The Contradictory Colonial Space: Remaking Rural Punjab 1892-1912

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ABSTRACT

The article looks at the Chenab Colony Project launched in 1892 in Colonial Punjab and discusses the divisive colonial policies that projected caste categories on to the landscape of an irrigation scheme. It explains how the spatial plan was closely linked with the canal design but also with administrative control and efficiency. The purpose was to manage Chenab Colony by making it a navigable and controllable space. The intersection of uneven water distribution with discriminatory land allotments were part of a contradictory colonial space that fragmented the lived experience of the colonized population isolating them from their natural space to take control of their relationship with their environment.

Introduction

If we look at Punjab from a satellite, we may note a sudden transformation of villages as we move from Jhang to Lyallpur (now Faisalabad). The striking difference is in the spatial organisation of the fields and village sites which are distinctly along straight lines and grid patterns in Lyallpur as compared

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to the villages in districts like Jhang where fields are contoured around all kinds of shapes, and the village sites do not appear to follow a scheme. These particular villages in Lyallpur were developed by the British under the grand irrigation and agricultural settlement schemes known as the canal colonies.

Punjab underwent enormous agricultural transformation under the colonial rule owing to the irrigation schemes that rendered millions of acres culturable and instigated a massive population movement from Central to Western Punjab. In this context, the Chenab Colony was the first and the largest irrigation scheme that was visualised by the colonial administration not only as a technological intervention but also as a feat of social engineering. The scheme drew heavily on the body of knowledge developed by the British officials in Punjab through field experiences, underpinned by the Western theoretical models of the time. The Chenab Colony emerged as a unique spectacle of spatial organisation developed by enthusiastic British officials who closely worked with the grantees to impose their vision of efficient rural structures on the colony villages. This organisation was also aided by the design of canals that were mostly engineered along perfectly straight lines and enforced a geometric order on the landscape of the Colony. This article discusses the colonial rural spatial planning in detail, while focusing on the Chenab Colony project that was visualized in 1882 and launched a decade later in 1892.

The discussion is centred upon the contradictory space represented by the Chenab Colony that enabled the colonial administration to take control of both the environment and the population in the villages. Colonialism produced an oppressive and classificatory abstract space in the canal colonies that was supported by science and technology. Abstract here refers to a reduced and fragmented space in which the individuals can be dominated and ruled. This space had an inherent contradiction that simultaneously included and excluded people, things, ideas, and entities. The Canal Colonies included certain aspects of traditional Punjabi society, combing them with modern rural practices while

excluding and marginalizing pastoralism and riverine agriculture. Canal irrigation was introduced to the wastelands using modern technology but the allotments along these villages were made to landholding peasants using conservative and oppressive caste categories. The Canal Colonies were linked through rail and road to international markets, but it was decided that capitalist agriculture was not suitable for Punjab which was deemed as the land of peasant proprietors. The peasants were encouraged to produce cash crops and use machinery and fertilizers at the same time relying only on family labour. A spatial practice of homogenised villages was developed to mask these contradictory relations.[1]

These contradictions were not planned but organically grew out of different policy approaches within a heterogeneous colonial administration. The Chenab Colony was a modern capitalist irrigation project. But this was also a period when the emphasis on preserving local institutions was particularly strong. When the British Crown took over the direct control of India after the chaos East India Company faced during the War of Independence in 1857, a commitment was made to uphold the Indian institutions and withhold any interference with them. The Punjab administration was at the forefront of such policy-making. There were frequent avowals of the need to preserve the traditional society of Punjab which was supposed to be a land of peasant proprietors. [2] Thus, preserving the peasant and the traditional village organization was a major priority which led to several pieces of legislation such as the Punjab Tenancy Act, 1868 that safeguarded the rights of the tenants, Pre-emption clauses in the Punjab Laws Act, 1872 that prevented sale of village land to strangers, and

1 The discussion on space is derived from Henri Lefebvre*, The Production of Space,* trans., Donald Nicholson Smith (Oxford: Blackwell, 1991) and adapted for a colonial space that is based on contradictions just like the space produced by Capitalism. In fact, Capitalism is a part of the colonial project. This aspect is not covered in this article, but will be taken up in another work.

2 Richard Temple, "Settlement Report Jullundhur 1851," In *Gazetteer of the Jalandhar District 1883-84* (Lahore: Arya Press, 1884) 28-9.

the Alienation of Land Act, 1900 that prohibited the sale of agricultural land to non-agricultural tribes.

The Punjab administration was geared towards preserving the traditional society, but it simultaneously wished to undertake agricultural expansion to increase its revenue base. The policies for canal colonies brought together both these approaches leading to the creation of a contradictory space. While the proposed irrigation projects used modern technology, the officials firmly believed they had a close understanding of the Punjabi society to replicate the traditional social categories in the canal colonies. Thus, they took great pains to select peasants from the castes that they thought were best suited for agriculture, mainly Jats and Arains .[3] They also tried to ensure that the settlers in a colony village came from the same or at least neighbouring villages in origin districts. The allotment scheme was based on interpretation of castes and their agricultural performance documented by revenue officials in various settlement reports. A large number of presumably high performing peasants were brought in mainly from districts in Central Punjab such as Jalandhar, Amritsar, Ludhiana and Gurdaspur. The Jat cultivators from Jhang and Montgomery, classed as average cultivators and labelled as *hitharis*, received some grants as well. The local pastoral nomads labelled *Janglis* were not considered suitable for allotment of cultivatable land but were begrudgingly given some grants when they protested. The officers believed that by carefully using a caste understanding in the selection of grantees, they were able to maintain Punjab's social organization based on peasant proprietorship.[4] In a similar vein, the system of distribution of water was adapted from existing local practices. But overall, the plan for the colonies did not address several technical issues, which were tackled by the colonization officers when

3 Officiating Rev Sec. to Sr. Sec. Fin. Comm. Punjab 5th Jan 1892, *India Office Library (IOR)* R/P4080.

4 *Report of the Colonies Committee Punjab 1907-08* (Lahore: Civil and Military Gazette Press, 1908), 3-4.

the colonies were actually launched, and the settlers were brought in.[5]

These gaps in planning allowed for infusion of different elements which did not necessarily conform to the traditional approach. In some ways, this became an opportunity for the officers to reform the village organization, at least spatially according to their own vision. A colony officer proudly boasted that the villages in the Chenab Colony had reached a 'high stage of development' and afforded 'lesson to the rest of the province.'[6] At times these ambitions clashed with the vision and practices of the peasant settlers. Such friction was not appreciated by the higher echelons of Punjab administration that reversed some of the actions of the colonization officers through legislation in 1912. But there were certain developments that were accepted by both the settlers and the administration.

