

Jámrao Canal.

Administration Report of the Colonization
Officer, — , for the year 1906-07.

No. 1181.

REVENUE DEPARTMENT.

Bombay Castle, 4th February 1908.

Memorandum from the Commissioner in Sind, No. 5291, dated 23rd December 1907—Forwarding, with his remarks, a letter No. 3336, dated 21st September 1907, from the Colonization Officer, Jámrao Canal, who submits the Annual Administration Report of the Jámrao, Dad, Nasrat and Hiral Canal tracts for the year 1906-07.

RESOLUTION.—It seems not unreasonable to anticipate that a considerable proportion of the Marwári, Thar and Kachi labourers who went back to their homes will return to the Jámrao on the recurrence of unfavourable seasons in their own countries. That the prosperity of the tract should be so largely influenced by such a variable factor is, however, an unsatisfactory feature of the situation, and Government will be glad to be informed of the result of the careful attention which the Commissioner in Sind indicates in paragraph 2 of his memorandum that he is giving to it. They agree with the Colonization Officer that it is desirable to extend the areas held by the Panjabi peasant-holders. On their holdings the labour difficulty is least felt, and they are least likely to desert under stress of unfavourable seasons.

2. The falling off in revenue is much less than might have been expected in the circumstances of the year, the realizations being largely in excess of the original forecast, on an area slightly below that anticipated. The Colonization Officer explains that the remission on account of damage to wheat by rust is not in proportion to the loss actually incurred; and it is to be feared that where the cotton could not be picked the revenue paid must have been extremely high in relation to the profit derived by the cultivator from his holding.

3. The Governor in Council trusts that the consideration which the Commissioner in Sind is giving to the junior Talpurs will lead to some effective measures being found possible for the improvement of their condition.

4. Government concur with the Commissioner in thinking that the increased demand for lift land on the Dad Canal is more probably due to the cause which he mentions than to that assigned by the Colonization Officer, and approve of the precaution which he has taken to guard the interests of Government.

5. The Panjab system of distributing water should be further reported on after a normal season has enabled it to be fully introduced and its working to be susceptible of examination.

6. The Governor in Council is glad to be assured that in a trying year the administration of the tract continued to be carried on with ability and energy by the Colonization and Irrigation officers.

J. E. C. JUKES,

Acting Under Secretary to Government.

To
The Commissioner in Sind,
The Collector of Hyderabad,
The Deputy Commissioner, Thar and Parkar,
The Colonization Officer, Jámrao Canal,
The Private Secretary to His Excellency the
Governor,
The Public Works Department of the Secretariat.

With copies of the memorandum
from the Commissioner in Sind,
No. 5291, dated 23rd December
1907, and its accompaniments.

Rev 218

No. of 1908.

Copy forwarded for information and guidance to

No. 5291 of 1907.

REVENUE DEPARTMENT.

*Camp of the Commissioner in Sind,
Karachi, 23rd December 1907.*

Report of the Colonization Officer, Jamrao
Canal, for the year 1906-07.

Submitted to Government.

2. The Commissioner observes with regret the decrease of cultivation on the Jamrao and the Hiral canals. The causes contributing to this result are (1) want of labour, (2) failure of the water-supply in the rabi season. The want of labour was due chiefly to the return of the immigrants from Marwar, the Thar and Jaisalmer. As pointed out by the Colonization Officer, the increase of cultivation has depended chiefly on these immigrants and when, as in the year under report, these people return to their homes, because of an abnormal rainfall in their country, their want is keenly felt and results in a decrease in the cultivated area. The anticipated labour difficulty is causing anxiety, and is one which needs very careful attention.

The practical destruction of the Egyptian cotton crop in kharif from the attacks of the boll worm and of wheat crop in rabi from the effects of rust is deplorable. Government are already aware that measures will be taken this year for checking the boll worm pest.

4. The Commissioner regrets to find that the condition of the junior Talpurs remains unchanged, and the matter is receiving his consideration.

5. The increased demand for lift land on the Dad canal is attributed by the Colonization Officer to the fact that the cultivable area on all other canals is exhausted, but in a recent correspondence the Commissioner has had before him from the Superintending Engineer in charge Rohri Canal Project that officer considers that the reason can be found in the fact that capitalists, who can afford to wait the completion of the project, are taking up land especially lift which, after a few years, will be worth much more than is now paid for it. Dr. Summers expressed a fear that some of this land may have to be acquired for the canal at a much larger price. But the Commissioner has issued orders for the insertion of a condition in the agreements to be taken under rule 32 of the Land Revenue Code rules that, if the land is required for any public purpose, it shall be surrendered on payment of compensation equivalent to the amount of occupancy fee paid to Government.

6. Under the arrangements sanctioned in the correspondence underlying Government Resolution No. 10249, dated the 30th October 1906, auctions for the sale of Egyptian cotton were held at Mirpur Khas on the 17th November, 1st and 16th December 1906 and 5th January 1907, and 4,879 maunds 7½ sers were sold at rates varying from Rs. 14-0-3 to Rs. 10-8-0 per maund. The rates were fairly satisfactory and would have been still more satisfactory had the cotton not been seriously affected by boll worm.

7. The administration of the tract was carried on throughout the year with ability and energy by Mr. Chatfield, the Colonization Officer, and his *locum tenens* Mr. Moysey. The Commissioner endorses the commendations bestowed by Mr. Chatfield on his Assistants and subordinate staff.

A. D. YOUNGHUSBAND,
Commissioner in Sind.

To

THE CHIEF SECRETARY TO GOVERNMENT,
REVENUE DEPARTMENT,

BOMBAY.

No. 3336 of 1907.

REVENUE DEPARTMENT.

Colonization office,

Hyderabad, 21st September 1907.

From

G. E. CHATFIELD, Esquire, I. C. S.,

Colonization Officer,

Jamrao Canal,

To

THE COMMISSIONER IN SIND.

SIR,

I have the honour to submit the Annual Administration Report of the Jamrao, Dad, Nasrat and Hiral Canal tracts for the year ending 31st July 1907.

2. Mr. E. L. Moysey was in charge of this office till 16th September 1906 and since that date I have been in charge.

SECTION 1.

RESULTS OF THE YEAR.

Jamrao tract.

3. The year under report is the seventh year of the working of the Jamrao Canal and the 13th since its construction was commenced.

4. The cultivated area was 252,212 acres 14 guntas as against 301,618 acres 8 guntas in the previous year—a decrease of 49,405 acres 34 guntas—and the jamabandi was Rs. 10,30,353-9-9 as against Rs. 12,41,412-2-3—a decrease of Rs. 2,11,058-8-6. Details of this and the preceding year's jamabandi are given below :—

	1905-06.			1906-07.		
	Rs.	a.	p.	Rs.	a.	p.
Land revenue	9,89,917	0	0	8,38,082	11	0
* Water cess	2,453	3	0	3,708	10	0
Malkano	1,55,960	5	11	1,08,864	14	2
Local funds cess	72,424	8	0	60,380	3	0
Fines	7,501	3	0	2,734	4	9
Miscellaneous revenue	13,155	14	4	16,582	14	10
	12,41,412	2	3	10,30,353	9	9

The decrease is due to shrinkage of cultivation. The chief cause of this was want of labour. From the date of its opening, the Jamrao tract has chiefly depended for labour upon the immigrants from Marwar, the Thar and Kach, who had left their own countries owing to the scanty rainfall of past years. The heavy rains which fell in the hot weather of 1906 attracted these foreigners to their homes in enormous numbers. A second cause for the great shrinkage in rabi cultivation was the failure of the water-supply in the rabi season.

Owing to the peculiar conditions, the effect of the decision to do away with the old system by which water was guaranteed only for one-third of each

* Note.—Water cess is now only levied in 8 dehs of Tando Bago, where the Settlement of 1898-99 has not expired.

holding, has been quite obscured. Zamindars found it extremely difficult to obtain either the necessary labour or (in the rabi season) the necessary water to cultivate a fair proportion of their estates. So far as can be seen at present, the labour difficulty is likely to increase rather than diminish. While this economic cause continues to depress cultivation, it will be useless to look for beneficial results from the removal of the old artificial restrictions.

5. The above results considerably exceed those anticipated in the original project as the following figures show:—

Year 1906-07.

				Area cultivated. Acres.	Revenue. Rs.
By forecast	...	...	...	260,000	6,81,460
By results	...	...	...	252,212	8,41,791 (including only land revenue and water cess).

The financial result exceeds the revised forecast framed by the Superintending Engineer, Indus Left Bank Division.

				Area. Acres.	Revenue. Rs.
For 1906-07	...	...	...	295,000	8,24,895
Final	...	...	...	300,000	8,39,300

6. The principal crops grown on the canal are cotton in kharif and wheat in rabi, of which the former occupied 39.29 per cent. of the total area cultivated last year, and the latter 31.30. The Sindhi cotton crop was an excellent one, but the prices were so low that many of the zamindars did not derive much benefit from this fact. Many of them kept their cotton in the vain hope of a rise in price and even of those who sold in advance (as is the usual custom) many were cheated by the banias who refused to take delivery at the price agreed upon. Apart from the low prices, want of labour deprived the cultivators of much of their expected profits, as they were unable to pick the cotton and obliged to allow a large proportion to fall to the ground, where it was spoilt by the next watering. This inability of the cultivators to pick their cotton was a most remarkable phenomenon, and field on field of the most excellent crops might be seen going to waste. The Sindhi crop was not gravely affected by the boll-worm which practically destroyed the Egyptian cotton. Of the latter, there was an area of 5,098 acres. The foggy weather in the beginning of November proved fatal to it.

The wheat crop throughout the tract was a failure. It suffered during the greater portion of the rabi season from the want of water which is noticed below. Toward the end of the season, when the wheat was in ear, a much larger supply of water became available and the crop was liberally watered. Whether for this reason, wholly or partially, or from some other cause, rust attacked the crop and in a great measure destroyed it. The amount of remission granted on this account has little relation to the extent of the damage. For the latter was not fully realized until the crops had been cut and threshed by which time it was too late to apply for remission.

7. Remissions on account of injury to crops were granted to the following extent:—

				Rs.	a.
Deficiency of water	...	...	...	8,204	9
Saltiness of land	...	...	...	383	15
Floods	...	...	...	243	12
Locusts	...	...	...	234	3
Rust	...	...	...	9,445	2
				18,511	9

8. The canal worked satisfactorily during the kharif season. In the rabi season, after December 5th, the supply in the canal was very poor. This was due to the low supply in the Indus. At one time the discharge at the head of the canal was only 1,050 cusecs and it was impossible to run any of the minors at full supply level, even when rotating the main canal and west branch. In February, the supply in the Indus fell so low that the Jamrao and Mithrau had to be given water in rotation. The designed supply is 3,200 cusecs and the average discharge during kharif was 2,648 cusecs and rabi 1,960 cusecs.

The minors were rotated during kharif for 2 weeks.

Dad canal.

9. The Dad worked well during the past year. The area of cultivation in my charge rose from 14,096 acres 10 guntas to 20,897 acres 36 guntas and the jamabandi from Rs. 37,812-4-3 to Rs. 59,563-0-9. The increase is due to the high inundation. Remissions were granted to the extent of Rs. 529-1-0 on account of deficiency of water supply and locusts.

Nasrat canal.

10. Cultivation rose from 63,073 acres 12 guntas to 94,934 acres 17 guntas and the jamabandi from Rs. 1,75,394-6-10 to Rs. 2,67,859-12-7. The increase is due to allotment of fresh land. The canal worked well. Remissions to the extent of Rs. 5,526-11 were granted, which were chiefly due to blight. This disease totally destroyed the juari crops. The bajri and cotton crops were, however, excellent.

Hiral canal.

11. The area cultivated was 23,357 acres 13 guntas as against 35,087 acres 10 guntas shown last year and the jamabandi was Rs. 51,459-6-10 as against Rs. 75,893-6-6. The decrease is due to the desertion of the tract by Thari haris, owing to rains in the Desert. This part adjoins the Desert and is entirely dependent on it for labour.

12. The canal worked well. The kharif crops were good. The rabi crops were damaged by *rati* and remissions to the extent of Rs. 1,112-13 were granted. The results exceed the estimate framed in the project as the following figures show:—

		Area.		Revenue.	
		A.	g.	Rs.	a.
By forecast	...	14,942	0	26,978	0
By results	...	23,357	13	35,037	10

SECTION II.

ALLOTMENTS OF LAND.

Jamrao canal

13. The total area of the Jamrao tract is 870,844 acres 4 guntas, of which 776,281 acres 6 guntas are returned as culturable. Of the latter area, 302,267 acres 10 guntas were held under the Land Revenue Code at the close of 1905-1906 and 306,663 acres 7 guntas under Act III of 1899, leaving a balance of culturable waste, amounting to 167,350 acres 29 guntas, available for distribution.

14. Allotments from this area were made as follows.

15. Re-adjustment of holdings was almost completed in the previous years, but an area of 4,699 acres 26 guntas was given out during the year under this head.

16. 1,866 acres 19 guntas were given out this year in settlement of nobat and bewari claims.

17. Grants of frontage lands to local zamindars have practically been completed in the previous years, but an area of 2,372 acres 38 guntas was given out this year under this head.

18. 182 fresh grants, aggregating 5,976 acres 7 guntas, were made to Panjabi colonists principally to peasant colonists. At the close of 1905-1906 there were 1,013 Panjabi colonists, including peasants, yeomen and capitalists holding 68,384 acres 6 guntas. Of these, the grants of 37, amounting to 1,579 acres 11 guntas, were cancelled during the year under report owing to the death or desertion of the occupants. The total area held by Panjabi colonists is therefore now 72,781 acres 2 guntas.

19. An area of 1,879 acres 22 guntas was given out to other colonists (Kachis, Jodhpuris and Sindhis). The area held by these colonists at the end of 1905-1906 was 32,301 acres 29 guntas and is now 34,181 acres 11 guntas.

20. 1,540 acres 28 guntas were given to Military pensioners, bringing up the total area held by them to 9,904 acres 10 guntas.

21. One more Junior Talpur received a jagir grant amounting to 185 acres 19 guntas. The total number of grantees of this class is now 63 and they hold 10,333 acres 26 guntas.

22. 6,592 acres 32 guntas were given to expropriated and other specially recommended zamindars from districts outside the Jamrao tract.

23. The total grants made during the year under review thus amount to 23,480 acres 32 guntas.

24. Appendix I gives details of the land held by each class of grantees. Out of the total culturable area of 776,281 acres 6 guntas, the area occupied at the close of the year was 632,411 acres 9 guntas, leaving 143,869 acres 37 guntas of nominally culturable land to be disposed of hereafter. About 45,255 acres out of this area are in dehs reserved for colonization and the remainder is scattered among other villages. With the exception of the land which is reserved for junior Talpurs, the area remaining for distribution is of the poorest quality.

25. The areas reserved for colonization are approximately as follow ;—

	Acres.
(a) For Panjabi peasants ...	17,223
(b) For Panjabi capitalists ...	200
(c) For Military pensioners ...	5,359
(d) For Junior Talpurs ...	6,300
(e) For others ...	16,173
	<hr/>
	45,255
	<hr/>

Dad canal.

26. The total area commanded by this canal in the tract under my charge is 96,863 acres, of which 73,038 acres are classed as culturable. The kabuli area at the commencement of the year was 47,270 acres 27 guntas and the area granted during the year was 3,987 acres 3 guntas. The total area now held on this canal in the tract under my charge is therefore 51,257 acres 30 guntas. Much of the land classed as culturable is really not so, partly on account of poor quality and partly because the height of the lift and the consequent cost of irrigation is prohibitive. But there has been an increased demand during the year for Dad land, chiefly owing to the fact that the cultivable lands on all other canals are now practically exhausted.

Nasrat canal.

27. The total area now commanded in the tract under my charge is 216,539 acres, of which 184,341 acres are returned as culturable. The area occupied at the commencement of the year was 124,603 acres and grants,

* In the last year's report they were shown by mistake to hold 10,201 acres 33 guntas instead of 10,148 acres 7 guntas.

amounting to 29,757 acres 25 guntas, were made during the year as follows:—

	A.	g.
(a) In re-adjustment of holdings ...	189	15
(b) In settlement of claims for relinquished or fallow-forfeited land ...	926	22
(c) In satisfaction of local claims ...	23	7
(d) To Junior Talpurs ...	833	1
(e) In extension of holdings ...	21,596	6
(f) To Military pensioners ...	271	32
(g) To expropriated zamindars and jagirdars ...	266	12
(h) To special recommendees ...	5,651	10
	<hr/>	<hr/>
	29,757	25

The total area now given out on this tract is therefore 154,360 acres 25 guntas, leaving a nominally culturable area of 29,980 acres 15 guntas to be disposed of hereafter. The greater part of this is very sandy and practically unculturable.

Hiral canal.

28. The total and culturable area on this canal are 54,238 acres 32 guntas and 49,006 acres 16 guntas respectively. Of the latter, 47,511 acres 19 guntas were in occupation at the commencement of the year and 256 acres 14 guntas were granted during it as follow:—

	A.	g.
In re-adjustment of holdings ...	56	7
In extension of holdings ...	34	31
To local people ...	36	3
To Tharis ...	43	24
To special recommendees ...	53	16
To Mirs ...	32	13
	<hr/>	<hr/>
	256	14

The total area now given out on this canal amounts therefore to 47,767 acres 33 guntas.

SECTION III.

COLONISTS.

