilies</td>
<td>1747</td>
<td>1847</td>
</tr>
<tr>
<td>Potatoes</td>
<td>50</td>
<td>153</td>
</tr>
<tr>
<td>Sanhemp</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

Unlike in other parts of India, in Rajasthan the land reforms were not merely *de jure* change in the revenue laws; despite the fact that the second phase of reforms, which attempted to impose ceilings on agricultural holdings, did not meet with the perceived success. The number as well as the area under large landholdings has substantially declined. According to Vyas and Sagar,

Their importance in the agrarian structure has also significantly reduced. These holdings accounted for 3.6 per cent of the total holdings in 1961 – 1962 but came down to 1.4 per cent by 1982. The share of the middle peasantry i.e., holdings between 4 hectares to 10 hectares have improved in terms of the area they command.46

The data on average size of operational holdings for 1995 – 1996 reveals that district of Dungarpur is at the bottom with 1.37 hectares as the average size of holdings and Jaisalmer is at the top with 13.10 hectares as average size. In Ajmer district the average size of the holding is 2 – 3 hectares.47

Physical and meteorological conditions in Ajmer district make irrigation a very significant factor in determining agricultural growth. The idea of tank embankments was one that presented itself early to the minds of those conversant with the district as the means of providing irrigation.48

There were no tube wells in the district in 1966, when the green revolution was cheering the farmers of the other parts of the country. More than the size of the landholding it is the access to irrigation that solely determines the adoption of the HYV technology.49 Wells as such form the most important source of irrigation. In 1960 – 1961 there were

---

49 Ibid.
56795 wells in the entire district. In 1959 – 1960, about 25 per cent of the net-cropped area received any irrigation. Canals are there but they irrigate only 2000 acres of land. In 1988 – 1989, out of the net irrigated area 86.98 per cent was irrigated by the wells and tube wells. 11.06 per cent by tanks and the remaining 1.96 per cent by other sources. 50

However, these days the situation is slowly changing for the better in the district of Ajmer. Since the Eighth Plan, efforts are being made to substantially improve the irrigation capacity in the district by successfully initiating various watershed programs like NWDPRA, IWDP among many others. It thus provides us an invaluable opportunity to understand how these changes are coming about? What has been the nature of the relationship between local people and the state in this scenario?

The rural economy of the district draws as much sustenance from animal husbandry as from crop husbandry. In an economy that is subjected to wide variations in agricultural production and often faces drought situations, livestock provides a more reliable source of sustenance. According to Vyas, “an important feature of the livestock economy is very high equity in its distribution across different holding size classes.”51 In 1988, the district livestock population is shown in the following table.

---

51 Sagar (1995); 2679.
TABLE 3.1.6

LIVESTOCK POPULATION IN AJMER DISTRICT
(In 1988)

<table>
<thead>
<tr>
<th>Animals</th>
<th>Number</th>
<th>Percentage to total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle</td>
<td>37,2817</td>
<td>23.83</td>
</tr>
<tr>
<td>Buffaloes</td>
<td>14,8177</td>
<td>9.47</td>
</tr>
<tr>
<td>Sheep</td>
<td>56,6958</td>
<td>36.24</td>
</tr>
<tr>
<td>Goats</td>
<td>45,3990</td>
<td>29.02</td>
</tr>
<tr>
<td>Donkeys and Mules</td>
<td>4,364</td>
<td>0.28</td>
</tr>
<tr>
<td>Horses and Ponies</td>
<td>499</td>
<td>0.03</td>
</tr>
<tr>
<td>Camels</td>
<td>5,191</td>
<td>0.33</td>
</tr>
<tr>
<td>Pigs</td>
<td>12,438</td>
<td>0.80</td>
</tr>
<tr>
<td>Total</td>
<td>156,4434</td>
<td>100.00</td>
</tr>
</tbody>
</table>


Nature of Public Action in The Region:

Ajmer provides a valuable opportunity to analyze the nature and effectiveness of state as well as society's initiatives in facilitating state-society synergy and making efforts to achieve sustainable development.

