Socio-Economic Impact of Sutlej Valley Project (SVP) on Princely State of Bahawalpur: A Historical Review

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Abstract

The aim of this study is to highlight the significance of Sutley Project (SVP), a colonial mega canal colonization scheme launched by the British India in 1922-33, in order to irrigate Punjab, Princely States, Bahawalpur & Bikaner. State Bahawalpur possess princely status in British India from 1748-1947. It had a glorious history with its popular Nawabs. In 1892, Bahawalpur possessed around 50 major & medium canals with a total length of 1800km with population of 6.5 lac. From 1748-1947 it was ruled by twelve Nawabs, who contributed whole heartedly for development and welfare of the State. Nawab Sir Sadiq was visionary leader like others predecessor, Nawab Sadiq was keen for the development work and launched a flagship project, Sutlej Valley Project (SVP) 1922. It was a landmark achievement for the prosperity of the State, specially, in the Socio-Economic & Agro-Economy of the State. Post SVP, Revenue of the State was more than double & agriculture land extends four times. Bahawalpur initiated the SVP by adopting modern canal systems & planned to build in order to cater the needs of people living in desert region including urban & rural areas.

Keywords: Agriculture, Demography, Irrigation, Land Settlement.

Introduction of Princely State Bahawalpur

Bahawalpur's history and development can be divided into two phases.

First period comprises of 139 years, 1727 to 1866 and second period, was of 81 years, 1866-1947.

The Bahawalpur as a Sovereign State had alliance with East India Company in 1833, and remained loyal to the British Empire 1857-1947. The Physiography of Bahawalpur state is diverse, South-West ends consists of massive desert & South-East edges with sizable population and lush green fields. As for agricultural irrigation, Bahawalpur was part of the Greater Indus Basin. The Sutlej River crosses Bahawalpur State

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320 km, River Chenab 160 km and the Indus River 110 km.¹ Both rivers & desert areas acted as natural boundaries. In the beginning of the 20th century, the idea was to utilize river water for irrigation of desert & barren lands.

The Nawabs of Bahawalpur took keen interest to modernize the State. They kept foundation stone of Forts, Palaces, Gates and Educational Institutions. Last Nawab of Bahawalpur, Sir Sadiq Muhammad Khan Abbasi-V, born in 1904 raised under the Regency Rule in State Bahawalpur (1903-24). Nawab was junior and could not hold the government, the caretaker cabinet of Regency gave guidelines to Nawab Sadiq. As Nawab becomes mature, he assumes office and starts working. On April 1924, Nawab Sadiq takeover the administrative duties of State Bahawalpur. In 1920-21, Nawab Sir Sadiq accepted the SVP plan with support of Government of India. The British Government adopted a unique canal system for India but in Rajasthan, there was no proper irrigation system and dam. Natives were dependent on natural sources of water for irrigation purpose and the shortage of water was acute problem for the peasants.

In1866, Captain Mr. Munchain, appointed as 1st British Political Agent to Bahawalpur, excavated more than 26 Canals which were linked with River Sutlej for Bahawalnagar & Bahawalpur Districts.² Furthermore, in-mid 1870, Ford-Wah Canal was created. This canal was vital for the development of agriculture for the local area. In 1889, the Sadiqia-East Canal carried out from Sulemanki upstream and extended up to 40 kilometers. In 1898, its tail extended further 22 kilometers. From 1867-1905 there was an old Canal System and 'Superintendent' was Head of Canal System at district level. Capitan Mr. Charles Cherry Munchain was the first Advisor of Canals in the State.³ In January 1905, Bahawalpur State realized the importance of Irrigation System and established the Irrigation Department later the proper posts of Canal Officers were created, Superintendent was In-charge at District Level.

¹ Muhammad Din, *The Political History of Bahawalpur1833-66*, Bahawalpur, 1962, 93.

 ² L.J.H. Grey, *The Land Settlement of Bahawalpur State*, Bahawalpur, 1900, 128

³ Malcolm Lyell Darling, *The Punjab Peasant in Prosperity and Debt* (London: Oxford, 1928), 153.