(a) *Panjabis.*

29. The total number of Panjabi colonists holding *paka* grants increased from 1,513 to 1,864 and the total population from 6,544 to 7,039, including 2,812 females. The number of colonists who deserted during the year was 10.

30. The area held by each class of Panjabis is as follows:—

	A.	g.
(a) Peasants ...	54,983	16
(b) Yeomen ...	13,970	0
(c) Capitalists ...	3,827	26
	<hr/>	<hr/>
	72,781	2

31. The excellence of the Panjabi peasant-holders has been remarked in previous reports and I have nothing further to say upon this subject, except that their villages have suffered least, if at all, from the present labour difficulty. The colonies of Panjabi peasants are the most solid and successful in the tract. The quarrels which were started by the introduction of the numberdari system, and fanned by interested parties from the 'yeomen'

villages have now died out. The advantages of the system in Sind, where it does not form an integral part of the Revenue administration as in the Panjab, are doubtful: but at any rate the post of numberdar has ceased to be a bone of contention.

32. As regards Panjabi yeomen, their grip of the land is beginning to fail, as the effects of bad cultivation become more apparent. As their lands bring them less profit, the difficulty of keeping their Panjabi haris increases (*vide* paragraph 31 of the last Administration Report). Moreover, a large number of those Panjabis whom they were able to entice to Sind to work for them, came in the hope that they would eventually secure grants from Government as peasant holders. As the land available for the latter class is exhausted and they lose this hope, their motive for remaining in Sind disappears. The Panjabi 'yeoman' is not a success and it is probable that the class will die out gradually. As it does so, I propose that it should be replaced by the vigorous peasant-class. These peasant holders work well because they are working for themselves and stick to Sind because they have a stake in the country. Moreover, as they increase in numbers the temptation to return to the Panjab decreases.

33. One Panjabi capitalist has relinquished his land. This class suffers from the difficulties of the 'yeoman' class, but as the grantees are wealthy and subject to fewer burdensome conditions, they are tolerably content.

(b) *Other colonists.*

34. The Kachi colonists have continued to do well, where the land given to them has been of good quality. Unfortunately, several of their villages are of inferior quality as regards soil.

35. The Tharis, especially those on the Hiral canal, have shown a tendency to neglect their holdings as soon as there is a chance of cultivation in the Desert. This is the more extraordinary as the lands which they have received on the Hiral canal are the very best as regards soil and water supply, of any in my charge. They have been given the alternative between forfeiting their grants and cultivating them. The majority attempt to evade the choice, but some have boldly accepted the former alternative.

36. The remarks made in the last report upon Military pensioners and Talpur grantees apply equally well to the year now past. Both classes are extremely unsatisfactory as colonists—always excepting the Commissioned Officers, who manage their grants very judiciously where the land is good.

37. The growth of villages in the Nasrat taluka is steady and satisfactory. Before any extension of a grant is allowed, every grantee is obliged to show that he has built a residence for himself in his village. This is found an effective method of applying pressure upon non-resident grantees.

SECTION IV.

MALKANO AND TAKAVI.

38. Appendix II shows the demand and recoveries on account of malkano during the past Revenue year. The outstanding balance is large, but the year has in many ways been so disastrous that it has been impossible to press for its recovery without recourse to severe measures. The mass of the zamindars are at present simply not in a position to pay.

39. The total area sold by auction during the year was 223 acres 9 guntas and the average price realised was Rs. 29-1 $\frac{1}{2}$ an acre.

40. Appendix III shows takavi advances and recoveries. Rs. 73,170-4-9 were recovered during the financial year on account of advances under Act XII of 1884 and Rs. 81,266-13-9 on account of advances under Act XIX

of 1883 or Rs. 1,54,437-2-6 in all, as against a total of Rs. 2,38,130-15-8 in the previous year. Besides this, Rs. 31,479-11-0 of the arrears have been recovered between the 1st April and the 31st July, leaving a balance of Rs. 52,018-8-6.

SECTION V.

SURVEY.

41. The survey of all the tracts has been completed as previously reported. The present work consists of making alterations of maps and records necessitated by construction of new or by alterations in the alignment of old water-courses and field tracks, and by the allotment of lands for village sites and other public purposes. These changes are still constant and entail much work. The work done in the record office is shown in the subjoined statement.

Year.	No. of cases received exhibiting corrections in survey records, including deeds.				Number of cases returned duly corrected.				Remaining to be completed.				Number of maps supplied.				Number of new survey registers prepared and supplied to				Corrections in the names of occupants and assessments on settlements being revised.				Maps prepared for printing.		Registers prepared for record office.			
	Survey registers.	Survey maps.	Field books.	Distribution statements, i. e., form f.	Survey registers.	Survey maps.	Field books.	Distribution statements, i. e., form f.	Survey registers.	Survey maps.	Field books.	Distribution Statements, i. e., form f.	Number of extracts from field books supplied to Revenue authorities.	Without cost to village cess establishment.	With cost to village cess establishment.	Without cost to principal zamindars of the deb.	To district officers.	To petitioners.	Village officers.	District officers.	Petitioners.	Village officers.	District officers.	Petitioners.	English.	Sindhi.	New registers.	Corrections in the names of occupants and assessment.		
1900-1907.	805	807	291	...	428	744	248	...	77	63	23	...	2	90	4	105	98	70	19	19	...	...	...	...	...	20	27	...		

SECTION VI.

GENERAL REMARKS.

42. *Irrigation.*—During the past year, the Panjabi system of distributing water has been in force. According to this system, a fixed quantity of water is assigned to each village, and each occupant of the latter receives the whole supply for a fixed period in the week. It was agreed, however, that each village should be allowed the choice either to distribute its water-supply according to its own devices, or to apply to the Executive Engineer to draw up a "share-list," i. e., a list of the occupants in the village showing the period to which each was entitled. Out of a total of 463 villages in the tract, 320 villages applied for such "share-lists," and the lists were prepared accordingly. I learn, however, from the Executive Engineer that only 58 villages are actually distributing their water according to the lists, while the remaining villages have relapsed into their old haphazard system of taking water, each man as he requires and can obtain it. The reason of this appears to be that the occupants have more water than is sufficient for the low proportion of thier grants which they are at present able to cultivate, and that they can therefore afford to take water in a wasteful way. It is noticeable that the Panjabi peasants, who cultivate a far higher proportion of their lands annually than the Sindhis, adhere to a fixed rotation. When the duty of the water rises, other cultivators will be forced to follow their example. But until the present labour-difficulty disappears, the duty must be a low one.

The above remarks may seem to contradict the statements made as to want of water in the last rabi season. As a matter of fact the want of water was such that no system of distribution could have given satisfactory results, as is proved by the fact that the Panjabi villages were amongst the chief sufferers. In a word, there was hardly any water to distribute, so it mattered little how it was distributed. The fact remains, that the "share-list" system has fallen flat so far as the Sindhi villages are concerned: and the reason for it is that the area of cultivation is not limited by the amount of water but by the amount of labour available.

43. *New staples.*—The fate of the Egyptian cotton crop has been noticed already. What cotton was saved from the general wreck sold at very high prices. This was due to increase of competition. The value of the cotton had become more widely known amongst Indian merchants, and arrangements were made by Government to collect and auction the cotton, thereby enabling firms which do not ordinarily do business in the tract to compete with those which do. These operations have been the subject of a separate report and need no further mention here.

44. *Barsim* was not sown last year on the Jamrao. The seed was not ordered by the Agricultural Department, and when the attention of the department was called to the subject, it was too late to order it from Egypt. The mistake was regrettable. Seed sufficient for 106 acres has been ordered for the coming season.

45. *Bannas.*—Owing to want of labour on the canals, the improvement of these boundary marks has been somewhat checked. All possible pressure, however, is being brought upon zamindars to keep them in good order.

46. *Towns.*—The new town of Nawabshah has made very striking progress, though the poor price of cotton and the failure of the chief grain-crop (juari) has depressed trade in the Nasrat taluka. Bucheri, Daur and Bandhi have been completed in the course of the year, and are doing well. The buildings of these four towns have been a great boon to the taluka, which practically contains no others. Much credit is due to the Mukhtiarkar, Mr. Bhawandas, for his work in this connection.

The new town of Mirpur Khas is for the most part built, but hitherto has not attracted much trade to itself. Messrs Ralli Brothers, however, are shifting their ginning factory from Tando Adam to Mirpur Khas, and the future of the town is assured. Jamesabad is practically deserted owing to the emigration of Tharis and Kachis, who formed its chief population. The only hope for it is the construction of the proposed light Railway from Mirpur Khas to Jhudo, which is one of the great needs of the tract.

47. Mr. Gobindram Salamatrai, Assistant Colonization Officer, Jamrao Canal, has managed his charge most capably as usual, and his sense and experience render his advice of the greatest value to me. Mr. Kundansing has also done excellent work. Of the Mukhtiarkars in my charge, Mr. Bhawandas of Nasrat, has already been mentioned: his Revenue work of all kinds is very good and thorough.

As regards my office, it is unnecessary to praise individuals, where all have worked well under heavy pressure; but I mention the name of Mr. Hasomal Khatumal, since he distinguished himself not only in the office but as Special Mukhtiarkar in the cotton selling operations.

I have the honour to be,

Sir,

Your most obedient servant,

G. E. CHATFIELD,

Colonization Officer.

APPENDIX I.

STATEMENT showing the land held by grantees of different descriptions in each taluka of the Jamrao Canal:—

Talukas.	LOCAL HOLDERS.						
	Originally occupied land held under the Land Revenue Code.			Grants under Act III of 1899, to local zamindars made in consideration of local claims.			TOTAL.
	Re-adjusted and squared.	Unsquared.	Total.	In satisfaction of bevari and naubat claims.	In extension of holdings.	Total.	
1	2	3	4	5	6	7	8
Sinhoro ...	28,865 25	50,975 15	79,841 0	12,665 19	35,574 18	48,239 37	128,080 37
Mirpur Khas ...	17,962 6	61,496 38	79,459 4	8,900 34	25,869 33	34,770 27	114,229 31
Dero Mohbat ...	29,333 14	...	29,333 14	16,293 4	23,347 26	39,640 30	68,974 4
Jamesabad ...	22,994 3	95,339 13	118,333 16	4,287 11	51,467 35	55,755 6	174,088 22
TOTAL AREA OCCUPIED.	99,155 8	207,811 26	306,966 34	42,146 23	136,259 32	178,406 20	485,373 14

Talukas.	Sindhi zamindars from outside the tract specially recommended and expropriated zamindars.	COLONISTS.					Grand Total.	REMARKS.
		Panjabis.	Other colonists.	Junior Talpurs.	Military pensioners.	Total.		
		9	10	11	12	13	14	15
Sinhoro ...	3,751 7	14,868 19	5,848 22	3,814 10	1,514 36	26,046 7	157,878 11	
Mirpur Khas ...	7,233 25	948 24	9,613 28	...	745 23	11,307 35	132,771 11	
Dero Mohbat ...	1,678 38	25,140 20	6,284 27	6,519 16	2,551 13	40,495 36	111,148 35	
Jamesabad ...	7,173 39	31,823 19	12,434 14	...	5,092 18	49,350 11	230,612 32	
TOTAL AREA OCCUPIED.	19,837 26	72,781 2	34,181 11	10,333 26	9,904 10	127,200 9	638,411 9	

APPENDIX II.

STATEMENT showing realizations of malkano for the year 1906-1907.

Taluka.	Total sum due for recovery.		Amount recovered.		Balance.	
	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.
<i>Jamrao canal.</i>						
Mirpur Khas ...	69,665	4 2	21,425	5 5	48,239	14 9
Sinhoro ...	55,647	7 11	20,261	7 9	35,386	0 2
Jamesabad ...	1,11,466	0 10	34,287	1 1	77,178	15 9
Digri ...	25,989	4 10	12,442	12 2	13,546	8 8
TOTAL ...	2,62,768	1 9	88,416	10 5	1,74,351	7 4
<i>Nasrat canal.</i>						
Nasrat ...	52,975	0 9	24,267	11 9	28,707	5 0
<i>Dad canal.</i>						
Nasrat ...	7,373	8 9	4,005	14 0	3,367	10 9
<i>Hiral canal.</i>						
Pithoro ...	9,774	4 6	6,839	13 10	2,934	6 8
GRAND TOTAL ...	3,32,890	15 9	1,23,530	2 0	2,09,360	13 9

G. E. CHATFIELD,

Colonization Officer,
Jamrao Canal.

APPENDIX III.

TAKAWI advances and recoveries during the financial year 1906-07.

Taluka.	Amount advanced up to the 1st April 1906, excluding recoveries.			Amount advanced during the year.			Total advanced.		
	Act XII.	Act XIX.	TOTAL.	Act XII.	Act XIX.	TOTAL.	Act XII.	Act XIX.	TOTAL.
1	2	3	4	5	6	7	8	9	10
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Digri mahal ...	7,471 12 0	21,102 10 10	28,574 6 10	2,315 0 0	2,860 0 0	5,175 0 0	9,786 12 0	23,962 10 0	33,748 6 10
Jamesabad ...	18,400 4 0	71,227 15 0	89,628 3 0	10,710 0 0	4,348 12 0	15,058 12 0	29,110 4 0	75,576 11 0	1,04,686 15 0
Mirpur Khas ...	25,265 8 4	30,930 10 3	56,196 2 7	34,735 0 1	18,053 4 0	52,788 4 1	60,000 8 5	48,983 14 3	1,08,984 6 8
Sujhoro ...	18,959 10 0	43,338 8 0	62,298 2 0	6,995 0 0	1,550 0 0	8,545 0 0	25,954 10 0	44,888 8 0	70,843 2 0
Nasrat ...	4,521 9 4	94,757 15 0	99,279 8 4	23,415 0 0	49,626 6 0	72,941 6 0	27,936 9 4	1,44,284 5 0	1,72,220 14 4
Pithoro ...	3,310 0 0	14,771 2 0	18,081 2 0	1,770 0 0	1,530 0 0	3,320 0 0	5,600 0 0	16,621 2 0	21,401 2 0
	77,629 11 8	2,76,128 13 1	3,54,057 8 9	79,940 0 1	77,888 6 0	1,57,828 6 1	1,57,868 11 9	3,54,017 3 1	5,11,885 14 10

	Total amount for recovery during the year, including arrears of past years.	Recoveries made during the year.			Amount written off during the year.	Arrears outstanding at the end of the year.	Arrears recovered since March 31st.	Arrears still outstanding.	REMARKS.
		Act XII.	Act XIX.	TOTAL.					
11	12	13	14	15	16	17	18	19	
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Digri mahal ...	33,749 6 10	4,436 15 4	10,946 15 0	15,383 14 4	...	18,305 8 6	1,281 9 0	17,023 15 6	
Jamesabad ...	40,063 6 0	10,943 0 0	20,478 13 11	31,421 13 11	...	8,641 8 1	4,656 9 0	3,984 15 1	
Mirpur Khas ...	59,432 9 0	19,190 4 1	8,340 0 3	27,539 4 4	2,355 0 0	29,538 4 8	14,228 5 11	15,309 14 9	
Sujhoro ...	34,720 11 2	11,905 10 4	9,006 7 9	21,772 2 1	2,114 8 0	10,834 0 1	8,286 14 1	5,547 2 0	
Nasrat ...	55,002 9 0	23,309 9 0	24,629 7 10	47,939 0 10	...	7,063 8 2	2,989 5 0	4,074 3 2	
Pithoro ...	19,436 5 0	3,315 14 0	7,065 1 0	10,380 15 0	...	9,055 6 0	3,037 0 0	6,018 6 0	
	2,42,404 15 0	73,170 4 9	81,266 13 9	1,54,437 2 6	4,469 9 0	83,498 3 6	31,479 11 0	52,018 8 6	

G. E. CHATFIELD,

Colonization Officer,

Jamrao Canal.

Jámráo Canal.

Administration Report of the Colonization
Officer, —, for the year 1907-08.

No. 4847.

REVENUE DEPARTMENT.

Bombay Castle, 18th May 1909.

Memorandum from the Commissioner in Sind, No. 4150, dated 7th—16th December 1908—
Forwarding, with his remarks, a letter No. 3449, dated 26th September 1908, from the
Colonization Officer, Jámráo Canal, who submits the Annual Administration Report of
the Jámráo, Dád, Nasrat and Hirál Canal tracts for the year 1907-08.

RESOLUTION.—The prominent feature of the Colonization Officer's report is the scarcity of water in all the four canals. The Jámráo suffered most severely, but the shortage was general and resulted in a large decrease in the area under cultivation. The cause of the shortage in the rabi discharge of the Jámráo is discussed in the letter* from the Superintending Engineer, Indus Left Bank Division, No. 1092, dated 13th March 1909, of which a copy is attached to this Resolution. In paragraph 2 of Government Resolution No. 2751, dated 16th March 1909, Government have called for a report on the exact requirements in the way of water for cotton to which reference is made in paragraphs 4 to 6 of the Superintending Engineer's letter. The opinions and suggestions contained in paragraphs 2, 7, 8 and 10 of that letter will be separately considered.

2. In view of the poorness of the season, the collections of revenue on all the canals, and especially on the Hirál, appear satisfactory. Government agree with the Colonization Officer that the recoveries on account of malkano were as good as could be expected. The tagávi advances made during the year exceed the recoveries by about Rs 55,000, while there appears to have been a small decrease of about 2,000 acres in the total amount of land held by grantees in the Jámráo tract. The amount of tagávi written off during the year is small, but the arrears have risen from 54 to 77 per cent. of the collections and, in view of the migratory habits of certain classes of the colonists, some degree of caution appears necessary. It is satisfactory to note that good progress has been made in the development of several villages in Nasrat Páluka and Jamesabad, where the advent of the light Railway may be expected materially to improve the position of the colonists.

