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Nature, Social Stratification and Marginalisation in Rajasthan, 1650-1850 C.E.

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Nature, Social Stratification and Marginalisation in Rajasthan, 1650-1850 C.E.*

Mayank Kumar**

"The idea of nature has shifted substantially in recent years from an independent reality external to and different from the human and the cultural to a domain that is increasingly dependent on and shaped by the operation of a global human society".¹

The gradual realisation that an understanding of nature is contingent on the character of social interactions with the wider physical world offers new insights to examine human-nature interactions. Nature ceases to be a static phenomenon separated from human society or providing merely passive backdrop. Rather, nature is being constructed and reconstructed at every moment at numerous levels. Along with the study of the physical attributes of nature it is important to investigate the ways in which nature has been perceived differently by and among different sections of the society. It is such multiple perceptions and relationships which give new meanings to different components of nature. Monolithic readings of nature and natural resources have often hindered an appreciation of the complexities associated with the examination of society in general and interactions

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¹ Franklin Adrian, *Nature and Social Theory* (New Delhi: Thousand Oaks, 2002), p. 19.

between human and nature in particular. For instance, the role of social stratification in marginalisation is well established but in what ways nature/ecology influenced these patterns needs to be investigated.²

In general, the dominant historiography of seventeenth and eighteenth centuries in north India has been marked by an absence of a nuanced reading of interactions between humans and environments. The focus of historians has been on the political apparatus and economic structures, the latter dominated by trade and commerce. Natural resources have been examined either as a component of agrarian production or in terms of agro-pastoralist production. Society at large has been depicted as one living in harmony with the nature. Society in general was portrayed as passive recipient of 'ideas' and 'practices' which largely advanced the views of those who held political power. The requirements of different sections of society for different kinds of natural resources ranging from cow-dung to forest produce have been viewed in terms of 'prudent-use' practices continued since time immemorial.³ Even culture has been examined mostly on the basis of Turko-Persian narratives or court chronicles. Popular culture has been depicted in terms of social customs, norms and practices as reflected in prescriptive literature. Traditions of different castes and religions among the masses have been examined in terms of practices as enunciated in religious texts often offering a normative picture. Concerns, dilemmas, apprehensions, of peasantry, pastoralists or people on the margins were not accorded due recognition.

Day-to-day negotiations with nature have been explained in terms of 'functional' analysis where only livelihood has been depicted as driving force. Ann Grodzins Gold's argument that, 'elements of the

² Irfan Habib, 'Social Distribution of Landed Property in Pre-British India: A Historical survey, *Enquiry*, New Series, 2/3 (1965), pp. 21-75; 'Peasant in Indian History' *Presidential Address, Indian History Congress*, Kurukshetra, (1982).

³ Madhav Gadgil and Ramachandra Guha, *This Fissured Land: An Ecological History of India* (New Delhi: Oxford University Press, 1992).

environment become emblems of satisfaction and deprivation, submission and confrontation^{'4}, needs special emphasis.

Most works attribute their failure to address questions of social stratification and marginalisation to the lack of sources. Most of the writings gave primacy to sources imbibed in the 'Turko-Persian' traditions. It is 'in part due to the dominance of the narrative from the Persian sources. ...the Turko-Persian chronicles have been hegemonic'.⁵ In the same vein Thapar suggests that juxtaposition of different kinds of sources appears to be tool through which a more contested and nuanced reading of the same event/era can be reconstructed. 'The juxtaposition assists in observing the variant perspectives on the event, or else, why the event was ignored in the kinds of texts where one would expect to find some reference to it'.⁶

General marginalisation of sources in vernacular languages for examination of early modern times has restricted the concerns of historians of the period only to the court and issues related with court politics. It will be great injustice if I do not mention that in the recent past we can follow growth of both: attempts to critically engage with the sources especially in the Turko-Persian traditions⁷ and reliance

⁶ Ibid.

⁴ Ann Grodzins Gold, & Bhoju Ram Gujar, *In the Time of Trees and Sorrow: Nature, Power, and Memory in Rajasthan* (Durham & London: Duke University Press, 2002), p.14.

⁵ 'They have been privileged as factual without adequate discussion of their historiographical intentions and without an attempt to juxtapose these with other sources. The reading therefore has been restricted to the interpretation provided by these chronicles. But even this reading has been literal and limited, and the contradictions within this category have received little attention. ...The complexities of using this category have often been ignored in favour of a literal, simplistic reading.' Romila Thapar, *Somanatha: The Many Voices of a History* (New Delhi: Penguin-Viking, 2004).