Chart of Irrigation Department Bahawalpur State: 1905				
17- Ziladar 24- Daroghas 18- Naib Daroghas				
72- Peons	264-Mirabs	180-Arbitraters ⁴		



Source: Official Map of State Bahawalpur (Rajputana State) in British Raj1857

Historical Background of SVP

The Sutlej is second longest flowing river of Pakistan with total of 1850 km in length. Sutlej originates from Western Tibet Mountain Range and tributary of the Indus River, it passes from various provinces of India & Pakistan, Himachal Pradesh, Haryana and Punjab and then enters into Rajasthan and get merged at Panjnad Headworks, Bahawalpur. River Sutlej provides water from irrigation and other blessings to province of Punjab, Haryana & Rajasthan.⁵ Export Inspection Council (EIC) transformed from commercial company to a military power from 1612-1857, so this led the foundation stone of British Empire in India.

In mid-1850, the idea of SVP was welcomed by East India Company, they planned for the better utilization of water from river Sutlej. In 1854, Company Raj proposed a rough outline to utilize the hydro resources of the river Beas & the Sutlej in order to irrigate the agriculture land of Lahore, Montgomery, Firozpur, Bahawalpur and

⁴ Shahamat Ali, *The History of Bahawalpur*, London, 1848, 121.

⁵ Sir Alexander Burnes, *A Voyage The Indus* (Karachi: Oxford University Press, 1960), 87.

Bikaner States.⁶ Initially, there were two major motives behinds the mega plan firstly, to ensure Agro-Economy production, the insurance of food security to the rapid growth of population. Secondly, the supply of raw materials for generating revenue for the British Government.⁷ Modern irrigation system of engineering irrigation infrastructure work commenced after the annexation of Punjab in 1849. British administration devised a plan for comprehensive large scale canal system. Rajistan, Sindh & Punjab regions were reviewed for modernization.

British administration developed nine Canal Colonies in the Punjab Province from 1885-1926. Each colony scheme had its own strategies and agricultural importance. Sidhnai Canal was the premier in the British Punjab and Nili Bar was the last colony and the Sutlej Valley Project (SVP) was contemporary colony to last one.⁸ Bahawalpur was Apex State in the Punjab Province to come under the canal enhancement programme based in the Punjab Canal Colonies. This irrigation project not only converted barren land into fertile, but also provided continuous supply of water to the region thus, establishing a massive canal irrigation system in the Punjab. British Government initiated huge infrastructure development projects which includes canals and dams in the province of Punjab and Sukkur Barrage in Sindh.⁹ In post 1857, Export Inspection Council (EIC) replaced by British Empire & transfer of power shifted over to Crown of British India in Subcontinent.

In 1873, after a comprehensive study led by Engineer Mr. J.W. Burnes that proposed a mega plan for irrigation of Punjab, Bahawalpur & Bikaner adjacent area.¹⁰ British Indian Government constituted a Committee over the Burnes Scheme. Controversies arose about the distribution of water, revenue & financing, engineering skill, river route and estimates on irrigated land. As an expert, Sir Claude Hill specially visited from United Kingdom to settle the Issues but no outcome was

⁶ James M. Doula, 'The Punjab Canal Colonies', Journal of Royal Society of Arts, 62:3210 (29 May 1914), 611-623. http://www.Jstore.org/stable/ 41341616-

 ⁷ Bernard Darley, 'The Development of Irrigation in India', *Journal of Royal Society of Arts*, 90:4602 (12 December, 1941), 39-56. https://www.jstor.org/stable/41359832

⁸ The Punjab Colony Manuals of 1922, 1924 & 1936. Official Record.

⁹ David Gilmartin, *Blood & Water: The Indus River Basin in Modern History*, University of California Press 2015, 115.

¹⁰ Punjab Irrigation Department: Annual Administration Report of Bahawalpur State: 1873-74 (Lahore 1874), 149.

seen. Mr. Hill submitted his Report to Government of England. Later on, British review its plan and revisited six times in different phases.

