



## RESEARCH PAPER

### Land Colonization and Socio-political Change in District Multan: Project of Sidhnai Canal (1885-1900)

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## ABSTRACT

Waste land utilization and Canal colonization were not only a tool to supplement revenue but also a mechanism of political control on local level. Once incorporate to settle down, nomads would be more agreeable to rule over. Powerful pastoral tribes of Multan and neighboring districts had caused a serious law and order problem. Those canal colonization policies were manipulated as power instrument of Colonial Control. District Multan is located on the East, North and West by the districts of Montgomery, Jhang Muzaffargarh and on the South by the Bahawalpur. The Sutlaj separated it from Bahawalpur and the Chenab from Muzaffargarh but Jhang and Montgomery had their boundary running for the most part through desert area. Chenab and Ravi both are flowing through Indian state of Himachel Pardesh enter in Jammu and Kashmir within the boundaries of Northern areas near the town of Jehlem. In 1898 eight more villages near the confluence of the Ravi and Chenab were absorbed with the object of facilitating certain extensions of the Sidhani canal system. Sidhnai is a flood control inundation canal link Trimmu-Sidhnai which transfer supplies from the Jehlem and Chenab to the Ravi River at Sadhnai Abdul Hakim Barrage. It provides irrigation to the agricultural of Khanawal and Multan Districts. Historians already had explored the history of the canal colonies at provincial level and there is a space as regional study, and therefore, this study was conducted to fill the research-gap in the existing historical literature. This research is based on primary sources of British Indian Libearay, Center of South Asian Studies, University of London UK and Civil Sectarat of Lahore. However, to analyze the data collected data: qualitative and quantitative methods have been applied to gauge the impact of the process of socio-political transformation in Sidnai Colony enforced through political control and land utilization of inundation canals

**KEYWORDS** Colonization, Socio-political Change, Project of Sidhnai Canal

## Introduction

The district was naturally watered by Chenab and Sutlej rivers. The Chenab its more extensive floods and better alluvial deposits was the most fertilizing. The value for these rivers increased for irrigation purpose in colonial era by excavation of inundation canals. A full report of the system of inundation canals as it existed in 1858 were prepared by John Morris, the settlement officer in the district at the time of first regular settlement. (Multan Division Report, 1855-59) All the inundation canals were of recent formation, the most ancient of them having been dug one hundred and sixty years ago.

A noteworthy precede cent set by colonial administrator in this regard was the involvement of the private sector in the development process. They desired that both capital and energy are not wanting among the people and all that is required of the local authorities is, to see that both these requisites to success, in this canal excavation as in all

other undertaking, are judiciously applied. They desired that the government should foster the disposition 'to expend money in such works on the part of men possessed of capital, combined with energy, local influence, and an honest desire to carry out schemes for reclaiming waste land (Gazetteer of Chenab Colony, 1994)

Canal colonization were not only a tool to supplement revenue but also an mechanism of political control on local level .Once incorporate to settle down , nomads would be more agreeable to rule over. Historically, powerful pastoral tribes of Multan and neighboring districts had caused a serious law and order problem. Nomadic residents of the high Bar incessantly raided each other and settled the population (Khan, Muzaffar & Mustafa, 2022). This was the first organized attempt to make an effort on the part of the district administration to invest irrigation sector to renovate the existing canals. Although the canals management was a major step forward, much more work was required. The district had an area of 5,948 square miles; government waste was 3,691 square miles, of which only 1,237 were found under crops. (Gazetteer of Chenab Colony, 1994) Only a network of inundation irrigation channels running throughout the length and breadth of the district could achieve that goal. This was due to the natural limitations on the excavation and irrigation capacity of the inundations canals. The maximum length an inundation canal could attain was not more than forty miles; therefore, the vast expanse of the district was naturally out of irrigational reach of that system