The broad social context of canal colonies has been discussed by Imran Ali in his seminal work on the canal colonies. He has identified the discriminatory practices against the nomadic population and the inequalities generated by allotments meant for political and military purposes.[7] More specific works on the spatial distribution of the canal colonies have been produced by Bhattacharya and Gilmartin. Bhattacharya has explored the process of *killabandi* (billet measurement) and the design of *abadis* (village sites) but he does not discuss the larger spatial organization of the Colony under which villages were allotted along caste lines.[8] Gilmartin has touched upon the link between irrigation in the

5 *Gazetteer of The Chenab Colony 1904* (Lahore: Civil and Military Gazette Press, 1905), 38.

6 *Annual Report for Chenab, Jehlum, and Chunian Colonies for the Year ending with 30th September 1904* (Lahore: Civil and Military Gazette Press, 1905), 7.

7 Imran Ali, *The Punjab under Imperialism 1885-1947* (Princeton: Princeton University Press, 1988).

8 Neeladri Bhattacharya, *The Great Agrarian Conquest*: *The Colonial Reshaping of a Rural World* (New Delhi: Orient Black Swan, 2018).

village design but has not addressed this in detail.[9] The relation between spatial planning and administrative efficiency, caste and water distribution has not been previously explored. This article discusses these factors in the context of both the traditional and innovatory approaches in the spatial planning of the canal colonies and the successes, conflicts and contradictions in the process. It argues that these contradictions were an important feature of the colonialism in Punjab which were pushed behind a façade of harmony visible in the organization of the canal colonies. Thus, this colonial space resembled the capitalist space which has inherent contradictions hidden behind or within the organized spaces.[10] The article relies on official records to decipher this contradictory space and cites a few sources that give voice to local perspectives. However, this subject can be further explored by searching for more indigenous sources and including oral histories which are currently been collected under various projects, such as the 1947 Partition Archive.[11]

The Line against the Irregular

Visual impact was the most important aspect of the abstract space created by colonialism. In the Chenab Colony, the geometric character of villages was considered scientific and aesthetically superior to irregular village lanes and fields. The Colonization Officers[12] believed that the villages of canal colonies were to be "superior in comfort and civilization to

9 David Gilmartin, *Blood and Water: The Indus River Basin in Modern History* (Oakland: University of California Press, 2015), 156-160; and David Gilmartin, "The Punjabi Village and the Setting of the Canal Colonies," In *People on the Move: Punjabi Colonial, and Post-colonial Migration,* ed., I. Talbot and S. S. Thandi (Delhi: Oxford University Press, 2004), 4-25.

10 For discussion of contradictions of capitalist space, see Lefebvre, *The Production of Space,* 11 and 158-64.

11 *https://www.1947partitionarchive.org/.*

12 'Colonization Officials' here refers to the staff which was particularly associated with settlement and operations in the canal colonies. F. P. Young was the Colonization Officer of Chenab Colony who carried out most of the initial developments and was instrumental in devising several policies.

anything which had previously existed in the Punjab."[13] The planning coincided with a general tendency of the imperialists to bring order to the chaotic local organization, as Andrew Sinclair has put it "symbolically, the war of civilized man against the savage has always been the attack of the line against the irregular."[14] In America, "geometry and reason were chosen to demonstrate the authority of man over the contours of nature"[15] and also over the local forms, which symbolized backwardness to the imperial mind. In Africa, villages where heaps of huts were 'jostled together without any apparent order,' offended European sensibilities. Similar views were held by the British officers in India. For instance, the settlement officer, L. S. Saunders, wrote about villages in Lahore district, "The houses and courtyards [were] huddled together in common village sites with narrow lanes … dirty and badly drained." [16] The canal colonies presented an opportunity to the British officers to showcase rural reforms that aimed at giving villages a neat geometrical landscape and clean sites. The fields were laid down in squares or rectangles of 25 to 27.5 acres each and village sites were composed of perfect grids of straight streets, at times bounded by circular roads. Precise measurement of plots in the village was a major concern. The first colonization officer, F. P. Young, introduced a system of measuring small squares of 8 *kanal* and 8 *marla* within each large square. The larger squares were marked with masonry blocks, whereas small squares were marked by *killas* (wooden billets). The scheme later came to be called as *killabandi.* .[17] It was widely appreciated for its scientific approach to mark-off the property.

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13 Malcolm Lyall Darling*, The Punjab Peasant In Prosperity And* Debt (London: Humphrey Milford, 1928), 134.

14 Andrew Sinclair, *The Savage: A History of Misunderstanding* (London, Weidenfeld and Nicolson, 1977), 102.

15 Sinclair, *The Savage, 102.*

16 L. S. Saunders, *Lahore: Report on the Revised Land Settlement of the Lahore District*, *1865-69*, IOR/V/27/314/568, 56.

17 *Gazetteer of The Chenab Colony 1904,* 126.

The geometric planning served two purposes: Firstly, it was aesthetically appealing from a colonial point of view. Secondly, it was administratively convenient. Developing the map before settlement was a major factor that allowed for the use of quadrilaterals for the village design. Cadastral mapping of existing property had been the cornerstone of revenue collection not only for the British but also for the pre-colonial rulers.[18] But the canal colonies were unique in reversing the process and projecting the map on to the village. Prior mapping of villages simplified the revenue operations by accurately recording the location and size of the holding and by minimising the assessment operations by consolidating the fields. Initial scheme in the Chenab Colony was to let the farmers select the plots in allotted villages and draw field maps after five years when the *zamindar* had made his fields. This was the usual practice while allotting government wastelands for rent or sale. When Popham Young began his revenue operations for the first harvest in 1893, he found this method too difficult for revenue assessments, both for the officials and for the grantee. He subsequently proposed to draw the maps on paper and direct the grantees to lay fields on the ground accordingly. This led to development of villages on grid patterns. The large squares were bound on one side or the other by watercourses and it was easier to define the boundaries of the field relative to them. Thus, boundary disputes were minimal in the colony owing to the numerous watercourses that crisscrossed the villages.[19]

Figure 1 shows the satellite images of fields in a colony village, *Kala Gaddi Thaman-Chak 73 GB*, Lyallpur, as compared to that in the old village *Thaman*, Gurdaspur (Fig. 2) from where several grantees for the former village originated. The images are from 2018 and reflect the current state of villages. An important factor visible in Chak 73 GB is fields affected by salinity, whereas the fertility of land in

18 John F. Richards, *The Unending Frontier: An Environmental History of the Early Modern World* (Berkeley: University of California Press, 2003), 27.

19 "Colony Report 1898," In *Report on the Land Revenue Administration of the Punjab for the Year Oct. 1896-Sept. 1897*, xxii.

Thaman is striking. Also, villages all over Indian Punjab have gone through phases of consolidation and redistribution of property. In any case, the quadrilateral fields of a Chenab Colony village still bears contrast to the multi-shaped fields in an older village where the boundaries could have been marked off along the natural contours of soil. Rectangular fields were not uncommon because of the ploughing and raised seedbed (*kiari*) techniques used for cultivation.

