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SELECTIONS FROM THE RECORDS

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SELECTIONS FROM THE RECORDS  
OF THE  
FINANCIAL COMMISSIONER'S OFFICE, No. 43.

No. LXXI.—PAPERS RELATING TO THE IRRIGATION WORKS  
IN THE SIALKOT DISTRICT.

No. 2897, dated 19th October 1894.

From—Lieutenant-Colonel J. A. L. MONTGOMERY, Officiating Commissioner and Superintendent,  
Ráwalpindi Division,

To—R. SYKES, Esquire, Senior Secretary to Financial Commissioner, Punjab.

BOTH Mr. Rivaz and Mr. Thorburn, when on tour in the Siálkot district last winter,

Five maps of the five tahsils.  
Five Statements A showing canals and  
*bands* made in each tahsil.  
Five Statements B showing agricultural  
advances made for wells from 1st April  
1888 to 31st March 1894.

told me I ought to send up a report showing what I had done towards encouraging and developing irrigation works while in charge of the district. I have the honor in accordance with these instructions to send the papers noted in the margin.

2. Immediately after taking charge of the district in 1888, I saw that much could be done to encourage the construction or repair of irrigation works. The district lies not far from the hills; and the flow of water during the rains from north-east to south-west is very great. The people had already made some attempts to store this water; but their attempts had been fitful and marred by a want of combination among themselves. I found the people only too glad to be advised in these matters, and I was fortunate at the time in having M. Aurangzeb Khan as Tahsildár of Pasrúr. The work begun by him in connection with the great Satrah *chhamb* gradually increased, and the other Tahsildárs came to know that the way to get on was to do what they could for the good of the people. I spent a good deal of time in my tours in considering irrigation projects. The largest works were:—

- (a). In tahsil Daska the Aik Canal.
- (b). In tahsil Pasrúr the works connected with the Satrah *chhamb*.
- (c). In tahsil Raya the canal from the Degh at Jiwan Goraya, and that from Hachar.

3. The officers who did the best work were:—

- (1). M. Aurangzeb Khan, Tahsildár of Pasrúr, now Officiating Extra Assistant Commissioner.
- (2). M. Feroz Dín, who succeeded him as Tahsildár of Pasrúr.
- (3). M. Imám Ali Khan, Tahsildár of Daska, and now Officiating Extra Assistant Commissioner.
- (4). M. Ghazanfar Ali, Náib-Tahsildár of Raya.

I shall be glad if the thanks of Government can be conveyed to these officers. They did not spare themselves, but were often out at all seasons of the year supervising the construction of irrigation works, settling disputes, and saving *bands* from destruction when threatened by floods.

4. The great point was we carried the people with us. When I asked them why they did not combine and make a *band* in a place that was manifestly profitable, they would reply that they could not agree among themselves who was to begin the work; but if I would send a *tahsil chaprási* who would make them combine, they would be very thankful. In the smaller works the sending of the *tahsil chaprási* was ordinarily all that was needed. It will be noticed that a good deal of Degh water has been diverted for irrigation purposes, more especially in the Raya tahsil. In this connection I should note that I was very particular to allow no new *bands* in the Degh. They were repaired or reconstructed only where the *Riwáj-i-ám* of the last settlement showed them to have before existed. This was necessary to preserve the rights of the lower villages and districts in their old established irrigation. When the Degh is not in flood less water now goes down to the Gujranwála and Lahore districts; but this is only because the Siálkot villages now take the water they have always been entitled to.

5. The irrigation customs have been carefully revised during the present settlement, and will be found in the new *Riwáj-i-ám úbpáshi*. I hope succeeding Deputy Commissioners of Siálkot will continue to take an interest in these irrigation works, and will increase their number. Without constant supervision many of the *bands* will fall into disrepair, and the people will be great losers. The five statements marked B show the amount advanced to the people for wells during the six years ending 31st March 1894. In this matter also it is very important that the Tahsildárs should be kept up to their work. Every loan applied for means extra work to the Tahsildár in inspection and to the Revenue Accountant in the preparation of accounts. But my experience is that if every facility is given to the people to apply for loans a great deal of money can be most profitably advanced, and they are most thankful for it.

I shall be obliged if the maps can be returned, as no copies have been retained of them, and they will be useful for future reference to the Deputy Commissioner of Siálkot.



A.—List of Bands and Canals (Irrigation Works) made in Tahsíl Royá since 1st April 1888.

No.	Name of irrigation work.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the zamíndárs themselves?	Remarks, giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, i.e., papers of 1892-93.			
1	Khál Dhilli ... ..	Dhilli ... .. Dátewál ... .. Jhada ... ..	...	Kanáls. 800 1,000 100 1,900	Rs. a. p. ...	Was dug by the zamíndárs themselves.	A cut made by the people from the Degh. No expense incurred. Water from this cut also benefits to some extent Bohgal Najjár and other villages. Length 9,652 feet.
2	Jiwan Goraya masonry dam.	} Joint property of works Nos. 5 to 12. } Baggeke, Bhuchh and 31 villages belonging to works Nos. 5 to 12 are benefited.	}	} ...	} 294 6 0	} Paid by the zamíndárs.	} Very few villages used to irrigate their lands from the Degh before. It was thought expedient to extend the irrigation to all the villages shown in column 3. Band No. 3 has been constructed in the Degh to prevent water from running in its natural course, and from this band, khál No. 4 has been cut off in order to carry the water required for villages appertaining to works No. 6 to 12. A masonry dam (No. 2) with sluices, which serves as a distributary of water, has also been constructed. It is used as a bridge also. These three works jointly form one main work, and are meant to serve the purposes of a proper distribution of the water of the Degh.
3	Jiwan Goraya Band ...						
4	New Jiwan Goraya Khál...						

5	Canal from Jiwan Goraya to Chhamb Mandhali.	Jiwan Goraya ... ..	7,858	4,940 10 0	Do. ...	Jiwan Goraya was the only village irrigated before by means of a small cut; this has been very largely extended and widened; there are now over it eight bridges, which can also be closed with sluices for irrigation purposes; two bridges used as such only; and a distributor of water to subsidiary cuts used as bridge also. The minor cuts taken from the main canal are 23 in number, all with masonry heads. The large depression near Chakrali, known as <i>kund</i> Chakrali, is used as a reservoir, from which water is taken to the lower villages. There are 21 <i>jhallars</i> on this <i>kund</i> . The main canal is about 18 miles in length. The money shown as spent on this work does not include that spent by the people on their own subsidiary head works. These they have made themselves. The water should be let out of the <i>kund</i> all the cold season, as its bed is generally cultivated and all the bridges must be kept closed so as to stop water running into the <i>kund</i> during the cold season.
		Amin Shah ... ..	1,205			
		Dhingana... ..	1,496			
		Mehla Suja ... ..	4,113			
		Jai Singhwala ... ..	380			
		Mardana ... ..	5,697			
		Chakrali ... ..	9,503			
		Khunda ... ..	7,481			
		Kot Bhailan ... ..	1,542			
		Bhitewadh ... ..	3,242			
		Kot Muhammad Zamán... ..	1,595			
		Sharifpur... ..	483			
		Chak Telián ... ..	341			
Mandhali ... ..	600					
Ratta Pirán ... ..	4,811					
Rattian ... ..	2,341					
			52,688			
6	Khal Mari ... ..	Mari Kalán ... ..	3,600	...	...	A cut made by the people from a branch of the Degh issuing from the Jiwan Goraya masonry dam No. 2 used as a distributor of water. By means of this cut water is taken to a large depression in the vicinity of Mari Kalán, and there subsidiary cuts have been made for irrigation. Length 12,903 feet.
		Mari Khurd ... ..	4,480			
			8,080			
7	Agal Mari Kalán ... ..	Mari Kalán ... ..	See above.	400 0 0	Rs. 400 takavi...	This <i>band</i> is not for irrigation, but in order to prevent the lands of the village from being inundated by floods from the Degh. The first time it was made it was breached. It has now been made a second time, and will, it is hoped, stand now. Length 3,300 feet.
8	Hachar Band used as a road. Length 1,315 feet.	Joint property of works Nos. 9, 10 and 12.	See Nos. 9 to 12.	Rs. 1,417 includes the expenditure incurred on works, Nos. 9 to 12.	Rs. 570 obtained by takavi. The remainder paid by the zamindars themselves.	The water supplied by the distributary at Jiwan Goraya (work No. 2) is first brought to the vicinity of Hachar in a branch of the Degh. There two bridges have been made by the District Board where the Hachar <i>band</i> always stood; the bridges are provided with boards for the openings to serve as sluices. <i>Khals</i> Nos. 9 and 10 are taken off from this <i>band</i> , which is now a public road, and water is taken down to the Ghurkán <i>chhamb</i> . The Bhagodiál <i>agal</i> (embankment) is on the west of the



A.—List of Bands and Canals (Irrigation Works) made in Tahsil Raya since 1st April 1888—concluded.

No.	Name of irrigation work.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the zamindárs themselves ?	Remarks, giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, &c., papers of 1892-93.			
9	Khál Hachar ... Length 6,451 feet.	Hachar ... Baggeke ...	...	Kanals. 5,536	} See No. 8.		chhamb, thus water is preserved for irrigation, and the lands of Bhagodiál are preserved from inundation. Beside the two large bridges mentioned above, there is a bridge on the Ghurkán khál, and 3 others, smaller ones, have been made out of the money given by the people; they serve as sluices at the head of subsidiary cuts. Fifteen smaller sluices have also been made in the Bhagodiál ágal and khál Ghuchli. The latter is connected with the former, as the water preserved in Chhamb Ghurkán by means of the Bhagodiál ágal is let into the Ghuchli Khal.
			...	2,700			
			...	8,236			
10	Khál Ghurkán ... Length 6,451 feet.	Ghurkán ... Hardo Ladheke ...	...	6,236	} See No. 8.		
			...	6,641			
			...	12,877			
11, 12	Agal Bhágodiál and khál Ghuchli.	Kotli Wirk ... Pindori ... Jám Gil ... Jhundir ... Manánwála ... Farkhandabad ... Bhagodiál ... Ghuchli ... Bure Othi ... Murádpur ...	...	1,392	} See No. 8.		From the band at Jiwan Goraya to the end of this irrigation project the distance is nearly 15 miles. The expenditure shown in this statement does not include money spent by villages separately on their own small head works; this was small in amount in each case. Length of No. 11, 19,030 feet. Length of No. 12, 6,215 feet.
			...	1,062			
			...	1,392			
			...	2,102			
			...	800			
			...	4,000			
			...	4,119			
			...	7,043			
			...	7,771			
			...	1,426			
...	24,407						