(a) State Initiated Measures:

Besides the implementation of land reforms, the state government has been actively initiating and implementing various policies and programs in every sector to ensure development. I will only attempt to
cover a few well-known measures implemented by the state in the rural areas since independence.

The State of Rajasthan has been a pioneer in introducing measures like Antyodaya and introducing Panchayati Raj Institutions, which were not only lauded by the entire nation but were also modified to be implemented, at the national level. Antyodaya was the first and rather interesting experiment in direct intervention for poverty eradication. It was introduced in 1978. It was based on the Gandhian philosophy of 'upliftment of the poorest of the poor first'. The program aimed at identifying five of the poorest families in each of the 33000 villages and providing them with an asset base to help them. This program was evaluated and re-introduced at the national level as 'Integrated Rural Development Program' in 1981.52

IRDP is a major credit linked self-employment program for the alleviation of poverty. It is based on the recognition that an important cause of poverty is the low asset and skill base as well as limited access of the rural poor to institutional credit. Its objective is to provide self-employment, to the rural poor on a sustainable basis. Further, as argued by Indira Hirway,53 the program has the potential of bringing about slow but lasting changes in the economic, political and social structures in favour of the poor. This author's analysis of IRDP and JRY,54 in terms of its distributional effects and its viability in generating additional income, on a sustainable basis, at the national level, suggested that IRDP is basically a compensatory project and suffers from some major limitations. Briefly the limitations are:

1) IRDP being a centrally sponsored program carries guidelines and design principles that are not necessarily reflective of diverse local situations in the country, thus giving little operational flexibility to the

---

52 Sagar (1995); 2684-2685.
states. This difficulty is compounded by the fact that local level planning has not yet taken roots. At the best the attitude of the bureaucracy at all levels is "YOU COOPERATE AND WE WILL OPERATE", thus not only discouraging participation but also leading to wasteful investments.

(2) Though it was to be a "comprehensive strategy for translating the objectives of rural development, social justice, full employment within 10 years, it got reduced to a limited approach of creating self-employment opportunities for the non poor.

(3) The scheme suffers from inappropriate follow up action of the investments made.

The performance of IRDP in Rajasthan, according to Vidya Sagar has been far below the national average. He says,

One thing that is common to all the states generally but needs special emphasis in the case of Rajasthan, is the adequacy of investment that could generate sufficient sustained income for the poorest households.55

Besides IRDP, various rural wage employment programs have also been introduced in the state. These programs are providing relief to the people of the villages analyzed here, when work becomes scarce due to drought conditions. This does not however mean that these programs are being implemented flawlessly.

Rajasthan was also the first state to introduce Panchayati Raj institutions on the recommendations of the Balwant Rai Mehta Committee report.56 A few years back, a flexible non-formal education program, Lok Jumbish was introduced and successfully implemented in Rajasthan. In the villages under study this program was received with

---

55 Sagar (1995); 2689.
56 Ibid.
great enthusiasm. The state of Rajasthan has played an important role in social transformation of our country.

On the darker side, however some startling facts also continue to hound us. According to the data collected by the state government in 1997, about 31 per cent of the state's population continue to live under the poverty line. In Ajmer district, 26.50 per cent of the families live below the poverty line, and, 17.06 and 3.06 per cent of the aggregate figure belongs to the S.C. and S.T. respectively.⁵⁷

Moreover, it is often observed that the state authorities, instead of cooperating and responding positively to the people's efforts in promoting natural resource management and accountability as well as democratic participation in the state institutions, have in fact hindered their efforts. This attitude basically reflects a display of authority over those people, who dare to challenge the established and unjustifiable practices in the system. This attitude is not exclusively found only among the state authorities. Every person or an institution, in the position of any kind of authority does not like its power being shared, curbed or decisions being questioned.

Vidya Sagar has very rightly argued that state intervention for poverty alleviation in the harsh agro-climatic environment marks the state as well as the district. He says that the "emphasis should be on the infrastructure development programs, especially watershed development and reforestation along with programs of employment and asset distribution," ⁵⁸ which provide a cushion to the people suffering from inadequate rainfall.