Multiples Survey commence for Sutlej Valley Project — 1905-21

- 1. 1905: Fist Survey Report on Irrigation Commission presented by Mr. Kennedy & Mr. S. Preston.
- 2. 1906: 2nd Survey Report on Irrigation Commission recommended by Mr. F. Charles Glass.
- 3. 1915: Inspector General of India, Sir John Benton & Engineer of Bahawalpur State Mr. Davis.
- 4. 1916: Inspector General of India, Sir Michael Nethersole & Secretary India Mr. F.C. Rose.
- 5. 1919: Inspector General of India, Sir Thomas Ward & Secretary India Mr. F.C. Rose.
- 1921: Mr. H.W. Nicholson. December15, 1921 Signature between State Bahawalpur & Bikaner.¹¹

Chief engineer of irrigation, Mr. Nicholson endorses SVP and urged that the project would be greatly beneficial for region. Secretary of State for India, Mr. Edwin Samuel Montagu1917-22 was signatory of SVP. A special agent to Governor General, Lt. Col. A.J.O. Brien was appointed as Additional Member of Public Works & Revenue.¹² In 1921, Tripartite Agreement signed by the British Government Punjab, Bahawalpur & Bikaner for sharing the water of the Sutlej & Beas rivers. The agreement proposed equal sharing of water among the three states.¹³ According to the SVP, eleven canals were to be constructed, four for Punjab, six canals for Bahawalpur & Sir Ganga Canal for Bikaner.¹⁴ In 1922, SVP was initiated by Public Works of Punjab Province, Government of India. SVP 1922-33 was one of the greatest achievements by Sir Sadiq for the State. According to this project, new canals would made on the Sutlej and supply water to massive area of the state to irrigate the land. Furthermore, Sulemanki Headworks, Islam Headworks were also planned within Punjnad Headworks.

¹¹ *Government Records of the Survey of India*, Government Printing Press of India, New Delhi, 1922, Vol. 16.

¹² Mr. Dobson, Member of SVP Enquiry Committee on 30th January 1932. Report of the Indian Irrigation Commission & Board of Revenue Reports and Returns of the Agricultural Statistics of India, 1921-30, 374-88

 ¹³ Fareeha Zafar, Canals, Colonies & Class: British Policy in the Punjab 1880-1940 (Lahore: School of Economics 2016), <u>http://hdl.handle.net/123456789/15435</u>. Date 04.04.2017

¹⁴ The Administration Report of Bahawalpur State 1921-22, 87

SVP started in 1922-33 can be divided into four groups.

Firozpur	Sulemanki	Islam	Panjnad
Headworks	Headworks	Headworks	Headworks

Firozpur Headworks constructed under the Sutlej Valley Project 1922-26. It was the first Headwork of SVP on the River Sutlej and its tributary. The River Beas joins about 40 miles under the Headworks with capacity of 4, 50,000 Cusecs. The channels taking off from Hussainiwala Headworks cater the Irrigation needs of Firozpur, Fazilka and Jalalabad Tehsil. The kharif crops are totally depending on these channels. Besides, Bikaner Canal carriers' water to Ganga Nagar District of Rajasthan State for irrigation and drinking needs.¹⁵

- i. Firozpur Headworks was built in 1926 on the Sutlej River. Three Canals were originated from these Headworks, Dipalpur Canal from West Bank to irrigate Lahore & Montgomery (Sahiwal). Two Canals linked from Eastern Bank of River Sutlej.
- ii. Eastern Canal to feed District Firozpur & Bahawalpur State.
- iii. Bikaner Canal to irrigate Bikaner State.¹⁶

Sulemanki Headworks was part of SVP & completed in1922-27. A major Pakpattan Canal was excavated in1925, which irrigated the right bank of the Sulemanki Headworks & adjacent area. Pakpattan Canal took place in British Punjab on the right bank of Sulemanki Headworks.



Source: Original inauguration stone on Sulemanki Headworks 1926.