3. Government are pleased to note the attention devoted by the Commissioner to the question of the rotations between the Mithráo and the Jámráo. His proposals in connection with the Junior Pálpurs will be awaited.

4. Government trust that the conference alluded to in paragraph 44 has been held by this time and would be glad to be informed of the results of its deliberations and of the Commissioner's conclusions. As at present advised Government seriously doubt whether the restriction on Sindi Haris should be maintained. There are no reasons apparent why labour should not go to the place where it is most profitable to the labourer and where it can be employed to the greatest advantage, or why zamindárs in other parts of Sind who are doing generally well should be protected from having to offer good terms to Haris in order to prevent them from leaving their service for the Jámráo or any other places where conditions are attractive. It has to be remembered that large capital has been sunk in the Jámráo, and it is in no way apparent why Government should take measures to curtail the return upon that capital by compelling colonists to refuse labour which is available to them in Sind in favour of labour from outside sources on which it seems clear that certain reliance cannot be placed. This part of the question can be decided without delay, and an early decision is eminently desirable.

5. The attention of the Director of Agriculture should be invited to paragraph 6 (ii) of the report and he should be requested to investigate fully the question of the amount of water necessary for wheat which was found by

*Printed as an accompaniment to this Resolution.

demonstration resulting from the short rabi supply to need much less water than the cultivators supposed.

6. Government regret to notice that the report was detained for over two and a half months in the Commissioner's office.

H. B. CLAYTON,

Under Secretary to Government.

To

The Commissioner in Sind,
The Collector of Hyderabad,
The Deputy Commissioner, Thar and Parkar,
The Colonization Officer, Jámráo Canal,
The Director of Agriculture,
The Superintending Engineer, Indus Left Bank Division,
The Private Secretary to His Excellency the Governor,
The Public Works Department of the Secretariat,
The Government of India (by letter).

With copies of the memorandum from the Commissioner in Sind, No. 4150, dated 7th December 1908, and its accompaniments.

No. of 1909.

Copy forwarded for information and guidance to

No. 1092, dated 13th March 1909.

To—The Joint Secretary to Government, Public Works Department.

Sir,

In reply to Government memorandum No. 196-r., dated 25th February 1909, I have the honour to report that the reduction in the rabi discharge of the Jámráo Canal is due to several causes, some of which are:—

(i) The Ghotki and other floods crossing its feeder, the Nára supply channel, below its 9th mile, in 1906 and 1908, which caused the deposition of silt in this channel.

(ii) Ten years' accumulation of sand, due mainly to fallen trees, bushes, roots, etc., of which over 100,000 have been removed this season, many by hand labour, and large ones by dynamite.

(iii) The abnormally low river, due mainly to important bends being cut off below Sukkur in 1906, which shortened a stretch of the river by nine miles. This, it is anticipated, will right itself soon next flood-season, I hope, as there are already signs of coming out off above, and of erosion below Sukkur.

2. I am almost certain that Colonel Fife was right in thinking that the Ghotki and other floods could be diverted so as to keep them out of the Nára supply channel and Nára River, but several experienced officers think this cannot be done. I have had a small survey party employed for some weeks on investigating this question for a length of 18 miles from Rohri, and as far as I can see there should be very little difficulty in this part. Government have called for an estimate to continue this survey down the Nára River, which will be carried out next working season, if sufficient establishment is available.

3. The Colonization Officer has compared the designed *kharif full supply* of 3,200 cusecs, with the *actual measured rabi supply*, perhaps because he was not aware that the original designed discharge in the rabi season was 1,000 cusecs, which at a duty of 100 was proposed to irrigate 100,000 acres of rabi crops. The average rabi supply, in the season 1907-08, for the 141 days the canal was flowing, was 1,203 cusecs, which is more than the discharge originally proposed.

4. I think we may take it for granted that when the Jámráo was designed it was never anticipated that about 100,000 acres of cotton, which is a *kharif* crop, would be given water during the months of October, November, December and even January in the rabi season. This has been pointed out before and what I consider a nominal extra rate of only 10 annas per acre has been charged for some years for cotton watered after 31st October, and now a consolidated rate is fixed for cotton which includes this small extra charge. I strongly recommend that the irrigation of cotton should be stopped on 31st October, except in seasons when the river is high enough to give ample water for both *kharif* and rabi, both on the Jámráo and in the Eastern Nára District, without starving the rabi crops. This will give a better chance for the increase of rabi, which every one wishes to see, and as every acre of rabi will pay assessment of about Rs. 3-8-0 or more, while cotton only pays 10 annas for water in the rabi season, the gain to Government will be considerable.

5. I am of opinion that the reduction in value of the cotton crop, by stopping its irrigation on 31st October or even a fortnight earlier as the rabi season is taken as commencing from 1st October, will be very little indeed, but the opinions of agricultural experts might be taken on this point.

6. As this watering of cotton in the rabi season, with rabi water, is a question of the greatest importance, I beg to suggest that Government should call on the Agricultural Department to make experiments on a fairly large

scale, to compare the value of cotton, both Egyptian and Sindhi, irrigated up to 15th or 31st October, and up to December or January, according to the existing practice, which in my opinion is a very wasteful one. From what I have observed the cotton on the Nasrat and other canals which receive water up to October, and in some cases only till September, is quite as good, and in many cases better than, the Jámráo cotton, which I think is almost all over-watered.

7. As I have pointed out in former reports, the enormous quantity of water which is allowed to flow over the Jámráo tract has raised the sub-soil water level about 12 feet, and has caused many parts of the district to become unhealthy, owing to the prevalence of malaria.

8. The remedy for this is to use less water, and this can be done by turning lift into flow, as then water channels can be allowed to flow for a certain number of days and can be closed for fixed periods, while with mixed flow and lift water must be given almost continuously for lift and while this is done, it is almost impossible, so the local officers tell me, to stop zamindárs with flow lands taking water continuously as well. The work of turning lift into flow is in progress.

9. I could write much more on this subject, but have already done so in reports during the past four or five years.

10. I think a dredger or excavator of some kind should be obtained for the Nára below its head regulator, which could continue to work nearly all the year round, and eventually clear a channel, which would not be likely to silt up again after the floods are diverted. I hope that much of the silt will be secured out on the rise of the river in April and May, but this remains to be seen. As a rule much silt is, I believe, secured out in September and October, but owing to the floods the Nára mouth was kept shut and so the good effect of this scour was lost. I have given instructions to take cross section of the bed at regular intervals so as to trace the progress of silt deposition or scour.

I have, etc.,

THOS. SUMMERS,

Superintending Engineer, Indus Left Bank Division.

REVENUE DEPARTMENT.

Office of the Commissioner in Sind,
Government House, Karachi, 7th December 1908.

Report of the Colonization Officer, Jamrao Canal,
for the year 1907-08.

Submitted to Government.

2. The Jamrao has seldom before been affected by a low inundation to the extent that has characterized the year under report. The dearth of labour which caused a large shrinkage of cultivation last year was not felt this year to any serious extent, yet not only was this shrinkage not made up but there was on the contrary a further decrease in the cultivated area, the result being a falling-off in revenue amounting to nearly 2½ lakhs as compared with the preceding year and to more than 4½ lakhs as compared with the year 1905-06. The stress of the deficiency in water-supply fell in the rabi season. In kharif the supply was not as copious as usual but, thanks to the foresight and vigilance of the Executive Engineer, it proved sufficient for the cultivation undertaken in the season, and the crops were on the whole successful.

3. With reference to the Colonization Officer's remarks regarding rotations between the Mithrao and the Jamrao, it is impossible to ignore altogether the claims of the former canal to a rabi supply when there is a deficiency in the Eastern Nara Channel and at a recent conference of the Revenue and Public Works Department Officers at which the Chief Engineer for irrigation was present it was decided that—

- (1) the Jamrao Canal should not be closed entirely ;
- (2) rabi cultivation on the Matharu Canal should be encouraged ;
- (3) the Mithrao should not be closed, and its rabi crop sacrificed, to give more water to Jamrao Canal ;
- (4) if there is not sufficient water in the Nara at the Jamrao Canal Head to give all that is wanted by the Jamrao and Eastern Nara Districts during the present rabi season, the quantity reaching the Jamrao Head should be divided between the Jamrao and Eastern Nara in proportion to the area of rabi requiring water in each tract, which may be taken as about 2 to 1, unless these figures are shown to be wrong ;
- (5) if the above arrangement is not found to work satisfactorily, the question will be reopened, and fresh proposals put before the Commissioner in Sind.

4. The labour difficulty was not markedly serious this year ; but the problem is one with which the future not only of this Canal but of the entire Province is closely bound up and is receiving due attention. The Commissioner has recently reported on it, alluding to the negotiations on foot for the introduction of Salvation Army labourers on the canal. He does not however entertain any very sanguine expectations of a material extension of the supply of labour from this source. The result of the conference referred to in paragraph 4 of the report will be awaited with interest.

5. The area under Egyptian cotton was 6,490 against 5,098 acres last year. It is a matter for congratulation that the injury sustained by the crop last year from boll-worm did not deter the zamindars from undertaking it again, and that this year it escaped on the whole so lightly as is indicated in paragraph 6 of the report.

6. The question of the Junior Talpurs is still under consideration. It has been found to involve subsidiary questions of considerable complication, which it is hoped will shortly be settled.

A. D. YOUNGHUSBAND,
Commissioner in Sind.

To

The Chief Secretary to Government,
Revenue Department,

Bombay.

No. 3449 of 1908.

REVENUE DEPARTMENT.

Colonization Office,
Hyderabad, 26th September 1908.

From

C. H. BLATHWAYT, Esquire, I. C. S.,
Colonization Officer,
Jamrao Canal,

To

THE COMMISSIONER IN SIND.

SIR,

I have the honour to submit the Annual Administration Report of the Jamrao, Dad, Nasrat and Hiral Canal tracts for the year ending the 31st July 1908.

2. Mr. G. E. Chatfield was in charge of this office till 30th October 1907 and from that date I have been in charge, except for a period of one month from 30th June 1908, when I proceeded on privilege leave and Mr. R. E. Gibson held charge of the office in addition to his own duties.

SECTION I.

Results of the year.

Jamrao Tract.

3. The year under report is the eighth year of the working of the canal and the 14th since its construction was commenced.

4. The cultivated area was 203,413 acres 19 guntas as against 252,212 acres 14 guntas in the previous year, a decrease of 48,798 acres 35 guntas, and the jamabandi was Rs. 8,13,379-14-5 as against Rs. 10,30,353-9-9.

Details of this and the preceding year's jamabandi are given below :—

	1906-07.			1907-08.		
	Rs.	a.	p.	Rs.	a.	p.
Land Revenue ...	8,38,082	11	0	6,75,108	0	0
Water cess ...	3,708	10	0	4,237	14	0
Malkano ...	1,08,864	14	2	71,522	6	11
Local Fund Cess ...	60,380	3	0	47,506	14	0
Fines ...	2,734	4	9	2,310	10	0
Miscellaneous Revenue ...	16,582	14	10	12,694	1	6
	10,30,353	9	9	8,13,379	14	5

This large decrease, following on an almost equal decrease last year, is attributable entirely to the deficiency of water-supply in the rabi season and the rotations enforced between the Jamrao and Mithrao, which will be described later. Cultivators had been warned beforehand that the supply for rabi would be deficient and this, together with the fear of the consequences of the rotations with the Mithrao, deterred many from cultivating in rabi. The

figures for kharif cultivation were practically identical with those of last year, and the entire decrease was under rabi cultivation :—

	Kharif cultivation Acres.	Rabi cultivation. Acres.
1906-07	... 160,000	90,000 (approximately).
1907-08	... 159,758-8	43,654-11.

The extent of this falling-off in rabi will be still further seen when it is mentioned that 2 years ago (1905-06) there were nearly 118,000 acres under wheat alone on the Jamrao.

The labour difficulty, adverted to in last year's report, was not so seriously felt this year, and I do not think it contributed to the falling-off in cultivation. It is, however, still a serious question and one that will always recur, (particularly I am afraid in the current season, the recent rainfall having been extraordinarily heavy in the Thar and Marwar).

5. The area under cultivation is the smallest there has been since the 1st year of the working of the canal, being even slightly exceeded by the figures of cultivation in the 2nd year. The financial results compare well with those anticipated in the original project, as the following figures show:—

		Year 1907-08.		
		Area cultivated.		Revenue.
		A.	g.	Rs. a. p.
By forecast	... 260,000	0		6,81,960 0 0
By results	... 203,413	19		6,79,345 14 0

But they compare very unfavourably with the final revised forecast framed by the Superintending Engineer, Indus Left Bank Division :—

	Acres.	Revenue.
Final	... 300,000	8,39,300

Provided, however, that there is a decent supply of water in the river in future rabi seasons, there is no reason to fear any repetition of the figures of the year under report.

6. The principal crops grown on the canal are cotton in kharif and wheat in rabi. The former occupied 53.31 per cent. of the total area cultivated, and the latter 18.48, the percentages last year being 39.29 and 31.30 respectively. The reason of this large increase of the percentage of the area under cotton is of course the immense decrease there has been in the area under wheat, but it may be of interest to note that there has also been a slight increase in the actual area under cotton, 108,451 acres 30 guntas being sown with that crop as against 99,130 acres in the year 1906-07. The Sindhi cotton crop was good on the whole, and prices were high, touching even Rs. 7-2-0 a maund for a short period and standing at Rs. 6-12-0 for a considerable time. The zamindars must have made considerable profits off this crop, nor were they hampered by the want of labour, at all events not in anything like the manner described in last year's report. Egyptian cotton was sown in 6,490 acres this year. It did on the whole fairly well and in some parts excellently, though the total out-turn from the whole area has been estimated at only about 4 maunds an acre. Boll-worm caused considerable damage in places, particularly in Jamesabad and Digri talukas, but some places were practically free from this pest and everywhere the damage was nothing like what was sustained in the previous year. On the whole the kharif season on the Jamrao was a good one.

So much of the wheat crop as was not ruined by failure of water-supply did fairly well, and in places the out-turn was very satisfactory. Rust was practically entirely absent—there was of course no chance of over-watering—and results showed the cultivators that wheat needs much less water than they commonly supposed. In fact if a very little more water had been available,

there might have been no loss to the wheat crop. As it was, wheat on good, hard lands, that are retentive of moisture, did very well, but on light and inferior lands, where more water is required, considerable damage was caused, necessitating rather heavy remissions. Owing however to the extraordinary high prices prevailing for wheat, the cultivators were, to a large extent, compensated and many told me that, in spite of the great deficiency of water, they had done better with their wheat crops than in the former year, when most of the crop was destroyed by rust.

7. Remissions on account of injury to crops were granted to the following extent:—

			Rs.	a.
Deficiency of water	...	...	14,948	7
Saltiness of land	...	...	1,263	14
Floods	...	...	481	15
Boll-worm	...	...	32	15
			<u>16,727</u>	<u>3</u>

Nearly the whole of the first item consists of rabi remissions, remissions in kharif being quite insignificant. The deficiency in the water-supply is again strikingly illustrated by this figure, as (with the exception of last year, when also there was some deficiency of water in the rabi season and when remissions on that account amounted to Rs 8,204-9) the remissions given in former years for this cause have been entirely insignificant, never exceeding a few hundreds of rupees. The loss might have been greater but for the careful rotations enforced by the Executive Engineer and his steady adherence to the policy of reducing such outlets as were discharging more than their designed full supply, whereby the water available was more evenly distributed than in former years.

8. The canal worked very well in the kharif season. The average discharge at the 12th Mile was 2,563 cusecs. This is lower than the average discharge in past kharif seasons and even this discharge the Executive Engineer states was only obtained by closing the undersluices and raising the weir shutters for practically the whole of the season. This is the first time the weir has had to be made use of in the kharif season since the canal was opened. Owing to the low supply kharif rotation of minors had to be enforced from the beginning of July till end of the season. In the rabi season, owing to deficiency of water in the Indus and consequently in the Nara, the supply in the canal was very poor. From the beginning of December till the 23rd of February the canal got water by rotation with the Mithrao. The Jantra was closed for a fortnight and opened for three weeks at a time, but the supply in the Nara was so small that when the canal was open rotation of minors had to be enforced. This meant that each minor only got water for one week after a closure of four weeks. The average daily discharge at the 12th Mile was 752 cusecs, but on one occasion the discharge fell as low as 130 cusecs and for several weeks it was only 350 cusecs.

The designed supply of the canal is 3,200 cusecs. The average daily discharge during rabi in former years has been:—

			Cusecs.
1903-04	...	...	2,726-6
1904-05	...	...	2,636
1905-06	...	...	2,354
1906-07	...	...	1,960

Dad Canal.

9. The Dad worked well during the past year. The area of cultivation in my charge was 17,218 acres 12 guntas against 20,897 acres 36 guntas and the jamabandi was Rs. 56,666-6-1 against Rs. 59,563-0-9 last year. The decrease was due to deficiency of water-supply particularly in the rabi season. No

remissions were granted during the year. Considering that the Dad is an inundation canal, and the inundation generally was very poor indeed, these results are very satisfactory.

Nasrat Canal.