⁷ Sanjay Subrahmanyam and Muzaffar Alam, (eds.), *The Mughal State* 1526-1750 (New Delhi: Oxford University Press,1999); Richard Eaton, *The Rise of Islam and the Bengal Frontier: 1204-1760* (Delhi: Oxford University Press,1997); Cynthia Talbot, *Pre-colonial India in Practice: Society, Region, and Identity in Medieval Andhara* (Delhi: Oxford University Press, 2001); Sunil Kumar, *The Emergence of Delhi Sultanate:* 1192-1286 (Ranikhet: Permanent Black, 2007), p.14.

on vernacular sources in the mainstream history writings.⁸ However, writings relying on vernacular sources have been marginalised as being representative of 'regional studies.' There are number of monographs which have enriched our understanding of the functioning of seventeenth and eighteenth-centuries societies by examining revenue administration at the village level and role of social differentiation of peasantry in revenue assessment and realisation along with examination of artisanal class. Therefore the traditional binary of 'ruler' and 'ruled' needs to be problematised for a reconstruction of social world of seventeenth and eighteenth-century society in Rajasthan.

A Note on the Nature of Evidence:

To reconstruct the past, we need to understand and analyse several kinds of sources. The regional literature also abounds in references to the physical environment. However, these sources require careful scrutiny, as the biases of the contemporary concerns are part of any kind of documentation. Before we delve into the social contextualization of such references, it is important to mention that the descriptions of nature by official and literary sources differ, yet they quite often complement each other. Descriptions of nature as environmental features of any region often perpetuate certain stereotypes. The traditional images of nature that are constantly reinforced in the conventional sources focus on the physical features of the region. The major concerns have therefore, been to study the geographical features vis-à-vis the production possibilities. In official sources, natural features were the basis of production possibilities and the strategic significance of the region in the wider context. Their

⁸ G.S.L. Devra, *Rajasthan ki Prashashnik Vyavastha* (Bikaner: Dharti Prakashan, 1981); G. D. Sharma, *Rajput Polity: A Study of Politics and Administration of the State of Marwar*, 1638–1749 (Delhi: Manohar, 1977); S.P. Gupta, *Agrarian System of Eastern Rajasthan* (Delhi: Manohar, 1986); Dilbagh Singh, *State, Landlords and Peasants* (Delhi: Manohar, 1990); B. L. Bhadani, *Peasants, Artisans and Entrepreneurs: Economy of Marwar in the Seventeenth Century* (Jaipur: Rawat Publications, 1999); Nandita Prasad Sahai, *Politics of Patronage and Protest: The State, Society, and Artisans in Early Modern Rajasthan* (New Delhi: Oxford University Press, 2006).

primary concern was to describe the kind of soil, possible crops or the availability of mineral/s whereas literature provides glimpses of the perceptions of the nature vis-à-vis society. The absence of detailed accounts on nature is a stark feature of the sources of the medieval and early modern period. We mostly get the sketches of the ruling classes and institutions, written with the objective of perpetuating their self-interests.

As far as literary sources are concerned, Rajasthan is very rich. Rajasthani literature has flown into five major currents: Jain, Charan, Akhyan, Saint and Laukik.9 We need not go into details of literary traditions. However, it is important to point out that these literary sources provide interesting insights on the environment and its changing meanings. The usage of various similes and imageries in describing plants, animal life, as well as the physical features of the region throws light on the contemporary perceptions of environment. The information thus gleaned is of great importance in exploring certain dark patches in our narrative and occasionally supplements the information obtained from various other sources. It will not be out of place to state that scholars relying on literary sources in vernacular languages have produced some very interesting works. With the extensive use of vernacular literature nuances of social systems, political culture,¹⁰ traditional knowledge systems,¹¹ agrarian production systems¹² have been very lucidly worked out. These works of vernacular literature can shed light on the human-nature interactions.

⁹ Hiralal Maheshwari, *History of Rajasthani Literature* (Delhi: Sahitya Academy, 1980), p. 9.

¹⁰ David Dean Shulman, *The King and the Clown in South Indian Myth and Poetry* (Princeton: Princeton University Press, 1985).

¹¹ Sheldon Pollock, (ed.), Forms of Knowledge in Early Modern Asia: Explorations in the Intellectual History of India and Tibet (Delhi: Manohar, 2011).

¹² David Ludden, An Agrarian History of South Asia: The New Cambridge History of India (Cambridge: Cambridge University Press, 1999), Vol. IV-4; 'Archaic Formations of Agricultural Knowledge in South India', in Peter Robb, (ed.), Meanings of Agriculture: Essays in South Asian History and Economics (Delhi: Oxford University Press, 1996), pp. 35-70.

One of the most prominent literary traditions in Rajasthan has been the writing of *khyat*. The term is self explanatory, meaning glory. Generally, the *khyats* were written to describe the deeds of the kings or patrons of the bards. Precisely for this reason, *khyats* constitute an important source for analysing the contemporary attitudes, perceptions, concerns and reactions of the patrons, kings and aristocracy. It is pertinent to point out here that although these works are good examples of literary efforts, the authors seem to be more concerned with the politico-administrative needs of the kingdoms. Contemporary literature, celebrates the natural beauty of the region.

Nature: Multiplicity of Representations

The immediate manifestations of the environment in literature are climate, seasons and landscapes. Seasons are important manifestations of environment. These have been represented in the contemporary literature. In popular mind, there are specific features related with different seasons of their respective region.

