

H.D. SETTLEMENT REPORT MALIRTAPA KARACHI



REVENUE DEPARTMENT.

From

C. B. PRITCHARD, ESQUIRE, C.S.I.,
Commissioner in Sind.

To

HIS EXCELLENCY THE RIGHT HONOURABLE
LORD REAY, LL.D., G.C.I.E.,
Governor and President in Council,
BOMBAY.

*Commissioner's Office,
Karachi, 29th April 1889.*

MY LORD,

I have the honor to submit the accompanying papers relating to the introduction of a settlement in twelve villages of the Malir Tapa of the Karachi Taluka.

2. The tract of country to which these proposals apply lies on both sides of the Malir river in the neighbourhood of the Landhi railway station which is about sixteen miles distant from Karachi. A considerable portion possesses unusual facilities for irrigation both by wells and water channels led from the river. The remainder is "bārāni" land, which is entirely dependent on a scanty and precarious rainfall. Only embanked land of this latter description has been surveyed. In the open, or "rel", barani land the cultivation is so shifting that it cannot be brought under a permanent survey.

3. The irrigated land produces considerable quantities of fruit, vegetables and other garden produce, which find a ready market in the town of Karachi.

4. These villages have never before been surveyed. Up to the present time the practice has been to lease the land in blocks at uniform rates of Re. 1 per acre on irrigated, and 8 annas per acre on "bārāni", land. The assessment is paid on the whole occupied area, and there are no figures available to show what the area actually under cultivation has been in previous years. Consequently the only figures available for the purposes of comparison are those obtained by the Survey Department in 1887-88, which are as follows :—

Occupied Area.	Cultivated Area. Acres.	Assessment. Rs.	Average Rate.		
			Re.	A.	P.
6,394	4,296	5,856	1	5	9

The Superintendent's estimate of the future revenue to be derived from these villages under the settlement is based upon the area found to be actually under cultivation in 1887-88.

5. For the purpose of assessment the villages have been divided into two groups as shown in the sketch map. The Collector of Karachi states that "the proposed grouping of the surveyed lands into two classes of villages is judicious and has my entire concurrence." In this opinion I agree.

6. The rates first proposed by Mr. Disney will be found in para. 13 of his report No. 305 of 1889, dated the 6th April. The Collector of Karachi was of opinion that the rates proposed are moderate; and having regard to the exceptionally favourable situation of the villages concerned, and the facilities for irrigation which they enjoy, I am disposed to think that the rates first proposed are not in themselves higher than the cultivation would bear. But they would involve an increase of 91 per cent. in the gross collections, and of 80 per cent. in the land revenue. I consider that it would be injudicious to make such a large increase suddenly, and I therefore requested the Superintendent to submit revised proposals by which the increase would be limited to 50 per cent. The difference between the results of the rates first proposed and the revised rates is as under:—

	Gross Assessment.	Clearance allowance.	Net Revenue for collection.	Village cess.	Land revenue.	Assessment. 1887-88	Increase.	Increase per cent
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Proposed rates...	11,799	606	11,193	658	10,535	5,856	4,679	86.0
Revised rates ...	9,838	606	9,232	513	8,689	5,856	2,833	48.2

Even with the revised rates the increase in some of the better villages will be very large, as much as 116 per cent. in Thano and 85 per cent. in Malh.

7. The deduction on account of clearance allowance is intended to compensate occupants who have to maintain and clear channels of considerable length to irrigate their fields. Mr. Disney proposes that an allowance up to a maximum of 8 annas per acre should be made in such cases, and the proposal has my approval.

8. I would recommend that the revised rates should be sanctioned and that they be introduced from 1889-90 for a period of five years. At the end of that period the rates may be enhanced if a further increase is considered desirable.

I have the honor to be,

My Lord,

Your Lordship's most obedient Servant,

C. B. PRITCHARD,
Commissioner in Sind.

No. 1308 OF 1889.

REVENUE DEPARTMENT.

From

COLONEL R. I. CRAWFORD,
Collector of Karachi.

To

C. B. PRITCHARD, Esquire, C.S., C.S.I.,
Commissioner in Sind.

*Collector's Office,
Karachi, 15th April 1889.*

SIR,

I have the honor to forward herewith Mr. Disney's letter No. 305 of 6th April 1889, containing proposals for the introduction of an irrigational settlement in the Malir Tapa of Taluka Karachi in this District.