							Rs. a. p.		
13	Kot Sainsra Band ...	Kot Ahdián ... Moghalwála ...	...	...	...	517 665	170 0 0	Paid by Govern- ment.	The money spent was given from the Contingent allowance for Sánsi Kotes. The people of Moghalwála gave labour. The <i>band</i> has two masonry sluices and irrigates a good deal of rice land. Length 330 feet.
14	Dhadora Band ...	Dhadora ...	...	...	...	900	...	...	This <i>band</i> was made by the people with their own labour. No money was spent. The area benefited is considerable. Length 1,798 feet.
15	Arud Afghán Band ...	Arud Afghán ...	...	...	...	3,343	200 0 0	Paid by the zamíndárs themselves.	This <i>band</i> was made by the people; the money was spent on two masonry sluices; a large quantity of water is now collected and used for irrigation. The expenditure has long ago been recouped from increased profits. Length 5,329 feet.
16	Ladhewála Band ...	Ladhewála ...	...	...	...	2,443	100 0 0	Do. ...	The <i>band</i> was made by the people, the money was spent on a masonry sluice. The expenditure has been recovered from increased profits. Length 1,606 feet.
17	Báth Band ...	Báth Band ...	...	...	...	400	...	...	A small <i>band</i> made by the people with their own labour.
18, 19 and 20	Band Ghariál Kalán, Agal Ghariál Kalán and Agal Ghariál Khurd.	Ghariál Kalán ... Ghariál Khurd ... Bhágián ... Akbarián ... Kot Bhuchh ...	...	...	...	10,661 6,800 4,180 2,810 3,532	1,079 9 9	Rs. 260 <i>takávi</i>	A large <i>band</i> has been made in the branch of the Degh near Ghariál Kalán; the <i>chhams</i> of Ghariál Kalán and Ghariál Khurd are used as the two reservoirs. The large <i>band</i> is also used as a bridge and contains a sluice for an outlet. There are also five other sluices at the head of the subsidiary cuts. The earthwork was done by the people themselves, this is not included in the estimate of expenditure. Nearly all the area of the five villages is irrigated by this work. There are some <i>jhallárs</i> also. Length of No. 19, 3,146 feet. Length of No. 20, 2,222 feet.
						27,983			
		Total area irrigated ...	...	...	...	144,439			



A.—List of Bands and Canals made in Tahsíl Daska since 1st April 1888.

No.	Name of band or canal.	Villages benefited.	Area irrigated by canal or band.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves ?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, i.e., papers of 1892-93.			
1	Jámke Canal ... ..	Ralioke ... ..	Kanáls. 4,150	Kanáls. 4,167	Rs. a. p. ...	...	<p>This canal was made in 1890. It takes out of the Aik at Ralioke and extends through several <i>chhamb</i>s as far as Kila Sardár Thákur Singh, benefiting 30 villages. The canal is made to feed the <i>chhamb</i>s on the way, and so the area irrigated from the <i>chhamb</i>s has been very largely increased, i.e., from 16,589 kanáls to 31,057 kanáls. The expenditure on it was Rs. 3,273, all subscribed by the villages affected. A length of about 3 miles through the lands of Darweshke, Rám Rayán, Thhatta, Tirhára and Akbar was made in 1893 by the zamindárs themselves. The canal first goes through the villages of Ralioke, Kaurpur, Jámke, Jaisarwála, Gága, Daska, Kot Daska, and Kotli Chhambwála, and these villages take some of the water as it passes. The water first collects in the Daska <i>chhamb</i> and thence goes into the Raja Ghamán and Músewála <i>chhamb</i>, where there is a <i>band</i> with two sluices. Excess water is allowed to escape through these sluices; but if too much is allowed to go off there is a failure in the supply taken on by the canal direct from the Daska <i>chhamb</i>. The next depression met with is in the Darweshke Rohi; after that the <i>chhamb</i>s of Nika and Lurikki are fed, also that of Ghake. There are <i>bands</i> at all these places, with sluices; after that the water goes to the Akbar and Dharmkot <i>chhamb</i>s and thence to the great <i>chhamb</i> Khaki. There is a <i>band</i> here too. The total length is 18 miles.</p>
		Kaurpur ... ..	1,442	1,643	...	...	
		Jámke ... ..	...	3,000	...	...	
		Jaisarwála ... ..	...	720	192 0 0	Shareholders.	
		Gága ... ..	...	320	37 0 0	Do.	
		Kot Daska ... ..	...	1,600	80 0 0	Do.	
		Daska ... ..	...	1,976	379 0 0	Do.	
		Kotli Chhambwála ... ..	...	240	37 0 0	Do.	
		Kálla ... ..	...	320	82 0 0	Do.	
		Raja Ghumán ... ..	...	1,153	442 0 0	{ Do. Takávi.	
Músewál ... ..	...	256	161 0 0	{ Takávi 100 Sharers 61			



Darweshke	...	...	1,151	1,902	127	0	0	Sharers.
Thhatta	...	...	245	253	32	0	0	Do.
Tirhára	...	...	...	211	118	0	0	Do.
Rám Rayán Khurd	...	...	680	692	183	0	0	{ Takávi 100 Sharers 83
Rám Rayán Kalán	...	...	565	594	149	0	0	{ Takávi 100 Sharers 49
Bhittewhád	...	...	138	136	158	0	0	{ Takávi 100 Sharers 58
Salhoke	...	...	121	134	246	0	0	{ Takávi 100 Sharers 146
Akbar	...	...	110	587	155	0	0	Sharers.
Dharmkot	...	...	80	148	45	0	0	Do.
Táhliwála	...	...	147	278	34	10	0	Do.
Naushera	...	...	283	349	90	0	0	Do.
Kotli Kewal Rám	...	...	309	267	46	0	0	Do.
Wadála	...	...	1,402	2,486	247	0	0	Do.
Natháke	...	...	905	1,181	98	0	0	Do.
Mokhal	...	...	1,010	1,292	171	0	0	Do.
Nadála	...	...	2,125	2,679	517	0	0	{ Takávi 300 Sharers 217
Rámke	...	...	1,405	1,681	237	0	0	{ Takávi 140 Sharers 97
Rámgarh	...	...	290	296	98	0	0	{ Takávi 60 Sharers 28
Kila Sardár Thákur Singh	...	...	31	196	...	...	...	...
			16,589	31,057				



A.—List of Bands and Canals made in Tahsíl Daska since 1st April 1888—concluded.

No.	Name of band or canal.	Villages benefited.	Area irrigated by canal or band.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, <i>i.e.</i> , papers of 1892-93.			
			Kanáls.	Kanáls.	Rs. a. p.		
2	Band Doburji ... ..	Doburji ... ..	...	...	200 0 0	Takávi ...	Both villages joined in this <i>band</i> ; Amínpur in order to ensure a supply of water for its rice, Doburji in order to prevent the water logging of its land. Length 2,673 feet.
		Aminpur ... ..	588	733	70 0 0 70 0 0	Takávi. Shareholders.	
3	Band Daulowáli Wairán	Daulowáli Wairán ...	6	387	200 0 0	Takávi ...	Practically a new <i>band</i> with a masonry sluice. The village has benefited very much from it. Length 4,060 feet.
4	Band Taraunián ...	Taraunian ... ..	310	641	120 0 0	Do. ...	This <i>band</i> has been made in conjunction with mauza Dehsar in tahsíl Pasrúr. There are two sluices. Both villages have largely benefited. Length 907 feet.
5	Band Raja Ghumán and Músewála.	Rája Ghumán ... ..	...	1,153	300 0 0	Do. ...	Practically a new <i>band</i> with two masonry sluices. The water comes more especially by reason of the Aik Canal. Both villages have benefited largely. Length 742 feet.
		Músewála ... ..	...	256	100 0 0	Do.	

6	Nála Aik from Begowála to Fatehgarh.	Farhádpur	...	...	1,500	2,250	43	12	0	Shareholders	...	The cut taken from the Aik for these two villages has been improved, the consequence is an increased area under irrigation.
		Fatehgarh	...	...	1,600	2,124	43	12	0	Do.		
7	Khál Saidánwála	Begowála	...	...	...	480	12	0	0	Do.	...	This and the four following cuts all belong to the same large village Begowála. These cuts have largely benefited the village. The work done has been only to clear existing channels.
8	Khál Munánwála	Begowála	...	...	...	398	14	0	0	Do.		
9	Khál Teliánwála	Begowála	...	...	232	399	16	0	0	Do.		
10	Khál Kashmíriánwála	Begowála	...	...	300	432	8	0	0	Do.		
11	Khál Kotli Chhambwáli...	Kotli Chhambwáli	...	...	...	...	300	0	0	Takávi	...	

Length 2,761 feet.



A.—List of Bands and Canals made in Tahsíl Zafarwál since 1st April 1888.

No.	Name of band or canal.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves ?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, i.e., papers of 1892-93.			
			Ghs.	Ghs.	Rs. a. p.		
1	Sabzkot ... ..	Sabzkot ... .. Chak Bagga ... .. Ráipur ... .. Kádirabad ... .. Garhi Mahe ... ..	127 33 ... ... ...	292 133 100 48 16	300 0 0	Shareholders ...	There used to be here originally a small earthen dam; quarrels used to take place regarding it between the villages of Sabzkot and Chak Bagga. The new <i>band</i> is a more substantial one, and money has been collected for the purpose of making in it a masonry sluice. This has been done with the consent of the villages to be benefited. Three cuts are taken off from the <i>band</i> , viz., two for Sabzkot and one for the other villages. The area to be irrigated in Kádirabad will increase. The <i>band</i> (when the sluice is completed) will also serve as a bridge for foot passengers and animals.
			160	589			
2	Nájo Chak ... ..	Nájo Chak ... .. Shahpur ... .. Baghiári ... .. Sapwál ... ..	224 ... 17 8	236 128 19 29	...	...	No sluice. An old <i>band</i> strengthened.
			249	412			
3	Khára Band on Kála ...	Khára ... ..	12	68	...	...	As above

4	Sohiánwála on Nála Kála.	Ganeshpur ... .. Sohián ... ..	69 4	131 33	106 0 0	Sharers ...	This <i>band</i> was originally made by the villages of Sohián, Sidwán, Kot Báka Singh and Ganeshpur. A bridge was made in it with no means of keeping in the water. In 1891 sluice boards were supplied, and the water can now be collected for irrigation. But only two villages benefit from this, and the expenditure on the sluices (Rs. 66) was only given by Ganeshpur and Sohián.
			73	164			
5	Warsalwála Band on Gadgor Nála.	Wársalke ... .. Kot Dána ... .. Balowáli ... .. Maniála ... .. Chawinda ... .. Sehnewáli ... ..	... ... ... ... 27 ...	1 1 3 19 32 7	416 0 0	Expended by District Board.	This <i>band</i> is really formed by the road, and so the expenditure on it has been undertaken by the District Board. The area benefited by it is not large.
			27	63			
6	Marlánwála Band on Gadgor Nála.	Marl ... ..	...	32	...	...	A small <i>band</i> made by the villagers. No sluice.
7	Arki Canal ... ..	Arki ... .. Isa ... ..	... ...	58 45	...	...	This is a part of the work connected with the great <i>Satráh chhamb</i> in tahsil Pasrúr.
8	Kot Dhíngránwála Band	Bhatte ... ..	45	52	...	...	A small <i>band</i> made by the people. No sluice.
9	Badiána ... ..	Badiána ... ..	...	18	100 0 0	Sharers ...	A small <i>band</i> made by the people.
10	Khurpa ... ..	Khurpa ... ..	80	59	100 0 0	Do. ...	An old <i>band</i> repaired and maintained by the people. Part of the area was originally irrigated by lift, this irrigation has now been abandoned.