In its historical context, the earliest canal system in Punjab was inundation canals. These were used to get water from the rivers during periods of high flood season. The Mughal period saw the little canal construction as rulers chose instead to increase agricultural revenues with land surveys, tax farming and land settlement plans. It was the regional states, which arose after the Mughal decline that saw significant canal development in the late 18<sup>th</sup> and 19<sup>th</sup> century. It has been argued these regional states, the Sikhs of the Punjab, the *Nawabs* of Bahawalpur, rural elites of Multan sought to provide a base for local and regional elites. (Gilmartin,1994) These elites, by the pastoral tribal chief, religious figures or wealthy men of commercial casts, were critical to the state functioning and canal construction not only allowed increased agricultural production, but also defined a structure of power linking them to the state. The state helped organize canal construction, but did not directly control it, relying on its ability to "define" and manipulate 'communities' of canal shares, frequently dominated by privileged elites.(Gilmartin. ,1994) The region prior to the coming of the British rule the creation of a considerable network of canals (Agnihotri,1996) These were located especially along the Sutlej, Chenab, Jumna and Indus rivers.(Islam,1997) In 19<sup>th</sup> century under the Sikhs, Sawan Mal the Sikh governor of Multan was particularly noted for the creation of canals in his region as part of a large prosperity project ( Duranni,1962)The Sidhani , Matital , Hajiwah and Ghulam wah all are examples of significant pre-British canal.

Annual silt clearance was necessary with inundation canals, a task for which in the years preceding the British was generally performed by the local users for rights to the canals' water (Gilmartin, 1994). The extension and renovation of inundation canal system was not just limited to Multan district in fact it was Punjab wide phenomenon, which greatly improved the state of irrigation and cultivation throughout the province. A number of districts experienced considerable increase in cultivation. In 1875, 50% of the whole area of the Gujrat district was under cultivation and in 1890 it increased to 71%. Similarly there was a great increase in the South- eastern districts of Karnal, Rohtak and Hissar and in frontier district like Dera Gazi Khan, Peshawar and Bannu ( Bannerjee, 1982). In Multan district under government encouragement, Private canal system got impetus but contrary to it, in Muzaffargh due to lack of initiative on the part of the private

sector, the government had to take the inundation canal system under its direct supervision, which after renovation began to irrigate 2,93,853 acres (Bannerjee, 1982). So it would not be wrong to say that even before that even before the construction Sidhani canal colony system noticeably development in the irrigation sector had taken place in Multan district.

### **Limitation of the Inundation Canal System**

However, there were some inherent limitations to inundations canal system as well as the central Bar and Thal were naturally deprived from the facility and were totally depended on rainfall. In the rainy years there were good crops but whenever there was no rain it had a telling effect on vegetation, cattle and human life. Dry years created always drought situation. The Bar and Thal became wilderness, the cattle were driven to the Sutlej and Chenab. More over the area irrigated by the inundation canal was limited. The irrigational reach of the canals was not more than 20-30 miles from the river source. The Sutlej inundation canal system, which was comparatively larger than the Chenab inundation canal system (Mooltan Gazttee, 1901-1902) was irrigating a limited portion along the flow of the Sutlej River. These channels also provided unpredictable irrigation. They only began to flow when the water table in the river rise towards the end of March or in early April and would continue to do so regularly till about the end of the June, After that they would give an irregular supply up to the August or the beginning of September. (Multan Settlement Report, 1889-1890) The water of these canals was heavily charged with silt which, was invaluable for the *alakine* soil, but it arrived so unpunctually and spasmodically that cultivation was always rather a gamble. This problem was further excepted to be intensified by the opening of the Sirhind canal. (Report on the Administration of the Punjab, 1901-1902)

The question of the supply of water in the rivers was of considerable interest In connection with the canal system of the district and with the complaints often made that the canals have suffered from the construction of Sirhind and Chenab Canals. The Sirhind canal was opened in 1883-84, began to develop in 1887-88, and was in full working order in 1891-92 (Report on the Administration of the Punjab, 1901-1902), while the Chenab canal was opened in 1887-88, began to developing in 1892-93 and was practically in full working order in 1897-98. (Administration Report of Punjab, 1901-1902). The canals of this district begin to flow in the Spring when the flood rise, and cease flowing in the autumn when the flood subside, so that the effect of canals above- stream would be felt mainly in the months of April and October .

The introduction of gram cultivation it was greatly transformed. Besides inundation canals, well irrigation also increased. In the Multan district well was known as Persian wheel or Jhalar, primitive, traditional method of cultivation (Habib, 1970) The value of well was depend upon the quality of water, on its depth from the surface and on the continuity of the supply. The depth of the well depends mainly on its distance from the river. Wells were occasionally found in which the water was brackish and unfit for drinking. A marked line of such well extended from Duniyapur in the center of the district to Jalalpur Pirwala in the South west.

### **Perennial Canal Systems**

Perennial canal system was generally unknown in the Punjab until the middle the middle of the 19<sup>th</sup> century and the British irrigation and colonization projects. Perennial canals require permanent diversion works known as barrages and head works to be

constructed as strategic sites along the Regions Rivers. By raising water levels these barrages allow greater diversion from the rivers, especially during the winter season when the low water flow limits the effectiveness of inundation canals.