10. Cultivation was 70,821 acres 14 guntas as against 94,934 acres 17 guntas and the jamabandi was Rs. 2,12,479-3-4 as against Rs. 2,67,859-12-7 in the last year. The decrease is due to deficiency of water-supply. The canal worked well on the whole, though there was some trouble from erosion at the head. Remissions to the extent of Rs. 6,598-1 were granted which were chiefly due to deficiency of water-supply. There was very little rabi cultivation on the Nasrat, as no water was available. The kharif crops were very fair on the whole.

Hiral Canal.

11. The area cultivated was 13,714 acres 19 guntas as against 23,357 acres 13 guntas shown last year and the jamabandi was Rs. 48,087-13-7 as against Rs. 51,459-6-10 last year. There would of course have been a very large decrease in the jamabandi, but for the introduction of the new rates in the year under report, which are almost double the old rates. The decrease in cultivation is due partly to the deficiency of the water-supply particularly in the rabi season, there having been practically no rabi at all on the Hiral, whereas there were about 6,000 acres in the former year. But a more important reason, I think, is the fact that the land on the Hiral is getting exhausted by over-cropping. In the first few years, when the soil was virgin, an enormous percentage of the total occupied area was cultivated, as the following figures will show:—

Cultivated area.			
Acres.			
1903-04	...	20,372	...
(1st year of working).			Only half the dehs, i.e., an area of 27,946 acres 39 guntas had been given out then.
1904-05	...	31,438	
1905-06	...	36,156	
1906-07	...	23,357-13	

Considering that the total occupied area on the Hiral is now only about 47,000 acres, it will be seen that the high proportion of cultivated area maintained in the first few years cannot possibly be expected to be maintained, under the conditions that prevail in Sind. A further reason for the decrease is to be found in the labour difficulty, by which this tract is peculiarly afflicted. This difficulty, however, was not felt in the same degree as in former years.

12. The canal worked well, and the kharif crops were fairly good, though much of the cultivation was particularly bad and careless. Remissions to the extent of Rs. 507-8 were granted during the year. The financial results greatly exceed the estimate framed in the project, though the area is slightly in defect, as will appear from the following figures:—

		Area.		Revenue.		
		Acres.	g.	Rs.	a.	p.
By forecast	...	14,942	0	...	26,978	0 0
By results	...	13,714	19	...	48,087	13 7

SECTION II.

Allotment of land.

Jamrao Canal.

13. The total area of the Jamrao tract is *863,614 acres 11 guntas of which *771,975 acres 25 guntas are returned as culturable. Of the latter area, 306,966 acres 34 guntas were held under the Land Revenue Code at the close of 1906-07 and 325,444 acres 15 guntas under Act III of 1899, leaving a balance of culturable waste amounting to 1,39,564 acres 16 guntas available for distribution.

* The decrease in the figures of gross and culturable areas as compared with the figures shown in last year's report is due to territorial changes which took place within the last two years.

14. Allotments from this area were made as follows.

15. Re-adjustment of holdings was completed in the previous years. No fresh land was granted during the year under this head, but an area of 1,804 acres 20 guntas reverted to Government on account of non-payment of fallow assessment, etc., leaving therefore the occupied area at the end of the year at 305,162 acres 14 guntas.

16. No fresh area was granted during the year under head "Bezari and Nobat claims," but on the contrary an area of 1,330 acres 5 guntas reverted to Government on account of non-payment of fallow assessment or other breaches of conditions. The total occupied area under that head is therefore 40,816 acres 23 guntas.

17. Grants of frontage lands to local zamindars have practically been completed, in the previous years, but an area of 4,542 acres 13 guntas was given during the year. The area reported last year under this head was 136,259 acres 32 guntas making a total of 140,802 acres 5 guntas, but an area of 5,313 acres 29 guntas reverted to Government on account of non-payment of fallow assessment and breaches of conditions. The total occupied area at the end of the year is therefore 135,488 acres 16 guntas.

18. An area of 2,760 acres 1 gunta was granted to persons specially recommended and expropriated zamindars.

19. 112 fresh grants aggregating 2,261 acres 14 guntas were made to Panjabi colonists, principally to peasant colonists. At the close of 1906-07 there were 1,708 Panjabi colonists, including peasants, Yeomen and capitalists, holding 72,781 acres 2 guntas. Of these the grants of 24, amounting to 2,062 acres 15 guntas, were cancelled during the year under report, owing to death or desertion of the occupants. The total area held by Panjabi colonists is therefore 72,980 acres 1 gunta.

20. An area of 1,107 acres 39 guntas was given out to other colonists (Kachis, Jodhpuris, and Sindhis). The area held by these colonists at the end of 1906-07 was 34,181 acres 11 guntas, making a total of 35,289 acres 10 guntas, but an area of 4,080 acres 24 guntas was relinquished or cancelled for breach of conditions, thus leaving the total occupied area at the end of the year at 31,208 acres 26 guntas.

21. 6 more Junior Talpur received jagir grants amounting to 1,151 acres 27 guntas and the grant of one consisting of 191 acres was cancelled and an area 345 acres 31 guntas reverted to Government on account of non-payment of fallow assessment. The total number of grantees of this class is now 68 and they hold 10,948 acres 22 guntas as jagir grants and 198 acres 32 guntas as rayati grants, making a total in all of 11,147 acres 14 guntas.

22. 1,556 acres 20 guntas were given to Military pensioners bringing up the total area held by them to 11,460 acres 33 guntas, but an area of 146 acres 20 guntas was given up, so the total area occupied at the end was 11,147 acres 14 guntas. Under Government Resolution No. 6536, dated the 30th June 1908, no further grant is to be made to this class of colonists.

23. Appendix 1 gives details of the land held by each class of grantees. Out of the total culturable area of 771,975 acres 25 guntas the area occupied at the close of the year is 630,146 acres 23 guntas, leaving 141,829 acres 2 guntas of nominally culturable land to be disposed of hereafter.

24. About 36,218 acres out of this area are in delis reserved for colonization and the remainder is scattered among other villages. With the exception of the land now small in extent reserved for Junior Talpurs, the land remaining for distribution is of poor quality. It is not expected that it will be taken up now, except possibly by capitalists.

25. The areas reserved for colonization are approximately as follows :—

	Acres.
(A) For Panjabi peasants	15,161
(B) For Junior Talpurs	4,949
(C) For others	16,108
	<hr/> 36,218

Dad Canal.

26. The total area commanded by this canal in the tract under my charge is 96,871 acres 35 guntas, of which 73,735 acres 13 guntas are classed as culturable. The Kabuli area at the commencement of the year was 51,257 acres 30 guntas and the area granted during the year was 7,173 acres 15 guntas. The total area granted on this canal in the tract under my charge was 58,431 acres 5 guntas, but an area of 89 acres 8 guntas was given up, leaving therefore at the end of the year the total occupied area of 58,342 acres 37 guntas. Much of the land classed as culturable is hardly so in reality on account of poor quality and height of lift. However, a fairly large area has been taken up in the year under report, chiefly because there is no other culturable land available on other canals. Many Rinds from the hill-country have lately taken up grants here and, at present, promise well. But no one accepts land on the Dad now, if he thinks there is any possibility of getting culturable land on the Nasrat or elsewhere.

Nasrat Canal.

27. The total area now commanded in the tract under my charge is 216,569 acres, of which 186,556 acres 13 guntas are returned as culturable. The area occupied at the commencement of the year was 154,360 acres 25 guntas and grants amounting to 11,291 acres 22 guntas were made during the year as under :—

	Acres	guntas
(a) In satisfaction of barani claims ...	57	25
(b) In extension of holdings ...	4,703	18
(c) To Sindhi zamindars specially recommended ...	5,900	18
(d) Junior Talpurs ...	462	1
(e) To Military pensioners ...	168	0
	<hr/>	<hr/>
	11,291	22

Of the land previously granted an area of 5,029 acres 7 guntas has been subsequently given up, leaving therefore the total occupied area at the end of the year 169,623 acres. The culturable area left is 25,933 acres 19 guntas, which is very sandy for the most part and practically unculturable.

Hiral Canal.

28. The total and culturable areas on this canal are 54,236 acres 35 guntas and 48,961 acres 28 guntas respectively. Of the latter 47,767 acres 33 guntas were in occupation at the commencement of the year and 220 acres were granted during the year on account of extension of holdings, and 917 acres 8 guntas were relinquished or cancelled, making total occupied area 46,850 acres 25 guntas.

SECTION III.

*Colonists.**(a) Panjabis.*

29. The total number of Panjabi colonists holding *paka* grants increased from 1,708 to 1,796 and the total population from 7,039 to 7,835, including 2,919 females. The number of colonists who deserted during the year was 24.

30. The area held by each class of Panjabis is as follows :—

	Acres	guntas.
(a) Peasants ...	57,493	16
(b) Yeomen ...	12,898	23
(c) Capitalists ...	2,588	2
	<hr/>	<hr/>
	72,980	1

31. I fully agree with what has been said in former reports as to the excellence of the Panjabi peasant holders and have but little to add to it. Their villages are well built and mostly prosperous, and every endeavour is made to help those who have poor or bad land by exchanging them to better

land when an opportunity offers. Unfortunately the deficiency of the water-supply in rabi told more severely on these colonists than on the Sindhis. The average Sindhi cares little about rabi, so long as his kharif crop is good. But, to the Panjabi Abadgars rabi is perhaps the principal crop, and owing to the smallness of their holdings (generally 32 acres in each case) they cannot merely refrain from cultivating in rabi, when water is deficient, as a large landholder can. Consequently a very large proportion of the loss incurred in the rabi season has fallen on them. This class of colonists give endless trouble both to the Revenue and Irrigation Officers by the persistency and frequency of their complaints. It must be admitted, however, that this season they had something genuine to complain about, though no remedy was possible. They are, however, on the whole contented, and, given a good rabi season this year, will soon recover themselves. Their numbers are being increased wherever possible, by distributing among new Abadgars any grants of Panjabi Yeomen or Capitalists that are cancelled or fall vacant from time to time.

32. As regards the Panjabi Yeoman, they are on the whole not a success, though there are some notable exceptions. The difficulty they experienced as regards their Panjabi haris has been described in last year's report, and possibly some relaxation of that condition of their grants might be advocated. Many of them are getting rather heavily into arrears, and they cannot stand a bad season. Their numbers are diminishing, and it is always made as easy as possible for them to throw up their grants by refunding to them their malkano. These grants, when they fall empty, are invariably distributed among Abadgars, of whom there are always plenty available. These Yeomen are moreover often troublesome in fomenting factions and quarrels in the peasant-villages, and they are very fond of making petitions to which they induce ignorant peasants to affix their thumb-marks and even complaints against their Officers.

33. One Panjabi capitalist relinquished his land in the year under report.

(b) Other Colonists.

34. The Kachis are good cultivators, and in some cases, notably when working for some big Kachi zamindar, have done very well indeed. Unfortunately the peasant colonists amongst them have mostly got rather inferior land, and are not doing very well on it. They add to their resources by plying carts for hire, and in that way make themselves very useful to the locality in which they reside. But they are often rather unsteady colonists and apt to desert when heavy rains fall in their native country.

35. The Tharris, at least those on the Hiral, rather improved last year, no doubt because there was not so much attraction in the Desert. They can show very fair cultivation at times, and on that account were treated leniently in the year under report. A genuine beginning was made by them in building villages on the Hiral, and it was hoped they would really settle down there. It is feared, however, that the recent extraordinary rainfall in the Desert and the exceptionally favourable conditions prevailing there will prove too much for them and they will go away. If that is found, on inspection, to be the case, no more consideration can be shown to them. They were settled on the Hiral Canal in consideration of the straits to which they had been reduced by the famine and years of scarcity in the Thar, but they must of course make their permanent abode on the Hiral, if they mean to keep their grants, and cannot possibly be allowed to use their excellent lands on the Hiral merely as a place to fall back upon in times of scarcity.

36. The ordinary run of Military pensioners are extremely unsatisfactory as colonists. In many cases unfortunately they have been given (or rather have chosen through ignorance) inferior land, but even where the land was good they have generally spoilt it. As it is found impossible to exchange them now to better land (there being no better land available) and many of them are heavily in arrears, which they have no hope of paying, their grants will in many cases have to be cancelled and the arrears struck-off. The Commissioned Officers have on the other hand done well as a rule, and many of those on the Nasrat are particularly prosperous, and are making *paki* wells, gardens, etc. As already stated, Government have directed now that no further grants are to be made to Military pensioners.

37. A full report has lately been called for by you on the subject of the Talpur grantees, and will be submitted shortly. I need at present say little, except that, as before, they take practically no interest in their lands, never reside on them, and for the most part very rarely visit them, leaving everything to their agents. In consequence they do not make anything like what they ought to off their lands, and many of them are heavily in arrears. Still there are a few who do well, and they must in general have done fairly well, at all events in the first years of their grants, the land given them being almost without exception the best available.

38. Building of villages progresses steadily in Nasrat taluka. The rule, that no extension of a grant is allowed till a grantee has built a *pat* house in his village, is now well understood everywhere, and is very salutary. Considerable progress has recently been made here in sinking new wells, and Government have recently sanctioned a large grant-in-aid for this.

SECTION IV

Malkano and Takavi.

39. Appendix II shows the demand and recoveries on account of malkano during the past Revenue year. The recoveries have not been satisfactory, but considering the character of the season, no more could be expected. It would, I think, have been impolitic to be more severe in pressing for the recovery of these outstandings. As it is, a sum of Rs. 1,34,044 has been recovered against Rs. 1,23,530-2 last year.

The total area sold by auction during the year was 328 acres 34 guntas and the average price realized was Rs. 27-15-8 an acre.

40. Appendix III shows takavi advances and recoveries. Rs. 63,024-10-2 were recovered during the financial year on account of advances under Act XII of 1884 and Rs. 76,308-14-3 under Act XIX of 1883 or Rs. 1,39,333-8-5 in all, as against a total of Rs. 1,54,437-2-6 in the previous year. Besides this Rs. 22,631-12-4 of the arrears have been recovered between the 1st April and the 31st July, leaving a balance of Rs. 85,010-10-7 still outstanding. Though the outstanding balance shows an increase on last year's figures, the total amount recovered is fairly satisfactory.

SECTION V.

Survey.

41. The survey of all the tracts has been completed as previously reported. The present work consists of making alterations of maps and records necessitated by construction of new or by alterations in the alignment of old water-courses and field tracts and by the allotment of lands for village sites and other public purposes. These changes are many and entail much work. The work done in the Record office is shown in the subjoined statement.

Year.	No. of cases received necessitating corrections in survey records, including arrears of past year.				Number of cases returned duly corrected.				Remaining to be completed.				Number of maps supplied.				Number of new survey registers prepared and supplied to				Corrections in the names of occupants and assessments on settlements being revised.				Maps repaired for printing.				Registers prepared for Record office.			
	Survey registers.	Survey maps.	Field books.	Distribution statements, i.e., Form F.	Survey registers.	Survey maps.	Field books.	Distribution statements, i.e., Form F.	Survey registers.	Survey maps.	Field books.	Distribution statements, i.e., Form F.	Number of extracts from field books, supplied to Revenue authorities.	Without cost to village cess establishment.	With cost to village cess establishment.	Without cost to principal zamindar of the deh.	To district officer.	To petitioners.	Village officers.	District officers.	Petitioners.	Village officers.	District officers.	Petitioners.	English.	Sindhi.	New registers.	Corrections in the names of occupants and assessments.				
1907-08.	486	838	140	...	426	745	80	...	60	93	60	...	2	300	...	3	153	27	306	206	...	250	250	...	...	...	...	206	8			

SECTION VI.

*General remarks.**Irrigation.*

42. The Panjabi system of distributing water was again in force during the year under report. Share lists were drawn up as before by the Executive Engineer, whenever cultivators applied for them, but they do not seem to have been a success and generally are not adhered to. In this connection I cannot do better than quote in full a note kindly furnished by Mr. Gebbie on the subject.

He writes:—

"I regret to report that the share lists appear to be a failure. No attempt was made to force these lists on the cultivators; but if they asked for them they were issued. To begin with the people in 320 villages asked for and were given share lists; but in September the lists were being adhered to in 58 villages only. This is only another proof that the supply of water provided is considerably greater than what is actually necessary.

2. This kharif season a certain number of people have asked for share lists again; but they were invariably those who were dissatisfied with the private rotations fixed by the people themselves and in many cases they were obviously only trying to see whether the share list would give them more water than the private rotation. I think, however, that there is reason to believe the people are beginning to see the advantages of the share lists; but will be a long time before they are generally adopted. Of course the great deficiency of water was prejudicial, to an even greater degree than last year, to any system of distribution."

Rotation of the Jamrao with the Mithrao.

43. At the risk of being thought prolix, I must make a few remarks on this rotation, which was first employed to any extent in the year under report, though the Jamrao had once been closed for this purpose in the former year. The rotation was, I understand, only agreed upon after most careful deliberation, and a consideration of the needs of both the Jamrao and Mithrao, and no doubt it was not anticipated that the water-supply would be so extraordinarily small as it proved to be. I am not in a position to say whether this rotation was of any great advantage to the Mithrao, but certainly it did a great deal of injury to the Jamrao cultivation. Judging from results it would probably have been better to have warned the Mithrao cultivators to expect no water in the rabi season, and to have given all that was available to the Jamrao. Besides the damage that was actually caused to the rabi crop on the Jamrao, it was undoubtedly the fear of these rotations that prevented many people from cultivating in rabi at all and thus greatly reduced the area under rabi crops. The rabi cultivation on the Jamrao is generally between one-third and one-half of the total cultivated area, so that its importance is obvious, and the rabi crop is absolutely essential, at least to the Panjabi colonists. In fact, what with these rotations and the bunding of the Nara for about a fortnight in March for the purpose of clearing obstacles in it, there was at time serious deficiency, not merely of water for cultivation, but even of drinking water in the Jamrao tract. As there is generally an assured supply of water in the Jamrao all the year round, there are in many villages no wells at all, and cultivators had sometimes to go long distances to get any water for themselves and their cattle.