A.—List of Bands and Canals made in Tahsil Siáلكot since 1st April 1888.

No.	Name of band or canal.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, i.e., papers of 1892-93.			
			Kanáls.	Kanáls.	Rs. a. p.		
1	Band ... ..	Pathanwáli ... ..	...	982	400 0 0	Takávi ... ..	No masonry sluices here. Water is taken by means of small wooden sluices. The village benefited very largely from this band. The length of this band and of No. 2 together is 3,850 feet.
2	Do. ... ..	Bhani ... ..	...	345	200 0 0	Do. ... ..	As No. 1.
3	Do. ... ..	Wangal ... ..	...	2,404	200 0 0	Do. ... ..	No sluices at all. Water is usually taken by opening out the band where required. Length 5,280 feet.
4	Do. ... ..	Nidoke ... ..	...	1,237	200 0 0	Do. ... ..	As No. 3. Length 3,850 feet.
5	Gurhiwála ... ..	Chhichhariáli ... ..	849	906	140 0 0	Do. ... ..	There is a masonry sluice. A good deal of water is contained in this depression, and the area irrigated is considerable. The water must be emptied out in October so far as to allow rabi crops to be sown on the Mahal Chenáwán land. Length 1,650 feet.
		Mahal Chenáwán ... ..	...	63	...	...	
		Gurhi ... ..	996	2,312	600 0 0	Takávi.	
6	Do. ... ..	Gunna Khurd ... ..	...	837	600 0 0	Do. ... ..	There is a masonry sluice. The area benefited by this band is comparatively small. Length 2,750 feet.

7	Kohar Band	...	...	Kohar	...	...	...	31	1,379	200 0 0	Takávi ...	...	There are two masonry sluices. This was an old <i>band</i> ; it has been very largely increased and strengthened, and now is most profitable to the village. Length 2,750 feet.
8	Sahochak Band	...	...	Sahochak	...	...	...	20	552	200 0 0	Do. ...	...	No sluice. The <i>band</i> was originally quite a small one. It has been considerably enlarged. Length 1,100 feet.
9	Dharmkot Band	...	...	Dharmkot	...	...	...	374	374	...	Money spent by the sharers themselves.	...	An old <i>band</i> repaired. No increased area irrigable. No sluice. Length 110 feet.
10	Sioke Band	...	...	Sioke	...	...	...	129	129	...	...	...	Same remarks as for Dharmkot. Length 120 feet.
11	Kuluwál Band	...	...	Kuluwál	...	...	...	310	302	240 0 0	Takávi ...	...	The <i>band</i> here was enlarged and a masonry sluice made. These were broken down in late floods. The area irrigable is practically the same as before. The people of the village are not very anxious to attend to this <i>band</i> since they have been ordered that no damage will be allowed by reason of it to be done to the lands of Bhartanwála. Length 330 feet.
12	Palkhu Band	...	...	Malhopar	...	...	...	...	218	...	...	...	A small <i>band</i> made by the people themselves. No sluice.
13	Do.	...	...	Jhulke	...	...	...	...	308	...	...	...	As above.
14	Do.	...	...	Dhille	...	...	...	...	225	...	...	...	Do.



A.—List of Bands and Canals made in Tahsíl Pasrúr since 1st April 1888.

No.	Name of band or canal.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, <i>i.e.</i> , papers of 1892-93.			
			Kanáls.	Kanáls.	Rs.		
1	Chhamb Satráh Band ...	Satráh ... ..	5,483	7,476	640	Takávi. District Board Miánwáli. Satráh.	The following sluices have been made in this <i>band</i> since 1888:— (1). Bridge with three openings on Satráh and Miánwáli cut. (2). Bridge on Kot Mokhal and Dhandal cut. (3). Bridge on Begewáli cut. (4). Bridge on Langiánwáli and Begewáli cut. (5). Sluice for Begewáli. (6). Sluice for Khanduwáli. (7). Sluice for Chiánwáli. (8). Outlet sluice for Chiánwáli. (9). Repairs to old sluice, known as "Paki Mori." This latter No. (9) was the only old sluice. There have also been made four minor sluices in the main cuts, <i>viz.</i> , three in Satráh cut, one in Miánwáli cut. There is also an outlet culvert in the Satráh cut called "Surghappi"; and there are several other minor sluices in subsidiary cuts. A new outfall * bridge on the main <i>band</i> to take surplus water into the Begewáli cut is now about to be made. This <i>band</i> in 1888 was a very small one, and had been for some time utterly neglected.
		Miánwáli ... ..	2,573	2,761	11,043		
		Mokhal ... ..	...	2,086	160		
		Dhandal ... ..	137	395	100		
		Kalli ... ..	...	768			
		Kot Kaura ... ..	114	122			
		Thákar Wairán ... ..	276	276			
		Langiánwáli ... ..	1,937	1,998	360	Langiánwáli.	
		Begewáli ... ..	200	1,522	20	Langewáli.	
		Khanduwáli ... ..	850	850			
		Chiánwáli ... ..	154	154	880	Báchh on all vil- lages	
		Thatha Umra ... ..	...	357			
		Kotli Múbarán ... ..	...	2,525			
		Kotli Bába Hira ... ..	...	512			
		Ratta Bajwa ... ..	1,163	2,904			
		Chhangi ... ..	...	766			
					...	25,477	

2	Seránwáli Band on Bege-wáli.	Seránwáli ...	...	...	...	1,973	1,400	Expended by the Sardár.	<p>This <i>band</i> has been made entirely by Sardár Richpál Singh, who is sole proprietor of Seránwáli. A good deal of money has been spent on it, as the rush of water here is very great, and the <i>band</i> has several times been breached. There are three sluices. Length 2,337 feet.</p>
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It now extends for nearly two miles, and the sheet of water held together by it in the rains is about eight square miles in extent.

The water comes here by several streams from the north-east, and also from the drainage of the lands in the neighbourhood.

The people have spent only Rs. 1,500 on it; the District Board has spent over Rs. 11,000, and this expenditure will be further increased by the construction of the new out-fall bridge.

The villages have benefited immensely and have already realised far more than the Rs. 1,500 spent by them.

Rules have been drawn up for the proper management of this large irrigation work. But the attention of the Tahsildár and the Deputy Commissioner should be constantly directed towards it, especially in time of floods. If the sluices are kept shut when water is coming in in any quantity the *band* will certainly be breached in many places. The District Board is an interested party in the upkeep of the *band*, as it is now the main road from Pasrúr to Satráh, and on towards Wadála, in one direction and Mundeke in another.

There should always be an active and intelligent Tahsildár at Pasrúr to supervise this important work, and the others mentioned below.

\* NOTE.—This has been made, and is of the greatest use in preserving the *band* from breaking.



A.—List of Bands and Canals made in Tahsíl Pasrúr since 1st April 1888—continued.

No.	Name of band or canal.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, <i>i.e.</i> , papers of 1892-93.			
			Kanáls.	Kanáls.	Rs.		
3	Gilgitti band on Begewáli	Gilgitti ... .. Dehsarbála ... ..	... ...	730 755	300	Takávi ...	There was originally a small and practically useless <i>band</i> . This has been increased and strengthened. There is no sluice here; none is required. The money spent has already been recovered from increased receipts. Length 82 feet.
4	Khot Band on Begewáli	Khot ... .. Dehsarpáin ... ..	... ...	167 1,453 <hr/> 1,620	200 220 <hr/> 1,397	Takávi. District Board.	A new road has lately been made where this <i>band</i> lies; the District Board has, therefore, borne a large share of the expense. There is a sluice. The villagers helped in the earth work, and have already realised the amount spent by them from increased profits. Length 836 feet.
5	Mohanpur Band on Bege-wáli.	Mohanpur ... .. Amínpur ... ..	... 588	304 733 <hr/> 1,037	160 160 <hr/> 140 <hr/> 460	Takávi ... By the people.	This was an old and disused <i>band</i> . It has been largely increased in size and strength, and a sluice has been made in it. The rush of water is very great, and the <i>band</i> has been breached more than once. Amínpur is in the Daska tahsíl; but the <i>band</i> should be worked from Pasrúr. The benefit to the people has been very great, and the money spent has probably been already recovered. Length 168 feet.

6	Chádar Band	...	...	Bakápur Chak Ramdás	...	...	...	1,105 650	89	Shareholders	...	This is an old established masonry dam, said to have been made in the time of the Moghal Emperors. The masonry and mortar were excellent. But it had been neglected and there were no sluice boards. The defects have now been remedied at a small expense to the great benefit of the people. Length 1,375 feet.
								1,755				
7	Chak Ramdás Band	...	...	Chak Ramdás	...	...	...	607	300 40	Takávi. Villagers.	...	A new <i>band</i> made in the <i>kálar</i> ; a considerable area of <i>rohi</i> land is thereby irrigated. The people have benefited much by it, and have already recovered what they spent on it. There is one masonry sluice. Length 10,511 feet.
									340			
8	Rahímpur-Vándo Band			Rahímpur Vándo	...	...	...	938 630	140 140	Takávi. By the people.	...	This is also a new <i>band</i> made in the <i>kálar</i> . There is a masonry sluice. The benefit to the people has been very great. The expenditure has already been recouped. Length 1,100 feet.
								1,668	80			
									360			
9	Saunfar Band	...	...	Saunfar	...	...	...	392	400	Takávi	...	Also a new <i>band</i> . There is a masonry sluice. It has been very beneficial. The money spent has already been recovered from extra produce. Length 1,397 feet.
10	Rána-Vándo Band Degh.	on		Rána Vándo Daliánwáli	...	...	...	2,917 2,359 1,765	553	Villagers	...	There was a small and neglected <i>band</i> here. This has been much strengthened, and two sluices have been made. Irrigation is now more certain and a large area is benefited. The expenditure has long ago been recouped. Length 962 feet.
								7,041				
11	Kurikot Band	...	...	Kurikot	...	...	...	1,370	300 40	Takávi. Villagers.	...	An old and neglected <i>band</i> ; largely strengthened. There are two sluices of masonry. The money spent has been long ago recovered from extra profits. Length 357 feet.
									340			

A.—List of Bands and Canals made in Tahsil Pasrúr since 1st April 1888—continued.