Figure 1: Kala Gaddi Thaman-Chak 73 GB, Lyallpur

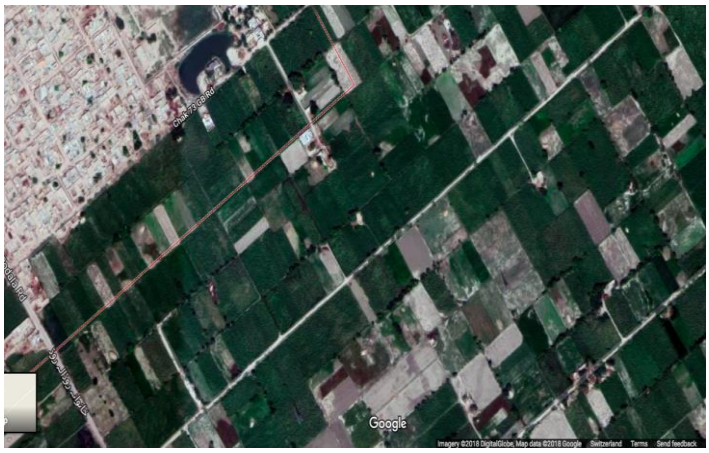


Figure 2: *Thaman*, Gurdaspur

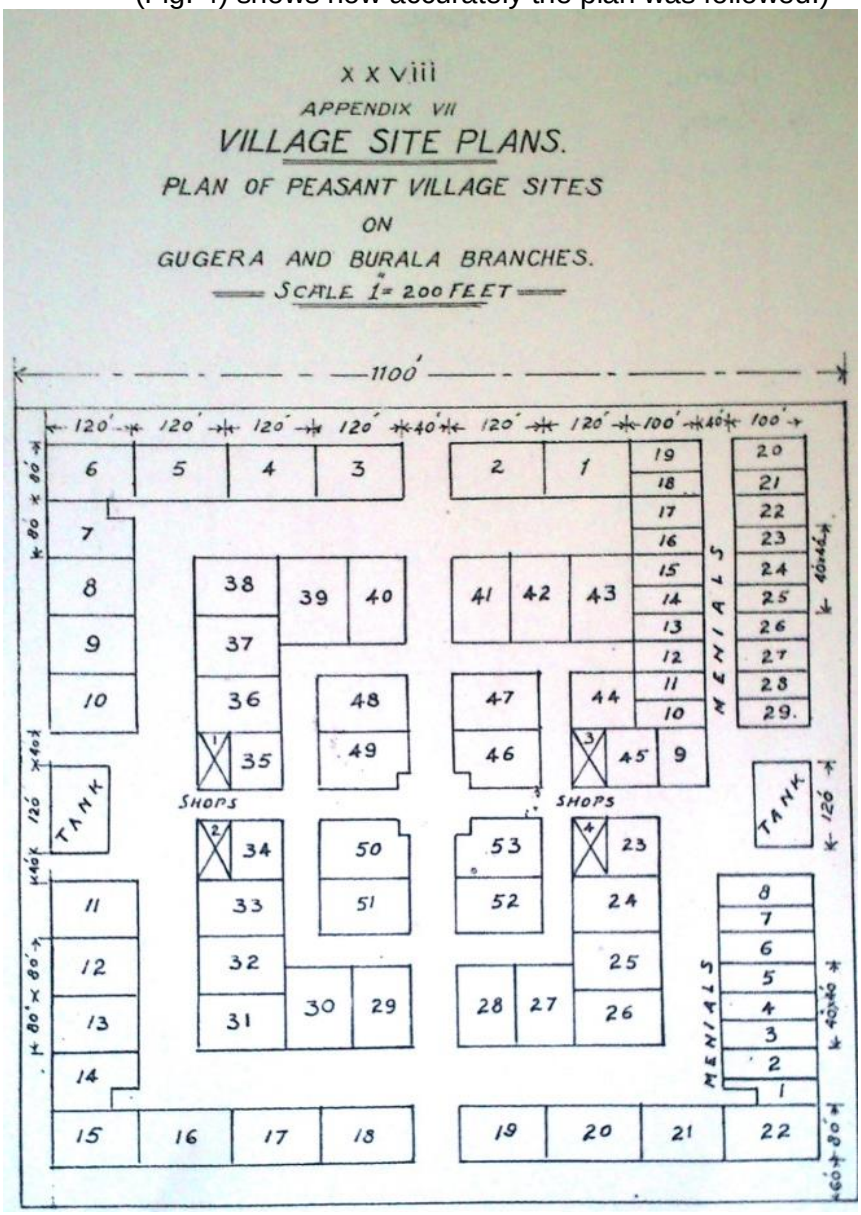
SOURCE: Google Maps.

On the Chenab canal the quality of soil and its natural contours were not taken into account for the square-laying operations. The squares cut through the contours leading to inclusion of salinized and rocky soil in the villages. The colony staff had to deal with a litany of requests for exchanging grants. This experiment led to changes in mapping policies in the colonies developed after the Chenab Colony. In the new projects, soil types were surveyed to avoid wasting water on unculturable land. Such land was either thrown into village commons or excluded altogether from the boundary of the village. Contoured maps of the tract were prepared to mark the natural drainages with which watercourses could be aligned. The area commanded by one or more such watercourses was constituted into a village.[20] This allowed for a departure from the favoured straight line later in the Jhelum and Shahpur colonies.

Apart from the fields, the village site also had to be planned (Fig. 3 & 4). This was so because when left to develop their own *abadis*, the grantees did not tend to fall in line with neat geometry of the fields. In Chenab colony, a square was reserved for the village site. When the grantees were allowed to select the area for their residence, it resulted in growth of irregular lanes marked by boundaries of compounds of irregular sizes. The colonization staff was not pleased with such *abadis*. Therefore, in the plan developed for Jhang Branch serially numbered rectangular compounds were provided which were systematically allotted by the colony officials, giving preference to early settlers for most sought after area near the main *Chauk* (crossing).

20 H. K. Trevaskis, *The Punjab of Today: An Economic Survey of the Punjab in Recent Years*, 1890-1925 (Lahore: Civil and Military Gazette Press, 1931), 283.

Figure 3: Village Site Plan on Jhang and Burala Branches, Lyallpur (The comparison of the blueprint with an actual village (Fig. 4) shows how accurately the plan was followed.)



SOURCE: L. French, *The Panjab Colony Manual* (Lahore, 1913) OR/V/27/315/24, p.144.

Figure 4: Spatial Planning of a Colony Village Site, Chak 15 E/B

SOURCE: Google Maps.