Folk culture is also replete with praises and lamentations/ complaints about the changing seasons. Folk traditions are at times satirical about seasons. Perceptions of winter clearly brought out its diverse impact on different sections of society. An eighteenth-century Jain poet Dharma Vardhan describes the winter in the following terms:

ठंड सबली पड़े हाथ पग ठाठरै, वायरो ऊपरा सबल बाजै। माल साहिब तकै मौज मांगे नहीं, भूखियइ लोक रा हाड भाजैं।। किंड़किडै दांत री पांत सी–सी करै, धूम मुख खमा तणा धखिया। दरब सूं गरब सो जांणि गुरजै दरक, दरब हीण सबै लोक दुखिया।।२।। सौढ़ बिच सूइजै तापिजै सिगड़िए, सबल सी माहि पिण सद्रब सोरा। ए तिण वार में पांणजी, ओजगी, दोजगी भरै निस दीह दोरा।।३।।¹³

¹³ Agarchand Nahata, (ed.), 'Rajasthani sahitya main sheet varnan', *Maru Bharti*, (1952-53), 1/1-2, p. 4.

[Winter is very severe; hands and legs are shivering. Winds blow fast as if singing the *Vayro* — a folksong. Rich people are enjoying it, whereas poor are suffering due to its severity. Teeth are producing the sound of si-si. Camel is also feeling cold. Ego of common man is questioned by the severity of winter. Every body is tired of winters. People are sleeping in blankets and getting heat from *Sigri* — a kind of kiln. Rich people are better placed. In such cold conditions, the life of the irrigationists and the night watchmen becomes hell.]

Rich people enjoy whereas poor suffer under climatic severity. People cover themselves with blankets and keep themselves warm with the use of Sigri — a kind of kiln. In such cold conditions, the life of the peasants who irrigate their fields and the night watchmen was miserable.

For winter it is said that the way a borrower shies away from lender, similarly in winter Sun looses its intensity. Nights become longer and days become shorter:

जिण भांत लैणायत दीठां देखायत घटै, तिमि तिणी भांति दिन दिन निसी दीठैं सूरज रौ तेज घटक लागौ नैं सूरज रो तेज घटियौ, राति मोटी होण लागी।¹⁴

Contemporary literature mentions both virtues and vices of the region.¹⁵ They were aware of the inherent goodness of the hardships. Due to paucity of perennial rivers and a low water table, especially in the arid parts, rains were the main source of potable water for humans and animals. The timely arrival of rains was very important. The following saying represents the desperation for rains: 'It is suggested that people are prepared to sacrifice their wealth to ensure rains. Hundred female camels can be sacrificed, sons may die, but

¹⁴ Ibid.

¹⁵ Agarchand Nahata, (ed.), 'Rajasthani gadhya main varsha varnan', *Maru Bharti*, (1952-53), 1/1-2, pp. 63-64; Kanhiya Lal Sahal, 'Rajasthan ki Varsha Sambandhi Kahavaten', *Maru Bharati*, (1956), 4/1, p. 18; Jai Shankar Dev Sharma, 'Prakrati se Varsha-gyan ki Bangi', *Rajasthan Bharati*, (1956) 6/3-4, p. 59; Agarchand Nahata, (ed.), 'Thali Varnan', *Maru Bharti*, (1954), 2/1, pp. 81-83.

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we need rains'.¹⁶ In the same vein, another saying suggested that, 'only when king is happy, everybody is happy similarly land shall be happy only with the rains'.¹⁷

The arid nature of this region has been aptly summarised by Nainsi. He had royal patrons but his verse reflected popular perceptions. Writing of *Mangli ka Thal* (West of Jaisalmer), he says, it is a region full of dust storms. It is such a desolate desert that if a newcomer misses the path, he shall be lost forever and die.¹⁸

Even in such arid conditions, such an identification with the environment highlights adaptability and an acceptance of environmental features as destiny. This is reflected in the conversation between people living in different regions. Each speaker highlights the beauty of his or her own region while criticising the problem of other regions. In the folktale of Dhola Maru Ra Duha, Malwani being a resident of Malwa points out the problems with the environment of Marwar, whereas Maruni defends Marwar.¹⁹ Contemporary literature offers various reasons to settle in the region, which is described as the best country in the world. The water is available at great depths, but is very good for health. Prosperity is limited but people are religious. People are helpful and hard working. People from other regions come and settle in this epidemic free region. Young men are playful and even the old ones are very agile.²⁰ Similarly, the vices have also been described at great lengths. In the region sand storms are common feature, therefore, generally wind blows at great speed. Water is brackish, so it is not potable. Ponds retain water only for six months, and livestock suffers due to limited availability of water:

उंफडा जल पीवइ बुरि असेस।। कहइ जे बोल मिलई सुखकार। सहु सिरि देस

²⁰ Nahata, 'Thali Varnan', Op. Cit. pp. 81-83.