---

⁵⁸ Sagar (1995), 2689.
(b) **Society Initiated Measures:**

According to the Rajasthan State Gazetteer, social life in the villages is organized around traditions and values. There are various institutions that encourage mutual aid and collective life. In all the four villages, people stressed on taking decisions, at the village level, on the basis of consensus. The tradition of persuasion and consensus building is actively and religiously followed, as they very strongly believe that a majoritarian voting system divides the villagers creating avoidable tension and dis-harmony in the village. The decisions thus taken also normally enjoy wider social acceptance and compliance.

Gossip and discussion on local affairs at the chaupal in the evening is a part of the day-to-day routine of villagers. Here, they share their pleasures and sorrows. According to Aruna Roy and others,

Whenever working men and women in the state get together, they bring with them a wealth of information about their work and experiences of development. These experiences contain the detailed accounts of the work sites, which worked, how their trust was betrayed. They are minute in detail and inter-related with many other happenings.

Moreover, the local folk groups and devotional song groups have effectively associated themselves with people's activism. They include the problems of people and their demands in their songs. Generally the songs are sung in an interactive mode, i.e. in the form of questions and answers. This mode also reveals the level of consciousness among the people and probably their determination and willingness to fight.

The people of this region are actively involved in demanding responsiveness, accountability and respect from the state authorities, through vibrant and informed public activism. The People's Campaign for

---

the Right to Information has been organized under the guidance of Mazdoor Kisan Shakti Sangathan (MKSS) in the four districts of Rajasthan namely Rajasmand, Ajmer, Pali and Bhilwara. I have been closely studying and analyzing this movement for past three years now, as a participant observant.

The rationale behind upholding the participatory and democratic decision-making is that in a system based on “rules by the people”, people will get what they want or what they believe is best, as compared to alternate systems in which an elite determines what is best. But, even in the former system, to know what is best, people must be enlightened and informed which in turn enhances their capability for effective and informed discussion, deliberation and participation. This campaign differs substantially from other protest movements. It has been demanding that the development shown on paper should be visible on the ground. Thus, the people of rural Rajasthan are demanding the right to photocopy payment bills, vouchers and muster rolls, so that they can scrutinize whether the allocation was spent correctly or not.61

Such efforts are also being made in other parts of the country. For instance, similar demands have been raised in Uttarakhand also in recent years. According to Dr Jayal,

In Khandava village it was found that a sum of Rs 17,80,000 was sanctioned to the PWD to build a 5km-approach road to the Ambedkar village of Naulichak, but no works done. Similar investigation into misappropriation of funds in other gram panchayats of this block, under a variety of schemes ranging from afforestation to irrigation works and water supply schemes, have yielded a total ‘missing’ amount of Rs. 87,27,900.62

---

61 Ibid.
People in this region of Rajasthan have taken this process a step further, i.e. demanding and receiving the misappropriated funds and investing them in effective developmental projects. For instance, the campaigners took effective possession of 1,000 bighas of governmental land, which was under the illegal occupation of an oppressive erstwhile zamindar of Sohargarh, and now is under a forest development project.63

Further, this campaign, while stressing on informed debate, has emerged as a forum, attracting a diversity of participants with a convergence of interests between the poor, the middle class and even those among the local opinion makers, who were looking for support before they took a confrontational, though legitimate stand. The campaign is based on a concept with phenomenal potential that could lead to a far more democratic form of governance, where democratic rights are exercised from day to day, rather than once every five years.

Parallel legislations exist everywhere in the world. For instance, Sweden has a 200 year old law on Right to Information; USA implemented its Freedom of Information Act in 1966, Australia and New Zealand in 1982. In India, the Right to Information, according to Aruna Roy, is limited to right to freedom of speech and expression.64 But now, the idea is spreading, to widen the scope of this right to include the concerns of economic well being of the people----as these concerns are directly related and determines the very survival of the people.

In this region of Rajasthan, transparency has now gained grassroots constituency. In this, Rajasthan has surely led the way with the National Campaign for People’s Right to Information. In Uttarakhand likewise Dr Jayal mentions such demands being raised by the people.