No.	Name of band or canal.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, i.e., papers of 1892-93.			
			Kanáls.	Kanáls.	Rs.		
12	Shádí Khanwála Band ...	Shádí Khanwála ...	...	898	500	Takávi ...	This is a new <i>band</i> . A masonry sluice is being made. It will greatly benefit the village. Length 225 feet.
13	Sáib and Nat Band ...	Sáib ... Nat ...	...	3,337 1,280 4,617	500 7,697	Takávi. District Board.	This is a new <i>band</i> , and it must be acknowledged that as a <i>band</i> for irrigation it has been to a great extent a failure. Sáib has benefited somewhat, Nat not at all. All that has resulted is that a raised road has been made with four bridges in it (one containing five openings), and people can now cross the Degh when in flood without fear of being drowned. The area shown as now irrigated is probably exaggerated. Length 274 feet.
14	Náda and Kotli Ananta Band.	Náda ... Kotli Ananta ...	...	2,296 758 4,054	420 100	Takávi ...	This is a new <i>band</i> , made in the <i>kálar</i> . Owing to a change in the course of the Degh it has not been a success, and has been abandoned.
15	Bhopar Band ...	Bhopar ...	...	1,588	300 90	Takávi. Villagers.	There was here a small but neglected <i>band</i> . This has been very largely strengthened, and a masonry sluice made in it. The money spent has already been recovered from increased profits. Length 1,925 feet.



16	Thatha Guláb Singh Band	Thatha Guláb Singh	...	...	1,988	500 80	Takávi. Villagers.	This is a new <i>band</i> , made in the <i>kálar</i> . There is a masonry sluice. It has been most beneficial, and the money spent has been long ago recovered from increased profits. Length 3,300 feet.	
17	Thapnála Band ...	Thapnála ...	...	...	167	2,334	500 80	Takávi. Villagers.	The facts here are the same as in the Thatha Guláb Singh <i>band</i> . Length 5,720 feet.
18	Ráoke Band ...	Ráoke ...	...	...	272	272	140	Takávi ...	There were no signs here of the old <i>band</i> . The present <i>band</i> is a good one with a masonry sluice. The benefit has been sufficient to recoup the money laid out. Length 588 feet.
19	Nandpur Chhangí Band...	Nandpur ... Chhangí ... Mirakpur ...	...	...	...	157 849 37	100 300	Takávi ...	As No. 18. Length 484 feet.
						1,052			
20	Mandránwála Band ...	Mandránwála ...	...	...	...	385	200	Takávi ...	As above. Length 3,580 feet.
21	Káli Band ...	Káli ... Mahál Bola ... Chanáwán ...	...	...	...	565 97 576	400	Village báchh ...	There was here originally a small and weak <i>band</i> . This has been very largely strengthened, and two masonry sluices have been made in it. The benefit has been great, and the money spent has been already recovered. Length 3,305 feet.
						1,239			
22	Dharang Band ...	Dharang ... Kotli Makbára ... Shah Matha ... Bakápur ... Butewáli ...	...	...	...	1,162 1,745 2,257 152 729	100 300	Takávi. By villagers.	This was quite a small <i>band</i> . It has been largely strengthened and lengthened. Three masonry sluices have been made. The villages have largely benefited and have long ago recouped the outlay. Length 880 feet.
						6,047			

A.—List of Bands and Canals made in Tahsil Pasrúr since 1st April 1888—continued.

No.	Name of band or canal.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, i.e., papers of 1892-93.			
			Kanáls.	Kanáls.	Rs.		
23	Saboki-Dandián Band ...	Dhadián ... .. Saboki ... ..	...	785	500	Takávi. District Board.	This is connected with the last <i>band</i> . The expenditure of the District Board is shown here, the bridges having been made by that body as the <i>band</i> is a road. Length 3,612 feet.
			...	905	1,269		
				1,690			
24	Guráli-Gurála Band ...	Guráli ... .. Gurála ... ..	...	405	200	Takávi ... ..	An old <i>band</i> , very much strengthened and lengthened. There is one masonry sluice, and it is proposed to make another. The benefit has been great, and the money spent has been recouped. Length 962 feet.
			...	1,634	400		
				2,039	600		
25	Kálar-Suhawa Band ...	Kálar ... .. Suháwa ... .. Jaboke ... .. Mirzapur ... ..	...	2,248	380	Takávi ... ..	There was a small <i>band</i> here; this has been largely strengthened and lengthened. There is a sluice for irrigation and as an outlet for surplus water. The District Board money spent was on a bridge, the <i>band</i> being used as a road. Length 7,639 feet.
			...	1,143	140		
			...	276	40		
			...	396	240		
				4,063	800		
				580	District Board.		

26	Málo Máhe Band	...	Málo Máhe	...	...	...	1,044	260	Takávi	...	The road has been raised and used as a <i>band</i> , and there is a bridge.
			Satoke	...	...	...	31	140			The benefit to the people has not been as great as was anticipated. Length 1,386 feet.
							1,071	400			
27	Koreke Band	...	Koreke	...	...	...	2,796	420	Do.	...	An old and neglected <i>band</i> , very much enlarged. There is a masonry sluice. Much benefit has accrued and the money spent has been recouped. Length 1,166 feet.
28	Ban Bajwa Band	...	Ban Bajwa	...	...	...	3,883	300	Do.	...	Practically a new <i>band</i> with a masonry sluice. The benefit has been great, and the money spent has been recouped. Length 1,584 feet.
29	Bhúler Band	...	Bhúler	...	...	...	2,189	...	...	...	A <i>band</i> made by the people themselves to their great benefit. Length 112 feet.
			Lat Hajra	...	...	...	65				
							2,254				
30	Dhíngránwáli Band	...	Dhíngránwáli	...	...	...	1,235	200	Do.	...	A new <i>band</i> , with a masonry outlet, made for the Sásnikot. Length 731 feet.
											NOTE.—This <i>band</i> is in Zafarwál tahsíl and is shown in the map of that tahsíl, but as the charge of the work is vested in the Tahsildár of Pasrúr it has been included in this list.
31	Kot Kalál Band	...	Naul	...	...	303	303	...	Do.	...	The <i>band</i> itself requires to be repaired after every heavy flood. To make a sluice in it would cost more than the people can afford.
			Kot Kalál	...	...	1,384	1,384	...			A large number of villages have been benefited. The money has been spent in subsidiary cuts or dams connected with this <i>band</i> , and the money spent has been more than recovered from increased profits. Length 220 feet.
			Sharmkot	...	...	...	735	...			
			Log Gil	...	...	...	37	...			
			Nangal Hashri	...	...	...	287	...			
			Takhtpur	...	...	...	694	...			
			Ude Nangal	...	...	...	266	...			
			Bureke	...	...	164	164	...			
			Sehte	...	...	...	297	20			
			Nangal Rám Chand	...	...	...	402	...			
			Misapur	...	...	...	1,721	20			
			Kot Ghúman	...	...	...	85	60			
			Dáta Brahmnan	...	...	...	499	...			
			Dúlamwála	...	...	...	307	...			
			Mirza Bajwa	...	...	...	134	...			
			Kotli Bajwa	...	...	...	1,035	120			
			Hájipur Kotli	...	...	...					
						1,851	8,350	220			



A.—List of Bands and Canals made in Tahsíl Pasrúr since 1st April 1888—continued.

No.	Name of band or canal.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves ?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, <i>i.e.</i> , papers of 1892-93.			
			Kanáls.	Kanáls.	Rs.		
32	Kulewáli Band ... ..	Kulewáli ... ..	...	821	...	...	A new <i>band</i> made by the people themselves. Length 1,650 feet.
33	Basiwála Band ... ..	Basiwála ... .. Bakápur ... ..	...	787 825	...	...	The people have made this <i>band</i> themselves and have benefited much from it. Length 3,240 feet.
				1,612			
34	Tauriánwála Band ... ..	Tauriánwála ... ..	...	2,152	60	Takávi ...	An old <i>band</i> , very much strengthened and enlarged. The money spent has been long ago recouped. Length 1,472 feet.
35	Nangal Hushri Band ... ..	Chandar ... ..	...	1,180	...	...	This is a new <i>band</i> and has largely benefited the villagers. A new sluice is about to be made. Length 104 feet.
		Takipur ... ..	...	2,150			
		Nunc ... ..	...	1,663			
		Gujar Guraya ... ..	...	453			
		Uda Nangal ... ..	...	100			
		Nangal Hushri ... ..	...	200			
				5,746			

36	Bucha Tang Band	...	Bucha Tang	...	...	...	...	140	Takávi ...	...	A <i>band</i> made with the help of an advance. But a diversion of the Degh has made it a practical failure.
37	Khot Band	...	Khot	...	...	...	100	...	...	...	A small <i>band</i> made by the people. Length 1,110 feet.
38	Ratangarh	...	Mán Bahdpur	...	...	...	376	60	By villagers	...	A new <i>band</i> from which a cut goes to the Lála <i>chhamb</i> , and thence another cut takes the water to the <i>rohi</i> of the two villages. The water is taken through a culvert across the Dhamthal road. It is proposed to widen this, other villages also get benefit from this work. Length 9,042 feet.
							1,480	120			
							1,856				
39	Paropi Band	...	Paropi	...	...	...	278	...	...	...	A small <i>band</i> made by the people. Length 112 feet.
40	Uddo Fatta Band	...	Uddo Fatta	...	...	...	...	300	...	...	A new <i>band</i> being now made with two sluices. Length 3,036 feet.
41	Chhamb Manjike	...	Nangal Kamla	...	...	...	632	...	...	...	The irrigation from this <i>chhamb</i> was before fitful and irregular, and the area entered as formerly irrigable did not get water regularly. The irrigation has been systematised now. Some villages in the Zafarwál tahsil also benefit from this <i>chhamb</i> .
			Thathi	...	...	...	150				
			Panwána	...	...	3,061	3,061				
			Sarai Shah Fatta	...	...	353	353				
			Lohar	...	...	602	602				
			Malipur	...	...	1,270	1,270				
			Rámke	...	...	1,881	1,881				
					7,167	7,849					
42	Chhamb Patla Lakhanke	...	Satráh	...	...	...	364	...	...	...	Two cuts have been brought from the Satráh <i>chhamb</i> to this one with the result that a large area is brought under rice cultivation.
			Pan	...	...	...	368				
			Udo Fatta	...	...	...	947				
			Sabangil	...	...	...	59				
			Lakhanke	...	...	...	583				
						2,318					

A.—List of Bands and Canals made in Tahsil Pasrúr since 1st April 1888—concluded.