¹⁶ सौ सांढीया सौ करहलां, पूत निपूती होय। मेवड़ला बूठा भला, होणी होय सो होय । | Sahal, 'Rajasthan ki Varsha Sambandhi Kahavaten,' p. 18.

¹⁷ मेह ने पावणां किताक दिनां रा । राजा मान्या सो मानवी, मेयां मानी धरती। Sahal, 'Rajasthan ki Varsha Sambandhi Kahavaten,' pp. 17-18.

¹⁸ Munhot Nainsi, *Munhot Nainsi Ri Khyat*, (ed.), Acharya Badri Prasad Sakaria (Jodhpur: Rajasthan Oriental Research Institute, 1962), Vol. II, p. 31.

¹⁹ Mahavir Singh Gahlot, (ed.), *Dhola Maru Ra Duha* (Jodhpur: Rajasthani Granthagar, 1985), pp.176-180.

थली सिरदार ।। धरा जिण बालक धर्म सु धीर। आया जिण काज अखंड अभीर।। नियाहण टेक जिहां नर नार। सहु सिरि देस थली सिरदार।।²¹

On a different plain, the response for nature and natural resources are visible in the following examples where social sensibilities shared by ruling elite and masses can be deciphered. The general disposition towards protection of tree is clear in an anecdote recorded by Nainsi. In this seventeenth-century parable ruler is restrained from cutting mature trees. Rao Maldevji got the babool trees of pargana Merta cut down. As a mark of revenge Viram Deo decides to cut the mango (Mangifera indica) trees of pargana Jodhpur. However, people strongly advised him against this. Realising that the denudation of trees would cause irreparable damage he decided to chip a small branch of a mango tree symbolising that he had 'settled the account'.²² As against this, there are other references where ruler showed little sympathy towards environment and social concerns for environment.²³ The classic example which instantly comes to mind is the incident which led to the beginning of Khejri movement. Such diversity of reactions is part and parcel of social negotiations with the environment and reinforces our contention that the interaction between nature and society cannot be reduced to one particular mode of relationship. An important example in this regard was the representation of the khejri tree in the official flag of Bikaner kingdom in the seventeenth century. Flags in India depicted animals — the lion in the Mughal case. Hence, the representation of the *khejri* is unusual. However, being a tree of semi-arid land, it symbolises the character of the region.

Here, it is pertinent to point out that even the Turko-Persian tradition can be re-read to decode the social sensibilities shared

²¹ Ibid.

²² Munhot Nainsi, Munhot Nainsi Ri Khyat, Op. Cit. Vol. II, p. 101.

²³ Sumit Guha, 'Claims on the commons: Political power and natural resources in pre-colonial India,' *Indian Economic and Social History Review*, 39/2-3 (2002), pp. 181-196; Mayank Kumar, 'Claims on Natural Resources: Exploring the Role of Political Power in Pre-Colonial Rajasthan, India', in *Conservation and Society*, 3/1 (2005), pp. 134-49.

among the different sections of society. Through a nuanced reading of sources in the Turko-Persian tradition, Sunita Zaidi²⁴ has brought out the sensibilities towards nature. She has argued that contemporary social perceptions towards water and weather have been shared even by the ruling elite of the time.

Access, Appropriation, Social Stratification and Marginalisation:

The access point of different sections of the society or individual influences their capacity to appropriate environment in terms of natural resources. The capacity to invest was highly skewed in favour of upper sections of society not only in terms of caste prescriptions but also in terms the ability to generate and/or retain agrarian surplus. The possession of cattle and tools made cultivation possible in this region of abundant land.

The influence of hierarchy was visible in the system of taxation where caste identity was an important consideration for concessions in land revenue assessment. The taxation system is clear testimony where wealthier section enjoyed concessional rate of taxation and already marginalised sections of society were forced to pay land revenue at higher rates. For example, in *pargana* Jalore, the quantum of the land revenue demand varied on the basis of the caste of assesses. The land revenue demand was fixed at the rate of onefourth where the *banias, ghanchis* (oil pressers), *sabugar kumbhar; pinjaras* (cotton carders) were the revenue payers. With the 'expenses' incurred on collection of land revenue, the demand on these castes came to one-third of the produce, whereas only onefourth was realised from the Rajputs.²⁵

²⁴ Sunita Zaidi, 'Royalty and Environmental Perceptions in Mughal Empire', Paper presented at National Seminar on *Culture and Environment: Changing Perceptions*, (Delhi: Delhi College of Arts and Commerce, March 2006).

²⁵ Bhadani, Op.Cit. p. 201. The shares of produce taken in revenue from the various castes illustrate this and classes of revenue payers in *pargana* Pokaran as given in Nainsi, and in *pargana* Jalore as recorded in the *Jalore Vigat*.