Immediately after the British annexation of the Punjab in 1849, colonial administrators build an expensive water management system .Works began in 1851 (James, 1848) on the upper Bari Doab. Their initial efforts were directed to cleaning and expanding canals which were pre-existing at the time of their arrival. While the goal of expanding agricultural land was reported from the first, a primary reason for this construction was the political necessity of newly un employed Sikh soldiers occupied. By 1873, in the Punjab there were 2,500 miles of inundation canals which irrigated more than one million acres. The majority of these canals were located on the upper reaches of Sutlej and Jehlem , while some of these canals were located around the confluence of the Indus and its tributaries. (Punjab Administration Report,1874) While revenue funds for protection against famines. Minor canals were differenced from protective canals only by their lack of separate accounts.( Islam, 1997)

While early colonial irrigation policy was focused on returns to state revenue and famine protection, in last quarter of the century saw a more political and ideological focus. Works of bold and magnificent conception , as described in the Punjab irrigation manual, were designed to alter the whole landscape of the Punjab Plain. Not only were the canals to provide an agricultural bonanza, they expressed the political legitimizing power of technological transformation (Gilmartin, 1984).

Early British Canal works were built largely throughout previously populated parts of the Punjab (Paustian, 1930) beyond these areas, on the up lands areas of Doabs, lay large tracts of land designated wastes, which did not support a settled population. Rainfall in those areas was reported to be less than 10 inches per year and the level of ground water was as low as 50 to 80 feet. (Islam, 1997) During periods following the meager rainfall they would support a fairly abundant growth of pastures during which nomad's tribesman known as the Jangils grazed their cattle. They also provided a considerable amount of fuel and small building wood. (Agnihotri, 1996) Enabled by the employment of the pernian canals, the British crown appropriated these "unclaimed" bar lands as "crown Waste" and began to plan for their development. The forest act of 1878 and criminal tribes act 1871 were complementary legal provisions to enable this take over (Agnihotri, 1996 ) Previous pastoral users of the land were largely ignored with their land use claims not being recognized as constituting prosperity rights. In contrast to previous use of existing water courses and channels the new perennial canals starting with the Bari Doab canal started to be obliged along the ridges of the doabs enabling greater expansion of irrigation (Paustan, 1930)

As the waste land was largely unoccupied, the British began a new scheme of colonization of recovered territory. This element of colonization distinguished the Punjab from other parts of India where canals were limited to improving existing agricultural system. (Islam, 1997)A stated professed goal of these new projects was the prosperity for the people of the Punjab "artificial irrigation supplies the wastes of ill-favored times places," The endeavor , however, was grounded in the necessities of political of political central and colonial ideas of "progress" . British control was tied to a system where the definition of prosperity rights in land was central .By trying the local population to the land and legally defining that relationship through the institution of private property, the British also tied them to a social scientific "discourse" where community and custom defined a social order associated with the colonial state.( Gilmartin,1998)The heart of the

administrative order in British India was periodic revenue settlement which necessitated the precise location of individual within the social framework and the land administrators carefully recorded, "shares" in village assets, individual property "rights" in land and water among a host of other local knowledge ( Gilmartin,1998)

As repositories of local knowledge, local leaders were both thus legitimized and tied into the greater state system. Given the dependency of agriculture in the Punjab on water, it is not surprising that the "most important division of land "was derived from its water sources. The Punjab settlement manual designated five classes for assessing land value and legal status during revenue settlements, *barani*, *saialb*, *abi*, *nahri* and *chahi*. The *Sidhnai* was opened in 1886; and the three so called subsidiary canals, which from part of the same system, were opened somewhat later, the *Koranga* and *Fazil Shah* in 1890, and the *Abdul Hakim* in 1891 (Final Settlement Report, 1929).

The normal duration of supplies in the main canal may be said to be from the beginning of April to the middle of October, while on the subsidiaries the water begins to run about a fortnight later and ceases about a fortnight earlier. The soil is fairly uniform, except for some stretches of hard rice land, throughout the *Sindhna* area; and a large proportion of the land, having formerly been Government jungle, is now held by miscellaneous colonists from the central Punjab and elsewhere, many of whom have under the conditions of their leases obtained proprietary rights in this land from Government (Punjab Colony Manual)

The cropping too differs in some respects from that on other canals owing partly to the character of the irrigation and partly to the presence of foreign settlers: indigo, for instance, being quite an uncommon crop, while crop like *china* and *Sathri* are far more generally grown than on other canals. The crops, too are less protected by wells than else were, and many crops which else were largely supported by well irrigation are on the *Sighnao* cultivated by canal water alone. The distribution of the water is more have been able at this settle out to carry out to a very large extent a system of measurement by 2 acre fields, each of which is divided into four rectangular compartments not only in improving the economy of water but in admitting of a rapid and easily intelligible system of crop measurements.