The village site was divided into four blocks by 40 feet wide roads; each block was then further divided by streets. On one of the blocks, menial quarters were located, as visible on both maps (Fig 3 & 4). The menials' plots were smaller with narrower streets. Caste divisions were strictly observed in designing the village sites. This was, of course, not entirely an official idea; concerns were raised by grantees that the menial quarters should not be in intimate proximity to the *abadkars*.[21]

The requests made by the settlers were taken into consideration by the colonization staff but not all were accepted. For instance, the settlers believed that the numerous crossroads and openings were not viable from a security point of view, particularly when skirmishes with the disgruntled local population were common. The officials, too, were concerned with the security of the settlers in order to discourage desertions which were not uncommon given the difficult circumstances. They wanted to make the settlers responsible for their own security. Thus the demand to

21 *Deva Singh, Colonization of the Rechna Doab* (Lahore: Punjab Government Office Records Publications, *1929),* 46.

decrease entry and exit points was accepted. At times the grantees also built a mud wall around the village giving it the appearance of a square fort.[22]

Did such planning actually bring modernity to the Chenab colony villages? Do straight lines actually represent an improved way of living, advancement and development? All these meanings are usually attached with modernity, although such association may not always be valid. Villages developed along straight lines conform to a modern visual aesthetic but are not by default superior to other forms of organization. This is evident from the effects on the fields that did not follow the natural contours of soil or in the design of the *abadis* which seemed to be rather insecure. James Scott has discussed how irregular streets bestow a sense of privacy and security on the residents that the grid streets cannot. However, grids are favoured by the states to gain spatial access to subjects or citizens, and exercise surveillance with much ease.[23] This was certainly the case with the Chenab colony. By introducing geometrical conformity, the colonial officials were definitely able to bring the villages at par with a modern state's vision where subjects can be closely controlled. Thus, while the village plans may not have represented a superior civilization in terms of comfort of its residents, they were better suited to the state as a controllable space.

Straight lines in landscape are also meant to project a certain kind of neatness. The British officers wanted to emphasize cleanliness through other measures, too. Thus cleanliness was insisted *ab initio* in the village sites.[24] This meant that waste and cattle were to be kept at a distance from the village. These measures were not always favourable for the villagers. Waste majorly referred to cattle dung that was used as

22 *Singh, Colonization of the Rechna Doab.*

23 James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), 60-61.

24 *Colony Report 1904,* 7.

manure as well as fuel. The very sight of it confused the British officers.[25] They painstakingly ensured that the settlers get rid of this habit in the new *abadis*, and thus a colony report boasted, 'It was possible to visit dozens of estates on end on the two branches without seeing a borrow pit or mudden-heap inside the village site.' [26] But this practice only added to women's labour who were responsible for procuring dung into heaps for manure and for making it into *uplay* (dung cakes) for fuel. The colonial government generally claimed forest as *rakhs* (reserve forests) limiting usufructuary access for villagers; and scrublands were cleared and taken up for cultivation. Thus *uplay* took over as the major source of alternate fuel because wood was scarce and expensive, more so in the colony villages. Women had to keep up the supply of this fuel. In a way this task was a replacement for collection of fuel-wood so the increase in labour spent may not have been substantial. But potentially, use of *uplay* could have reduced the labour expended on fuel, if the dung heaps were at a more accessible location. There must have been several ways to ensure cleanliness while ensuring convenience of the villagers, but this was not the era of participatory development. The British officials devised policies which they believed were superior though the natives could not always agree with them or find them functional.

Keeping the cattle away from the village site was also problematic. Only the natives of the Saandal Bar[27] were able to do that. Officials encouraged the grantees to follow the 'admirable example set by *Janglis* and stall their cattle in

25 F. L. Brayne, *Socrates in a Punjabi Village* (Oxford: Oxford University Press, 1929), 92.

26 *Annual Report for Chenab, Jehlum, Chunian and Sohag Para Colonies for the Year ending with 30th September 1902* (Lahore: Civil and Military Gazette Press, 1903), 7.

27 The dry highland between Rivers Ravi and Chenab. It was uncultivated and controlled by pastoral nomads until 1892, when the canal irrigation was introduced. The Chenab Colony was predominantly situated in the Sandal Bar and led to displacement of the nomads which has been discussed in detail in Bhattacharya, *The Great Agrarian Conquest,* 342-45.

steadings away from the *abadi* on cultivated land.' [28] The natives (so called *Janglis)* were able to navigate the issues of cattle theft but the migrant settlers were not. Cattle theft was not merely a crime; in the nomad society of the Bar it had certain social functions including territorialisation and a coming of age ritual for boys.[29] When the Bar was made into a settler colony, cattle theft also became an act of resistance that the incoming settlers had to deal with, but they did not have recourse to traditional conflict resolution mechanisms that were managed by local *khojis* and *rassagirs*.[30] Police was not particularly helpful in such cases. Thus, for the security of the cattle, they had to be stalled at home. This was another issue of spatial management which was approached differently by the officers and the villagers.

Similar was the case with arboriculture. In some grants, a condition was included to plant trees around allotted squares, both for aesthetic reasons and fuel. This was not particularly enforceable because it was hard to ascertain whether a peasant had planted the tree until the saplings grew. The farmers were reluctant owing to the damage trees could cause to the crops because of the shade and the nesting birds. The farmers suggested that half *killa* per square should be reserved for planting groves instead.[31] Officials believed that well sinking, disposal of manure, filling up of holes and other matters related with health and sanitation should be regulated by the government officials.[32] At times, fines and penalties were imposed for failure to follow these regulations.

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28 *Annual Report for Chenab, Jehlum, Chunian and Sohag Para Colonies for the Year ending with 30th September 1902,* 6.

29 E. B. Steedman, *Report on the Revised Settlement of the Jhang District of the Punjab, 1874-1880* (Lahore: W. Ball, 1882), 62.

30 *Khojis* were experts in tracking animals and persons by following the footprints. Several nomads were themselves good at such tracking. *Rassagirs* were influential men who acted as arbitrators for episodes of cattle theft.

31 Steedman, *Report on the Revised Settlement of the Jhang District of the Punjab, 1874-1880.*

32 *Report of the Colonies Committee, 1907-08*, 4.

A Sanitary Board was constituted to provide grants-in-aid to villages for sanitary improvements, drawing its fund from the ground rent imposed and collected by the colonization officers.[33] The grantees wished to have minimal interference from the revenue officials and gradually the resistance grew against close monitoring of their activities. In 1907, finally the Chenab Colony began protesting, instigated by the refusal of Punjab government to bestow full property rights and by rumours, not totally unfounded, of changes in inheritance laws to introduce primogeniture.

The Commission formed to investigate the protests registered a number of complaints against the spatial and sanitary management by the officials and against collection of a ground rent.[34] There was a strong demand for *panchayats,* selected from among the grantees, that may handle such enforcement issues instead of official subordinates.[35] Thus, the attempts to introduce structural changes in the Chenab Colony villages were met with mixed responses. While the settlers did not have much say in how the villages were planned before they arrived, they tried to actively shape the measures and resist control once they moved in. This orderly physical space visible to the subjects was underpinned by an abstract space that reproduced British perceptions of caste categories and combined them with allotment of resources to produce a governable rural society.

Caste and Space

Caste was at the centre of the contradictory colonial space. The intersection of a spatial vision with perceived caste hierarchies was meant to recreate the traditional structure of the Punjabi society. As discussed, only certain castes were allotted lands and the recipients were settled in the villages of their own caste. Efforts were made to draw grantees of one

33 *Report of the Colonies Committee, 1907-08*, 8.