No.	Name of band or canal.	Villages benefited.	Area irrigated by band or canal.		Amount spent on irrigation work.	Was the amount obtained by takávi or paid by the sharers themselves?	Remarks. Giving a brief description of each work, whether sluices, &c., have been made, and what advantages have accrued from it.
			Before 1st April 1888.	Now, &c., papers of 1892-93.			
43	Nála Arki ... ..	Kasrwál Bhág ... ..	...	110	1,765	District Board...	This cut has been made to feed the Satráh <i>chhamb</i> . A road is taken along its bank; trees have been planted by the District Board.  The head from the Degh requires to be kept open as it is liable to silt up. A cut from this goes to Pasrúr. Length 19,567 feet.
		Kasri Bhág ... ..	...	16			
		Firozpur Bhág ... ..	...	136			
		Káleke Bhág ... ..	...	119			
		Dugri ... ..	...	395			
		Chanewáli ... ..	...	220			
		Balagan ... ..	...	138			
		Chhímwa ... ..	...	132			
		Dehar ... ..	...	19			
		Change ... ..	...	458			
Naukarián ... ..	...	279					
				2,022			
44	Jallowáli Khál Nála ... ..	...	...	...	...	...	A branch of the Degh cleaned out by the people.
45	Datazedka Khál ... ..	...	...	...	...	...	As above.
46	Chhamb Sakhána and Kabrwáli.	Sakhána ... ..	...	1,059	80	Villagers ...	There are two masonry outlets. This is a new work. Length 2,080 feet.
		Kabrwáli ... ..	...	2,007			
				3,066			
	GRAND TOTAL ...		21,696	122,137	39,883		



**B.**—Statement of Wells made from Takávi in the Siálkot District since 1st April 1888.

Name of Tahsil	YEAR.	Amount of takávi given for wells.	Number of wells constructed or repaired.
ZAFARWAL.	1st April 1888 to 31st March 1889 ... ..	Rs. 900	7
	Do. 1889 to do. 1890 ... ..	3,500	23
	Do. 1890 to do. 1891 ... ..	6,540	52
	Do. 1891 to do. 1892 ... ..	1,680	12
	Do. 1892 to do. 1893 ... ..	3,630	32
	Do. 1893 to 28th February 1894 ... ..	1,160	8
	Total ... ..	17,410	134
PASSUR.	1st April 1888 to 31st March 1889 ... ..	4,760	22
	Do. 1889 to do. 1890 ... ..	4,340	24
	Do. 1890 to do. 1891 ... ..	6,925	38
	Do. 1891 to do. 1892 ... ..	6,260	31
	Do. 1892 to do. 1893 ... ..	9,550	55
	Do. 1893 to 28th February 1894 ... ..	3,100	16
	Total ... ..	34,935	186
RAYA.	1st April 1888 to 31st March 1889 ... ..	400	11
	Do. 1889 to do. 1890 ... ..	2,140	12
	Do. 1890 to do. 1891 ... ..	4,830	5
	Do. 1891 to do. 1892 ... ..	2,080	19
	Do. 1892 to do. 1893 ... ..	2,980	23
	Do. 1893 to 28th February 1894 ... ..	620	15
	Total ... ..	13,050	85
DASKA.	1st April 1888 to 31st March 1889 ... ..	1,460	...
	Do. 1889 to do. 1890 ... ..	2,320	8
	Do. 1890 to do. 1891 ... ..	5,200	15
	Do. 1891 to do. 1892 ... ..	3,880	23
	Do. 1892 to do. 1893 ... ..	7,060	20
	Do. 1893 to 28th February 1894 ... ..	2,880	30
	Total ... ..	22,800	96
SIÁLKOT.	1st April 1888 to 31st March 1889 ... ..	1,810	7
	Do. 1889 to do. 1890 ... ..	1,920	11
	Do. 1890 to do. 1891 ... ..	5,580	37
	Do. 1891 to do. 1892 ... ..	3,000	14
	Do. 1892 to do. 1893 ... ..	2,680	12
	Do. 1893 to 28th February 1894 ... ..	3,850	3
	Total ... ..	18,840	84

No. 670—6398, dated 2nd November 1894.

From—R. SYKES, Esquire, Officiating Senior Secretary to Financial Commissioner, Punjab,  
To—The Revenue Secretary to Government, Punjab.

I am directed to submit for the information of His Honor the Lieutenant-Governor the papers marginally noted, relating to irrigation works in the Siálkot district, and to say that the Financial Commissioner considers that Colonel Montgomery is to be congratulated on the success which has crowned his efforts in encouraging and aiding the development of irrigation works in the Siálkot district, a result which is mainly due to his personal influence and energy. The works constructed have brought a large area under irrigation and have been of great benefit to the district.

F. W. R. FRYER, Esq., C.S.I.

Commissioner Ráwalpindi's No. 2897, dated 19th October 1894, and enclosure.

2. The officers mentioned in paragraph 3 of the Commissioner's letter deserve credit for their exertions, and the Financial Commissioner thinks that it would be an encouragement to others to follow their example if they received the thanks of Government as recommended by Colonel Montgomery.

No. 10, dated 7th January 1895.

From—R. G. THOMSON, Esquire, Revenue Secretary to the Government of the Panjab,  
To—The Senior Secretary to the Financial Commissioners, Punjab.

I am directed to acknowledge the receipt of your letter No. 670, dated the 2nd November 1894, forwarding for the information of the Lieutenant-Governor a report on irrigation works in the Siálkot district.

2. Sir Dennis Fitzpatrick has read the papers with much interest, and considers that the energy with which Colonel Montgomery has taken up and brought to so successful an issue work which could not, strictly speaking, be said to fall within the scope of his ordinary official duties, deserves the special thanks of Government. I am accordingly to request that these remarks may be communicated to Colonel Montgomery. But His Honor thinks that the importance of the works undertaken calls for some more detailed account than that now given. I am accordingly to request that Colonel Montgomery may be asked to prepare a full general report on the nature of the works and the total expenditure and results. This would eventually be printed amongst the Selections of the Financial Commissioner's Office. Moreover, to ensure the matter not being lost sight of, it should be referred to annually in the Land Revenue Report of the Siálkot district.

3. The Lieutenant-Governor concurs in the commendation bestowed by the Officiating Commissioner of Ráwalpindi on the four officers marginally noted who assisted him in his endeavours to extend irrigation in Siálkot. The efforts of M. Aurangzeb Khan deserve special mention. I am to request that these orders may be communicated to these four officers.

4. The original enclosures of your letter are herewith returned.

No. 529, dated 3rd September 1895.

From—R. SYKES, Esquire, Officiating Senior Secretary to Financial Commissioner, Punjab,  
To—R. G. THOMSON, Esquire, Revenue Secretary to Government, Punjab.

With reference to paragraph 2 of your letter No. 10, dated 7th January 1895—  
W. M. YOUNG, Esq., C.S.I. (Revenue Irrigation), I am directed to submit a letter from the Commissioner of the Ráwalpindi Division, No. 2383—8-IV-11, dated 14th August 1895, and its enclosures, forwarding a report by Colonel Montgomery regarding the irrigation works constructed during the time he held charge of the Siálkot district.

No. 2383—I-IV-11, dated 14th August 1895.

From—S. S. THORBURN, Esquire, Commissioner and Superintendent, Ráwalpindi Division,  
To—R. SYKES, Esquire, Senior Secretary to Financial Commissioner, Punjab.

In compliance with the request conveyed in your No. 459, dated 23rd January last, and subsequent reminder No. 4054 of 22nd ultimo, I have the honor to submit, in original, a letter No. 96 of the 6th instant from Lieutenant-Colonel J. A. L. Montgomery, Divisional Judge, Delhi Division, and enclosures, submitting the full report called for by Government in regard to the measures adopted in the Siálkot district for the development of irrigation works. I invite attention to paragraph 5 of Colonel Montgomery's letter requesting that, when done with, the maps that accompany the report may be returned for record in the Siálkot district office.

No. 96, dated 6th August 1895.

From—Colonel J. A. L. MONTGOMERY, Divisional Judge, Delhi Division,  
To—S. S. THORBURN, Esquire, Commissioner and Superintendent, Ráwalpindi Division.

In the correspondence received by me with your memo., dated 15th April last, I was requested to give some further information regarding the irrigation works which were constructed during the time I held charge of the Siálkot district.

I have found some difficulty in carrying out this request, but M. Ghulám Ahmad Khan, Khan Bahádur, Officiating Settlement Collector, has kindly helped me; I forward his report in original with a few notes of my own. I should add that M. Ghulám Ahmad informs me he has taken the physical descriptions of the district and of each tahsil from the draft of the Gazetteer of the district which was prepared by Captain Dunlop-Smith, late Settlement Collector. The length of each *band* or canal has been entered in Statement A from figures obtained from the Siálkot district. I cannot vouch for their accuracy.

2. I do not know that there is much that I can add, more especially as I have not at the present time the opportunity for checking my remarks by personal local observation. It may be generally remarked that the only works of real importance are those noted in paragraph 2 of my former letter. These were undertaken without professional advice; and I am prepared to admit that it might have been better if I had obtained such advice. The Aik Canal is a cutting which takes water from the Aik, and connects a system of depressions down to the Khakhi *chhamb* near Nadála.

On the Satráh *chhamb* we found an old *band*; we strengthened and very largely lengthened this. Experience showed us the weak places, and we proceeded gradually to strengthen them and to make more water-way. The construction of the last sluice bridge (see note to No. 1 Pasrúr Statement) has been of the utmost importance. I hope the embankment is now safe from floods, provided of course the sluices are opened in time.

The canal from the Degh near Jiwan Guraya goes through very friable soil; we experienced some difficulty in preventing the undue widening of the canal by the wearing away of the soil at the sides. It has not been an uncommon thing for the water to wash away both sides of a bridge and leave it high and dry in the middle of the channel. This can no doubt be remedied by preventing too great a rush of water and by making longer and better wing walls to the bridges. But the regulation of the rush of water is difficult when the Degh is in flood.

3. My object throughout was to work with the people and to spend as little money as possible. The works have not the fine appearance of the great *bands* in Gurgáon; but, on the other hand, they have been constructed at much less expense. In fact it may be said of all the Siálkot works that they can be maintained in repair by the people themselves, without the assistance of Government or of the District Board, provided of course they are supervised by the District Authorities. In some cases I diverted the road so that it should go along the top of a *band*. The people built the *band*, and the District Board the bridge with sluices. We thus secured a double purpose. Some of the roads, notably in the south of the district, become quite impassable when floods are out. Those aligned along *bands* can now be kept open all the year round, to the great convenience of the people.

4. On all the larger canal cuts we insisted on the people making proper masonry openings for their distributaries, and in some cases the people have agreed to a maximum size of field or *kiári* for irrigation purposes to prevent waste of water. Where several villages have combined for one work, the maintenance share of each village has been defined, and the villages on the canal from the Degh at Jiwan Goraya in Raya have agreed to a small water-rate to go towards working expenses. Every *band*, except a very few of the quite small ones, is furnished with one or more sluices to regulate the water. I insisted on the construction of these sluices, as the only way of preserving the *bands*, and of ensuring a proper distribution of water. There is a great tendency to waste water in the beginning. As rice especially requires water in September just before ripening, we



encouraged the people to keep as much water as possible in store for the later times. The sluices are of the ordinary pattern, bridges with arched openings, provided with slots into which the sluice hands can be fitted one on the top of the other. On the lower side of the sluice has generally been made a masonry reservoir to catch the first water and form a cushion for the subsequent water to fall on before flowing away. As far as possible the sides of the *bands* have been planted with grass or rushes to prevent their wearing away from the action of the water. It was difficult to induce the people to make the *bands* sufficiently thick and with a good slope. They learnt by degrees that extra labour spent on this object was not thrown away.

5. I now return the statements and maps, received back from Government, and have again to request that the maps may be returned, when done with, to the Siálkot district office. I am sending the office copy of this report to the same office.