Furthermore, the demand varied in both the harvest as different rates were fixed on various castes. In the *kharif*, (*sawnu*) *bhog* was fixed on the *banias* and *mahajans*, at the rate of 22 to 22.5% of the produce and the other cultivators (*karsa*) at 22.5 to 25%. From the *banias* and the *mahajans*, 'expenses' (*kharch-bhog*) amounting to 6-1/4 *Sers* over and above the land revenue were levied; from the *karsas* (cultivators) the same was realised at the rate of 7½ *Sers* per *man*. This means that while for the *banias* the land revenue including the *kharch-bhog* amounted to almost half of the produce, this limit was exceeded for the ordinary peasants.²⁶ Similarly, in Jalore the highest rate of demand was 25% of the produce, which was levied on the *banias*, *ghanchis*, *sabudar*, *kumbhar* and *pinjaras*. If we add the expenses incurred in collection of land revenue, their total liabilities came to 33% of their produce. Revenue demanded by Rajputs was less, and was a marker of their high social status.²⁷

Similar inequity in taxation rates can be seen in the Amber principality. "A differential scale of revenue demand was applied to the privileged and unprivileged cultivators. The differentiation was based on caste, the privileged being charged less. The raiyatis for example were required to pay *mal* which was about 15 to 20 per cent higher than the *riyayati* rates".²⁸ The term *riyayati* is self explanatory; concessional tax payers. Usually the cultivators belonging to the upper castes were classified as riyayati. Incidences of land revenue demand upon different castes/strata of society varied according to caste and status. The land revenue was imposed at much heavier rate upon the *raiyat* and *palti* than upon the upper strata. The strata that paid land revenue at concessional rate also enjoyed several privileges.²⁹ It is interesting to note that "The privileges went with the person rather than with his land". The riyayatis retained the concession even on lands leased to him by another land owner not so entitled, but they ceased to be operative if the *rivayatis* leased out his own land to one whose status had not earned him this

²⁶ Bhadani, Op.Cit. p. 201.

²⁷ Ibid., p. 212.

²⁸ Singh, Op. Cit. p. 109.

²⁹ Gupta, Op. Cit. Table I, II and III, pp. 124-126.

privilege.³⁰ This had far reaching consequences for social hierarchy and stratification. Privileges went with the person not with the land. This clearly establishes the relationship between access to capital and the expansion of agrarian production. Any further increase in the area under cultivation owned by *riyayati*, especially at the cost of land holdings owned by *raiyati* would have amounted to corresponding loss of revenue to the state. Thus, one finds prohibition to convert *raiyati* land to the *riyayati* category. The primary concern of state was the stabilisation and expansion of revenue base. It blocked any expansion of agrarian production among the sections which could challenge the ruling elite.³¹

Thus, the size of holdings possessed by different sections of society is an important indicator of the prevalent economic disparity among various castes/social classes. It emerges from the three villages of Jalore, that the holdings of upper caste peasants are larger as compared to other caste peasants. For example, in the village Piplod, pargana Tajpur kharif harvest, there are records of 122 asamis. Of these, 4 were between 10 to 20 *beeghas*. Of the those at the top four villagers, one was a *patel*, one was a *mudro maewari* (bania), and two *telis*. 11 cultivators cultivated land from 5 to 10 beeghas each. The remainder — as many as 83 villagers — cultivated less than one *bigha* each. This reinforces clearly that the traditional power structure, often based on caste, lay behind much of the stratification.³² The social disparity prevalent in the society in terms of ownership of land is also reflected in a reference contained in Jama Kharch mauza Saluno dated 1774 vs. There were 20 karsas in the village who had holdings varying in size from 8 to 200 beeghas.³³ Four karsas cultivated more than 100 beeghas each, 8 cultivated 50 to 80 beeghas, and 6 from 20 to 30 beeghas and 2 merely 8 beeghas. Cultivation of such large expanse of land is a clear testimony that

³⁰ Singh, Op. Cit. p.17.

³¹ Ibid., p. 19.

³² Gupta, Op. Cit. pp.130-32.

³³ Madhvi Bajekal, Agricultural Production in Six Selected Qasbas of Eastern Rajasthan (c.1700-1780), Thesis submitted to the University of London, 1990, p. 43.

this section of society could afford to hire others to work on their lands.

As is evident from the land revenue assessment systems that certain castes were privileged and rest were marginalised. The implications of such an unequal system of taxation can be deciphered in negotiations of different sections of society with the nature and natural resources. Higher revenue demand from marginalised sections of society adversely affected their productive capacity in the landscape. Generally in India, two crops have been a regular possibility, but in Rajasthan due to scarcity of water, at times it was difficult to raise even one crop.³⁴ The short-term and long-term variability in the rainfall could play havoc with the crops and dry up pasturage, thereby make the sustenance difficult. For instance, in 1647 AD for pargana Amber it was reported by Purohit Harsram, that from sawan vadi '7' to sawan sudi '1', there was little rainfall in the pargana and because of strong winds, ploughing was not done and production fell sharply³⁵ which often forced migration of the peasantry.³⁶ Similarly in 1660 A.D., it was reported to the state that in *qasba* Aaveri, rain measuring ten fingers fell on *sawan sudi*, '11', so ploughing could be done only for 4-5 days.³⁷

The choice of crop varied according to the variations in the weather conditions and possibilities of rains. The capacity to adapt to climatic variability seems to be inbuilt in agricultural societies, if rains were

³⁴ Munhot Nainsi, *Marwar ra Pargana ri Vigat*, Vol. II., Narain Singh Bhati, (ed.), (Jodhpur: Rajasthan Oriental Research Institute, 1969), pp. 12, 36, 258-9, etc.