2. The proposed grouping of the surveyed lands into two classes of villages is judicious and has my entire concurrence.

3. The rates proposed by the Superintendent of Revenue Survey in Sind are moderate and I approve of them.

4. Mr. Disney's statement that on the Malir lands assessment under the new irrigational settlement will be levied on cultivated survey numbers only, is, I presume, subject to the proviso that no assessment on uncultivated lands will be demanded so long as the fixed number of fallows is not exceeded.

5. I agree to the proposal that the new rates should take effect from the revenue year 1889-90.

I have honor to be,

Sir,

Your most obedient Servant,

R. I. CRAWFORD, COLONEL,
Collector of Karachi.

No. 305 of 1889.

From

H. K. DISNEY, ESQUIRE,
Superintendent, Sind Revenue Survey.

To

THE COMMISSIONER IN SIND.

SUPERINTENDENT'S OFFICE,
Karachi, 6th April 1889.

SIR,

I have the honor to submit proposals for the Irrigational Settlement of that portion of the Malir Tapa of the Karachi Taluka, which has recently been surveyed by this Department.

2. The tract referred to extends in a north-westerly direction, on
Situation.
either side of the Malir river, for about sixteen miles from the town of Karachi. It comprises about 46,000 acres, and this area was at the recent survey divided between twelve villages or hamlets. Detailed survey was extended only to the land held under lease which proved to be nearly 7,000 acres. Cultivation is general in the neighbourhood of the Malir river. In other parts, it is much scattered, occurring in plots, larger or smaller, according to irrigational facilities.

3. The furthest of the twelve villages, which form the surveyed portion
Communications.
of the Malir Tapa, is not more than sixteen miles distant from Karachi and all the villages are connected with that important market by fair roads over an easy country. The North-Western State Railway has a station within the tract at Landhi, 12 miles from Karachi, but, to avoid break of bulk, produce as a rule goes by road and is nearly all carried on camels, the rate to Karachi from the most distant village being 9 annas a camel load of about 4 maunds.

4. The Malir lands possess a most valuable source of irrigation in the
Irrigation.
sub-surface flow of water, which is general in this tract of country. This natural advantage is utilized at small cost by means of temporary (kacha) wells sunk in the sandy soil, the depth at which water is obtained ranging as a rule from 12 to 25 feet. The Malir river, which at a level but little below that of the surrounding country has its course through this tract, also affords a ready means of irrigation. Though dry the greater portion of the year, water is readily obtainable by digging a few feet in its bed. The beds of the smaller hill torrents, which are tributaries of the Malir, afford a like supply. The water thus obtained is conveyed by means of channels until it reaches and flows on to the land, which it is destined to irrigate. These irrigational channels are known locally as "wangis."

The number of wells is increasing rapidly. When the Malir lands were measured in 1886-87, there were 197 wells. In the interval of one year between measurement and classification, 114 were added and since October last there has been a further increase of 52, making a total of 363 wells, all of which are now in good working order.

There are 37 irrigational channels (wangis). Owing to the scanty rainfall of the last few years, there appears to have been some general subsidence of the underflow in the Malir lands. Water is not now found so near the surface and the supply to some of the channels has in consequence

partially failed. The land formerly commanded has either a reduced supply or has been left high and dry. Of the 37 channels, 10 now give a comparatively certain supply all the year round, 12 are effective up to about the end of February and 15 have partially or entirely failed. In lands where a flow supply is, under present conditions, no longer available, the cultivators have in most cases resorted to well irrigation. As shown in the last para., wells are largely on the increase and as they afford a certain and cheap means of irrigation, it is not to be regretted that they should be preferred to the more precarious channel supply.

There is a considerable area of barani land, the cultivation of which is dependent on rainfall and the natural drainage from the hills. Of this, the area of "band" barani, or land so enclosed that the water-supply is impounded and allowed to soak into the soil, has been divided into survey numbers, but the 'rel,' or unenclosed barani, has not been so divided, and it is therefore not included in the present settlement proposals. 'Rel' barani land is for the most part devoted to grazing. It is cultivated to some extent in years of favourable rainfall, but at best the cultivation is fitful and irregular and could not well be restricted to demarcated areas.