34 *Report of the Colonies Committee, 1907-08*, 14-17 & 33-36.

35 *Report of the Colonies Committee, 1907-08*, 131.

village from the same district. Men of different castes were not to be mixed and entire distributaries were reserved for certain castes.[36] Generally, the menials were the only residents of a village with a different caste(s), but they were not grantees and held land only for residence, if any. Central part of the Chenab Colony was populated by the Sikh and Hindu immigrants, the 'inner ring' by Muslim immigrants and local tribes were on the fringes.[37] The attempts to orchestrate the spatial organisation along caste identities were inspired by the ethnographic policy-making evolved post-1857 meant to preserve the traditional Punjabi society.

Thus, the villages in the Chenab Colony were brought together in a spatial scheme that roughly divided the colony along caste and at times religious lines. Perhaps, the purpose was to foster a sense of community within the villages and also between them, collectively up to a *zail*. The provincial administration was not concerned about the deepening divisions between the *zails*. In fact, as the communal issues progressed in national politics, this scheme went beyond the caste for the officials and they began to see it in religious terms. For instance, in 1922, Penny reported the differences in villages in terms of religious identity and not caste. He noted the Muslim villages did not welcome an outsider as tenant and the rents were lower in absence of open competition. Sikh villages appeared to be more accepting of outsiders and both rents and price of land were high.[38] Though it is not clear whether the grantees identified along religious lines, the sentiments attached to the tribal and caste composition of villages did appear to be strong among most groups. Penny notes this behaviour elsewhere in his report in terms of caste and tribe: the Bar nomads resented the sale of land in their villages to outsiders although a few Sikh Jatts were able to

36 French, *The Panjab Colony Manual*, 15.

37 *Colony Report 1902*, 3.

38 J. D. Penny, *Assessment of the Gugera Branch Circles I and II of the Lyallpur District, 1922,* 15.

secure land in their villages by offering higher prices.[39] The role of caste identities in the Chenab Colony can be noted from other sources, as well. Mazhabis, an inferior got (clan) of Sikhs, were able to get allotments in a *zail* dominated by Sikh Jat villages. However, the Jats made it clear that they were not willing to submit to a Mazhabi *zaildar*, if one was ever selected.[40] The Mazhabis themselves refused to accept a grantee of impure Mazhabi origin i.e. a Malwai or Majail, supposedly a Chuhra who had taken the *Pahul,*[41] but was not from the descendants of Mazhabi of Guru Gobind.[42] One could argue that such caste divisions were prevalent in old village as well, and were not unique to the Chenab Colony.[43] However, this is debatable, because there were several types of villages across Punjab and there were many that did allow outsiders to settle in villages, often on payment of a quit rent, leading to the development of *adna* and *ala maliki* [Urdu: inferior and superior ownership]. Secondly, the colony villages could have developed a more liberal social order to bring down caste segregation. Instead, the British administration chose to use caste as a device to control the settlers. As a result, inter-caste distrust and insecurities deepened.

This was further aided by the fact that caste divisions in the colony were made to coincide with differential land quality. For instance, on the Jhang Branch, the immigrant allotment was 'nearly all in the best country — the Bar being mostly appropriated to Jat Sikhs.' The inferior lands on the branch were allotted to Hitharis and Janglis who were 'listless and unenterprising' folks.[44] The land on Gugera Branch along the

39 Penny, *Assessment of the Gugera Branch Circles I and II of the Lyallpur District,* 10.

40 Memorandum on Captain C. Gilert's Letter, PRAP July 1902.

41 Sikh Baptism.

42 Captain G. Gilbert, Temporarily Commanding 34th Pioneers to the Assistant Adjutant-General, Sirhind Dstrict, 25th September, 1901, PRAP July 1902.

43 For a discussion of castes system in old villages, see Tom G. Kessinger, *Vilyatpur, 1848-1968: Social and Economic Change in a North Indian Village* (Berkley: University of California Press, 1974), 71-77.

44 B. H. Dobson*, Final Report of the Chenab Colony Settlement, 1915* (Lahore: Government Printing, 1915), 96.

fertile deposits from the Ravi became famous for its productive capacity. It formed a block of excellent soil, mostly *Maira*, which deteriorated a little towards the Jhang Branch but was still productive enough such that it was difficult to spot a poor village in the tract**.** The Jat Sikhs, supposedly the *best immigrant grantees*, were allotted forty-eight percent of the tract. Gujars from Gurdaspur, who were good agriculturalists but did not have the 'grit and thrift' required for *first class colonists*, held twenty-one percent of the land. Remaining land belonged to local inhabitants who were not considered extraordinary cultivators.[45] The Rakh Branch was the best circle with superior soil quality, and 'best settlers', particularly the Jats from Amritsar, and immigrant Arains who were 'elite of their kind.' The circle was well connected with markets including Lyallpur and Jaranwala.[46] Thus, it is evident from a number of reports that the best quality land was allotted to the 'best agriculturalists'.

The rationale behind such allotments was two fold. Firstly, the categories of agricultural castes were based on a perceived potential for production of various caste groups. The idea of Jats' propensity for superior cultivation was based on the agricultural output from districts such as Jalandhar and Amritsar which had a longer tradition of settled agriculture. The districts in Western Punjab such as Jhang, Shahpur and Montgomery had a mixed history of pastoralism, nomadism and settled cultivation and thus had a different agricultural structure with greater degrees of variations and uncertainty. Environment and decades of conflict had a major role to play in the differences in the agricultures of these two sub-regions of Punjab. However, the British primarily assigned these differences to castes. The idea that the Jats were intrinsically good agriculturalists was so deeply entrenched that the British officers refused to accept the Jats in the Western Punjab as true Jats. The shortcomings in their husbandry were not a

45 Penny, *Assessment of the Gugera Branch,* 2.

46 Penny, *Assessment of the Gugera Branch,* 101.

result of the difficult environment that they negotiated. Instead, they were lacking the true Jat character.[47] Thus it was understood that the wastelands that were home to pastoral nomad tribes could only be transformed by castes that were of a superior agricultural disposition.

The best agricultural castes were also brought in to meet a higher revenue demand. The link between caste and revenue can be found in several official reports. The allotment of best colony lands to best agriculturalists, this framework of caste and efficiency was to maximize the revenue returns in the Chenab Colony. The allotment policy was not merely based on an abstract ideal of saving the traditional society, rather it had actual implications to make the Chenab Colony financially viable. The spatial distribution of land was an important aspect of this policy. Attempts were made to collect revenue according to caste-wise classifications of the revenue circles. For instance, the revenue in the Rakh Branch circles with its best land and best cultivators was the highest, almost twice the demand in the Jhang Branch circles.[48] In 1916, there were protests in the Rakh Branch villages against this variable revenue demand. The revenue secretary noted that the peasants were to 'invariably grumble' if they had to pay more than their neighbours.[49]

While the tax differences were visible, the spatial distribution of caste was not easily discernible for the grantees. The Punjab administration on the other hand was very well aware of the divisions it had created. Mian Abdul Aziz, the Deputy Commissioner of Jhang, noted in 1928 that in his district 'Except for a sprinkling of Khatris, Aroras and Brahmans, practically the whole of the allotted area [in the Chenab Colony circle] is held by Musalmans…. As a matter of fact, this part of the old Sandal Bar was used exclusively as a dumping ground of the inefficient: presumably on the principle of 'like soil like men'. He also observed that later on when the

47 *Jhang District Gazetteer, 1883-84*, 55.