¹⁵ M. Mufakharal Islam, 'Irrigation, Agriculture & the Raj Punjab: 1887-1947', *The India Economic & Social History Review*, Vol. 37 (2000), 4.

¹⁶ James L. Wescoat, M. Abu-Bakr, Afreen Siddiqi, 'Socio-Hydrology of Channel Flows in Complex River Basins: Rivers, Canals, and Distributaries in Punjab', *Pakistan: Journal Water Resources Research*, Online ISSN: 1944-7973-54, 1 (January 2018): http://dx.doi.org/10.1002/2017wr021486.

On 12 April 1926, Governor of Punjab, Sir Malcolm Halley inaugurated the mega project. It was prime project to develop the South Punjab. Three more Canals were excavated from Head Sulemanki, which supplies water to South Punjab, Bahawalnagar & Pakpattan wasteland of the area. The Upper Pakpattan Canal arises from its right bank and two canals arise from the left. The canals on the left bank are Ford-Wah & Eastern Sadiqia Canal. Eastern Sadiqia Canal bifurcate into Siraj-Wah distributary. Eastern Gray Canal was drawn from these Sulemanki Headworks, which had supply 564 Cusecs water to Bahawalpur State. The first Sadiqia Eastern Canal was 70 miles long and it was drawn from the left side of the Sutlej. It irrigates the eastern side of Bahawalpur State. It was a perennial canal which supplies water up to 4917 cusecs.¹⁷ The following are branches of Sadiqia Canal:

- i) Hakara branch was completed in 1929-30. From the northern side of this canal more branches were drawn: while from the southern side of Hakara canal branches were drawn. Hakara Right Distributary was drawn at the tail of Hakra Branch.
- ii) Ford-Wah Canal drawn from the left side of Head Sulemanki and irrigated eastern part of Bahawalpur State. It was completed on 30 May 1930.
- iii) Pakpattan Canal was drawn from the right side of Sulemanki and irrigated Montgomery (Sahiwal) District & Nili Bar area of Multan region.¹⁸

The Sadiqia East & Ford-Wah Canals started to change the fate of the desert which lies from Fort Abbas to Hasilpur up to 160 kilometers downstream of Headworks. Now these canals irrigate 2.8 million acres of barren land.

¹⁷ Imran Ali, *The Punjab Under Imperialism: 1885-1947* (UK: Princeton University Press 1988), 13.

¹⁸ The Bahawalpur Archives, The History of the Sutlej Valley Project Report.



Source: Original Picture, Punjab Irrigation Department

Two main Canal Sadiqia East & Ford-Wah drawn from Head Sulemanki the Sadqia was perianal canal with capacity of 5230-cusecs. This canal was 49 miles in length and further divided in three Water Channels.¹⁹

Table 11. Hakara BranchLength 57 Miles2. Malik-Wah BranchLength 23 Miles.3. Siraj-Wah BranchLength 18 Miles

S. No	Name of Canal	Area of Acres	Cultivated Area	Cultivated Area
1	Sadiqia East-49-Miles.	1197425	887012	20897
2	Ford-Wah-47-Miles	45555	60713	358297
3	British Eastern	64115	1611	60474

Table 2

Ford-Wah was second prime canal drawn from Sulemanki, its length was 47 miles with discharge of 325 cusec water. Ford-Wah, further divided in to Macleod Ganj Branch, these distributaries bring green revolution in the region. The length of water channel was about 450 miles & total length of water channels was 2100 Km the area irrigated by these canals is about 850000 acres.²⁰ The Islam Headworks is situated 10 miles away to Hasilpur Tehsil, Islam Headwork again built on River Sutlej on 1922-

¹⁹ Francis William Hall Downing, 'Islam Weir: Sutlej Valley Project', Issue 69 of Selected Engineering papers, Institution of Civil Engineers (Great Britain), *The Institution*, 1929, 11-19.

²⁰ Dr. Hashmi, Zahra Akram, 'Canal Colonization in the Princely State of Bahawalpur: An Attribute of the Agrarian Development', ISSN: 2414-8563. *Journal of Historical Studies*, IV:I (January-June, 2018), 52-73.