The inundation canals of the district, again, may be noticed under three heads, viz., (i) the older Government canals; (ii) the *Hajiwah*; and (iii) the private canals. The present system of Government inundation canals was started by the *Daudpota* and *Afghan* rulers in the middle of the 18<sup>th</sup> century and the canals were in Full working order before the British annexation, but a great deal has been done under the supervision of the irrigation officers to improve, control and extend the supplies, and the average area irrigated by these canals which in 1868-69 - 1872 - 73 was 212,518 acres only had risen in 1893 - 94 - 1897 - 98 to 341,998 acres. (Settlement Report 1901)

These canals were originally a number of moderate-size cuts excavated independently of each other and having independent heads in the river banks, but the canal officers have been steadily amalgamating the canals and the process is still going on, so that the whole of the *Chenab* canals of the district will probably issue from a single head at a very early date, and a similar result may be achieved upon the *Sutlej* before many years have passed. The canals take their rise in cuttings made in the banks of the river and flow only when there is sufficient flood water to pass over the bed level of these openings, that is to say, generally speaking, from April to October.

When the rivers are in full flood from June to August there is always plenty of water, but at the beginning and end of the season, when the rivers are rising or falling, the conditions of irrigation are apt to become critical. The success of the Kharif crops does not depend on the volume of water received by them during the season, but upon the length of time during which supplies can be assured: and the success of the Rabi sowings depends not upon the amount of the water available during the summer but upon the amount, if any, available at the end of the season. Moreover, even if the supplies in the main canal are in every way satisfactory, the success of the irrigation is dependent on two further items, viz., the watercourses and the wells. As regards the watercourses, it must be noted that as a rule the main canals only are maintained by Government and there is nothing in the shape of *Rajbahas* or minors to bring the water to the door of the irrigator. Each owner must make his own arrangements for bringing the water from the canal, however far it may be, to his holding: if he is a rich man, he has made his own watercourse: if poor, he has combined with his neighbors, often with the rest of the owners of the same village, to build a joint watercourse.

There is seldom less than one watercourse per village, and the result is that numbers of these watercourses run parallel and independent, for huge distances (sometimes or 13 or 14 miles) from the canal to the villages which they irrigate. Each of them has to be cleaned out annually, the spoil banks become high each year and the cost entailed on the irrigators increases as the years go on. If the watercourse has originally been badly aligned, or if it has a bad outlet from the canal, or if it begins to silt up, or if the owners disagree among themselves as to its clearance, or if the cost of clearance increases so as to exceed their means, in all cases the irrigation is seriously impaired independently of the state of the main canal. (Revenue Report, 1890)

### **Sidhnai Canal Colony And Colonization**

British effort in canal irrigation in the canal colonies began in 1882. The first concrete proposals for construction of canals in the Punjab only inundation canals put forward by Charles Aitchison, in 1882. Of the canals proposed, two were to take off from the Chenab and one each from the Sutlej and the Ravi. While the Chenab Canals were to cover land in Gujranwala and Jhang district, the Sutlej was to pave the way for the Lower Sohai Para Scheme in Montgomery, while the channel was built to take water from the Sidhnai to reach in Multan.

The Sidhnai Canal Colony was the first large scale irrigation project to be realized in the Multan district. It was excavated on the Ravi River between 1883 and 1886, and supplied water to an area of about 250,000 acres. (Ali, 1997) There were many variations found in new canal irrigation system but Sidhnai Colony was irrigated by perennial Sidhnai canal specially for Kharif harvest. Thus Sidhnai was seasonal not perennial and well irrigation was necessary for the maturity of *Rabi* crop. The project was based on plots of 50 to 90 acres in size. (Punjab Colonial Manual, 1993)

All these plots were given on lease firstly. First type of lease was "jointly to a number of share-holders of a sufficient number of 90 acre holding to form an estate or a subdivision of a state and lease jointly to several persons of a holding of 90 acres". (F.B. Wace,) The perennial irrigated areas of canal, which had greater economic value, were the first to be colonized. Regarding acquisition of property rights 698 acres were given in the Sidhnai Colony. (Punjab Colony Manuals, 1923) Those acres were divided into plots.