48 *Jhang District Gazetteer, 1883-84,* 101.

49 Rev. Sec. Punjab to Rev. Sec. GOI, April 7, 1916.

provincial government carved out Lyallpur district from the Chenab Colony; it purposefully included the immigrant colonists from the central districts with their 'centuries old traditions of careful husbandry' in Lyallpur leaving the villages of Hitharis, Janglis, menials and criminal tribes in Jhang.[50] This was an extraordinary observation made by Mian Abdul Aziz. It bears a clear mark of communal tension that may have arisen because of the distribution of colony lands. However, his framing of the issue in religious terms could also be merely a reflection of the general awareness within the British administration regarding such divisions.

The evidence for a religiously motivated communal consciousness in the case of land allotments is not noticeable in the politics of the concerned districts. Perhaps, the grantees were not even aware of the specifics of social divisions that permeated the process of allotment. While the resistance of *Janglis* is documented and written about, it is difficult to find evidence that it was along religious lines.[51] For instance, in a bitterly contested election in Sheikhupura, the conflict between *Janglis* and *abadkars* [settlers] was played out between the respective candidates, Malik Muhabbat Khan and Khan Dauran Khan, in a tribal and not a religious context.[52] It is difficult to say whether the caste-wise spatial distribution was a major political issue but its impact on the Chenab Colony was nonetheless profound. The separation of high and low producing areas of the Colony into separate districts accentuated the differences. Thus, the caste divisions were an important instrument in limiting the lived experience

50 Mian Abdul Aziz, *Final Report of the Fourth Regular Settlement of the Jhang District, 1928* (Lahore: Superintendent Government Printing, 1928), 19.

51 For a detailed description of Janglis resistance, see Bhattacharya, *The Great Agrarian Conquest*, 385-435.

52 Case No. LXXXIV, Sheikhupura (M.R.), Punjab Legislative Council, Khan Dauran Khan V. Malik Muhabbat Khan and Four Others. E. L. L. Hammond, *Election Cases: India and Burma, 1920-35* (Calcutta: Butterworth & Co., 1936), 650-54 quoted in David Gilmartin, "The Law, the Local, and the Individual: Election Cases in Punjab during the Late Colonial Era," presented at *Conference on Locality, Genre and Muslim Belonging in South Asia,* Wake Forest University, September 15-17, 2017.

of the settlers as well as the native population of the Bar. The implementation of these divisions was meant to isolate the colonial subjects from the physical space and place them in an abstract space that concealed the social manipulation under colonialism. Another aspect of this space the control over water that tended to regulate the relationship of the colonial subjects with the physical space or environment, as discussed in the next section.

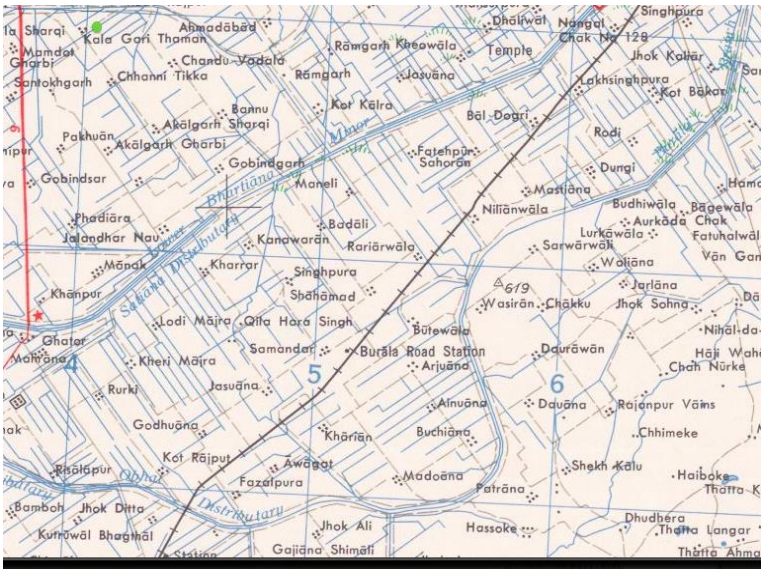
Water and Space

Water was a key element in the creation of a spatial practice that concealed the contradictions and oppression of the colonial space. The abstract space of the canal colonies was a means to disconnect the local peasants from the natural rhythms of the river and wells and subordinate them to the controlled provision of water as well as to the international markets. The colony villages were aligned with the watercourse as the fields were marked at right angles to it. Fig. 5 shows the alignment of watercourses along some major distributaries. The blue lines represent the watercourses that are strikingly straight. Allotments of land in *mauzas* on a given *rajbaha* [main distributary] were made at the same time. This was because water could not be distributed until a regular demand was ensured.[53] Allotting all the villages at one time allowed the canal engineers to determine how much water was required on the distributary. Irrigation department would generally align the distributaries and fix village boundaries before squares were laid down.[54]

53 Executive Engineer Chenab Canal to Colonization Officer Chenab Canal 6th May 1897, *Punjab Revenue and Agriculture Proceedings (PRAP) July 1897.*

54 Popham Young, Colonization Officer to Commissioner Lahore 31 July, 1896 and Sidney Preston Superintending Engineer, Chenab Canal to the Colonization Officer 28 July, 1896, *PRAP October 1896*.

Figure 5: Alignment of Watercourses along Main Distributaries



SOURCE: U502 NH43-1 Lyallpur Map available at: *https://pahar.in/category/maps/us-government-maps/u502-maps/* (U502 is a series of maps of India and Pakistan published by the US Army Map Service (AMS) in 1950s.)

Mechanisms for distribution of water also had an impact on how the fields were managed and the space was utilized. *Waribandi* (watering in turns)[55] was adopted in the canal colonies for regulating water supply to individual holdings in the villages. It was an efficient way to provide irrigation in turns instead of watering all the squares simultaneously. A scheme was adopted to supply water on each square in succession, and within each square, each acre was similarly watered. In winter months, when there was shortage of water in the rivers, the scheme had to be regulated for cycles of 10 days in which water supply could be ensured for all holdings irrigated in

55 Customarily, sinking of well to open up land for cultivation justified claims to property right. Jointly constructed wells called for shares in water that were governed by a system of *Wari* or turns. In some regions, land rights were so closely tied up with this system of turns in sharing water that the share in land was known as *Wari*, and not *hissa* (share). *Waribandi* was considered an important local system in determining shares in water for irrigation and was included in the Canal Act. Gilmartin, *Blood and Water,* 109-12.

turns. The size of the village was thus directly dependent on the nature of water supply.[56] An irrigation day was divided into *pehars* [period] of three hours each, which could fall at day or night. A holding could receive its *wari*, of two to four *pehars* in a day. During winter within ten days, twenty *waris* of maximum *pehars* could be allowed. Consequently, it was recommended that a chak should be only of 20 squares or 500 acres,[57] or a maximum of 40 squares if *waris* of only two *pehar*s were to be allowed, which was the minimum duration that could be allowed for adequate watering of a square.[58] The irrigation department's recommendation for 500 acres seemed too small for a village from administrative point of view and the colonization officers constituted larger villages which later ran into water shortages particularly in the Rabi Season when wheat was planted.