Bureaucratic accountability is obviously an oxymoron, but there have been attempts to demand accountability from the

---

64 Ibid.
elected representatives, and the Chetna Andolan has been in the forefront of such activity. Though the Uttar Pradesh government not yet have a Right to Information act, the people of Bhilangana block have been holding periodic 'Jan sunvais' (people's hearings).  

In Rajasthan, however this campaign has in fact provided a point of convergence for all other mass-based struggles in the state, relating to rehabilitating the displaced, against atrocities on women, preventing land alienation. All have identified the Right to Information as the minimum requirement that needs to be met with priority. This campaign practically compelled the state government of Rajasthan to transform this right into a state act.

To Sum Up The Discussion So Far,

As this study is based in a rural setting, Ajmer provides a perfect backdrop. The district's level of development after independence has been burdened with many problems, which are not new for the people of the region, who, along with state authorities are working to resolve them. The level of endurance and the will to achieve sustainable development can be judged from just the one simple fact that they compelled the state government to legalize the right to information for the entire state. I believe the people of this region (especially the ones I have met), in many ways, adhere to the essence that can be derived from the famous lines of Bernard Shaw,

You see things and say why?  
I dream of things that never were,  
And I say why not.

Jayal (2001); 662.
SECTION: 2

The climate is not very favorable for crop production in most parts of the State. About 90 Lac hectares of irrigated land experiences acute moisture stress, primarily due to the inadequate rainfall. Rainfall in Ajmer is not only scanty but also erratic, causing major distress. A visit to the area clearly demonstrates the extent to which life is dependent on the rains. Adequate rains are one of the main reasons that bring joy to the people, while lack of sufficient rainfall fill their lives with unlimited and indescribable misery, sadness and helplessness.

The irrigated area in the state of Rajasthan is 22 per cent of the total cultivable area. Therefore optimizing and stabilizing production from the rainfed areas has become vital. In order to increase production from the arable and non-arable areas development of land, water and biotic resources on watershed basis is advocated.

In the following pages, we introduce the two watershed regions under study beginning with Mangliawas Watershed and then moving on to Andheri Deori Watershed. An attempt is made to introduce these regions by explaining various features as well as the problems identified by the department, at the watershed level. The rationale for undertaking this exercise is to simply introduce the context, in which the villages and respondents live and have, expressed their views.

---

Ibid.
MANGLIAWAS WATERSHED: AN INTRODUCTION

The Mangliawas Watershed proposed under the Ninth Plan is located in Panchayat Samiti Pisangan. The project would officially conclude in the year 2002, and I completed analyzing the performance of this project in 2000.

This watershed is non-contiguous to the existing Sardhana Kesarpura watershed model, which was executed during the Eighth Plan period. The watershed is located at a distance of 25 km from Panchayat Samiti headquarters and 30 km from the district's headquarters on the national highway no. 8. Geographically, the watershed is situated between 74 27' to 74 33' longitude and 26 11' to 26 17' latitude and at an altitude of 320 m above MSL.68

The watershed Mangliawas has been selected for integrated development as well as for its demonstrative value of production, as the cultivators of the area are receptive to new technology. The Pisangan block has only 20 per cent of the irrigated area. The watershed is situated in the semi-arid eastern Plain agro-climatic zone.69

Villages that form the part of this watershed are Mangliawas, Daulatpura, Leedi, Amargarh, Lamana, Rudali and Jethana in complete or partial form. The total geographical area of the watershed is 4560 hectares. Its effective area is 4299 hectares out of which 1814 hectares is non-arable and 2485 hectares is arable land. Of the arable land, 438 hectares is under irrigation by wells and 2047 hectares is un-irrigated land.70

The topography of the area is undulating. The area falls in Aravalli Hill Ranges. The general slope of the area is 1 to 5 per cent. Erosion by water is severe in the non-arable land, which is largely devoid of

---

69 Ibid.
70 Ibid.
vegetation cover. The normal rainfall is 487 mm, about 90 per cent of the total annual precipitation occur during monsoon season. Fertility level of the non-arable soil is poor whereas that of the arable soil is moderate. There are 112 hectares of forestland in the watershed. The nearby forest can be classified as tropical dry deciduous type.\(^{71}\)

Agriculture and livestock rearing are the main occupations of the people. The main crops grown in the kharif season are Bajra, Jowar, Maize, Moong and Til. In Rabi season Wheat, Barley, Gram is grown in the irrigated areas. The productivity in general is low. As rainfall is uncertain, the Kharif crops have a high risk factor.\(^{72}\) Moreover due to persistent droughts, the investment capacity of the farmers is poor; thus very rarely high cost innovations are applied.