These plots were relatively large, as compared to the pattern of land prevalent in the northern and eastern districts- that was around 5-6 acres; as well as compared to other colonies like Shahpur and Lyallpur (Ali, 1997). It is likely that the British in the 19th century did not want to break too significantly, the present pattern of landed property, while admitting the need for its gradual revision. Of these plots, about half were allotted to colonists from other districts: generally *Jats* and *Rajputs* from Amritsar and Gurdaspur. (Ali, 1997)

In order to utilize areas for temporary cultivation, short-term leases for temporary cultivation were granted. Temporary cultivation mostly involved the surrendered and confiscated land as well as the land reserved for specific purposes, such as for artisans, *lumberdars* allowance or tree plantation until given to the concerned purpose. Temporary cultivation was best suited to reclaim poor land, test soil capacity and increase its the market value. Its purpose was to get cultivation and earn money quickly. It was confined to those lands that had possibility of irrigation and cultivation. Temporary cultivation under the new colonization scheme became regular and systematic.

The possession would be left till the arrival of the purchaser. Neither colonists nor locals were willing to purchase land for such a short period. Initially, temporary cultivation did not produce good results. There were some alternations of leases terms in temporary cultivation that lease shall continue in force in each settlement in the Multan district under the Government and lessees would have no right for cancellation, alteration or any type of modification. (Punjab Colony Manual)

As for the proprietary Rights in Sidhnai Canal Colony, the government was the sole owner of all land for colonization. The proprietary rights were transferred directly from the government to the colonist. "New Sidhnai Canal in Multan is ready to irrigate certain lands as the property of the government in the district of Multan. (Punjab Colony Manual form no.1)

In land sale, the pattern of lower Bari Doab was followed with some modifications as per local customs. In the initial period of colonization, grantees were slow in getting proprietary rights. In transferring the land, condition of self-cultivation was strictly adhered to and in case of absentee purchaser, land usually resumed. Occupancy rights in the government were given only to the grantees on low quality lands that paid lump sum amounts.

In the late 19th and early 20th centuries the canal colonization projects brought radical changes in the Multan district as elsewhere in the Punjab. There was now shift towards cultivation on commercial scale. ( Multan Settlement Report, 1901) With the inception of agriculture department in 1938, research oriented practices were started and higher yielding varieties were propagated by state machinery. Experimental seed farms were opened at Multan, Colonial officials were appointed to supply the high yielding seed varieties to the peasants. The improved method of cultivation brought the traditional farming into a systematic agriculture (Randhawa, 1947)

Furthermore, the use of fertilizers and improved seeds resulted in raising the standard of cultivation; particularly, cotton cultivation became more organized and productive. The new varieties of American cotton were 4-f, 124 F and K. T.25, which gave more income than *Desi* cotton. The American cotton had a staple of greater length. The plant produced more flowers and each flowers. Each flower was larger pod with smaller seed easy to be separated from the fiber. The first sort was more effective on the non-

perennial areas and latter two forms were successful on perennial tracts. In addition, the new varieties of wheat mainly C-518 and C-591 were appreciated by *Zamindars* as they gave good results. (3<sup>rd</sup> Indian Report,1853) Further Canal irrigation system brought development and prosperity to those who already owned land as compared to those who acquired it later. The value of land, in comparison to the value of crops, had increased significantly. Hence, land sale prices also increased, in the district of Multan, between the years 1885 and 1901. (Settlement Report,1901)

Regarding rise in the value of crops, it varied in different tehsils between 36% and 38%; however, during the years 1901-02 and 1916-17, the value of crops raised up to 41% and 49% respectively. The rise in prices had been on the average from 33% as minimum in Mailsi tehsil to 42% as maximum in Shujabad tehsil. (Emerson, 1921) Sale prices of land, on the other hand, more than doubled in all tehsils and only in Multan tehsil, the prices were nearly four times high from the prices of 1890.( Final Settlement Report 1921)

The most encouraging results were visible in the production of cotton, sugarcane, wheat and cereals. Indigo went down and its shrinking was generally favourable to the other crops. *Bajra*, *jowar* and gram were suitable for sandy soil and brought higher returns. There were frequent fluctuations in the production of rice and pulses, which were massively dependent on the water supply. (Settlement Report 1901,p.13) In the slump years, a decrease was visible in the production of all the items of crops but they regained their stability in the next years. Besides, poppy was cultivated in the three villages of Mailsi *tehsil*. (Assessment Report Tehsil Mailsi,1920)

Its cultivation was gradually reduced and vanished. Vegetables and fruits were grown on subsistence scale, while fodder was abundantly planted to provide food for livestock. (Multan District Report 1901) A striking feature of subsequent period of Sidhnai Canal project was the utilization of latest machinery and improved implements incorporated in agricultural procedures like furrow turning, drills, threshers and cutters. (Dependencies Report 1898) These simplified the heavy work in fields and facilitated farmers as the indigenous tools like ploughs, harrows and hoes were improved.