The colonization officer had to carefully communicate the details so that each cultivator would know exactly the time and duration of his turn. In the ten days cycle of winters, the turns were assigned in an odd number so that the same cultivator would not end up receiving water at the same hour every time. This allowed for each cultivator to have turns during both day and night.[59] Within the fields, the water was distributed through flooding small parcels of land called *kiaris*. The irrigation department recommended eight *kiaris* in an acre to prevent water wastage because larger *kiaris* required more water, but in practice the cultivators made only two to four *kiaris* per acre[60] that used more water but saved labour. The cultivators preferred to give a slightly higher water rate to reserve their labour for other tasks. Two men were required

56 F. B. Wace, *The Punjab Colony Manual,* revised edition (Lahore: Civil And Military Gazette Press, 1934), 175.

57 Wace, *The Punjab Colony Manual,* 175.

58 L. French, *The Panjab Colony Manual* (Lahore: Civil And Military Gazette Press, 1913), 144.

59 French, *The Panjab Colony Manual,* 176.

60 Randhir Singh, *An Economic Survey of Kala Gaddi Thaman, Chak 73 G.B.* (Lahore: Civil And Military Gazette Press, 1927), 34.

to run irrigation, one with the watercourse another to attend to the *kiaris*. In many villages, a timekeeper was hired for keeping turns of canal water and watching the watercourse.[61]

In squares with more than one grant, such as those held by the menials, water was supplied for a longer duration so that the cultivators could have time to distribute water among themselves. Since most of the squares were cultivated by more than one peasant family,[62] the scheme based on squares was not sufficient. There was further arbitration required to distribute water on the squares. Prakash Tandon, whose father was a canal engineer, noted:

> The farmer waited at the appointed hour, day or night, to receive the water in his field, and for the whole of his turn stood guard to make sure that his neighbours did not divert the water to their own land too soon. He stood there with the spade over his shoulder ready to strike. Water was his life blood, quarrels over it often led to murder…[63]

Very early on, in June 1894, *Panchayats* were established to settle disputes regarding water, rent and produce etc. Civil Courts were not easily accessible given the distances involved, so panchayats were frequently resorted to. A report for the year 1894 shows that in a period of four months from June to September, 456 cases were settled, which were mostly related with water distribution. Thus, the spatial design of square fields and the traditional practice of *waribandi* adopted for water distribution were not completely in sync.

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61 *Farm Accounts in the Punjab, 1933-34* (Lahore: Civil And Military Gazette Press, 1934), 188.

62 In most cases, one to two squares were allotted to the farmer that he was supposed to cultivate with his nuclear family, but several farmers gave half a square to tenants which were usually brothers or close relatives. The grant conditions excluded tenancy but the Colonization Officers turned a blind eye because the land was difficult to break and required greater labour and capital investment. The grants were mostly made to young farmers who did not have sons old enough to help them. After a few years, the trends in tenancy began to change because of increase in family labour and ease of cultivation on prepared land.

63 Prakash Tandon, *Punjabi Century, 1857-1947* (Berkley: University of California Press, 1968), 42.

Gilmartin has argued that the authority wielded by canal engineers conflicted with the customary forms of water control. The customary rights themselves were an interpretation by the British administration of local approaches to water use. The contradictions between the statutory and customary uses of water represented the division in the colonial thinking that separated the realms of rational and customary administration reflecting the different visions of communities constructed by these approaches. [64] The coexistence of these two visions of community defined the irrigation operations in the Chenab Colony. Canal water management was an extra-ordinary task, it was made possible by the efforts of engineers, colonization officers and settlers. All three actors had distinctive goals and approached the issues differently. The engineers were concerned with smooth supply of water and prevention of wastage, factors that signified the success of their design. The colonization officers wished to optimize administration and minimize conflict. The peasants were interested in ensuring sufficient supply of water with minimal costs, labour and conflict. These goals were centred on effective spatial planning for watercourses, fields and villages in a colony. It is evident that the irrigation and revenue officers went to extraordinary lengths to link the spatial planning with water distribution. To a large extent, they were successful and the customary practices were effective, too. However, the major lapses were caused by the way grants were assigned, the size of the villages, and miscalculations by irrigation department in the projected supply of water.

Another major issue was the variation in discharge across the length of canals and distributaries; this was also connected to the spatial distribution of villages and the caste groups. The water supply known as *haqq aabpashi* (right to watering) was not even throughout the colony. There were fringe villages, which designedly received less water owing to the difficult

64 Gilmartin, *Blood and Water*, 108.

terrain.[65] There were three zones of distribution. Zone A in which old villages were included received least water, only for 40 per cent cultivated area, and were actually located outside the colony. Zone B received 50 per cent and included areas in north-east of the district. Zone C included central and Southern parts of the district that were to receive 66.6 per cent. This distribution was calculated using the data on rainfall received in each zone and the depth of water table. However, the assumptions later proved to be faulty and revisions were made to allow for a 50 per cent supply in Zone A and 70 per cent supply in Zone B and C.

The fringe or tail villages adjacent to the old villages fell either inside or close to zone A and had meagre water supply. These were mostly Jangli or Hithari villages. The canals were designed to drain into unproductive soil and so technical disadvantage of receiving less water and bad soil were combined in the tail villages. The value of land was much lower in such regions. The peasants here at times worked as tenants in other villages. For instance, Ganga Ram, a famous philanthropist and capitalist landowner in the Chenab Colony, drew his tenants from the tail villages of the Shahkot distributary.[66] The capitalists/investors who bought land in auction also vied for the best land.[67] There was also a classist distribution of land in the colony but had a limited impact because the land sold to investors was less than twenty per cent.[68]

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65 French, *The Panjab Colony Manual*, 145.

66 *Annual Report on the Punjab Colonies for the Year ending 30th September, 1915,* 4b.

67 *Annual Report on the Punjab Colonies for the Year ending 30th September, 1915,* 3b.