The main problem of the area,\(^{73}\) because of which the project was introduced, is low productivity levels of arable and non-arable lands, primarily caused by adverse climatic conditions as well as unscientific management of the available resource. The main problems identified by the department are:

1. Soil erosion due to improper land use.
2. Moisture stress conditions faced by the crops due to uncertain and erratic behavior.
3. Declining trends in productivity of major crops.
4. Livestock related knowledge needs to be enhanced.
5. The carrying capacity of the village pastures is very poor in relation to the demands of the villagers.
6. Low investment capacity of the farmers.
7. Seasonal migration of the human population in search of employment.

\(^{71}\) Ibid.
\(^{72}\) Ibid.
\(^{73}\) Ibid.
These problems are present in almost every watershed that is taken up for treatment. On the basis of the needs identified, various watershed development and soil conservation activities have been proposed and are being implemented. The various activities taken up as well as their developmental performance will be discussed in detail in following chapter.

The following table gives the total outlay sanctioned to this watershed region, at a disaggregated level.

### TABLE 3.2.2

**THE FINANCIAL OUTLAY OF PROJECT**

( **RS IN LACS**)

| S. NO. | NAME OF ACTIVITY                     | AMOUNT  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(RS IN LACS)</td>
</tr>
<tr>
<td>1.</td>
<td>TOTAL OUTLAY OF THE PROJECT</td>
<td>121.97</td>
</tr>
<tr>
<td>(a)</td>
<td>Basic Activities</td>
<td>48.78</td>
</tr>
<tr>
<td>(b)</td>
<td>Project Activities</td>
<td>73.19</td>
</tr>
<tr>
<td>(c)</td>
<td>Average Cost / Hectares (PROJECT ACTIVITY)</td>
<td>2100.00</td>
</tr>
<tr>
<td>2.</td>
<td>TOTAL ALLOCATION FOR PROJECT ACTIVITIES</td>
<td>73.19</td>
</tr>
<tr>
<td>(a)</td>
<td>For Arable lands</td>
<td>18.71</td>
</tr>
<tr>
<td>(b)</td>
<td>For Non-Arable lands</td>
<td>23.62</td>
</tr>
<tr>
<td>(c)</td>
<td>For Drainage Line Treatment</td>
<td>23.55</td>
</tr>
<tr>
<td>(d)</td>
<td>For Live Stock Management</td>
<td>7.31</td>
</tr>
</tbody>
</table>

The work on the watershed commenced in February 1998. The total project cost sanctioned by the department is Rs 150.46 Lac, and the cost per hectare for the project is determined as Rs 3500.74

Andheri Deori Watershed: An Introduction

Andheri Deori watershed was operational during the Eighth Five Year Plan period. This field study in this region was conducted almost 5 years after the project has officially concluded, to analyze the developmental performance in terms of sustainability.

The Andheri Deori watershed is located in Panchayat Samiti Masuda of district Ajmer. The watershed is situated in the semi-arid eastern plain agro-climatic zone. As per available information, 20.93% of the cultivated area of this block is under assured irrigation.75According to the watershed department this watershed was primarily selected for its demonstrative value by virtue of its proximity to the National Highway and as cultivators of the area are receptive to the new technology.76

The watershed is located at a distance of 20 km. from the Panchayat Samiti headquarter. The district headquarters is 50 km from the watershed. The watershed is situated between 26° 5' to 26° 10' longitude and 74° 20' to 74° 28' latitude and at an altitude of 500 M. above MSL.77The total geographical area of the watershed is 4246 Ha. About 1820 Ha of land is used for cultivation purposes. It is composed of about a total 2750 holding. According to the watershed department, there are 465 marginal farmers, 2140 small farmers and 145 large farmers in this watershed region.78

---

74 Ibid.
76 Ibid.
77 Ibid.
78 Ibid.
Agriculture is the main occupation of the area. The main crops grown in the kharif season are bajra, jowar, maize, moong, and til. In the Rabi season the crops which are sown are wheat, barley and gram. These crops are sown in the irrigated lands. Local varieties are normally used. The productivity according to the watershed department before the commencement of the project was very low.