The improved methods and measures to control crop pests were manifested on the eve of religious and cattle fair in Multan. (Multan District Gazetteer 1901-9102.).The good specimens of agricultural produces were brought by *Zamindars* in these shows. Moreover, demonstrating plots under agricultural department were also arranged and responded well by the peasants. Some fields were selected for crop experiment to get better yield and successful methods were advertised among the peasants. (Randhawa, 1986)

However, the picture being projected by the government was not consistent at another level with its own reports. The negative aspects of irrigation were soon to be witnessed. It was just in the few areas of Multan which mirrored the British ideal of small 'peasant proprietor'. According to a British observer, in a few years, for a depth of thirty miles on both sides of the canal-irrigated lands, wells had dried up. As a result of dried up wells, peasants had to migrate towards the newly irrigated lands to work as farm-laborers', artisans and menials. (Gilmartin,1996)The problem seems to have been two fold. On the one hand cultivation was affected by the adverse impact of canal irrigation it-self; on the other hand they suffered through the diversion of natural river and irrigation resources available to them prior to colonization, as early as the 1890s.



The Multan Settlement Report 1901 recorded that the “Ravi for the greater part of winters is no longer a river, all the spare water is diverted into the Bari Doab Canal and the bed of the Ravi in this district can be crossed dry foot most of the cold weather. So far as *Sailab* cultivation is concerned, the state of the river in the winter is a matter of small moment. Complaints against the colonial administration were increasing. Likewise, the colonial management was also anxious due to rising dissatisfaction of local people with them. (Ali,1997)

The water logging issue was created, for the first time, with the construction of the Sidhnai Canal in 1884. The *Zamindars* of the riverian villages on the Ravi submitted petitions regarding the possible effect of the new channel. Their existing irrigation from the river, was affected from open cuts in the banks of Ravi. The issue was promptly investigated and it was found true. The ‘prosperity of the villages would be affected by the migration of the cultivators to the more favorable tracks commanded by the new canal. It was undesirable that these villages would be reduced and affected by the opening of the Sidhnai Canal. (Sidhani Canal Report,1889) Therefore, the government decided to excavate three subsidiary canals, Kuranga, Fazal Shah and Abdul Hakim Canals between 1890 and 1891, for the purpose of improving the irrigation system of these areas. On the other hand, the negative effects of the opening of the canals appeared in many areas of Punjab. In 1899, the Financial Commissioner of Punjab wrote that “the petitions of failure of *sailab* (Ali, 1997) come not only from Gujranwala and Jhang, but also from Shahpur, Mooltan and other districts irrigated by the great rivers. The accepted idea is that the reduction of *sailabis* because of canals. (Financial Commissioner Punjab 1889-99, File/19-42) A As stated above, in the South-West, the petitions seemed to be true. (Hamilton Senior Secretary to Financial Commissioner, 19/42 MDDR)

The Government of Punjab seemed more anxious about the rising tension among *Zamindars*. They wanted to satisfy them by giving them a reliable clarification. The Government considered less important *sailab* cultivation through the canals. (Financial Commissioner, Punjab Review, File A) This resulted in rising discontentment among the Muslim tenants and smaller *Zamindar* communities in the last years of the 19<sup>th</sup> century. Most of them had to leave their villages and shift to the *rawa* and *bar* lands in search of employment opportunities. Even many proprietors were worried because they were losing their cultivators who went to the more suitable tracts in the newly irrigated lands.