Labour difficulty.

44. As stated above this was not acute in the year under report, but it is apprehended it will be so again in the current year and is always liable to recur. The question is a very difficult one. Government have foregone two years' revenue from the colonists, largely for this reason that the importation of foreign haris by colonists and new grantees meant a great amount of expense and trouble. Nor is it possible or advisable to give any general permission to employ Sindhi haris, as there would be a great likelihood of their being taken away from zamindars in other parts of Sind, much to the detriment of their cultivation. This danger was foreseen and provided for at the time of the opening of the Jamrao by strict rules about the haris to be employed. Still the difficulty on the Jamrao and elsewhere may possibly become acute and cause a serious

decrease in cultivation and revenue. I intend to call a conference of my subordinates shortly to discuss this and other points and may then be in a position to make representations for some modification of the rules. During the year under report, some correspondence was carried on with Commissioner Booth-Tucker of the Salvation Army, who was anxious to send labourers in large numbers from the Panjab to Sind. It was hoped that this would help us to meet the situation, but nothing has been heard lately of these labourers, and it is feared they will not be sent.

New staples.

45. A full report has been made separately on the Egyptian cotton crop, and the result of the arrangements made by Government to collect and auction the cotton. The results were satisfactory and good prices were realised for the cultivators. The future of Egyptian cotton in Sind depends on whether we can show with tolerable certainty to the cultivator that it will pay him more than Sindhi cotton. If only 4 maunds an acre can be expected (the estimated average of the year under report), it is obvious that it pays a man at least equally to grow Sindhi cotton, from which he can count with a fair amount of confidence on getting 10 maunds an acre, if not more. American cotton is being tried on a small scale in the Nasrat taluka in the current year.

46. *Bersim* was sown to a small extent on the Jamrao, but its advantages do not yet appear to be generally understood. Seed sufficient for about 100 acres has again been ordered for 1908-09.

Towns.

47. The town of Nawab Shah and the new villages Bucheri, Daur and Bandhi in the Nasrat taluka have continued to make good progress. When Nawab Shah is made the head-quarters of the new collectorate, it should become a really flourishing town. Mr. Bhawandas, the Mukhtiarkar, has shown all his former energy in pushing on these works. The new town of Mirpur Khas is making good progress and many new shops, etc., have lately been constructed. The Mukhtiarkar Mr. Asudamal deserves credit in this connection. The heavy recent rains have, however, somewhat interfered with building operations. Jamesabad is at last showing signs of improvement, thanks to the long-looked-for advent of the Mirpur Khas-Jhudo Light Railway, which is now under construction and should be completed about Christmas. Mr. Lalchand, the Mukhtiarkar, takes great interest in the new town and is doing all he can to push it on. The new Light Railway should prove a great blessing to the whole southern division of the Jamrao, and it is hoped that it will soon be followed by another Light Railway in the northern division.

48. Rao Bahadur Gobindram Salamatrai, Assistant Colonisation Officer, Jamrao Canal, has continued to do excellent work and as Government have recently recognised his services by conferring on him a title I need say no more about him here. Mr. Kundansing, the Deputy Colonisation Officer, Jamrao Canal, has also done very well, particularly in persuading the Panjabis to persevere with Egyptian cotton while his intimate knowledge of the Panjabis under his charge, who are rather a troublesome lot to deal with, has been of the greatest assistance to me. I have already mentioned 3 of the Mukhtiarkars in my charge, and, speaking generally, the work of all was satisfactory, in a year of difficulty and hard work. My own office is accustomed to heavy work and have all worked well. The Head Munshi, Mr. Hasomal Khatumal, did very good work again when deputed as Special Mukhtiarkar in the cotton selling operations. Owing to his absence and, for a time, that of the accountant also, on a similar duty, a heavy strain was thrown on the rest of the office, which was well sustained. I should also mention the Head Clerk, Mr. Muhammad Hashim, and the Accountant, Mr. Parsram, as having continued to do good work.

I have the honour to be,

Sir,

Your most obedient servant,

C. H. BLATHWAYT,

Colonisation Officer, Jamrao Canal.

APPENDIX I.

STATEMENT showing the land held by grantees of different descriptions in each taluka of the Jamrao Canal.

Taluka.	LOCAL HOLDERS.							Sindhi zamindars from outside the tract specially recommended and expropriated zamindars.	COLONISTS.					GRAND TOTAL.
	Originally occupied land held under the Land Revenue Code.			Grants under Act III of 1869 to local zamindars made in consideration of local claims.			TOTAL.		Panjabis.	Other Colonists.	Junior Talpurs.	Military Pensioners.	TOTAL.	
	Re-adjusted and squared.	Unsquare.	TOTAL.	In satisfaction of Bezari and Naobat claims.	Extensions of holdings.	TOTAL.								
A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	
Sinjhor	36,445 8	1,890 25	80,205 33	12,606 32	35,002 19	47,609 11	127,905 4	4,367 32	15,739 38	5,362 12	3,197 15	2,452 3	26,731 25	150,004 8
Mirpur Khas	16,254 1	60,288 1	76,537 2	8,150 24	25,165 30	33,316 14	109,853 16	7,708 13	1,049 38	8,885 22	...	569 37	10,701 17	128,063 6
Digri	29,496 12	...	29,496 12	15,952 0	23,404 28	39,356 34	68,853 6	2,629 11	24,624 19	5,404 23	7,949 39	3,157 0	41,596 0	113,078 12
Jamesabad	21,801 12	95,031 35	116,833 7	4,107 1	51,915 19	56,022 20	174,865 27	7,323 23	31,565 26	11,090 0	...	5,159 10	47,820 36	230,000 0
Total area occupied.	95,096 3	209,165 21	305,162 14	40,816 23	135,489 16	176,304 39	481,467 13	22,029 39	72,950 1	31,208 26	11,147 14	11,314 10	126,650 11	630,143 23

APPENDIX II.

STATEMENT showing realizations of Malkano for the year 1907-08.

Taluka.		Total sum due for recovery.			Amount recovered.			BALANCE.		
		Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
<i>Jamrao canal.</i>										
Sinjhor	...	45,982	8	1	9,259	14	3	36,722	9	10
Mirpur Khas	...	60,202	15	3	26,094	7	3	34,108	8	0
Jamesabad	...	66,230	12	8	25,289	11	2	40,941	1	6
Digri	...	20,306	10	1	6,734	11	1	13,571	15	0
Total	...	1,92,722	14	1	67,378	11	9	1,25,344	2	4
<i>Nasrat canal.</i>										
Nasrat	...	93,674	3	9	50,278	7	0	43,395	12	9
<i>Dad canal.</i>										
Nasrat	...	23,276	8	11	13,890	8	5	9,386	0	6
<i>Hiral canal.</i>										
Pithoro	...	3,371	11	5	2,496	4	10	875	6	7
GRAND TOTAL	...	3,13,045	6	2	1,34,044	0	0	1,79,001	6	2

C. H. BLATHWAYT,
Colonization Officer,
Jamrao Canal.

APPENDIX III.

Takavi advances and recoveries during the Financial year 1907-08.

Taluka.	AMOUNT ADVANCED UP TO THE 1st APRIL 1907 EXCLUDING RECOVERIES.			AMOUNT ADVANCED DURING THE YEAR.			TOTAL ADVANCED.		
	Act XII.	Act XIX.	TOTAL.	Act XII.	Act XIX.	TOTAL.	Act XII.	Act XIX.	TOTAL.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Mirpur Khas	40,801 4 4	35,278 14 0	76,080 2 4	29,717 11 2	13,610 0 0	43,327 11 2	70,518 15 6	51,888 14 10	122,407 13 6
Singhoro	13,025 15 8	35,635 7 3	48,661 6 11	11,210 0 0	15,599 12 0	26,809 12 0	24,235 15 8	51,235 3 3	75,471 2 11
Jamesabad	18,167 4 0	55,097 13 1	73,265 1 1	20,560 13 6	14,393 6 0	34,954 3 6	39,728 1 6	491 3 1	38,219 4 7
Digri	5,531 11 8	12,595 11 10	18,127 7 6	6,490 0 0	8,928 4 0	15,416 4 0	12,021 11 8	2,221 15 10	13,543 11 6
Nasrat	4,427 0 4	119,637 9 2	124,064 9 6	26,370 0 0	44,541 0 0	70,911 0 0	30,797 0 4	164,478 9 3	194,975 9 6
Pithoro	1,764 2 0	9,256 1 0	11,020 3 0	1,465 9 0	1,404 9 0	2,869 9 0	3,229 2 0	10,610 10 0	13,889 12 0
TOTAL	83,717 6 0	270,501 8 4	354,218 14 4	95,813 8 8	98,474 15 0	194,288 7 8	179,530 14 8	368,976 7 7	548,507 6 0

Taluka.	Total amount for recovery during the year including arrears of past years.	RECOVERIES MADE DURING THE YEAR.			Amount written off during the year.	Arrears out- standing at the end of the year.	Arrears recovered since March 1908.	Arrears still outstanding.
		Act XII.	Act XIX.	TOTAL.				
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Mirpur Khas	60,535 5 11	20,092 12 0	9,114 5 6	29,207 1 6	620 0 0	30,708 4 5	7,677 11 10	23,30 8 7
Singhoro	18,000 10 0	6,789 4 3	9,900 0 8	16,689 4 11	...	1,340 11 1	622 0 0	7,711 1 1
Jamesabad	54,295 12 7	11,968 11 0	17,906 10 1	29,875 5 1	100 0 0	24,929 7 6	4,256 10 8	20,001 13 0
Digri	35,062 6 6	1,108 6 8	2,412 3 0	3,520 9 8	200 0 0	31,341 12 10	2,128 2 0	29,213 10 7
Nasrat	69,096 3 4	21,173 9 3	32,070 11 0	53,844 4 3	34 0 0	15,187 15 1	6,893 14 0	8,295 1 1
Pithoro	10,970 3 0	1,921 16 6	4,395 0 0	6,220 15 0	...	4,743 4 0	1,051 6 0	3,691 14 0
TOTAL	2,47,929 15 4	63,024 10 2	76,308 14 3	1,39,333 8 5	954 0 0	1,07,642 6 11	23,631 12 4	85,010 10 7

C. H. BLATHWAYT,

Colonization Officer,

Jamrao Canal.

Jámráo Canal.

Administration report of the Colonization
Officer, —, for the year 1908-09.

No. 3414.

REVENUE DEPARTMENT.

Bombay Castle, 15th April 1910.

Memorandum from the Commissioner in Sind, No. 87, dated 10th January 1910—Forwarding, with his remarks, a letter No. 3531, dated 19th October 1909, from the Colonization Officer, Jámráo Canal, who submits the Annual Administration Report of the Jámráo, Dad, Nasrat and Hiral Canal tracts for the year 1908-09.

RESOLUTION.—The year was an unfortunate one for the Jámráo tract, where abnormal rainfall followed by the failure of the cold weather supply of canal water resulted in great crop losses all the more keenly felt after the preceding unfavourable harvest. The shortage of the water-supply was further the cause of heavy mortality among the colonists' cattle, such as will seriously impede recovery from the failure of the present season and is all the more difficult to remedy because of the unfavourable state of the tagái account. The new town of Jamesabad, in spite of the railway and official encouragement, also does not flourish. Much improvement in rabi cultivation on the Jámráo cannot be expected until an assured supply of rabi water is provided by means of a barrage, and the necessity for such an assured supply is amply demonstrated in the report. On the Nasrat Canal there was a large extension of cultivation and increase of revenue due to an exceptionally good inundation, but the deficiency of rabi water made a great difference in the final result to the cultivators. The crops on the Hiral Canal were not entirely satisfactory and the only set-off was an excellent harvest on the Dad Canal where there was a large expansion of the area under cultivation combined with a very favourable season. In these circumstances Government agree with the Commissioner in Sind in regarding the falling off in recoveries on account of malkano and takávi as inevitable.

2. Apart from the seasonal failure and the losses in cattle, the Jámráo tract has other difficulties and problems which still await solution. The Panjab system of water distribution has been introduced for four years, but has not yet had the advantage of being tested in the circumstances of a satisfactory season. The adherence to the share lists in 105 villages during the current season is nevertheless a gratifying result, whatever be the causes which led to it, and it may be hoped that the increased advantage taken of the system will be at least maintained in normal years, so that each cultivator may obtain his due share of water and the evil be averted of some lands being over watered at the expense of others. The labour difficulty is still an acute one and not peculiar to the Jámráo tract, but it remains to be seen what relief will be afforded by the removal of the restrictions on the employment of Sindhi haris. Government do not consider the time opportune for raising the question of permitting rice cultivation. The question can only arise when there is surplus water available for the improvement of salt lands, but now there is a shortage of supply even for sweet land. The condition of the Junior Tálpurs has been under consideration for five years and Government are aware that the matter is not free from subsidiary complications, but trust that the Commissioner's personal investigation will lead to an early and effective settlement of the question.

3. The Governor in Council is pleased to endorse the Commissioner's recommendations on the work of the Colonization Officers and the Colonization establishment.

R. D. BELL,

Under Secretary to Government.

To
The Commissioner in Sind,

[P. T. O.]

The Collector of Hyderabad,
 The Deputy Commissioner, Thar and Parkar,
 The Colonization Officer, Jámráo Canal,
 The Superintending Engineer, Indus Right Bank Division,
 The Director of Agriculture,
 The Private Secretary to His Excellency the Governor,
 The Public Works Department of the Secretariat,
 The Government of India (by letter).

with copies of the memo-
 randum from the Commissioner
 in Sind, No. 87, dated 10th
 January 1910, and its accom-
 paniments.

No. of 1910.

Copy forwarded for information and guidance to

No. 87 of 1910.

REVENUE DEPARTMENT.

Office of the Commissioner in Sind,
Government House, Karachi, 10th January 1910.

Report of the Colonization Officer, Jamrao Canal,
for the year 1908-1909.

Submitted to Government.

2. For the second year in succession the results on the Jamrao have been unsatisfactory. There was a slight increase in the area under kharif and a corresponding rise in the figures of revenue, but the failure of the water in the beginning of October seriously affected the principal crop grown, viz., cotton (including the Egyptian varieties), the outturn of which was generally poor. The results of the rabi season were still worse. The area cropped was smaller by 30 per cent. than last year, and the extreme insufficiency of the water carried by the canal caused almost complete failure of the chief crop, wheat. The revenue on nearly 75 per cent. of the area cultivated with this crop had to be totally or partially remitted. The effects of this unprecedented deficiency of the cold weather supply were felt in other and more far reaching directions. The condition of the Panjabi colonists, the most successful class of cultivators on the Jamrao, was most seriously and adversely affected, for not only did their rabi crops, on which they are chiefly dependent, fail, but a great want of drinking water was experienced so much so that there was severe mortality among their cattle.

3. Conditions on the Dad Canal were again extremely favourable. The area under cultivation increased by nearly 60 per cent. and the canal has so risen in the estimation of the people that the available culturable area is being rapidly taken up. On the Nasrat, although the kharif season was a good one, the rabi crops suffered severely in consequence of the failure of the water-supply towards the end of September. The Hiral Canal worked better than in the previous year, but it does not show nearly such good results as in the first few years of its working. Scarcity of labour has been one of the chief causes of the diminution of cultivation on this canal. Now that the restrictions on the employment of labour have been suspended, a steady improvement in the area under cultivation may confidently be expected.

4. The reasons assigned for the falling off in the recoveries on account of Malkano and Takavi advances are adequate. The conditions of the season were much too unfavourable to justify the rigid exercise of coercive measures.

5. The question of permitting rice cultivation in certain parts of the tract, referred to in paragraph 41 of the report, will require careful investigation in consultation with the Agricultural and Public Works Departments.

6. The question of the Junior Talpurs has been occupying very serious attention for a considerable time past. The Commissioner will shortly make a personal investigation on the spot, and the matter will be dealt with separately.

7. The office of the Colonization Officer was efficiently and successfully held first by Mr. Blathwayt and later by Mr. Hamid A. Ali, who has submitted the report, and the acting Commissioner is glad to endorse the commendation bestowed by the latter officer on the Colonization establishment.

W. H. LUCAS,

Acting Commissioner in Sind.

To

THE CHIEF SECRETARY TO GOVERNMENT,

REVENUE DEPARTMENT,

Bombay.

REVENUE DEPARTMENT.

Colonization office,
Hyderabad, 19th October 1909.

From

HAMID A. ALI, ESQUIRE, I. C. S.,

Colonization Officer,

Jamrao Canal,

To

THE COMMISSIONER IN SIND.

Sir,

I have the honour to submit the Annual Administration Report of the Jamrao, Dad, Nasrat and Hiral Canal tracts for the year ending 31st July 1909.

2. Mr. C. H. Blathwayt, I. C. S., was in charge of this office till 19th April 1909 when I relieved him. The little personal knowledge I have of my charge has been derived from a short tour in Jamesabad and Digri talukas in June and visits to Mirpur Khas, Landhi and Nawabshah. For the rest I have to depend on notes, reports and discussions.

SECTION I.