The watershed covers nine villages namely Kana kheda, Kundia, Kheta kheda, Lakhina, Suhawa, Leherj, Gopal Sagar, Amrit Pura and Piplaj. The arable land is 1820 ha and non-arable land is 2216 ha. The irrigation facilities are available to 303 ha and 1517 ha is un-irrigated land. The total animal population is 15600 and human population is 4680.79

The Watershed area suffers from low productivity leading to low farm income and consequently poor investment capacity of the farmers. Off farm activities consist of animal husbandry, where outputs are mainly related to production levels in agriculture. The associated problems are moisture stress faced by the crops due to erratic behavior of rainfall. Soil erosion is also a problem due to lack of proper vegetative cover as well as inadequate drainage line treatment. Moreover, alternative employment opportunities are also severely lacking in the region. No major or medium irrigation works have ever been envisaged in this area. Therefore, any increase in productivity and incomes is contingent upon soil and water conservation practices.

It was on the basis of these needs that this region was taken up for treatment during the Eighth Plan period. The measures taken up will be discussed in detail in chapter 5. The total project cost sanctioned was Rs 141.20 Lac. On basic activities the project spend Rs 56.48 Lac. While, on
the various project activities Rs 84.72 Lac were spent. The following table gives the total disaggregated outlay sanctioned to the project.

**TABLE 3.2.1**

**THE FINANCIAL OUTLAY OF THE PROJECT**

(ROSS IN LACS)

<table>
<thead>
<tr>
<th>S. NO.</th>
<th>NAME OF ACTIVITY</th>
<th>AMOUNT (RS IN LACS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>TOTAL OUTLAY OF PROJECT</td>
<td>141.20</td>
</tr>
<tr>
<td>(a)</td>
<td>Basic Activity</td>
<td>56.48</td>
</tr>
<tr>
<td>(b)</td>
<td>Project Activity</td>
<td>84.72</td>
</tr>
<tr>
<td>(c)</td>
<td>Average Cost / Hectare (PROJECT ACTIVITY)</td>
<td>2100</td>
</tr>
<tr>
<td>2.</td>
<td>TOTAL OUTLAY FOR PROJECT ACTIVITIES</td>
<td>84.72</td>
</tr>
<tr>
<td>(a)</td>
<td>For Arable Lands</td>
<td>22.95</td>
</tr>
<tr>
<td>(b)</td>
<td>For Non- arable Lands</td>
<td>37.25</td>
</tr>
<tr>
<td>(c)</td>
<td>For Drainage Line Treatment</td>
<td>16.05</td>
</tr>
<tr>
<td>(d)</td>
<td>For Live Stock Management</td>
<td>8.47</td>
</tr>
</tbody>
</table>

Conclusion:

The need of this entire region is to use the natural endowments in an effective and harmonious manner so as to ensure integrated development and promotion of the resources as well as to adequately meet the various daily needs of the people like fuel, food and fodder on a sustainable basis.

The NWDPRA guidelines clearly state that the past experience has shown that unless respective community is actively involved in the planning, supervision and aftercare of the common property works, the resultant development suffers from a lack of attaining the perceived results. The approach, which analyzed in detail in the following chapters 4 and 5, stipulates the involvement of the village watershed committees constituted from within the respective individual villages. The question now is---- how effectively and responsively do these committees function under this project?

Both these watersheds under NWDPRA project have tried to adopt the approach of actively involving the community in question at various levels of implementation: In some villages, they have been successful. The project's implementing officers of both the regions stressed the benefits of this approach. They basically said that this approach ensures that when the village community is involved in the planning and execution of the works, then the probable aftercare of these works improves substantially. This approach of the project thus aims on ensuring and promoting sustainable development at all levels.