68 Initially, to minimize the interaction between the two, capitalist and peasant grantees were segregated in separate villages. The Colonization Officer feared that this might result in development of an elite capitalist circle which may become too difficult to cater to administratively. The plans were then revised to sprinkle capitalist villages among the peasant villages but capitalist were not under any circumstances to be 'intermixed with other settlers in the

The distributaries were overstretched, commanded more area than could be sufficiently supplied. In some cases the actual discharge was less than the designed discharge. Tail villages could only receive an equal distribution of water through rotational closure of outlets - a method which was considered 'unpopular and demoralizing' in the villages near the weirs. In order to manipulate distribution, water theft became an issue within villages. The distributaries were fitted with a Kennedy Gauge outlet that was easy to temper with. There were proposals to replace it but they were too expensive to dispense with.[69] In addition to this, there were canal breaches that seemed to be intentional:

> Occasionally there was an alarm, as when there was a breach in the canal bank, and then it was truly like a battle. A canal would break its bank and water rush into the fields, flood the country, and keep on advancing. The farmers around the breach were in a panic and would run with their cattle to dry ground. Their standing crops might be ruined; land waiting for the next crop or land just sown might be flooded; mud huts might collapse and altogether much loss could result. If the flood was serious, in the flat country it might cause waterlogging for a whole season. The farmers at a distance on the other hand might benefit by the unexpected supply of water, provided it was timely, and breaches in the canals were therefore sometimes suspect.[70]

Of course, such breaches could not be frequent but reflected the tensions among the communities and the villages that existed on the issue of water distribution. The *nahri patwari*, or irrigation record-keeper gained as much importance in the colony villages as the revenue *patwari*. Water distribution brought the communities together in canal colonies but also spurred conflict.

Apart from conflicts over irrigation, the Chenab Colony was also beset with environmental degradation owing to the canals. The biggest flaw in canal construction was ignoring the natural drainage which led to a rise in the level of ground

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same village' Rev Sec. to Sr. Sec. Fin. Comm. Punjab 5th Jan 1892, IOR/P4080.

69 Penny, *AR Gugera Branch*, 6.

70 Tandon, *Punjabi Century,* 43.

water at several points in the Chenab Colony, causing the water to rise to surface along with salts. These issues emerged within a decade of opening up of the canals but were felt with full force only in the post-colonial period. By 1930s, the government did try to address the issue by improving drainage of the canals and other measures such as exchanging affected grants. However, these issues did not ameliorate the economic divisions that had emerged in the Chenab Colony. Instead these differences were cast into district structure, marked by the backwardness of Jhang and prosperity of Lyallpur. Could the canals be designed differently to address the differences in access to resources in various villages and *zails*? This is too technical a question to be addressed in this article. However, it can be said that the scheme could have been less discriminatory if the land and water distribution was not so strictly tied up with the caste structures.

Conclusion

The Chenab Colony brought together conflicting policy approaches but still turned out to be successful both in terms of settlement of native population and productivity. This was done through creation of a spatial practice that was meant to hide the contradictions in the British policy. In the Chenab Colony rural space was imparted a permanence through the design of the canals and fields and alignment of the streets. The villages and the fields became the repeated products, the visual character of which added an objective element to the spatial planning of the Chenab Colony. The canal engineers wanted to introduce advanced technologies for irrigation, and the colonization officers wanted to simplify administration and improve the quality of life in the colony villages. These efforts were to be undertaken in consonance with the traditional institutions of Punjabi society. However, behind this impartial façade, there were several subjective factors that shaped the spatial planning of the Chenab Colony. The Colony was designed in a way to render it closely controllable by the British administration. The spatial organization also showed that the subtle attempts at civilizing the Indians continued to

be reflected in the many facets of material development of India, even when explicit claims to civilise the native were withdrawn. This was not a unique attempt at civilizing the natives, many such examples can be found in many parts of the African continent. However, the scale and success of the Chenab and similar colonies of the Punjab was certainly unique.[71] It was a precursor to development and social engineering programmes that became more prevalent in the post-World War II period.

The abstract space created by these contradictory approaches could be divided, measured and compared using the scientific methods. Precise measurement and mapping was an important aspect of spatial planning, as it was meant to ensure an efficient revenue structure, as well as efficient supply of water minimising wastage. The squares and straight lines were favoured which supposedly ensured organization and efficiency and allowed the government to exercise greater control over the villages and the Colony. Instead of allowing the grantees to build the villages, the Chenab Colony officials took it upon themselves to assign the fields and design the village sites. But it is important to note that even though the British spatial vision was distinct and the British aversion for native Punjabi villages represented the power asymmetries between the colonizer and the colonized, the physical remaking of the Punjabi village in the canal colonies was not as disruptive as was the discriminatory distribution of population in terms of access to resources. The prejudice was observed both in the allocation of land depending on its quality and in grant of access to canal water. These measures were taken to ensure the continuity of traditional social structures which were important to maintain the administrative order for

71 The Punjab canal colonies stand in contrast to several other similar projects. For instance, in the Baguinda Region in Sudan in 1920s, the French Imperialist *Office de Niger* developed an irrigation scheme that aimed at developing a cotton agrarian sector for the textile industry in France by establishing native colonies. These plans were met with significant resistance and the natives refused to move and settle in the region. M. Van Beusekom, *Negotiating Development: African Farmers and Colonial Experts at the Office du Niger, 1920-1960*, Portsmouth/N.H.,2002.

the province. Particularly, the institution of caste was an important device for social control and was deployed in the Chenab Colony to extend such control. But the recreation of the traditional social structures in a new spatial organization was a contradictory process. It clearly reveals the subjectivity of the British administration in selecting which elements of the so-called traditional society were to be encouraged and which were to be disdained. Thus, the traditional design of the streets was straightened out, but the caste differences were to be amplified using an intentional use of space.

Thus, the attempt by the Punjab government to manipulate the social categories for economic and political advantage resulted in complex issues in the Chenab Colony. Linking land allotments with caste and perceived agricultural potential led to precipitation of differences and creation of starkly different communities and neighbourhoods with a variable access to resources. Such planning only reinforced existing fault lines in the Punjabi society. One of the underlying issues was that the political connotations of caste could not be dissociated from the spatial plan. In fact, these political motives actively shaped the distribution of land in the Colony. This can be understood while contrasting this process with the adaption of *waribandi*. The use of this traditional method had its flaws and water disputes were not uncommon. However, the politics around it was predominantly local and was not linked with colonial control of subjects. While *waribandi* suffered from technical issues, it was not inherently discriminatory. Similarly, the attempts to introduce 'superior' planning of streets and fields were not essentially inappropriate, but they did not coincide with the local needs.

The approaches employed for spatial planning in the Chenab Colony were embedded in frameworks of both modernity and tradition. However, the most intrusive of them was the politically driven policy that associated caste with land distribution, which was fundamentally biased. It led to development of villages that suffered the combined issues of inferior soil and water shortages and were populated by least favoured segments of the population. This policy was not

easily discernible outside the administrative circles but it had an important role in creating sharp social divisions which may not have translated into political action but made the Chenab Colony a space of discrimination and colonial domination. It became an abstract space that extracted some colonial subjects from their natural and social environment and brought them together for maximized agricultural production while marginalized other by affecting their natural and social environment and agriculture.