³⁵ *Arzdasht, Sawan Sudi* 1, 1704 vs. Historical Section, Jaipur Records, Rajasthan State Archives, Bikaner (Henceforth, HS, JR, RSAB).

³⁶ An *arzdasht* written by Mouji Ram dated Kati *Sudi* 15, 1774 vs. HS, JR, RSAB, informs the state about meagre rainfall leading to drought. This resulted in the migration of the peasantry. In his *arzdasht* dated *Jeth Sudi* 1, 1762 vs. HS, JR, RSAB., Lal Chand Dala Ram informs about migration of peasantry due to drought and resultant decline in revenue collection. Similarly another *arzdasht* by Ajit Das, Man Ram dated *Chait Vadi* 3, 1752 vs. HS, JR, RSAB., informs that villages were deserted.

³⁷ Arzdasht, Sawan Sudi 11, 1716 vs. HS, JR, RSAB.

delayed, peasants shifted to cultivation of coarse crops like moth which has the shortest maturity period. Amar Chand and Sahib Ram, vakil of the Amber court informs that due to meagre and delayed rains till the month of Bhadava,³⁸ only moth could be sown.³⁹ Vakil Ajitdas and Man Ram inform that due to paucity of rains this season, it is not possible to sow even the *moth*.⁴⁰ The statement that 'it is not possible to sow even the *moth*,' testifies to the fact that perhaps *moth* was the last option resorted in the cases of delayed rains. It also testifies absence of irrigation facilities with the peasantry in this pargana. A similar picture becomes visible when Kanwar Pal and Bhopat Ram inform the administration on Kati Sudi 9, 1641 AD, that in the areas which have received insufficient rains, land is being worked upon to make it soft so that cultivation can take place.⁴¹ Kanwar Pal and Hari Valabh Das complement the information that wherever soil is hard, it needed one more shower. During delayed or insufficient rainfall, the land is ploughed extensively to make it soft and then seeds were sown. Wherever rains were insufficient, artificial irrigation through wells was necessary.⁴² The paucity and variability of rainfall resulted in introduction of numerous labour and/or capital intensive tactics to mitigate the vagaries of climate. The less privileged section of society lost out in the absence of surplus labour and/or capital.

A closer examination of ownership of different necessary agrarian equipments among the different sections of society will help us establish the ignored impact of nature/climatic conditions on the marginalisation. Apart from the land, primary necessity for agrarian production which was available in plenty, availability of water at appropriate times or access to means of irrigation to harness the ground/rain water played most important role in the continuation of agrarian production in the region. Cultivators with access to wells

³⁸ Traditionally *Bhadva* is the third month of rainy season and usually the last one also.

³⁹ Arzdasht, Bhadva Vadi 7, 1171 vs. & Arzdasht Sawan Sudi 9, 1695 vs. HS, JR, RSAB.

⁴⁰ Arzdasht, Falgun Sudi 11, 1695 vs. HS, JR, RSAB.

⁴¹ Arzdasht, Kartik Sudi 9, 1698 vs. HS, JR, RSAB.

⁴² Arzdasht, Asoj Vadi 7, 1699 vs. HS, JR, RSAB.

were able to grow crops even if rains have failed or delayed. Moreover, they could cultivate cash crops like cotton, as access to source of irrigation ensured regular and frequent water supply.

The most important source of irrigation in this region was well.⁴³ But the cost of the construction of masonry well was exorbitant. It was simply not possible for peasantry to dig masonry wells on regular basis.⁴⁴ Therefore, it is not surprising to note that in *pargana* Merta, out of 6947 to 7782 wells, only 20 wells were brick-lined. Similarly, in pargana Jalore, out of 693, only 147 were brick-lined wells.⁴⁵ Likewise, in pargana Dausa there were 513 wells distributed over eighteen villages, out of which 478 were kuchcha and 35 pucca, nine of latter being equipped with *dhenkali* – a water lifting device.⁴⁶ The plausible reasons seem to be the relative cost involved in the construction of these two types of wells. In 1738 A.D., in Qasba Sawai Jaipur, the cost of masonry wells was ₹ 300 while a kachcha well was sold for ₹ 84 in a village of *pargana* Phagi in 1764 A.D. Given the cost involved in the construction of masonry well, it is but natural to find that the kachcha wells heavily outnumbered the bricklined ones. Water-lifting systems like Persian wheel could be installed only on brick-lined wells. Thus, different types of well had differential potential to facilitate the amount of water-lifting capacity.