REPORT BY M. GHULAM AHMAD KHAN, K. B., SETTLEMENT COLLECTOR.

PHYSICAL FEATURES OF THE SIALKOT DISTRICT.

1. The Siálkot district is officially classed as submontane, but the northern border is nearly 25 miles distant from the low Jammu hills which fringe the Himalayan range. Its general aspect is a plain, sloping down from the uplands at the base of the Himalayas to the level country. It is watered on the north-west by the Chenáb and on the south-east by the Rávi, but about midway between these two rivers a high dorsal tract, extending from beyond the border, forms a somewhat elevated plateau which stretches far into the district. Upon the border this elevated tract is about 20 miles in breadth, and extends from the Degh to the high eastern bank of the Chenáb. Gradually contracting in width, it terminates about 10 miles to the south-west of Pasrúr, and 32 miles from the point where the Degh enters the district. It thus forms a triangle, its base resting on the border, one side following the line of the Degh, and the other cutting diagonally, due north and south, across the district. Towards the Chenáb the central plateau falls off abruptly but slopes more gradually towards the Degh. To the west of it lies a broad plain extending from the high bank of the Chenáb on the one side to the Degh on the other, and occupying approximately half the district. To the west of the Degh the country is also a level plain broken up on the north by a few hill torrents, but perfectly flat to the south.

2. With the exception of the Bajwát canals, the chief source of irrigation among the hill torrents in this district, through dams and embankments, are the Aik and Degh streams. The former rises in the Jammu hills and enters the district at the village of Umránwáli about six miles to the east of Siálkot cantonments. Its general direction is south-west, and it skirts the south of the city of Siálkot. On the upper reaches the banks are high, and as a rule steep, and the stream rarely overflows. When it enters the Daska tahsil, however, the bed gradually rises to the level of the surrounding country and the force of the current abates. In Daska it is of the greatest service to the villages within its sphere of influence. During the rainy months the supply of water is abundant, but this dwindles to very little during the dry part of the winter season.

3. The Degh is formed by the union of two petty streams north of Jasrota in Jammu territory, and enters the north-east corner of the Zafarwál tahsil near the village of Lehri. Shortly afterwards it splits into two branches which traverse the whole length of Zafarwál and re-unite on the Pasrúr border. After only two miles two branches are again formed. One of these flows due south into the Raya tahsil where it again joins the main branch. The other runs towards the south-west, and when half way through Pasrúr deflects to the south, and finally joins the Gujránwála district. From both these branches there are smaller offshoots. The supply of water being drawn from the lower hills and dependent solely upon the local rainfall, is somewhat uncertain and intermittent. There is water, however, in the channel at all seasons of the year, and here and there springs of water occur in the bed. When heavy rain has fallen in the hills the discharge of water is sudden and abundant, causing floods which are frequently destructive. From the plain country, too, considerable accessions of volume are received during heavy rain; for the river valley, lying low, forms the main drainage artery of the eastern portion of the district. The nature of the banks varies much. Abrupt in some places, they become in others so gradually sloped as to be almost undistinguishable. The bed of the river is of course sand, forming in places quick-sands of considerable depth. The current during the rainy season is very rapid, being scarcely fordable even when only knee deep. When waist-high the stream is quite unfordable. The course of the main current shifts constantly from side to side of the river bed, but there have been no instances of late years of any violent change. The action of the stream varies with its distance from the hills. It rushes through the whole of Zafarwál and the north of Pasrúr doing little but harm, and we seldom see any dam across it owing to the rapid slope of the country. To the south of Pasrúr and in Raya, however, the current becomes slow and its value as a fertilizing agent is very great. The majority of dams in Raya are constructed across the Degh stream or a branch of it.

4. Besides these hill torrents there are several other smaller streams in the district which, though they receive, as a rule, no supply from the hills, serve the useful purpose of carrying off the surface drainage of the country. They are generally known by different

names in different parts of their course. They cannot compare with the Aik and Degh as irrigation agents, but they are utilized by the zamíndárs wherever possible by erecting *jhallárs* or Persian-wheels on their banks, or constructing *bands* or dams across their channel.

5. There are also numerous marshy depressions locally known as *chhams* in many parts of the district. They are fed by rain, surface drainage, and the smaller streams which are a distinctive feature of some parts of the district. They are of considerable value as reservoirs for purposes of irrigation, and many of them have had their capacity considerably increased by artificial embankments. In such cases the water is generally made available for irrigation by means of ducts. It was believed by Mr. Prinsep that under encouragement from the District authorities much might be done to improve and extend the means of irrigation thus provided.

6. Nothing was done, however, till 1888-89 when the general question of these *chhams* and the channels leading to and from them was taken up by Lieutenant-Colonel Montgomery, the Deputy Commissioner, and for the next five years the whole irrigation system depending on them was thoroughly overhauled. Old embankments, dams and sluice-gates were restored, and where necessary new ones were built. The old ducts were put in working order and new channels were cut whenever an increase in the volume of available water or a change in the bed of any hill stream necessitated such a course. The interested zamíndárs supplied free labour, and when money was wanted it was furnished as a *takávi* advance from Government. Wherever the co-operation of the District Board was needed they responded to the call very warmly.

7. The general control of all these irrigation works is in the hands of the District authorities, and during the present settlement rules were drawn up providing in detail for each work and were entered in records of right of the villages concerned. The whole system is now in order, it works well, and with a little attention on the part of the district authorities there will be no fear of its failure in the future. It has resulted in a distinct addition to the assets of the zamíndárs in an appreciable proportion of the villages in the district, and consequently in an increase in the amount of revenue paid to Government. Not only has cultivation largely increased in the tracts affected by these works, but the character of the old cultivation has been raised, while the expense and labour of agricultural operations have declined.

8. Almost all the *chhams* dry up before the winter rains begin, and again at the beginning of the hot weather. Generally speaking, cultivation of the area recognised as belonging to them is forbidden, but however in most cases the cultivation of the rabi harvest is permitted.

The information required by His Honor the Lieutenant-Governor for the various tahsils is given below :—

#### TAHSIL PASRUR.

9. In this tahsíl the irrigation works are found in more abundance than anywhere else in the district. The tahsíl lies midway between the Rávi and the Chenáb and is an elevated plain sloping from the north-east to the south-west. The high central region of the Siálkot district, which may be said to form the watershed of the Rachna Doáb and is locally known as the great Bharari tract, stretches down from the low Jammu hills across Siálkot and Zafarwál and enters this tahsíl in the middle of the northern border. In the north of the district this high upland stretches from the left bank of the Chenáb for about 30 miles in Zafarwál and then gradually narrows as it declines towards the south. At first this decline is sharp and is marked by small torrents formed by the rapid surface drainage from the hills. In Pasrúr, however, the slope becomes more gradual and finally merges almost imperceptibly close to Saukanwiud in the great *kálar* plain, which is a distinguishing feature of the south of the Gujránwála district. Thus the rapid torrents with more or less well-defined banks which mark the sweep of the land in the north of the district generally give place in this tahsíl, particularly in the Kálar and Charkhri circles, to *chhams* or marshy depressions, which have been formed into irrigation reservoirs by the construction of dams.

10. The most important of all the reservoirs in the district is No. 1, known as the Satráh *chhamb*, so called from the village of the same name close by. The *chhamb* is an embanked one with several good masonry sluice gates. It is said to have been erected during the reign of the Mughal Emperors. But it had afterwards been badly neglected and fallen out of repairs until it was lately put to rights by Colonel Montgomery. Under his directions several more sluices have also been added which have materially added to the value of the *chhamb*. In order to render the *band* more stable, the *beran* grass has been planted inside and mango trees outside of it. The embankment has been so designed that its strength varies with the force of water, *i.e.*, where the force of the water is greater the embankment is stronger. The roads leading from Sábingil and Satráh to Daska serve as an *úgal*\* and are very useful for the collection of water.

\* NOTE.—Embankment for keeping in the water. (Sd.) J. M.



The bridges and roads on and about the embankment are the property of the District Board, and they are responsible for their necessary repairs. The zamindárs execute all other repairs, such as clearing and repairing the distributaries, &c., according to the proportion of their lands irrigated from the *chhamb*. The Tahsildár and Zaildár of the circle hold a general control over the management of the *band*. Besides, an irrigation *dárogha* has recently been employed. He is paid from the irrigation works fund. The proprietors of Ratta Bájwa, Khandúwáli and Chiánwáli complained of the loss they sustained from their being prevented from cultivating their lands under the *chhamb*.\* These villages are at the extremities of the *chhamb*, and it has been ordered that when the water get so as to injure their lands it should be let off by opening the sluice-gates. The area of the *chhamb* is defined by the erection of masonry pillars. The villages lower down the *chhamb* also benefit from the overspill water, but they have to pay on that account a small water-rate which amounts to about Rs. 200 per annum at an average. Besides, there is an annual income of about Rs. 100 from the sale of natural products, such as *nílophar* (*nymphæa lotus*), *khas* grass (*cymbopogon aromaticus*), fish, &c. All this income goes to the necessary annual repairs to the *band*, &c., which are generally carried out before the rainy season sets in, *i.e.*, during the months of March and April. For further account of the sluice-gates, &c., see List A. of Pasrúr tahsil.

11. Excepting the Satráh *chhamb* there are 45 irrigation works in tahsil Pasrúr. Of these 11 (Nos. 16, 17, 22, 23, 25, 26, 39, 40, 41, 42 and 46) are marshy depressions in the lines of natural drainage which have been converted by irrigation dams and *ágals* into useful reservoirs of water. These are all permanent reservoirs furnished with sluice-gates and distributaries except No. 39 Paropi which has no ducts and No. 40 Uddo Fatta which is still under construction. Necessary repairs, &c., to the dams or distributaries are made by the villages concerned in proportion to the share of water they get. Nos. 16, 17, 26, 40 and 46 are newly made dams and were designed by Colonel Montgomery. The remaining six are old dams, but have been much increased and regulated under the directions of that officer. As a rule, the District Board took no share in the preparation of these works, but as roads run along the top of *bands* Nos. 23, 25 and 42, the District Board have constructed bridges on these dams at their own expense which serve as sluice-gates. No. 43 is a cut made from the Degh stream in order to feed the Satráh *chhamb*. Nos. 44 and 45 are two branches of the Degh stream which have been cleaned out by the people and are much utilized for irrigation purposes.

12. The remaining 31 works are all dams right across the natural lines of drainage or *nálás*. Of these Nos. 7, 8, 9, 12, 13, 14, 16, 17, 28, 32, 33, 35, 38 and 46 are new works. The other works are old and appear to have been designed by the people themselves, but were repaired and put into working order by Lieutenant-Colonel Montgomery. The District Board have constructed the bridges or roads along the top of the *bands* Nos. 4, 13, 23, 25 and 43. All *bands*, except No. 39, from which water is allowed to run over the country have sluices and ducts for distribution of water. Repairs to all *bands* are made by the zamindárs interested, except where the bridge and road forming the dam or *ágál* belongs to the District Board, in which case the repairs are executed by that body. Repairs are usually carried out before the rainy season sets in, *i.e.*, during the months of March and April. Each *band* is managed by the villages interested in it under the general control of the Tahsildár. The nála Arki cut is about 19,547 feet (3,554 *kadams*) long and is under the control of the District Engineer.