27. As a 3rd component of SVP for supply of water in Bahawal-Canal with capacity of (5,400 cusecs), Qaimpur-Canal (4830 cusecs) and Mailsi-Canal (4,883 cusecs).²¹ It was best irrigation scheme for water supply in adjacent areas. It was inaugurated on October 28, 1927. The Islam Headworks designed for a discharge capacity of 0.3 Million cusecs. Post Indus Water Treaty 1960, the Mailsi Canal attached to Sidhnai-Mailsi Link Canal in 1965. Eventually, supply of water in Bahawal Canal decline from 5400-1000 cusecs of water. In this way local area of Bahawalpur effected after the IWT 1960.²²

- 1. Mailsi Canal
- 2. Desert Brach
- 3. Bahawal Canal
- 4. Ahmadpur Brach

All the above Four Canals were excavated from Islam Headworks for irrigation, Mailsi Canal stated from Right Bank of Islam Headworks & Bahawal Canal stated from Left Bank, these canals has much capacity to carried out the water which irrigate (689,000 acres of land) in Southern Punjab and (700,000 acres) in Bahawalpur State. Third one was Canal Qaimpur which also emerges from left side of river bank. The irrigation water of 2490 cusecs was supplied to perennial canals of Bahawalpur and 3459 cusecs for non-perennial Canals.²³ Anyhow, after 1947, the level of water on this head decline. Following canal was drawn from Islam head works and the first two mentioned below were drawn from the right side of the river. Bahawal Canal irrigates the western part of Bahawalpur District. It was 45 mile long canal supplies water to subsidiary perennial and non-perennial canals. Two major branches are drawn from this canal. Desert Branch was constructed to irrigate southern Cholistan desert of Bahawalpur. Its length is 20 miles. Ahmadpur branch supplied irrigation water to Tehsil Ahmadpur. From this canal. Derawar and Mithra distributaries are drawn.

²¹ Fareeha Zafar, *op.cit.*, 138.

²² Francis William Hall Downing, *op.cit.*, 17

²³ Dr. Zahra Akram Hashmi, *op.cit*.

Figure 4



Source: The Bahawalpur State Archives. Head Punjnad site under construction on 1930).



Source: The Bahawalpur State Archives. Head Punjnad site under construction on 1930).

Punjnad Headworks was IV & final point of the project & almost the dead ends of river Sutlej. Panjnad Headworks is situated 7 km away from the Tehsil, Alipur, Districts Muzaffargarh and the Province Punjab British India & Bahawalpur. The construction of Punjnad Headworks started in July 1926 and completed in April 1932 and no formal inaugural ceremony was held. It was opened on April 12, 1932. The Headwork built with discharge capacity of 0.45 million cusecs of water. Again in 1932, its design remodel & enhanced discharge capacity up to

the 0.7 million cusecs of water. This irrigation scheme aims to develop the desert areas. The Abbasia & Punjnad Canals excavated from Punjnad Headworks to irrigate the remaining areas of Bahawalpur. SVP brought a green blessing to the Bahawalpur State.²⁴

- I. Punjnad Canal
- II. Abbasia Canal

Punjnad Canal irrigated the western side of the State Bahawalpur (now District Rahim Yar Khan). The land located along with canal is considered to be the best area for agriculture. Abbasia Canal irrigates the south western side of Bahawalpur State. The maximum quantity of water in Sulemanki & Islam Headworks was available from April to October in kharif season and about 12,620 cusec water flows under the Headworks, from November to March. In the rabi season, the flow of water is 6297 cusec.²⁵ Usually in kharif Season, the shortage of water is witnessed, while adequate water is available in Head Panjnad. Bahawalpur increased the total length of canal & feeders up to 245 miles. The tributaries minor & sub-minor of these canals was 2200 km at the time of 1947.²⁶