Moreover, given the physiography of the region, with a very low water table, it was necessary to install water lifting mechanisms. The

⁴³ Mayank Kumar, 'Ecology and Traditional Systems of Water Management: Revisiting Medieval Rajasthan', in Mahesh Rangarajan, (ed.), *Environmental Issues in India* (New Delhi: Pearson, 2006), pp. 70-96; 'Situating the Environment: Settlement, Irrigation and Agriculture in Pre-Colonial Rajasthan', *Studies in History*, New Series, 24/2 (2008), pp. 211-33.

⁴⁴ It can be contrasted with Punjab region where even tenants had the capacity to sink well and it was fiercely resisted by superior landholding class. Tripta Wahi, 'Nature of Land rights in the Pre-colonial Punjab: A study of the tenancy documents,' *The Punjab Past and Present*, 36/2, (2005), pp. 1-17.

⁴⁵ Nainsi, *Marwar ra Pargana ri Vigat*, Op. Cit. Vol. II, (1969), pp. 89-213.

⁴⁶ Singh, Op. Cit. p. 52.

most important water lifting system of the day was the Persian wheel. The reference to the Persian wheels and other water lifting devices along with source of water in the administrative manual of Marwar is a clear testimony to their importance.⁴⁷ Even while allotting revenue assignments, i.e. *Patta*, villages were classified according to the availability of irrigation devices in the villages.⁴⁸ The ownership of these devices was restricted among the upper strata of society.⁴⁹

The availability of artificial irrigation influenced the kinds of crops that could be grown by the owner. The owner of these systems not only could secure their agrarian production in times of paucity of rains but were also able to grow cash crops. It is evident from the following reference, where, two Rajput peasants raised cotton on 75% and 60% of land they cultivated respectively,⁵⁰ whereas the peasantry in general cultivated staple food crops.

The images of self-sufficient village economies where economic and quasi-economic transactions were governed by a barter-economy crumbles in light of evidence. Irrigation implements or parts of water carriage systems could be purchased, sold, or mortgaged by the owner. The proprietary rights were well defined and often intensely guarded.⁵¹ As ownership was an economic asset, so it was also a criterion of social status. Generally, the ownership of these confined to upper strata of society who had enough capital to dig the well and construct the relevant mechanism to harness its potential. The importance of irrigation can be gauged by comparing the productivity of irrigated and non-irrigated lands. Madhvi Bajekal has calculated that in 1713-14 A.D., the differential in the yields of irrigated and non-irrigated rabi food grains was estimated to be 6.75 mounds per bigha and 3 mounds per bigha respectively.⁵²

⁴⁷ Munhot Nainsi, *Marwar ra Pargana ri Vigat*, Vol. I, Narain Singh Bhati,
(ed.), (Jodhpur: Rajasthan Oriental Research Institute, 1968), pp. 209, 211,
213, 214, 215 447, 449, 450, 452, 455; Vol. II, (1969), pp. 14, 124, 126, 129,
131, 133, 134.

⁴⁸ Sanad Parwana Bahi, No. 2, 1822, vs. Jodhpur Record, RSAB.

⁴⁹ Bhadani, Op. Cit. pp. 116-17.

⁵⁰ Bhadani, Ibid., p. 116.

⁵¹ There are ample evidences of dispute being arbitrated by rulers.

⁵² Bajekal, Op. Cit. p. 43.

One must remember that mere ownership of water-lifting devices was not sufficient to ensure required irrigation unless supported by the draught power. Thus, the ownership of draught power was a necessary precondition for maximising the potential of water lifting devices. Moreover, the ownership of draught power was an important precondition for the cultivation of land. The significance of number of bullocks can be realised from the following popular saying:

"Cultivating with one plough unit was a liability while two plough units were gainful employments, three plough units were proper cultivation and four plough units were source of power".⁵³

The disparity in ownership of draught cattle was also significant. Table no. 1 charts out the number of bullocks owned by various castes for *Qasba* Chatsu".⁵⁴

Caste of Asami	Number of Asamis	Cattle
Mali	70	133
Gujar	8	18
Teli	28	51
Brahmin	51	115
Lodha	5	17
Kumhar	4	11
Kayastha	5	11
Rajputs	3	12
Deswali	3	10
Meena	2	2
Nagori	14	35

Table No. 1Caste wise Break-up of Cattle in Qasbah Chatsu

Similar trend can be seen in the Amber region as well. It is represented in tables number 2 and 3.

⁵³ J.S. Gehlot, *Rajasthani Krishi Kahavaten* (Jodhpur: Rajasthani Granthagar, 1941), p. 56.

⁵⁴ Singh, Op. Cit. p. 34.