*Results of the year.**Jamrao Tract.*

3. The year under report is the ninth of the working of the canal and the 15th since its construction was commenced.

4. The cultivated area was 235,756 acres as against 203,413-19 acres in the previous year and the jamabandi was Rs. 8,66,081-1 as against Rs. 8,13,379-14-5. Details of this and the preceding year's jamabandi are given below:—

	1907-08.			1908-09.		
	Rs.	a.	p.	Rs.	a.	p.
Land revenue ...	6,75,108	0	0	7,59,218	13	0
Water cess ...	4,237	14	0	...		
Malkano ...	71,522	6	11	40,013	13	8
Local Fund cess ...	47,506	14	0	50,845	4	0
Fines ...	2,310	10	0	4,651	2	2
Miscellaneous revenue ...	12,694	1	6	11,352	0	2
	8,13,379	14	5	8,66,081	1	0

These figures, though they show an improvement over last year, cannot be considered satisfactory. Owing to a plentiful kharif water-supply, and to a fear of deficiency in rabi, the area cultivated in kharif was large. The fears regarding the rabi supply proved well-founded and the failure was complete. The labour difficulty is no doubt partly responsible for limited cultivation in rabi (as it is largely for bad cultivation), but at least during the year under report it occupied a secondary position. The figures for cultivation compare with those of the previous year as follows:—

	Kharif cultivation. Acres.	Rabi cultivation. Acres.
1907-08 ...	159,758-8	43,654-11
1908-09 ...	205,376-30	30,373-10

5. The above results compare as follows with those anticipated in the original project and in the final revised forecast framed by the Superintending Engineer, Indus Left Bank Division:—

1908-09.

	Area cultivated. Acres.	Revenue.		
		Rs.	a.	p.
By forecast ...	260,000	6,81,960	0	0
Final ...	300,000	8,39,090	0	0
By results ...	235,756	7,59,218	13	0

6. Of the crops grown on the canal cotton in kharif and wheat in rabi occupied 49.10 and 5.14 per cent. respectively of the total area cultivated as against 53.31 and 18.48 per cent. last year. The decrease in the latter is due to deficiency of water for rabi on the one hand and excessive growth of weeds consequent on abnormal rainfall on the other.

Unfortunately, the heavy rains and the failure of water early in October affected the cotton adversely; the outturn was poor in Mirpur Khas, Jamesabad and Digri, though fair in Sinjhora. Egyptian cotton failed badly both as regards yield and the prices obtained for it. This has already formed the subject of numerous detailed reports by my predecessor. The decrease in the percentage of the area sown with cotton is, I have no doubt, due to late hurried cultivation of bajri after the rains. This kind of cultivation was extensive in the neighbouring talukas of the Hyderabad district. Wheat was cultivated practically only in Panjabi villages. The crop, with a few exceptions, proved a complete failure, and rabi remissions have been very heavy. About 75 per cent. of the wheat cultivation had to be given partial or total remission. While both the principal crops on the Jamrao failed, the only other crop of importance, bajri also suffered considerably from excessive moisture, and the outturn at the best was only moderate.

7. Remissions on account of injury to crops were granted to the following extent :—

			Rs.	a.	p.
1. Deficiency of water	...	...	20,490	12	0
2. Saltiness of land	...	...	221	8	0
3. Floods	...	...	15,962	7	0
			36,674	11	0

These figures are largely in excess of those reported last year. The reasons have been already indicated above.

8. The conditions for water-supply were abnormal. The rainfall in July and August was nearly 20" (i.e., about five times the average), resulting in destructive floods. This forced the closing of the head regulator of the Nara supply channel for a long time in the abkalani season, and the channel got heavily silted. Further, the river at Bukkur fell rapidly after September, and reached a lower level than it has done in any year since the opening of the canal. Consequently, although water, mostly siltless spill water from floods, was abundant during the kharif season proper, it failed in October when the floods receded. The rabi discharge varied from 1,000 cusecs in the beginning to practically nothing in February and March.

Dad Canal.

9. The Dad canal with its branches worked excellently. It flowed from June 1st to October 10th. No necessity for rotation was felt. The area of cultivation in my charge was 27,541.18 acres against 17,218.12 acres in the previous year and the jamabandi was Rs. 1,00,698-0-7 against Rs. 56,666-6-1. New rates of assessment were introduced in the year under report. Remission amounting to Rs. 222-11 was granted on account of deficiency of water-supply in rabi and frost.

Nasrat Canal.

10. The inundation is described as an exceptionally good one. Cultivation rose from 70,821 acres 14 guntas in 1907-08 to 87,797 acres 1 gunta, and the jamabandi from Rs. 2,12,479-3-4 to Rs. 3,12,772-7-11. Here as on the Dad, new and on the whole higher rates of assessment were introduced. Remission amounting to Rs. 18,712-5 was granted in the year under report, chiefly on account of deficiency of water in the rabi season. Extensive cultivation in rabi (mostly jambho) had been undertaken on rain water, but adverse winds dried up the moisture and as the canal ceased flowing on September 30th, the crops failed in many places. The dhand from which the canal takes off seems to be silting, and I would suggest thorough clearance, with a dredger if possible.

Hiral Canal.

11. The area cultivated was 18,781.34 acres as against 13,714.19 acres and the jamabandi was Rs. 59,715 as against Rs. 48,087-13-7 last year. The canal worked satisfactorily. Remissions to the extent of Rs. 4,986-4 were granted, chiefly on account of floods due to excessive rain.

12. The financial results greatly exceed the estimate framed in the project as will appear from the following figures:—

	Area cultivated.			Revenue.	
	Acres.	g.		Rs.	a.
By forecasts	14,942	0	...	26,978	0
By results	18,781	34	...	59,715	0

The decrease in cultivation on the Hiral wah in the last two seasons is no doubt due partly to scarcity of labour and rabi water. But it must also be regarded as a natural reaction after the excessive and exhausting over cultivation of the first three years (considerably more than twice the area anticipated in the original project).

SECTION II.

Allotments of land.

Jamrao Canal.

13. The total area of the Jamrao tract is 563,614-11 acres, of which 771,975-25 acres are returned as culturable. Out of the latter area, 303,066 acres 24 guntas were held under the Land Revenue Code at the close of 1907-08 and 327,079-39 acres under Act III of 1899, leaving a balance of nominally culturable waste amounting to 147,504-16 acres available for distribution.

14. The following figures will show the allotments made from this area:—

	Area at end of 1907-08.	Granted during 1908-09.	Relinquished or cancelled in 1908-09.	Area at end of 1908-09.
	A. g.	A. g.	A. g.	A. g.
(a) Readjustment of holdings...	303,066 24*	78 32	...	303,145 16
(b) Bezari and Nobat claims...	40,816 23	...	959 15	39,857 8
(c) Frontage lands	135,488 16	4,084 7	...	139,572 23
(d) To specially recommended zamindars.	22,028 39	3,203 16	5,412 28	19,819 27
(e) Panjabi colonists.	72,980 1 (1,796 colonists of all classes.)	1,326 (37 new grantees, mostly peasants) 565 acres extension of holdings.	1,106 (32 grantees.)	73,765 1 (1,801 colonists)
(f) Other colonists (Kachis, Jodhpuris and Sindhis.)	31,208 26	...	2,961 28	28,246 38
(g) Grants to Junior Tal- purs (68 Mirs).	Jagir 10,948 22 Rayati 198 32	8 (to make up sanctioned area)	...	11,155 14
(h) Military Pensioners.	11,314 10†		2,690 16	8,909 2

* Incorrectly shown as 305,162 acres 14 guntas in Appendix I last year.

† Incorrectly shown as 11,147-14 in paragraph 22 of last year's report.

15. Appendix I gives the details of the land held by each class of grantees according to talukas.

16. Of the 147,504-16 acres remaining for distribution about 41,626 acres are in dehs reserved for colonisation and the rest scattered among other villages, being mostly very inferior soil.

17. The areas remaining for colonization are approximately as follows:—

(A) For Panjabi peasants	...	14,376
(B) For Junior Talpurs	...	4,941
(C) For others	...	22,309
		<u>41,626</u>

Dad Canal

18. The total area commanded by this canal in the tract under my charge is 96,871-35 acres, of which 73,735-13 acres are classed as culturable. The occupied area at the commencement of the year was 58,342-37 acres; 5,864-39 acres more were granted during the year, and 89-31 acres relinquished, leaving at the end of year a total occupied area of 64,118-5 acres. The Dad wah has worked so well in the last two or three years, that in spite of the fact that the land on it is mostly high lift, all the available areas are being rapidly taken up.

Nasrat Canal.

19. The total area commanded by the Nasrat in the tract under my charge is 216,569 acres, of which 186,556-19 acres are returned as culturable. The area occupied at the commencement of the year was 160,623 acres and grants amounting to 5,560-11 acres were made during the year as under:—

	Acres	g.
(a) In satisfaction of barani claims	15	0
(b) In extension of holdings	2,870	35
(c) To Sindhi zamindars specially recommended	2,674	16
	<u>5,560</u>	<u>11</u>

Of the land previously granted an area of 2,316-26 acres was relinquished, leaving a total occupied area at the end of the year 163,836-25 acres. The land now available for distribution is practically all unculturable. At the same time a good deal of excellent land is waiting for an extension of the canal and consequently not available for distribution. No land has been granted in the year to Junior Talpurs and Military pensioners on this canal.

Hiral Canal.

20. The total and culturable areas on this canal are 54,236-35 acres and 43,961-28 acres respectively. Of the latter, 46,850-25 acres were in occupation at the commencement of the year: 312-20 acres were granted during the year in extension of holdings and 485-5 acres were either relinquished or cancelled. The total occupied area at the end of the year under report was thus 46,678 acres.

SECTION III.

Colonists.

21. The total number of Panjabi colonists holding *paka* grants increased from 1,796 to 1,801 acres, but the total population is 7,139 including 3,039 females as against 7,835 (including 2,919 females) returned in the previous year. The decrease in the population this year is probably only apparent and due to the inaccuracies in enumeration. There is no doubt that several families have gone away to the Panjab owing to the scarcity of water last rabi season, but the increased number of females is a satisfactory sign of more permanent settlement.

22. The area held by each class of Panjabis is as follows:—

	Acres	g.
(a) Peasants	57,165	15
(b) Yeoman	13,493	17
(c) Capitalists	3,106	9
	<u>73,765</u>	<u>1</u>

23. The failure of the rabi water-supply has been hardest in the case of Panjabi colonists, who depend more than other grantees on rabi cultivation. Of the Panjabis, too, it was natural that the peasants (really the most deserving class) should suffer most, as they possess very small holdings and have least to fall back upon in case of a failure of crops. The death of large numbers of cattle is a loss which cannot soon be made up. Efforts are being made to transfer peasants into the best land available, and I am thinking of increasing the grants of the more deserving among them from 2 to 4 squares, but unless the rabi water-supply improves, I am afraid this class of colonists cannot thrive.

24. The process of weeding out undesirable Panjabi yeomen continues and the success of the colony largely depends on the ruthless completion of this work. There is no reason why the undesirables should be allowed to stay. The majority of them are no better as zamindars than Sindhis, while they have a "penchant" for creating and fomenting mischief and quarrels peculiar to themselves. As anticipated now that the soil has been to some extent used up, it is becoming more and more difficult to keep them in the colony, and their visits to the Panjab grow longer and more frequent.

25. The Panjabi capitalists are not more successful as zamindars. No changes worth recording have occurred in their holdings since the last report was submitted.

26. Panjabi yeomen and capitalists have hitherto been at a great disadvantage owing to the necessity of employing Panjabi cultivators imposed on them by clause 18 of the conditions of grants, and the fact that they have had often to accept inferior cultivators, if only they were Panjabis, no doubt partly accounts for their want of success. This restriction, somewhat relaxed in practice since a year or more, has now been removed.

(b) *Other Colonists.*

27. There is nothing to add to the remarks on other colonists made in last year's report. It is not difficult to foresee the time when lands reserved for Kachis, Tharis and Military pensioners will have to be distributed among Sindhi zamindars. These classes of colonists are unfamiliar with canal cultivation and, with a few exceptions do not prosper. A large number of grants have had to be cancelled and the arrears written-off as irrecoverable. The Tharis distinguish themselves as the worst and most unreliable among the colonists and it is not desirable that, should famine again drive them from their desert homes, they should be given land again. It is only fair to add that the villages reserved for these other colonists are often inferior in quality.

28. The question of Junior Talpurs is a difficult one. However, as the whole subject has been thoroughly discussed by Mr. Blathwayt in his No. 3678 of the 12/15th October 1908, it is unnecessary to say anything further here.

29. The work of building villages and wells is being vigorously pushed forward in the Nasrat taluka. The difficulty about drinking water promises to be only temporary as the level of subsoil water is rising year by year, and this rise, it is hoped, will also abate the brackishness of water found in wells, which, in places, is intense.

30. The villages where colonists have been introduced are those that lay entirely waste and unpopulated before the advent of the new canals, i.e., where no water could reach. On the Nasrat and Dad which are inundation canals, wells have been and are being built. There, the few permanent inhabitants are prepared for a scarcity of drinking water in the dry season. But the Jamrao is a perennial canal, and the colonists, confident of an unfailing water-supply, rarely dig wells. When, therefore, the Jamrao failed last rabi, and the minors and even the west branch dried up about the beginning of March, many villages were forced to get drinking water from a distance of over 15 miles, where a discharge that went down to 57 cusecs barely kept the main canal flowing. Under the circumstances, thousands of cattle, compelled to drink at stagnant pools, died of diseases contracted from the unwholesome water. The loss to colonists in cattle must take several years of prosperity to get over. The conditions described were especially acute in Jamesabad and Digri talukas, which are practically all new tracts opened up by the Jamrao.

SECTION IV.

Malkano and Takavi.

31. Appendix II shows the demand and recoveries on account of malkano during the past revenue year. The recoveries are unsatisfactory, but as the kharif crop was poor and rabi failed altogether and this bad season followed on one hardly better, no more could be expected. Further pressure for recoveries would have resulted in permanently crippling the cultivators' resources.

32. The total area sold by auction during the year was 70.38 acres, and the average price realized was Rs. 29-12 per acre.

33. Appendix III shows takavi advances and recoveries. Rs. 48,762-14-9 were recovered during the financial year on account of advances under Act XII of 1884 and Rs. 70,593-0-1 under Act XIX of 1883 or Rs. 1,19,355-14-10 in all, as against a total of Rs. 1,39,333-8-5. Besides this Rs. 23,925-2-3 of the arrears have been recovered between the 1st April to 31st July 1909 and Rs. 2,143-2-0 written-off as irrecoverable, leaving a balance of Rs. 1,40,176-4-10 still outstanding. The large increase of arrears over the figures of the preceding year is entirely due to the bad season.

SECTION V.

Survey.

34. The survey of all the tracts has been completed as previously reported. The present work consists of making alterations of maps and records necessitated by construction of new or by alterations in the alignment of old water-courses and field tracks and by the allotment of lands for village sites and other public purposes. These changes are many and entail much

work. The work done in the Record Office is shown in the subjoined statement.

Year.	NO. OF CASES RECEIVED EXCITING CORRECTIONS IN SURVEY RECORDS, INCLUDING AREAS OF PAST YEAR.				NUMBER OF CASES RETURNED DULY CORRECTED.				REMAINING TO BE COMPLETED.				NUMBER OF MAPS SUPPLIED.					NUMBER OF NEW SURVEY REGISTERS PREPARED AND SUPPLIED.			CORRECTIONS IN THE NAMES OF OCCUPANTS AND ASSESSMENT OF SETTLEMENTS BEING REVISED.			MAPS REPAIRED FOR REPRESENTING.		REGISTERS PREPARED FOR RECORD OFFICE.		
	Survey registers.	Survey maps.	Field books.	Distribution statements, Form F.	Survey registers.	Survey maps.	Field books.	Distribution statements, Form F.	Survey registers.	Survey maps.	Field books.	Distribution statements, Form F.	No. of extracts from field books, supplied to Revenue authorities.	Without cost to village cess establishment.	With cost to village cess establishment.	Without cost to principal amildar of the dch.	To District Officers.	To petitioners.	Village Officers.	District Officers.	Petitioners.	Village Officers.	District Officers.	Petitioners.	English.	Rabi.	New registers.	Corrections in the names of occupants and assessment.
1908-1909.	326	696	211	...	230	557	144	...	117	129	117	...	3	384	...	340	145	16	2	2	...	...	...	...	...	...	1	3

Irrigation.

35. The Panjabi system of water-distribution was tried for the 4th year on the Jamrao. In kharif, share-lists, drawn up by the Executive Engineer, were fully adhered to in 105 out of 209 villages and abandoned only after the heavy rains in 23 others. This shows an improvement on the previous year when the share-lists were adhered to in 58 villages only out of 320. The reasons given by the Executive Engineer for the improvement are (1) a reduction of outlets where the water-supply was considered excessive and consequent necessity of more economical distribution, and (2) a lack of confidence in the canal after the failure of the previous rabi. I confess I do not quite see why, if the causes shown by the Executive Engineer were really active, the number of share-lists applied for fell off so considerably. Nor does this falling-off support the view of the Executive Engineer quoted in last year's report, *viz.*, that the people are beginning to see the advantages of share-lists.

In rabi, 31 share-lists were drawn up, but as the water-supply failed and there was little cultivation, they were abandoned.

Labour.