The first colonization project in the Punjab was Sidhnai colony, located in Multan District. The estimation of cost construction is given below. (Financial Commissioner 19/42)

**Table 1**  
**Sidhnai Colony**

| Name of Colony | Period of colonization | Where situated |          | Name of canal work | Cost   |
|----------------|------------------------|----------------|----------|--------------------|--------|
| Sidhnai        | 1886-1888              | Doab           | District | Sidhnai            | Rs.000 |
|                |                        | Bari           | Multan   |                    | 1,301  |

The Sidhnai canal project was made by lieutenant J. Anderson, superintendent inundation canals. The proposal was to reopen as a navigable canal of irrigation, a channel known as the old Ravi extending from the tour of Sari Sidhu to Multan, Supplied by means of Dam across the Ravi at the upstream end of the straight and permanent reach known as the ‘Sidhnai, which extends seven miles below Tulmba. The question was first regularly investigated in the course of the surveys of the lower Bari Doab undertaken in 1870-75 in the last of years which two alternate estimates were submitted by Mr. E.C Palmr for a permanent and for an inundation canal from the Sidhnai reach

which amounted to Rs. 16,68,317 and Rs. 5,85,289 respectively. (Settlement Report Multan District, 1901)

The Sidnai was the only canal dependent on the Ravi. The Sidhnai different from the inundation canals of the Chenab from Sutlej that it possessed a weir and it differed from the perennial canals because its supply was more liable to fail the critical seasons of the year. This system combined with three subsidiary canals, Abdul Hakim, Fazal Shah and Kuranga. For the distribution of water, the surplus being first divided between the Kuranga and Fazal Shah and the balance going to the Abdul Hakim. The duration of their supplies was from 88 to 97 days less than to the main canal (Final District Settlement Report, 1921)

The following table gives particulars of the canals which constitute the Sidhnai system: (Gazetteer of Multan District, 1901-1902)

**Table 2**  
**Sidhnai system**

|                               | 1894-95   | 1895-96   | 1896-97   | 1897-98   | 1899-1900 |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| New revenue less interest     | Rs        |           |           |           |           |
| Charges                       | 1,26,426  | 2,02,673  | 1,52,304  | 1,92,394  | 1,01,868  |
| Nit revenue up to end of year | 7,08,599  | 10,43,215 | 11,95,521 | 13,87,915 | 1489,783  |
| Capital outlay to end of year | 10,21,940 | 10,93,592 | 11,24,106 | 11,64,409 | 11,98,977 |
| Profit Percent                | 16.16     | 22.28     | 17.37     | 20.33     | 12.32     |

The Sidhnai colony was settled mainly in 1886-88 and the total allotted area, after further extension in the 1890's was around 250,000 acres. For the utilization of land, the government expressed the wish not to create large properties in which grantees would become were renters, but to allot land to "small well-to-do agriculturists who will cultivate their own holdings". The actual size of grants in Sidhnai colony was influenced by the fact that canal irrigation was seasoned rather than perennial guarantees of land had to construct of mature the all important Rabi crops, and for this they had to process a certain amount of capital. (DC Multan to Financial Commissioner Lahore, 1888)

To attract such man the minimum size of grant in the later perennially irrigated colonies. The colonization process was molded by two forces: the state and the social structure. The former was important because it controlled land distribution. The canal colonies were situated in tracts designated as crown waste lands. This transferred ownership of these areas to the state, and allowed it to dispose of the land according to its direction since the state also controlled the canal system and the water source agriculture itself became department on the will of the ruling authority. The owner ship of both land and water gave the central power virtual control over the means of production thus greatly enhancing its authority over society (Ali, 1989)

How ever turning to the categorization of the canals, in 1921 this scheme was changed in British Punjab. All the channels were designated productive or un productive without regard to the financing scheme under which they were built. Productive canals were those which after the first ten years, could self finance their operating system expenses and interest in on the loans. Irrigation receipts fell into two categories, direct and indirect, Direct recipients include the abiana, or water rates charged for maturing crops and subsidiary services such as tools for navigation, water power etc. The abiana was a system in existence before the arrival of the British. Water users, be they land owners or tenants charged per acres of irrigated crop but the rate varied on the type of

crop being grown and source of water ( well or canal ). Plans for volumetric pricing were proposed but technical and political obstacles prevented wide spread adoption of such schemes until in to the 20<sup>th</sup> century. In direct receipts included "canal advantage rate " and interest of sale of "crown lands " made productive by the irrigation works . " Canal advantage, was a levy on land owners were now able to charge more rent and some of this increased income should be passed on the state that enabled it.