13. No complaint has ever been made except in the following cases:—

- No. 2 *Siránwáli*.—Complaint from the proprietors of mauza Begewáli. Ordered that the water should be allowed to stand in the depression only so far as not to be injurious to their crops.
- No. 23 *Sáhoke*.—Complaints from two villages. Orders passed were the same as in the above case.
- No. 24 *Gurála and Guráli*.—Complaints from two villages. Orders passed were the same as in the above case.
- No. 32 *Kálewáli*.—On complaint being made by the proprietors of the village, it has been proposed to dig a new outlet to let the excessive water out.
- No. 38 *Ratangarh*.—On complaint from villages lower down the *band*, it is proposed to make a bridge in order to let the water off to save the villages affected.†

#### TAHSIL RAYA.

14. The tahsil abounding in irrigation works next to Pasrúr is Raya. Longitudinally this tahsil is naturally divided into three great tracts. Two belts on the east and west slope down towards the Bávi on one side and towards the Degh on the other, while the ridge of slightly higher land runs down the centre. The whole tahsil, moreover, gradually declines from the Zafarwál border towards Lahore. Except *band* No. 16 (Ladhewála)

\*NOTE.—This complaint was only regarding rabi crops. (Sd.) J. M.

†NOTE.—This is in order to make a water-way through a road which obstructs the passage of the surplus water. (Sd.) J. M.



which is situated in the Darp, all *bands* and marshy depressions exist in the Dokánd and Kálar circles. Almost all of them are dependent for the water supply on the Degh stream, whilst the rest are formed in the lowest levels of natural drainage. A brief account of each is given below :—

- No. 1 *Khál Dhilli*.—A cut from Degh stream (with no sluice gate)—designed and dug by the zamíndárs of Dhilli, Dátewál and Jháda in 1891. It has no distributaries, the water being allowed to run over the country. Water comes in the cut only when the Degh stream gets sufficient water from rain in the hills. It is duly cleaned out by the zamíndárs when necessary.
- No. 2 *Jíwan Goráya masonry dam*.—It is fully described in the list. No aid was rendered by the District Board. The people of Chakráli complained against their deprivation of cultivating their lands under the *kund* during the rabi. It has therefore been proposed to make a new\* cut in order to let the water off during the cold weather.
- No. 6 *Khál Mári*.—A temporary dam is erected on the Degh stream when water is required for irrigation purposes. When the water is required by the villages lower down the stream, the *band* is pulled down. No aid was given by the District Board.
- Nos. 8—12 *Hachchar Band*.—Fully described in the list. No aid was given by the District Board. No complaints have ever been made by the villages lower down.
- No. 13 *Kot Sánís*.—The dam is erected on a depression formed by the constant stoppage of water there. It is an old and permanent *band*, but has been much augmented under the directions of Lieutenant-Colonel Montgomery. No complaint from any village.
- No. 14 *Dhadora Band*.—An old and permanent *band* on a low depression largely increased under the directions of Lieutenant-Colonel Montgomery. It has no sluice-gates and no distributaries. No complaint has been ever made by any village.
- No. 15 *Arúd Afghán*.—A newly made permanent *band* in a low land. It has masonry sluices and water ducts. No complaint has ever been made by any village.†
- No. 16 *Ladhewála Band*.—An old *band* renewed by Lieutenant-Colonel Montgomery. It is laid across a *nála* which forms from the overspill-water of the *rohi* lands of tahsíl Zafarwál. No complaint has ever been made in respect of it.
- No. 17 *Báth Band*.—It is a temporary *band* in the old Degh stream with no sluice-gate and water distributary. It is erected when necessity for water arises. No complaint has been made in respect of this *band*.
- Nos. 18—20 *Band Ghariál Kalán and Agal Ghariál Kalán and Agal Ghariál Khurd*.—A permanent dam made under orders of Lieutenant-Colonel Montgomery. It is fully described in the list. No complaint has ever been made in respect of it.

15. Except the *Kot Sánís Band* No. 13, the money spent on which was paid by Government, all the *bands* in this tahsíl were made by the zamíndárs at their own expense, the District Board having rendered no aid at all. All *bands* except No. 13, which is under the immediate supervision of the jamadár of the Sánís Reformatory *Kot Ahdián*, are managed by the interested zamíndárs themselves. The necessary repairs are also rendered by them during the autumn before the rainy months. Recently a jamadár has also been employed for the supervision of these *bands* under the control of the Tahsildár. He will be paid from the Irrigation Works Fund lately formed in this tahsíl.

#### TAHSIL DASKA.

16. The Daska tahsíl is a long narrow tract, shaped somewhat like a carrot, and may be said to form the western boundary of the district. It is throughout an unbroken plain, but, stretching as it does from the Chenáb to the Kálar tract to the north of Lahore, it contains different varieties of soil and varying facilities for irrigation.

\*NOTE.—This cut was thought of in my time, but there were difficulties which could not be overcome. I am very glad to hear it is now to be made. It will effectually dispose of all objections from Chakráli. (Sd.) J. M.

†NOTE.—One or two of the owners in the village objected at first. Their objections were overcome at last and the *band* made. (Sd.) J. M.

The centre of the tahsíl consists of a large plain of over 200 square miles, unbroken by streams or hills, but marked by more or less well defined hollows scattered over the greater part of its area. These hollows serve as lines of drainage for the surplus water from the higher submontane tracts to the north and north-east; where they are pronounced they form *chhamb*s which serve as reservoirs of water for the autumn crops. They are joined to each other, in some places by artificial cuts, but generally by natural drainage channels which prevent the winter floods from submerging the young spring crops.

17. The detail of the various irrigation works made since 1888 is given below—

No. 1 *Jámka Canal*.—Was made in 1890 by the zamíndárs themselves. The canal dries up when there is little or no water in the Aik stream. The villages\* along the canal complain that during the rainy season, when the Aik stream is in floods, the water in the canal is very troublesome to them. It will therefore be necessary to erect a masonry sluice-gate with wooden-board openings. For the first five miles the clearance is effected from the sale proceeds of grass and *sarkína* grown on the canal. After that distance it is cleaned out by the zamíndárs. It is managed and maintained by the interested zamíndárs themselves, no aid being given by the District Board. The canal is supplied with distributors of water.

No. 2 *Doburji Band*.—A newly made permanent band with water distributaries across the *Begewáh nála*. It was designed by the zamíndárs themselves.

No. 3 *Daulowáli Band*.—It is a permanent embankment. It has water distributaries.

No. 4 *Tarawánián Band*.—It is a joint band with the village of Khot in Pasrúr. See band No. 4 of that tahsíl. The remarks are the same.

No. 5 *Musewála and Rája Ghumán Band*.—It is a dam on the Rája Ghumán reservoir which is fed by the Aik Canal. It has masonry sluices and water distributaries.

No. 6 *Nála Aik*.—It is an old *nála* of the Aik stream which was renewed in 1891 under the directions of Lieutenant-Colonel Montgomery. It requires no clearing out nor any repairs†.

Nos. 7 to 10.—*Kháls*.—These are four old *kháls* renewed under the directions of Lieutenant-Colonel Montgomery. They are permanent and irrigate the lands of the large village of Begowála. They are called by different names after the names of the wells the areas of which they irrigate.

No. 11—A new cut made from the *Jámka Canal* in order to feed the *chhamb* at Kotli Chhambwáli.

All the works in this tahsíl have been made by the zamíndárs themselves, the only aid given by the District Board being in case of *Tarawánián Band*. They are all managed by the zamíndárs themselves under the general control of the Tahsildár. No complaint has ever been made in respect of any of these works. Necessary repairs to all these bands, except the *Tarawánián* bridge, are made by the zamíndárs themselves. They generally carry out these repairs during the months of March and April, i. e., before the rainy season sets in.

#### TAHSIL SIALKOT.

18. This tahsíl forms the link between the uplands at the base of the hills and the flat plains of the Punjab. But it is nearer the hills, and the Chenáb and its tributaries combine to produce greater diversity of feature. Part of the high central region of the district which stretches east into Zafarwál and south into Pasrúr occupies the lower portion of the eastern half of the tahsíl. This plateau, which is remarkably free from undulation, slopes sharply from north to south and forms a small watershed from which surface drainage finds its way down to the Aik and other streams in small shallow channels. To the south-west is the low flat country which marks the beginning of the plains proper. This portion presents no variation of surface and is broken only here and there by drainage channels and slight depressions.

19. There are 14 bands in this tahsíl as under:—

No. 1—*Pathánwáli Band*.—It is a permanent dam across the *Pathánwáli nála*. It has water distributaries and sluices. One watchman is employed by the zamíndárs to whom they have given a *muáfi* of 12 kanáls of land.

\* NOTE.—Mainly the villages at the head of the canal who derive little benefit from it. (Sd.) J. M.

† NOTE.—What was done here was to regulate the water and see that these two villages got their fair share. (Sd.) J. M.

Nos. 2, 3, 4, 8, 9 and 10.—These are permanent embankments with *ágals* on low depressions. Of these No. 2 was designed by Lieutenant-Colonel Montgomery, and Nos. 3, 4 and 8 were renewed and Nos. 9 and 10 were repaired under his directions. A guard is appointed during the rainy season for each of Nos. 3 and 4 who is paid at 2 *topás* of grain per plough. The guard appointed for No. 1 looks after No. 2 also. Only No. 2 has small wooden sluices and water distributaries. Nos. 3, 4, 8, 9 and 10 have no sluices and the water is generally taken by opening out the *band*.

No. 5.—Is an old and permanent dam on the Kohár *nála*. It has been renewed under instructions of the late Deputy Commissioner, Lieutenant-Colonel Montgomery. It has a masonry sluice and distributary for Gurhi, the remaining villages of Chhenawán and Chhichhriáí getting water by means of *jhallárs*. A watchman is appointed by the zamíndárs during the rainy season on payment of 2 *topás* of grain per plough.

Nos. 6 and 7.—These are two dams on the Kohár *nála*. No. 6 was designed by Lieutenant-Colonel Montgomery and No. 7 was renewed under his directions. The former has not proved a success and is falling out of repairs. These both have distributaries.

No. 11.—This is an old and permanent dam across a *nála*. It has been renewed and enlarged under the directions of Lieutenant-Colonel Montgomery, late Deputy Commissioner. The zamíndárs of Bharthánwála complained against it, and it has therefore been ordered that water should be let off in October in order to allow them to cultivate the rabi crops.

Nos. 12, 13 and 14.—All these three dams are on the Palkhú *nála*. Owing to the high banks of the *nála* the water is taken by means of *jhastar* or water-baskets by lift. There are no distributaries. All of these *bands* have been made by the zamíndárs themselves without any aid from the District Board. They are managed and maintained by the zamíndárs interested under the general control of the Tahsildár. The necessary repairs are carried out by them usually during the months of March and April, *i.e.*, before the rainy season sets in. No complaint has ever been made in respect of any *band*, except where it has been stated opposite the *band*.