It is true that owing to the acute want of water, the labour difficulty was less prominent than usual, but it was unfortunately no less great. The new canals seem to have lost in fascination lately. Plentiful rains have drawn away to their homes the starving population of the Thar Desert and Kutch, who form the bulk of labourers in Sind. As far as agricultural labour goes, the tract under report was at a disadvantage compared with other parts of Sind, because the conditions of land grants compelled grantees in many cases to employ non-Sindis. The restriction has recently been removed and this tract need not now be worse off than the rest of Sind.

37. The new towns of Nawabshah and Mirpur Khas continue to develop normally. Unfortunately, Jamesabad, in spite of the new railway and in spite of the unceasing efforts of the Mukhtiarkar, Mr. Lalchand, does not flourish. The reason appears to be that it is placed in the middle of a large, unproductive, salt-plain.

38. The light railway from Mirpur Khas to Jhudo was opened in May last, and has been welcomed by the people of the southern portion of the Jamrao tract. Its effect on trade, however, cannot be properly judged till after the present harvest is over. It is hoped that the other half of the light railways scheme, *viz.*, the line from Mirpur Khas to Khadro will also be taken up at an early date.

39. During the year, the Record of Rights inquiry was completed in Sinjhora taluka. In the current year, the work is to be undertaken in Nasrat and Digri.

40. With the progress of cultivation and population, Jamesabad taluka is becoming a more and more unwieldy charge for one Mukhtiarkar and it is

hoped that the plan for a separate mahal for Jhudo will be soon carried out. As the papers are to be submitted to you in a separate correspondence no more than a mention is needed in this place.

41. There are two other problems awaiting early solution. The grants of land under Act III of 1899 have to be confirmed as the five years' period of probation has in several cases been already exceeded. There are serious difficulties in the way. I expect, however, to be able to take up the matter now without much delay. The question of rice cultivation will also have to be thoroughly discussed and considered. Large areas of land are, owing to floods or salt, unfit for any other crop than rice. A great deal of land has developed kalar from bad cultivation, no manure and excessive water having been used. This is often through no fault of the zamindar. If he employed a Sindhi as cultivator, he had under the conditions practically to employ one from the non-cultivating classes, while foreign cultivators are generally unfamiliar with canal irrigation. The result was wasteful and exhausting cultivation. The question is what expenditure of water can be incurred for the reclamation (through rice cultivation) of these waste or exhausted lands. The subject requires study on the spot and I hope to be able to report after the cold weather tour.

42. In conclusion, I am happy to express my entire agreement with my predecessors in their appreciation of the good, steady and zealous work done by the Colonisation and the taluka establishments.

I have the honour to be,

Sir,

Your most obedient servant,

HAMID A. ALI,
Colonisation Officer,
Jamrao Canal.

APPENDIX I.

STATEMENT showing the land held by grantees of different descriptions in each taluka of the Jamrao Canal.

Taluka.	LOCAL HOLDERS.							Sindhi zamindars from outside the tract specially recommended and expropriated zamindars.	COLONISTS.					Grand Total.
	Originally occupied land held under the Land Revenue Code.			Grants under Act III of 1899 to Local zamindars made in consideration of Local claims.			Total.		Panjabis.	Other colonists.	Junior Talpurs.	Military pensioners.	Total.	
	Re-adjusted and squared.	Unsquared.	Total.	In satisfaction of Bezari and Nobat claims.	Extension of holdings.	Total.								
A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	A. g.	
Mirpur Khas ...	15,306 30	80,143 30	75,510 28	8,168 24	30,697 13	38,865 37	114,376 28	5,289 17	1,081 13	5,189 13	...	704 12	9,074 38	120,041 0
Sinjhoro ...	28,208 23	52,118 25	80,322 8	11,718 21	32,798 30	44,514 11	124,836 19	4,406 33	16,807 36	5,120 3	3,289 36	2,061 27	27,080 22	157,023 34
Jamesabad ...	21,632 16	95,837 24	117,470 0	4,107 1	52,253 39	56,360 0	173,830 0	7,070 17	32,119 11	9,280 33	...	3,291 0	44,407 4	235,587 21
Digri ...	20,842 20	...	20,842 20	15,866 2	23,623 21	39,489 23	69,532 3	2,063 0	23,756 21	5,060 29	7,805 18	2,412 8	30,714 31	112,209 24
Total area occupied.	55,045 17	208,099 39	303,145 16	39,857 8	139,572 23	179,429 31	482,575 7	19,819 27	73,765 1	28,246 38	11,155 14	8,909 2	122,070 18	624,471 11

APPENDIX II.

STATEMENT showing realizations of Malkano for the year 1908-09.

Taluka.	Total sum due for recovery.			Amount recovered.			BALANCE.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
<i>Jamrao Canal.</i>									
Mirpur Khas ...	49,135	4	9	12,443	5	8	36,691	15	1
Sinjhoro ...	45,270	9	3	16,608	8	5	28,602	0	10
Jamesabad ...	44,997	0	8	9,074	2	1	35,922	14	7
Digri ...	14,200	5	8	1,827	13	6	12,372	8	2
TOTAL ...	1,53,603	4	4	40,013	13	8	1,13,589	6	8
<i>Nasrat Canal.</i>									
Nasrat ...	52,629	6	9	21,039	5	11	31,590	0	10
<i>Dad Canal.</i>									
Nasrat ...	13,698	11	7	5,797	12	7	7,900	15	0
<i>Hiral Canal.</i>									
Pithoro ...	723	7	6	183	9	0	539	14	6
GRAND TOTAL ...	2,20,654	14	2	67,034	9	2	1,53,620	5	0

HAMID A. ALI,
Colonization Officer,
Jamrao Canal.

APPENDIX III.

Takavi advances and recoveries during the financial year 1908-09.

Taluka.	AMOUNT ADVANCED UP TO THE 1st APRIL 1908 EXCLUDING RECOVERIES.			AMOUNT ADVANCED DURING THE YEAR.			TOTAL ADVANCED.		
	Act XII.	Act XIX.	TOTAL.	Act XII.	Act XIX.	TOTAL.	Act XII.	Act XIX.	TOTAL.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Mirpur Khas	40,926 3 0	42,834 8 6	92,560 12 0	29,273 14 6	7,620 0 0	36,193 14 6	78,500 2 0	50,284 8 6	1,28,784 10 6
Sinjhoro	17,476 11 5	41,190 11 7	58,667 7 0	12,170 3 2	5,010 0 0	17,180 3 2	29,616 14 7	45,200 11 7	75,847 10 2
Jamesabad	27,079 6 6	51,104 9 0	78,243 15 6	16,166 3 2	15,641 0 4	31,707 4 1	43,245 10 3	46,705 0 4	1,09,951 3 7
Nasrat	9,633 7 1	1,91,478 14 2	1,41,097 5 3	2,105 0 0	17,954 0 0	40,059 0 0	31,7 7 1	1,49,427 14 6	2,81,166 5 3
Pithoro	1,307 3 0	6,355 10 0	7,662 13 0	2,085 0 0	815 0 0	2,900 0 0	3,392 3 0	7,170 10 0	10,662 13 0
Digri	12,183 5 0	17,758 0 10	29,839 5 10	3,137 2 5	18,006 10 0	21,143 12 5	15,220 7 5	36,703 10 10	60,884 2 5
TOTAL	1,17,496 4 6	2,90,574 5 1	4,08,070 10 7	84,237 7 10	64,948 10 4	1,49,186 3 3	2,01,733 12 4	3,55,534 5 5	5,57,266 12 0

Taluka.	Total amount for recovery during the year including arrears of past years.	RECOVERIES MADE DURING THE YEAR.			Amount written- off during the year.	Arrears out- standing at the end of the year.	Arrears recovered since March 1900.	Arrears still outstanding.
		Act XII.	Act XIX.	TOTAL.				
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Mirpur Khas	68,866 3 0	14,076 18 7	3,325 0 1	17,401 15 8	1,518 2 0	40,646 1 10	3,407 8 4	46,238 0 0
Sinjhoro	23,543 1 0	6,400 2 0	9,945 15 0	15,846 1 0	...	7,700 0 0	4,081 11 0	5,618 5 0
Jamesabad	86,956 11 9	6,281 13 8	10,507 0 6	16,788 14 2	100 0 0	50,067 13 7	4,113 9 7	45,955 4 0
Nasrat	91,935 6 6	19,150 10 6	42,357 5 6	61,508 0 0	125 0 0	30,302 5 4	9,573 10 6	26,723 10 10
Pithoro	5,692 15 0	1,447 6 0	2,284 5 0	3,731 10 0	...	4,961 5 0	1,261 2 0	3,700 3 0
Digri	25,603 8 4	1,406 0 0	3,073 6 0	4,079 6 0	109 0 0	21,423 13 4	1,488 8 10	19,935 4 5
TOTAL	2,86,000 7 11	48,763 14 9	70,508 0 1	1,19,355 14 10	2,143 2 0	1,64,101 7 1	23,925 2 3	1,40,176 4 10

HAMID A. ALI,
Colonisation Officer,
Jamrao Canal.

19739
No. 3792 of 1910.

REVENUE DEPARTMENT.

Office of the Commissioner in Sind,
Government House, Karachi, 21st October 1910.



Report of the Colonization Officer, Jamrao
Canal, for the year 1909-1910.

Submitted to Government.

2. The results on the Jamrao have been less satisfactory than even in the previous year. In fact, the area under cultivation has been the lowest on record since 1901-02 and the revenue realised the smallest since 1902-03. The very considerable shrinkage of kharif cultivation was due to the late rise of the river. The increase in the area under rabi, 24,130 acres, over the last year's figures, was for reasons explained in paragraph 6 of the Report not so great as might have been expected.

3. The figures of the year under report compare with those of 1905-06, the most prosperous year, as follows:—

	Area. Acres.	Jamabandi. Rs.
1905-06	301,618	12,41,412
1909-10	183,428	7,07,638

4. There was a slight decrease in the area under cotton; but the prices realised were excellent, ranging from Rs. 7 to Rs. 10 per maund. No Egyptian cotton was sown.

5. Remissions granted amounted to Rs. 11,733 as against Rs. 36,674 in the preceding year. There was no deficiency of water for drinking purposes.

6. The Dad canal worked satisfactorily, but the conditions were less favourable than in the previous year. There was a decrease in the area under cultivation and the revenue of 6.86 per cent. and 13.54 per cent. respectively.

7. Owing to the late rise of the river and erosion at the mouth of the Lundi Dhandh, the area cultivated on the Nasrat fell by 23.55 per cent. and the revenue by 17.98 per cent. as compared with the last year.

8. Supply in the Hiral canal was sufficient, but owing to negligence on the part of cultivators the results were not very satisfactory, the area cultivated and the Jamabandi being less by 10.42 and 4.14 per cent. respectively than in the preceding year.

9. The effects of the two previous bad seasons were reflected in the smallness of collections on account of malkano and takavi made during the revenue year, but the recovery of Rs. 60,464 since its close is a hopeful indication of future conditions. The sufficiency and good condition of cattle in the Jamesabad and Digri talukas, the increase in the number of Punjabi colonists, and the cessation of quarrels among the peasants, are all noted with satisfaction. A few typical cases of absentee Junior Talpurs were selected for cancellation of grants, and action was taken accordingly. This step should have a salutary effect.

10. The duties of Colonization Officer were efficiently performed by Messrs. Hamid Ali, Gibson and Gobindram, and the Commissioner endorses Mr. Gibson's commendation of the subordinates and establishment.

A. D. YOUNGHUSBAND,
Commissioner in Sind.

To

THE CHIEF SECRETARY TO GOVERNMENT,
Revenue Department,

BOMBAY.

No. 3231 of 1910.

REVENUE DEPARTMENT.

Colonization office,

Hyderabad, 27th September 1910.

From

R. E. GIBSON, Esquire, I. C. S.,

Colonization Officer,

Jamrao Canal,

To

THE COMMISSIONER IN SIND.

SIR,

I have the honour to submit the Annual Administration Report of the Jamrao, Dad, Nasrat and Hiral Canal tracts for the year ending 31st July 1910.

2. Mr. Hamid A. Ali, I. C. S., was in charge of this office till December 10th, 1909. On that date I took over charge from him and held it till May 4th, 1910, when I went on 3 months' privilege leave. R. B. Gobindram Salamatrai, Assistant Colonization Officer, then held charge of the office, in addition to his own duties, until the end of the year.

SECTION I.

RESULTS OF THE YEAR.

Jamrao Tract.

3. The year under report is the tenth of the working of the Canal and the 15th since its construction was commenced.

4. The area cultivated was 183,428-1 acres as against 210,763 acres in the previous year and the jamabandi was Rs. 7,07,638-5-0 as against Rs. 8,66,081-1. Details of this and the previous year's jamabandi are given below—

	1908-09.			1909-10.		
	Rs.	a.	p.	Rs.	a.	p.
Land revenue ...	7,59,218	13	0	6,06,852	13	0
Malkano ...	40,013	13	8	41,501	6	6
Local fund cess ...	50,845	4	0	42,220	9	0
Fines ...	4,651	2	2	2,947	13	0
Miscellaneous revenue ...	11,352	0	2	14,115	11	6
	8,66,081	1	0	7,07,638	5	0

5. The above results compare unfavourably with those anticipated in the original project and in the final revised forecast framed by the Superintending Engineer, Indus Left Bank Division—

	1909-10.	
	Area cultivated. Acres.	Revenue. Rs.
By forecast ...	260,000	6,82,460
Final ...	300,000	8,39,300
By results ...	183,428	6,06,852

The figures of cultivation show a decided drop from those of the preceding year and a difference of over a lakh of acres from those of the final forecast.

The figures for each season compared with 1908-09 are as follows:—

		Kharif. Acres.	Rabi. Acres.
1908-09	...	182,897	27,866
1909-10	...	131,432	51,996

The year was not fortunate on the whole. The decrease in kharif was due to the late rise of the river, and though rabi shows an advance, it was not so great as it ought to have been for the reasons shown in the following paragraph.

6. Of the crops grown on the canal, cotton in kharif and wheat in rabi occupied 45.70 and 23.45 per cent., respectively, of the total area cultivated as against 49.10 and 5.14 per cent. last year.

The slight decrease in cotton was probably due to the adverse conditions of the previous year, but the excellent prices obtained last year and the present favourable inundation should ensure a large expansion of cotton cultivation in the current year. The bottom price for cotton bolls sold on the field was Rs. 7 per maund. This price I found to have been general all over the tract, and as the season advanced, prices continued to rise, and those fortunate zamindars who still had stuff to sell got as much as Rs. 9, 10 and in a few cases even more. Egyptian cotton was not sown at all as the failure of the rabi supply rendered it impossible to get the seed in the ground early enough. Wheat shows a satisfactory advance, but the failure of the rabi supply in the two previous seasons, and the uncertainty as to the possible closure of the canal in February and March, undoubtedly prevented many of the smaller and less venturesome zamindars from using the excellent supply available last rabi. Very fine wheat with a heavy yield was raised by Panjabi colonists; especially in talukas Jamesabad and Digri. It was noticeable that they started wheat cultivation in October or November, whereas Sindhi zamindars as a rule did not sow till December, which late sowing renders the crop liable to rust. With an assured rabi supply I anticipate a considerable increase in rabi cultivation.

7. Remissions on account of injury to crops were granted to the following extent:—

		Rs.	n.
(1) Deficiency of water	...	812	2
(2) Saltiness of land	...	1,986	8
(3) Floods	...	8,934	10
		<hr/>	
		11,733	4

This comforting decrease of Rs. 25,000, as compared with the previous year, is due to the contraction of cultivation, and to the improved water-supply, and to the decrease in floods due to rain. Of the remissions granted for floods, the bulk were given in talukas Jamesabad and Digri.

Dad Canal.

8. The Dad Canal with its branches worked very satisfactorily. It flowed from 1st June 1909 to January 1910. The area of cultivation in my charge was 25,649.31 acres as against 27,541.18 acres in the previous year, and the jamabandi was Rs. 87,057.11 as against Rs. 1,00,698.0.7. Remission amounting to Rs. 216.4 was granted on account of deficiency of water-supply and flood, an amount practically the same as in the previous year.

Nasrat Canal.

9. The area of cultivation was 67,122.2 acres as against 87,797.1 acres and the jamabandi Rs. 2,56,540.12.11 as against Rs. 3,12,772.7.11 in the preceding year. The remissions granted amounted to Rs. 9,345.9, just half of those granted in 1908-1909. Remissions were granted chiefly on account of deficiency of water and flood. Zamindars said the inundation was good while it lasted, but the canal did not flow till June 2nd and ceased to flow on October 4th.

The late rise of the river and the erosion at the head of the Lundi Dhand, which feeds the canal, accounted for the brief nature of the inundation. However, the set of the river is now towards the right bank and there has been no erosion since September last.

Hiral Canal.

10. The area cultivated was 16,824-35 acres as against 18,781-34 acres and the jamabandi was Rs. 57,241-11 as against Rs. 59,715 in the previous year. Remissions to the extent of Rs. 952-10 were granted chiefly on account of deficiency of water and damage by rats.

The supply in the canal and its minors was sufficient, but owing to laziness or indifference on the part of zamindars in dehs 10, 11, 12 and 14, no attempt was made to remove the grass which had resulted from the Nara floods of the previous year, and consequently no crops were raised in those dehs.

11. The financial results exceed the project estimate as will appear from the following figures:—

	Area.		Revenue.	
	Acres.	g.	Rs.	a.
By forecast	14,942	0	26,978	0
By results	16,824	35	51,449	5

The area under cultivation, though smaller than before, continues to show an excess over the forecast, while the revenue is nearly double.

SECTION II.

ALLOTMENTS OF LAND.

Jamrao Canal.