Table No. 2Caste wise Break-up of Cattle in Mauza Jhak

Caste of Asami	No. of Asamis	Cattle
Patel	6	28
Patwari	1	9
Jat	7	16
Ahir	14	38
Na'I	3	5
Gujar	4	8
Brahman	6	12
Kumbhar	2	4
Teli	2	2
Chipro	2	10
Kharwal	5	12
Miscellaneous Caste not given	62	185

Table No. 3Caste wise Break-up in Mauza Pachal

Caste of Asami	Number of Asamis	Cattle
Patel	2	12
Jat	12	30
Brahman	5	15
Khati	1	2
Miscellaneous	10	35

Disparate access to ground water to sustain agriculture especially during paucity of rains was also critical. Thus, in Rajasthan, possession of land was not enough, the availability of artificial irrigation was also necessary to stabilise and increase production.⁵⁵

The political apparatus played significant role in reinforcing the stratification and marginalisation. Disparities were enhanced by and

⁵⁵ Mayank Kumar, 'Ecology, Social Stratification and Agrarian Production in Medieval Rajasthan,' in B.L. Bhadani, (ed.), *Medieval India 3: Researches in the History of India* (Delhi: Manohar, 2012), pp. 257-271.

reflected in the land revenue rates. The nature of irrigation facilities determined variations in land revenue rates. The tax burden on artificially irrigated land was less. This reduction was perhaps to compensate for the cost of the instruments made for irrigation nevertheless it contributed in reinforcing the inequality. For example, the crop cultivated in *bara* or *vor* or *varakyari* (land of the first quality) were charged at the rate of one-half, while the *piwal* or *piyal* (irrigated) lands watered by wells (*dhenkli*) and tanks (*tals*) were charged at a lower rate.⁵⁶ When a cash crop like sugarcane were produced on land naturally inundated by river water, it was more heavily taxed (₹ 5 per *bigha*) than that which was artificially irrigated by wells (₹ 3 per bigha).⁵⁷ The rate of taxation varied according to the means of irrigation. It was a general practice that, bhog (land revenue) was stated as a rate on arhat (Persian wheel). However, the rate varied according to the kind of wells.⁵⁸ The difference can be justified in terms of cost of investment and continuous efforts on the part of polities to enhance area under cultivation. Such a concession played in important role in perpetuation of social stratification and marginalisation.

Last but not the least, it was during the times of extreme climatic conditions that nature had its role in exacerbating process of marginalisation. Failures or delays in monsoon usually made it difficult for the lower rung of the society to sustain agrarian production. In extreme cases it led to abandoning their habitation and migration to climatically more favourable regions. An *Arzdasht* dated *Kartik Sudi* 11, 1685 A.D., informs that due to paucity of rains, there was insufficient production of the Kharif crops in *pargana* Bahatri. It resulted in famine like situation. Sustenance of *raiyat* become susceptible to starvation.⁵⁹ In *pargana*s Averi, Antela, Gazhi Ka Thana, Pahari, Toda Bhim, *raiyat* is in destitute conditions due to drought and they do-not have grains even for consumption.⁶⁰ Similarly,

⁵⁶ Gupta, Op. Cit. p. 148.

⁵⁷ Bajekal, Op. Cit. p.118.

⁵⁸ Ibid., pp. 118-19.

⁵⁹ Arzdasht, Kartik Vadi 3, 1742, vs.; Kartik Sudi 13, 1743 vs. Arzdasht, Sawan Sudi 13, 1740, vs. HS, JR, RSAB.

⁶⁰ *Chithi*, *Chait Sudi* 6, 1783 vs. Daftar Diwan Huzuri, Jaipur Records, Rajasthan State Archives, Bikaner. (Henceforth, DDH, JR. RSAB).

the Amil of the *pargana* Phagi reported that the *raiyat* in the villages of the *pargana* were finding it difficult to cultivate their entire holdings. They were cultivating only a part of their holdings. The land abandoned by them was being cultivated by the riyayatis with the help of the landless labourers. Thus, one cannot stop noticing the greater capacity of the *riyayatis* or the privileged section of cultivators to cultivate land and to sustain themselves even in adverse climatic conditions. Since the land was cultivated with the help of hired labour, the cost of production went up. But concessional rate of revenue available to the *riyayatis* made it economically viable proposition. As the privileges were vested in the person of the holder, state had no option but to permit the riyayatis cultivators to continue agricultural operation on raiyati land on payment of concessional rates.⁶¹ It is, therefore evident that the economically richer and socially higher cultivators added to their assets by appropriating land mortgaged by the *raiyat*. The depletion of resources of the poor peasants led to greater agrarian dependence and further stratification.62

Conclusion:

The influences of nature on social stratification and marginalisation were complex. It is difficult to state very categorically that nature directly influenced social stratification. Yet the discussion shows that landscape and climatic conditions in the region significantly contributed to the continuation and perpetuation, even if not, the primary reason for marginalisation of vast section of society. Furthermore, we find a greater interaction of the political apparatus with the wider landscape and access to and capacity to make use of natural resources varied among the various sections of society. There is a need to further investigate the influences of nature on social stratification, especially in arid and semi- arid ecological settings.

NMML Occasional Paper

⁶¹ Chithi, to the Amil Pargana Phagi, Chait Sudi 8, 1789 vs. DDH, JR., RSAB.

⁶² Bajekal, Op. Cit. pp. 335-6.

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