Increase of Agriculture Land in BWP State post SVP: From 1930-45

- 1. 1930 Year: 614971 Acres of Land Increased in Bahawalpur State.
- 2. 1935 Year: 625701 Acres of Land Increased in Bahawalpur State.
- 3. 1940 Year: 733945 Acres of Land Increased in Bahawalpur State.
- 4. 1945 Year: 844331 Acres of Land Increased in Bahawalpur State.²⁷

In 1922, cost of SVP was 330.31 million & 152 million provided by State. 20 million were paid from the State and the remaining amount was loan from the British Government. The lease started from 1936 and its maturity time was 1986. It was fifty years lease but Nawab paid rest of the amount in 1950. The Mark-up was 4% of total amount. Due to excellent management, productivity & prosperity, Bahawalpur able to pay principle and mark up amount in 36 years before time. Due to this project scheme 2.750 million acers of land out of 5.180 million were allotted to the public, with irrigation facility, on permanent basis. The remaining 3.330 million acres of land were distributed to the public on non-permanent basis.²⁸ Actually, all the Headworks stored the massive

²⁴ The Bahawalpur Archives, *The Sutlej Valley Project Official Report*, 1932.

²⁵ The Administration of Irrigation Report of State Bahawalpur, 1942-43.

²⁶ The Annual Table of Punjnad Canal as under which is irrigated.

²⁷ The Administration of Irrigation Report of State Bahawalpur1942-43.

²⁸ Col. Saeed Hashmi, *Subh-e-Sadiq*, Bahawalpur, 1949, 211.

water & canals received the enough amount of water. The peasant of the state was quite happy for the prosperity & welfare. As per calculations this project was profitable for the State of Bahawalpur. For procurement of SVP, Nawab Sadiq decided to send a team of young trainees in Sheffield University of Engineering, UK. Mr. Sheikh Ahmad Hasan, Syed Noor Ali, G.M. Malik, Ghulam Mehboob Subhani, & Ashraf Jalwana were included.²⁹ On return, they assume charge as qualified engineers and work for Bahawalpur Irrigation Department.

Table 5: Total Income Revenue		
From 1924-25	2.697 Million- 26 Lacs 97 thousand	
From 1944-45	5.562 Million- 55 Lacs 62 thousands	

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Table 1. Total Irrigation Income

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From 1924-25	1.144 Million- 11 Lacs & 44 thousands		
From 1944-45	7.418 Million- 74 Lacs & 18 thousands ³⁰		

 Table 5: Estimates in the Original Plan of 1920

	Area in Acres						
State	Peren	nial	Non-perennial		Total	Cusec	Cost in
	Gross area		Gross area		irrigated	s	Rupees
	commanded	Irrigated	commanded	Irrigated	area		
Bahawalpur	2000000	1231820	2866701	1592798	2824618	12504	71824335
British	900000	501620	2880846	1440423	1942043	14963	50091551
Bikaner	544520	340870			340870	2144	20121121
Grand Total	3444520	2074310	5747547	3033221	5107531	29611	142037007

Source: Government of Punjab: Irrigation Branch, Sutlej Valley Project, 1920.

²⁹ Ibid.

³⁰ Dr. Hashmi, Zahra Akram, *Agro-Economy of State Bahawalpur*, Ph.D. Dissertation. IUB 2018, 211.

Within two decades, the gross income of State Bahawalpur increased by 9.1 Million Rs and it was increased of 238 per cent. The production of food cereal crops was increased up to 51.50 million & it was made possible due to the demographic factor. In this era, the demography of Bahawalpur was doubled and 2.5 Million acre of deserted land converted into agriculture.³¹ Due to bumper crops & over production new markets, and roads were established. Furthermore, the Cholistan started to convert in green fields. A huge migration of farmer come for agricultural land, so Cholistan turned in to populated area in two decades. Massive migration of peasants from Amritsar, Lahore Lyallpur & Montgomery & Sindh Province was noticed in Bahawalpur. Sir Sadiq with his team planned to establish new markets at Haroonabad, Fort Abbas, Yazman, Rahim Yar Khan, Liaqatpur, Hasilpur, Chistian, Bahawalnagar, Sadiqabad and Bahawalpur. The SVP becomes the blessing for natives & gate way of the development.³² Cholistan Canal built as integral part of the SVP, now it has blocked with sand. Cholistan consists of 6.4 million acres of land which today is nothing but a barren desert without a drop of water.³³ Moreover, Bahawalpur & Cholistan possess a unique importance in defense strategy. This region is totally ignored in the last seven decades. It is the prime responsibility of the government of Pakistan to build more link canal to prevent further damage to life, environment, livestock, and agriculture and agro-economy of the Bahawalpur.