12. The total area of the Jamrao tract is 863,614-11 acres, of which 771,975-35 acres are returned as culturable. Out of the latter area, 303,145-16 acres were held under the Land Revenue Code at the close of 1908-1909 and 321,325-33 acres under Act III of 1899, leaving a balance of nominally culturable waste amounting to 147,504-16 acres. Of this area it is computed that practically 100,000 acres are unculturable, which leaves a balance for distribution of 47,500 acres.

13. The following figures will show the allotments made:—

	Area at end of 1908-09.	Granted during 1909-10.	Relinquished or cancelled in 1909-10.	Area at end of 1909-10.
	A. g.	A. g.	A. g.	A. g.
(a) Readjustment of holding	303,145 16	32 0	8,441 24	294,735 22
(b) Bezari and Nobat claims	39,857 8	35 8	671 25	39,220 31
(c) Frontage lands	139,572 23	3,095 17	54 22	142,613 18
(d) To specially recommended zamindars...	19,819 27	2,944 33	395 6	22,369 14
(e) Panjabi colonists	73,765 1	2,631 29	987 27	76,495 13
	(1801 colonists of all classes.)	100 new grantees mostly peasant, 1086-10 exten- sion of holdings.	(44 grantees.)	
(f) Other colonists (Kachis, Jodhpuris and Sindhis).	28,246 38	.....	426 12	27,820 26
(g) Grants to Junior Talpurs (68 Mirs) ...	Jagir 10,956 22 Rayati 198 32	223 5 (2 Mirs).	20 17	11,358 2
(h) Military pensioners	8,909 2	1,100 39	357 27	9,652 14

14. Appendix I gives the details of the land held by each class of grantees according to talukas.

15. Of the 47,500 acres remaining for distribution about 39,119 acres are in dehs reserved for colonization and the rest scattered among other villages, being mostly very inferior soil.

16. The areas remaining for colonization are approximately as follows:—

	Acres.
(a) For Panjabi peasants ...	11,646
(b) For Junior Talpurs ...	4,738
(c) For others ...	22,735
	<u>39,119</u>

Dad Canal.

17. The total area commanded on this canal in the tract under my charge is 96,871-35 acres, of which 73,735-13 acres are classed as culturable. The occupied area at the commencement of the year was 64,118-5 acres; 21,758-6 acres more were granted during the year and 601-25 acres relinquished, leaving at the end of the year a total occupied area of 65,274-26 acres.

All the good land on the Dad has now been taken up and there is practically no demand for land on this canal except in the Daur waste, which has been surveyed but the water-courses of which have not yet been excavated.

Nasrat Canal.

18. The total area commanded by the Nasrat in the tract under my charge is 216,569 acres, of which 186,556-19 acres are returned as culturable. The area occupied at the commencement of the year was 163,836-25 acres and grants amounting to 5,259-29 acres were made during the year under report as under:—

	Acres.	g.
(a) Military pensioners ...	269	36
(b) In extension of holdings ...	1,723	7
(c) To Sindhi zamindars specially recommended ...	3,266	26
	<u>5,259</u>	<u>29</u>

Of the land previously granted an area of 7,588-7 acres was relinquished, leaving a total occupied area at the end of the year 161,508-7. The land now available for distribution is practically all unculturable, but two dehs Kuba Shahdad and Kuba Shah Hasan at present in taluka Shahdadpur are to be watered by an extension of the Nasrat and will shortly be given out.

Hiral Canal.

19. The total and culturable areas on this canal are 54,236-35 acres and 48,961-28 acres respectively. Of the latter, 46,678 acres were in occupation at the commencement of the year; 1,388-31 acres were granted during the year to special recommendees in extension of holdings and 1,741-16 acres were either relinquished or cancelled. The total occupied area at the end of the year under report was thus 46,325-15 acres.

SECTION III.

COLONISTS.

20. The total number of Panjabi colonists increased from 1,801 to 1,857 and the total population from 7,139 to 7,900, the number of females remaining at 3,625. Considering the unfavourable circumstances of the two preceding rabi seasons this increase of the Panjabi population is a matter for congratulation.

21. The area held by each class of Panjabis is as follows:—

	Acres.	g.
(a) Peasants ...	59,262	11
(b) Yeomen ...	14,126	33
(c) Capitalists ...	3,106	9
	<u>76,495</u>	<u>13</u>

22. The condition of the Punjabi colonists was on the whole very satisfactory. But there are six or seven villages in talukas Digri and Jamesabad where their condition is far from good. This is not due to their own fault, but to the inferior quality of the soil. In these villages a fair amount of arrears are outstanding. Collections are attempted in cases where no undue hardship would result, but for the present, postponements have to be given. These men are deserving of every consideration, and when possible they will be transferred to better lands.

In spite of these failures, many new men of the peasant class applied for land, but most of them had to be refused as very little good land was available. Quarrels have practically ceased among the Panjabi peasants. Numberdars are no longer appointed: there are always 3 or 4 candidates for the post and in the absence of unanimity an appointment would only lead to friction and obstruction.

23. The yeomen in the southern division are on the whole more successful than those in taluka Sinjhoru, but as a class I would gladly welcome their departure and substitute peasant colonists in their stead. The slight increase in area held by yeomen is due either to extension of existing grants or to the conversion of one or two specially recommended peasant holders into yeomen. There is no change in the holdings of Panjabi capitalists.

24. There has been a considerable development of the cultivation of Punjabi sugarcane. Unfortunately the disposal of the produce presents some difficulty as the 'gur' made from this cane is said to be less sweet than that made from Sindhi cane. However, the Panjabis appear to believe in it, and a capitalist is shortly going to erect a cane-crushing engine, or has already done so.

(b) Other Colonists.

25. Tharis, with a very few exceptions, continue to be failures, and 21 grants were cancelled for non-fulfilment of the conditions. Kachis are almost extinct, but one successful Kachi colonist remains.

Of the Military pensioners, the commissioned officers on the Nasrat and in the north of taluka Sinjhoru are doing well, some of them particularly so, but pensioners of lower rank have generally failed. Ignorance of agricultural conditions combined with lack of capital and inferior soil have contributed to this result.

26. The Junior Talpurs have been the subject of special enquiry and reports during the year, and I have nothing further to add save that it is probable that more grants will have to be cancelled.

27. The buildings of wells in Nasrat taluka is proceeding and I understand the general level of the sub-soil water is rising annually. Throughout the Jamrao tract the water-supply was ample for drinking purposes, and complaints as to scarcity of fodder were rare; on the contrary there were complaints about the excessive growth of grass due to rainfall.

The number of cattle in talukas Jamesabad and Digri appeared to be sufficient, while their condition was good, and it seems that the losses indicated in paragraph 30 of last year's report are not likely to produce any prolonged effect.

SECTION IV.

MALKANO AND TAKAVI.

28. Appendix II shows the demand and recoveries on account of malkano during the past revenue year. Recoveries are not yet satisfactory, but last year was only a moderate year after two poor seasons.

29. The total area sold by auction during the year was 52.6 acres, and the average price realised was Rs. 47-2 per acre.

30. Appendix III shows takavi advances and recoveries. Rs. 57,123-10-2 were recovered during the financial year on account of advances under Act XII of 1884 and Rs. 59,175-15-1 under Act XIX of 1883, or

Rs. 1,16,299-9-3 in all as against a total of Rs. 1,19,355-14-10 in the preceding year. Besides this Rs. 60,463-13-10 of the arrears have been recovered between 1st April and 31st July 1910 and Rs. 4,024-0-0 written-off as irrecoverable, leaving a balance of Rs. 1,78,435-5-5 still outstanding. The arrears show an increase over last year, but an appreciable advance has been made in collections since the end of March. This means I hope that zamindars are beginning to recover from the effects of the two previous bad seasons, and if the present season prove favourable, collections should show a decided improvement in the current year.

SECTION V.

Survey.

31. The survey of all the tracts has been completed as previously reported. The present work consists of making alterations of maps and records necessitated by construction of new, or by alterations in the alignment of old, water-courses and field tracts and by the allotment of lands for village sites and other public purposes. Such changes are frequent. The work done in the Record office is shown in the subjoined statement:—

Year.	No. of cases received necessitating corrections in survey records including arrears of past years.				Number of cases returned duly corrected.				Remaining to be completed.				Number of extracts from field books supplied to revenue authorities.	Number of maps supplied.				No. of new survey registers prepared and supplied.	Corrections in the names of occupants and assessment on settlements being revised.	Maps repaired or reprinting.	Registers prepared or record office.							
	Survey registers.	Survey maps.	Field books.	Distribution Statement, i. e., Form F.	Survey registers.	Survey maps.	Field books.	Distribution Statement, i. e., Form F.	Survey registers.	Survey maps.	Field books.	Distribution Statement, i. e., Form F.		Without cost to V. C. E.	With cost to V. C. E.	Without cost to principal zamindar of the deb.	To district officers.					To petitioners.	Village officers.	District officers.	Petitioners.	Village officers.	District officers.	Petitioners.	English.	Sindhi.	New registers.	Corrections in the names of occupants and assessment.
1909-1910.	238	602	127	13	102	640	94	12	46	52	33	...	13	216	2	...	581	45	2	8	1	...

SECTION VI.

GENERAL REMARKS.

Irrigation.

32. The Panjab system of water distribution was tried again on the Jamrao. Government share-lists were in use in 30 villages at the beginning of the rabi season. No figures are available for kharif share-lists nor for 'rajuki' or private share-lists.

Share-lists are impossible in villages with a mixed lift and flow supply, but of their utility there can be no doubt. It is a pity that the advantages of a share-list are not more generally appreciated.

Labour.

33. Last year there was no general complaint as to scarcity of labour. The decrease in the area cultivated probably accounted for this. But a really good year with a heavy cotton yield would revive the former trouble. As it is, even now, cool labour commands a comparatively high wage in the tract.

Towns.

34. Mirpur Khas new town is nearly finished, a few shop plots only remaining. Nawabshah awaits the new district on the opening of which it

should flourish. There has been quite a keen demand for shop plots in this town on the part of Karachi tradesmen.

The light railway from Mirpur Khas to Jhudo has done nothing to assist Jamesabad which is really a dismal failure.

In spite of the railway, goods from Digri to Mirpur Khas are generally carried by road.

The new light railway to run from Mirpur Khas to Khadro *via* Sinjhora should prove successful and help to develop the Northern District.

35. The confirmation of grants made under Act III of 1899 (as amended by Act of 1908) has formed the subject of a separate correspondence and it is expected that the work of granting of sanads on confirmation will be commenced in the current year.

The question of allowing rice on the Jamrao Canal has been practically answered in the negative: permission to grow rice would not act as a stimulant to more careful and scientific methods of cultivation, and the canal could not supply the requisite amount of water.

36. Rao Bahadur Gobindram Salamatrai, Assistant Colonization Officer, continued to display the same high standard in his work and I have been greatly indebted to his experience and knowledge of the tract.

Of my own office I would specially mention Mr. Parsram, acting Head Clerk, and Munshi Muhammad Suleman, acting Head Munshi, who have maintained the reputation of this establishment for long hours and hard work.

Good work was performed by the Taluka offices on the whole, and Mr. Lalchand displayed ability and energy in the heavy charge of Jamesabad.

I have the honour to be,

Sir,

Your most obedient servant.

R. E. GIBSON,

Colonization Officer,

Jamrao Canal.

APPENDIX I.

STATEMENT showing the land held by grantees of different descriptions in each taluka of the Jamrao Canal.

Taluka.	LOCAL HOLDERS.							Sindhi zamindars from outside the tract specially.	COLONISTS.					Grand Total.
	Originally occupied land held under the Land Revenue Code.			Grants under Act III of 1899 to Local zamindars, made in consideration of local claims.			Total.		Panjabis.	Other colonists.	Junior Talpurs.	Military pensioners.	Total.	
	Re-adjusted and squared.	Unadjusted.	Total.	In satisfaction of Nobat and Bezari claims.	Extensions of holdings.	Total.								
A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	A. G.	
Mirpur Khas	15,280 1	5,780 20	75,071 21	8,172 29	31,180 20	39,353 9	114,424 30	5,772 18	1,591 1	7,807 26	...	704 12	10,102 30	123,300
Sinjhoro	27,055 23	98,428 24	75,484 7	11,557 37	33,899 20	45,457 17	120,941 24	4,869 36	17,679 15	5,150 12	3,247 19	2,955 36	20,033 2	154,841
Jamesabad	21,202 9	93,382 35	114,885 4	4,106 31	63,371 4	67,477 35	172,062 39	7,636 34	33,196 36	9,243 33	...	3,541 21	45,981 10	225,631
Digri	29,595 0	...	29,595 0	15,383 14	24,162 14	39,545 28	69,140 28	4,090 6	24,028 1	8,619 35	8,110 23	2,450 25	40,209 4	113,439
Total area occupied.	93,138 33	201,596 39	294,735 32	39,220 31	142,613 18	181,834 9	470,570 1	22,369 14	76,496 13	27,820 26	11,358 2	9,652 14	123,326 18	624,265

APPENDIX II.

STATEMENT showing realization of Malkano for the year.

Taluka.	Total sum due for recovery.		Amount recovered.		Balance.		Amount due for recovery after 5 years, i. e., the period of probation, but recovered during the year 1909-10.
	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.	Rs. a. p.
<i>Jamrao Canal.</i>							
Mirpur Khas	38,478	2 9	8,019	3 2	30,458	15 7	773 9 5
Sinjhoro	30,706	14 1	19,210	2 10	11,496	11 3	2,003 4 8
Jamesabad	38,429	14 7	8,876	6 2	29,553	8 5	672 1 0
Digri	18,735	2 6	1,926	11 3	16,808	7 3	20 0 0
	1,26,350	1 11	38,032	7 5	88,317	10 6	3,468 15 1
<i>Nasrat Canal.</i>							Grand total.
Nasrat	41,104	13 0	20,762	3 3	20,342	9 9	41,501 6 6
<i>Dad Canal.</i>							
Nasrat	12,836	11 0	5,293	15 0	7,542	12 0	
<i>Hiral Canal.</i>							
Pithoro	2,706	13 6	2,123	4 0	583	9 6	

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APPENDIX III.

Takavi advances and recoveries during the financial year 1909-10.

Taluka.	AMOUNT ADVANCED UP TO THE 1st APRIL 1909 EXCLUDING RECOVERIES.			AMOUNT ADVANCED DURING THE YEAR.			TOTAL ADVANCED.		
	Act XII.	Act XIX.	Total.	Act XII.	Act XIX..	Total.	Act XII.	Act XIX.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Mirpur Khas ...	54,813 7 9	43,085 14 5	97,899 6 2	12,105 0 0	3,575 8 0	15,760 8 0	66,938 7 9	46,660 6 5	1,13,659 14 2
Singhoro ...	23,446 12 7	36,595 11 7	60,042 8 2	6,929 12 4	4,530 0 0	11,459 12 4	30,376 8 11	41,126 11 7	71,502 4 6
Jamesabad ...	38,063 12 7	56,198 8 10	93,162 5 5	8,705 0 0	11,297 12 0	20,002 12 0	46,988 12 7	67,496 6 70	1,13,165 1 5
Pithoro ...	1,945 0 0	4,816 4 0	6,761 4 0	100 0 0	...	190 0 0	2,135 0 0	5,816 4 0	6,951 4 0
Nasrat ...	12,461 3 7	1,30,269 11 2	1,42,730 14 9	24,200 0 0	32,895 6 0	57,095 6 0	36,661 3 7	1,30,165 1 2	1,66,826 4 9
Digri ...	13,804 7 5	32,691 4 10	46,495 12 3	7,150 0 0	13,485 10 0	20,635 10 0	20,954 7 5	1,176 14 10	67,131 6 3
TOTAL ...	1,43,434 11 11	3,03,657 6 10	4,47,092 2 9	59,359 12 4	65,784 4 0	1,25,144 0 4	2,02,794 8 3	3,49,441 10 10	5,72,236 3 1

Taluka.	Total amount for recovery during the year including arrears of past years.	RECOVERIES MADE DURING THE YEAR.			Amount written-off during the year.	Arrears outstanding at the end of the year.	Arrears recovered since March 1910.	Arrears still outstanding.
		Act XII.	Act XIX.	Total.				
		Rs. a. p.	Rs. a. p.	Rs. a. p.				
Mirpur Khas ...	57,368 7 3	8,067 3 7	2,644 3 2	10,651 6 9	...	46,717 0 6	23,928 9 7	22,788 6 11
Singhoro ...	56,740 8 3	12,416 9 0	12,146 3 9	24,562 12 9	157 3 0	32,020 8 6	11,577 11 3	33,142 18 3
Jamesabad ...	1,07,532 4 9	11,504 10 6	6,648 15 7	18,153 10 1	2,030 3 0	87,148 7 8	5,562 7 7	70,596 0 1
Pithoro ...	6,951 4 0	1,295 0 0	2,423 0 0	3,718 0 0	278 0 0	2,955 4 0	440 9 0	2,514 11 0
Nasrat ...	81,850 3 0	20,799 4 0	33,266 11 8	54,065 15 8	...	27,794 3 4	6,727 4 0	21,066 15 4
Digri ...	48,978 1 3	3,100 15 1	2,946 12 11	6,147 12 0	1,558 10 0	42,371 11 3	937 4 5	41,334 6 10
Total ...	3,59,220 12 6	57,123 10 2	50,175 15 1	1,10,299 9 3	4,024 0 0	2,38,897 3 3	60,463 13 10	1,78,433 6 5

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