#### TAHSIL ZAFARWAL.

20. This tahsíl forms part of the uplands between the low Jammu hills at the base of the Himalayas and the level plain which comprises the rest of the district. These uplands run in a marked and direct slope from the northern border to a line running east and west which practically corresponds with the Siálkot and Gurdáspur high road, which passes through Philaura and Dhamthal. On the north the incline is most marked. There is no watershed on the border such as is found in Shakargarh. The result is the surface of the ground is more uniform and there are fewer *nálás* and ravines. Owing to the distance from the hills the drainage water finds its way to the plains in a few well marked channels some distance apart, instead of in those numberless small irregular cuttings which intersect the north of the Gurdáspur district. The slope of the country nowhere undulates and except in the extreme south-west there are no deep depressions which could be utilised as natural reservoirs. The only *chhamb* of any importance in this tahsíl is at Manjke. It is situated partly in this tahsíl and partly in tahsíl Pasrúr, but the largest benefit is derived from it by the adjoining villages of Pasrúr. In the Pasrúr statement it is described at No. 43, *Band* No. 10 is erected on this *chhamb*. It is a permanent dam and has been largely improved under the directions of Lieutenant-Colonel Montgomery.

21. All other *bands*, *i. e.*, Nos. 1—9, are dams right across *nálás* or natural lines of drainage, except No 7 (Arki Canal) which is described at No. 43 of the tahsíl Pasrúr list. A brief detail of each is given below :

Nos. 2, 6 and 8 are temporary *bands* with water distributaries. They have no sluices.

Nos. 3 and 9 are temporary *bands*. They have no water distributaries. The water is taken by means of *jhattás* or water-baskets.

Nos. 1, 4 and 5 are permanent dams with sluices and water distributaries.

Except No. 6 which has been designed by Lieutenant-Colonel Montgomery, all of these dams are old and were made by the people themselves. No aid has been given by the District Board except in case of No 5 where the road passes along the top of the *band* and that body paid Rs 416 in erecting the bridge over the *nála*. The temporary *bands* are only erected when water is required by zamíndárs for the irrigation of their rice or other kharíf crops. No complaint has ever been made in respect of these



*bands*. The old *bands* have largely been improved under the directions of Lieutenant-Colonel Montgomery. All the necessary repairs are made by the zamíndárs themselves, except in case of No. 5, for which the District Board is responsible. All repairs are usually carried out before the rainy season sets in. The zamíndárs look after the proper maintenance of these *bands* under the general control of the Tahsildár.



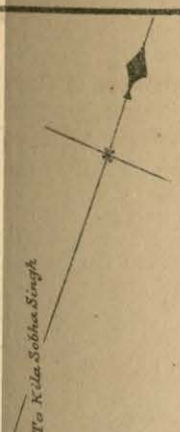
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# MAP OF TAHSIL RAYA

Scale 3 Miles 1 Inch.

furlongs 0 1 2 3 4 5 Miles



- 1 Salia Barbia
- 2 Kalandrabad
- 3 Kasso Bakhla
- 4 Aurangabad
- 5 Kollu Hasan Shah
- 6 Araxi Saharan
- 7 Chak Bhalinda
- 8 Bharawal
- 9 Gajjoke
- 10 Talwandi Bajwa
- 11 Megowal
- 12 Kesuwali
- 13 Boso Wairan
- 14 Budhu Kot
- 15 Bhatti Man
- 16 Nangal Janshed
- 17 Chak Pada
- 18 Chak Mughal
- 19 Sulehrian
- 20 Chak Saharan
- 21 Chak Soran
- 22 Phusipur
- 23 Chak Safdar
- 24 Ghagga
- 25 Jilipur

REFERENCES	
River and Streams	
Road	
Banda	
Chhamb's	
Canal and Cut	

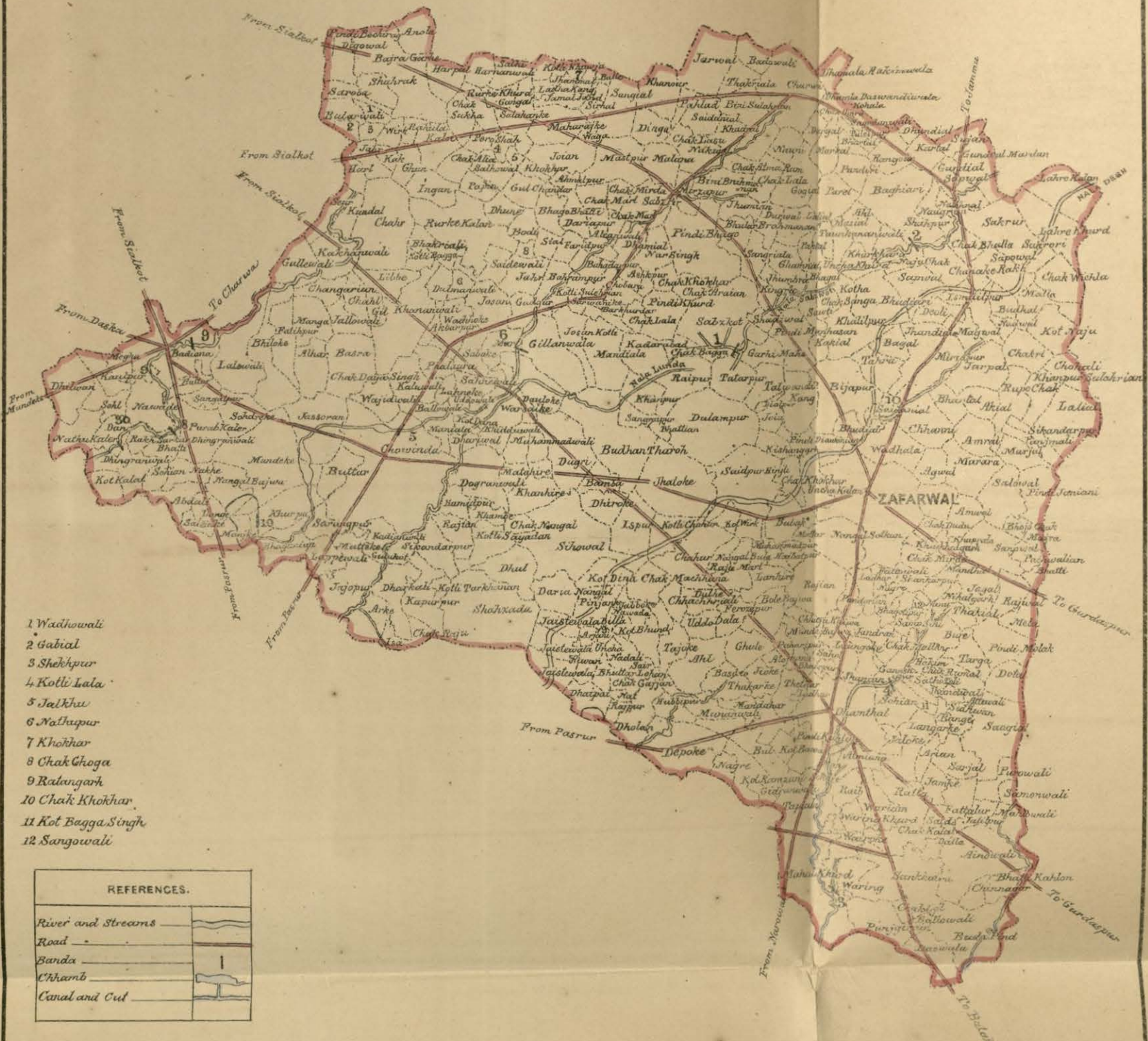
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In charge of Settlement.



# MAP OF TAHSIL ZAFARWAL

Scale 3 Miles = 1 Inch.

Furlongs 0 1 2 3 4 5 Miles



- 1 Wadhawali
- 2 Gabial
- 3 Shekhpur
- 4 Kollu Lala
- 5 Jal Khw
- 6 Nathapur
- 7 Khothar
- 8 Chak Ghoga
- 9 Ralengarh
- 10 Chak Khokhar
- 11 Kot Bagga Singh
- 12 Sangowali

REFERENCES.	
River and Streams	
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Chahnab	
Canal and Cut	

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# MAP OF TAHSIL DASKA

Scale 3 Miles = 1 Inch

furlongs 8 9 1 2 3 4 5 Miles



REFERENCES	
River and Stream	
Road	
Railway	
Banda	
Chhanb	
Canal and Cut	

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# MAP OF TAHSIL SIALKOT

Scale 3 Miles = 1 Inch.



## REFERENCES

River and Stream	
Road	
Chamber	
Barada	
Railway	
Canal and Cut	



1. Marwal
2. Khakhwal
3. Chak Chibran
4. Aminpur
5. Ajwal
6. Fird Bhalla
7. Chak Khuja
8. Baranthal
9. Ghazipur
10. Dhangal
11. Chhanni Hinto
12. Rurgala Mandal
13. Majwal
14. Sagripur
15. Atna
16. Malakhal Kalan
17. Malakhal Khurd
18. Dhundi
19. Dhundi Chand
20. Kallowal
21. Kotli Bhulla
22. Lakhanwala
23. Madota
24. Kharana
25. Sarota
26. Durgapur
27. Dargah Bala
28. Mehru Dhangla
29. Ghazian
30. Chak Pustian
31. Shadiwala
32. Budian
33. Chak Adil
34. Phulwan
35. Mawani Fird
36. Shankarpur
37. Rattan
38. Dhangli
39. Malakhal Kalan
40. Kotli Harwarain
41. Phari Khanawali
42. Salimpur
43. Malakhal Khurd
44. Dhangli
45. Dhandal
46. Chak Sada
47. Bhalli Kalan
48. Malke

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# MAP OF TAHSIL PASRUR

Scale 3 Miles = 1 Inch

furlongs 0 1 2 3 4 5 Miles

- 1 Ausalko
- 2 Dahir Bechiragh
- 3 Sarai Bhai Karm Singh
- 4 Araxi Patti Dohata
- 5 Malhoke
- 6 Chohan
- 7 Chawali
- 8 Bogargil
- 9 Udangil
- 10 Nangal Hasri
- 11 Gujar Goraya
- 12 Doborji Ram Chand
- 13 Nangalian
- 14 Mallata
- 15 Kahlonwali
- 16 Bahlotpur
- 17 Kaku Ghaxi
- 18 Jalluwali
- 19 Koli Tarar
- 20 Chak Hushiana
- 21 Bhullar Wairan
- 22 Gandowali
- 23 Khawa
- 24 Khair-ullapur
- 25 Mungo Pangur
- 26 Shah Husain
- 27 Sahad Batah
- 28 Chando Sukha
- 29 Kot Kalal
- 30 Chak Dhoda
- 31 Machhewali
- 32 Mian Harpal



REFERENCES	
River and Stream	
Road	
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