Particulars	1924-25 in Rupees	1944-45		
Income from Revenue	26,97,997-Rs	55,62,632-Rs		
Income from Irrigation	11,44,700-Rs	74,18,854-Rs		
Estimated Income from Crops	1,97,56,501-Rs	15,04,17,028-Rs ³⁴		

Table 6: Bahawalpur State Income from 1924-25 to 1944-45

Years	Income	Expenditure	Balance
1952-53	17,29,12,887	14,29,34,149	29,987,738
1953-54	20,34,11,638	16,25,72,500	40,839,138
1954-55	20,88,50,238	16,57,51,200	43,099,038 ³⁵

³¹ Dr. Khalid, Zahid Ali, State, Society & Environment in the Ex-State of Bahawalpur: A Case Study of Sutlej Valley Project, 1921-1947, Doctoral thesis (PhD), University of Sussex. http://sro.sussex.ac.uk/id/eprint/74838.

³² Imran Ali, *op.cit.*, 98.

³³ Dr. Umbreen Javed, *Politics of Bahawalpur From State to Region (1947-2000)*, PhD. Dissertation, 2004, 141.

³⁴ Col. Saeed Hashmi, *op.cit.*, 249.

 Types of Canal
 Irrigated Area of Bahawalpur State.
 Actual Area of State
 Area in Acres

 Irrigated area through Perennial Canals
 1,231,820 Acres
 Bahawalpur State
 2,825,000Acre

 Irrigated area through Non Perennial Canals
 1,440,423 Acres
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 Total area.
 2,672,243 Acres
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 Table 8: Estimate of the Irrigated Area through Sutlej Valley

 Project 1922-33

It was original cost but later, it was increased.

Conclusion

SVP becomes the back bone of the Bahawalpur State, further it also contributed the Pakistan's agro-economy. In 1947, Mr. Cyril Radcliffe Chairman of Boundary Commission for India & Pakistan having no knowledge of ground realities, chop-off land & rivers. In context of SVP, Mr. Radcliffe's ignorance played a fatal trick, Hussainiwala Headworks handover to India and Sulemanki Headworks merge in Pakistan. Further in 1960s, the region becomes the victim of hydro-politics. Indus Water Treaty (IWT) probe fatal for State of Bahawalpur. Post IWT 1960, the prosperity of State Bahawalpur began to down fall. The vision of Nawab Sadiq was lost.



Source: Punjab Irrigation Department.

³⁵ Bahawalpur State Income before One Unit-1955, Syed H, Mahmoud, Chief Minister of State (Speech), 1953-54.

³⁶ The Administrative Report of State Bahawalpur 1942-43, 50.

On the other side of border, the Rajistan belt presents a different view, a very fresh fields, livestock and massive yield. India builds 650km the Indira Gandhi Canal in 1952 with a capacity of 20000 cusecs to supply of water to entire Rajasthan region. It inundated the seven districts of Rajistan which contributes the prosperity of India. Cholistan has the capability to become a food basket for country. Reservoir are the sign of lifeline, prosperity & center of economy, the natural water flow help in recharge the underground silt & soil. As per survey reports the underground water had been contaminated and not fit for by human consumption and livestock. Due to the decrease in water level of the Sutlej River, the eco-system of the region is badly affected. Water level had dropped & agriculture production also reduced. The economic activities of natives are limited now. In the context of this natural climate condition, special plans are suggested to manage water accessibility for the people of the region.