The effect of perennial canals of the British was largely detrimental to the older inundation canals. As well as diverting water and thus reducing the effectiveness of the latter, The British were reluctant to provides funds for their annual cleaning as income derived from them was minimal compared to the perennial canals. (Agnihotri,1996 ) Additionally the Silab Land was adversely affected and the areas available for grazing drastically reduced, well usage dropped as the canal system expanded and farmers relied on easier to utilize sources of water. Some efforts were made by the British to compensate for loss of land value due to the new canals. Many local land lords were given compensatory grants of colony land with out to reside there.

The biggest problem after introduction of perennial canals, however, water logging. Seepage from canals drastically raised the level of ground water rendering land unfit for cultivation. This was often accompanied by the development of patches of Kallar (salts) which prohibited the growth of crops.

The drop well usage compounded this water table rise. As water became available, farmers quickly abandoned the labor- intensive irrigation technique. By the early 20<sup>th</sup> century was typically one or two feet a year (Agnihotri, 1996). British administrators developed a number of stop gap procedures to address the issue. These include drains dug to carry off seepage procedures to address the issue. These include drains dug to carry off seepage water, closure of some canals for period of time and keeping the water levels in canals as low as possible. British administrators developed a number of stop gap procedures to address the issue. These included drains dug to carry off seepage water, closure of some canals for period of time and keeping the water levels in canals as low as possible.

It has been argued that development of the British canal system highlighted tension with the British administrators itself (Gilmartin, 1996) .British colonial administrator linked colonial state and indigenous elites together in a common political order. A crucial element to this order was the scientific appropriation of local knowledge. Great efforts were made to catalogue indigenous defined rights and customs. In the earlier portions of British rule when inundation canals predominated, this system worked well. To the perennial canal engineers, however, this local knowledge was deemed irrelevant. Essentially, the rulers changed and local knowledge was deemed irrelevant. Essentially, the rulers changed and the local knowledge was excluded from the discourse of power. The old chher system of canal maintenance was unnecessary and new system of organization were such as chakbandi (the definition of chaks, or fixed areas, assigned to specific outlets (Gilmartin ,1996). Naturally: these changes prompted protests, Gilmartin however argues that the political problems that ensued did not simply results from the upset of local system of control, but because the power of the colonial state itself had been based upon the relationship to local knowledge.

From the stand point of colonial administrators, the irrigation network and canal colonies they enabled were a success on a financial level. By 1928 the eight colony districts contributed more revenue than the other 21 districts of the Punjab province

combined. Colonial administrators were proud to report that before the Chenab canal was constructed, 1800,000 acres of crown waste only gave revenue of “ a few hundred pounds ” from grazing rights were by 1906 the same land contributed revenue of over 70,000 pounds. The net profit to the state was 450,000 pounds which equaled a return of 23% on capital costs. (Financial Commissioner Multan ,1921) More intangibly, the ties of the colonists to the British administration made Punjab a land of considerable over all political stability. As one hopeful administrator commented early on in the colonization scheme,” the eyes of the masses have been opened to the agreed benefits they are receiving under British rule (Commsioner,1921)

## **Conclusion**

The district, however, also witnessed enormous socio economic revolution with the opening of perennial canal system, as the Sidhnai canal system began to irrigate the huge barren tracts of the district, which has hitherto been laying waste. The perennial canal system and the scheme of Sidhnai canal colony changed the whole landscape of the district. This resulted in substantial agricultural growth and in the overall prosperity of the district. A number of colony villages were established along the Sidhnai canal tracts. The villages were designed as having a well balanced lay out and were accepted with the colonist and functioned as a central component of socio- economic change. The district had favorable location and was linked the rest of the Punjab through the Lahore -Karachi railway line on which the market towns of Shujaabd , Mailsi and Kabir wala established to make easy the export of surplus agriculture produce out of the district. Multan town became the key center of commerce and internal rail born trade. In Multan business, industrial activities were twisted together and major industries and factories were located nearby the town. The colonial management did not encourage any industrial development except the cotton and ginning industry. Side by side, during the colonial period some towns lost their importance at the expense of others. For example the new Sidnai canal colonies had deprived Multan for trade in wheat with competition of Lyallpur. The development of Lower Bari Doab Colony shifted the center of gravity of cotton industry to newly developed mandi towns of Jahanian , Khanawal and Mianchannu with the large supply of American cotton. The direct route to Karachi by Khanawal Lodhran chord lines served further to increase the industrial of these mandies at the expense of Multan. Anyhow substantial economic development emerged in Multan. All of these socio economic developments had brought diverse impact on the localities and the communities within the district. The development pattern was skewed towards the business classes and the colony areas. There was innate stress between the development goals and the motives of political control which create unintentional effects of narrow down the development process.

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