5. The tract under report is thus referred to in a Gazetteer of the Province of Sind, published in 1876. "Some parts of the Malir plain, distant about 12 miles from Karachi, and readily accessible by railway from that town, are very fertile, and have produced, besides excellent vegetables of various kinds, cotton of such exceptionally good quality as to equal, in this respect, any grown in other parts of the Bombay Presidency. In 1861 a Mr. Jacob Bethcome, who owned a small farm of 22 acres at the Malir, raised a fine description of cotton there, which competed successfully with the best qualities of both the American and Egyptian varieties, and for this he received a prize of 500 rupees from the Government of Bombay. Again, in 1868, some good qualities of cotton were also produced in the same locality and these obtained several prizes at the Karachi Industrial Exhibition of 1869. The soil of the Malir is on the whole good and, what is of inestimable advantage in Sind, water is readily obtainable by means of wells at a comparatively small depth below the surface, in some places not exceeding 13 feet. Before the year 1866 some enterprise was shown by several mercantile firms in Karachi in taking up land at the Malir, but in that year there occurred several disastrous floods from the Malir river, which destroyed the greater part of the crops and this tended to discourage any further efforts in that direction."

The floods in the year 1866 referred to in the foregoing extract are said by the people to have been caused by the Malir river having suddenly changed its course. In 1869 there were again heavy floods, which washed away the railway bridge over the Malir river, near to the Landhi station, but which do not appear to have done much damage to cultivation. There has been no great flood since 1869. Occasionally after heavy rain in the hills, the Malir lands are inundated, but any damage or inconvenience which may thus be caused is more than compensated for by the increase in cultivation for which the inundation affords the means.

The area of actual cultivation found by the classers of this Department in 1887-88 was 4,328 acres. Of this, 2,460 acres were irrigated from temporary wells, 1,518 by water led from excavations in the Malir river and its tributaries, and 318 acres were in barani land. Mangoes and plantains combined with garden crops as long as the trees admit of other cultivation, are grown in 1,333 acres. Nearly 1,000 acres, including 300 under potatoes, were devoted to vegetables. Melons are extensively raised in the hot months, the area thus sown last year was 951 acres. The area cropped with sugarcane, Indian corn and lucerne grass was 460 and 236 and 186 acres respectively. 834 acres were under juari. Cotton is not now grown anywhere in the Malir Tapa.

The garden lands of the tract under report are cultivated to the best advantage. Fields are clean and well wooded and many of them are enclosed by hedges. Manure is used generally, a succession of crops being taken from the land during the year. It will be noted that the produce raised is just of the kind for which the cultivators obtain a ready and remunerative sale in the Karachi market. The large area under such crops as sugar-cane, plantains and melons may be taken as a sure indication of the duration and certainty of the water-supply.

6. The Malir Tapa has not hitherto been subjected to any survey settlement. The land has been given out on leases to continue until the introduction of a survey settlement. The area upon which assessment is levied is the area in occupation and in the tract brought under survey, this was found to be 6,387 acres. The rates now in force are one rupee per acre on land irrigated from wells or channels and 8 annas per acre on 'band' and 'rel' barani land.

Present rates.

Until the late survey by this Department there had been no division according to villages of the lands of the Malir Tapa, and for this reason, returns showing separately the revenue collections of the twelve villages for which the present proposals are submitted, are not available. There is no doubt that the present rates of assessment are paid with much ease. I have no particulars either as to the population of the twelve villages. The census returns of rural population are for the Karachi Taluka as a whole, and as the figures would have no special significance, they are not quoted here.

7. Of the 6,387 acres, which comprise the occupied area in the Malir lands, 5,142 acres are held by Muhammadans and 1,187 by Hindus. The remaining 58 acres are in the occupation of a Parsi resident of Karachi. The occupied area was at the late survey divided into 1,620 numbers, the average size of which is nearly 4 acres.

Occupied area.

8. Land is not sub-let to any extent. Nearly all the landowners being resident cultivate their own holdings. A few who live in Karachi sub-let their lands. The arrangement in the case of lands irrigated from channels is that the owner pays the Government assessment and takes half the produce. In lands irrigated from wells, he takes the same proportion of the produce but in addition to paying the Government demand, provides bullocks for working the well.

Sub-letting.

9. I have lately been over all the cultivated lands of the Malir and have made careful local inquiries for the purposes of this report. The people appear to be well-to-do. The expenses of living are not great. Houses, properly so called, there are none. Sheds of the lightest construction, which cost a mere trifle, serving as shelter in the mild, nearly rainless climate. There is just now a scarcity of good pasturage caused by the almost total failure of rain in the last year, and the cultivators in consequence keep as few cattle as they can do with; but sheep and goats are numerous, and many well-sized, serviceable looking ponies are kept by the zamindars for their own riding. The rates of assessment now in force are almost nominal and the profits of cultivation are large, but, as in other parts of Sind, very few of the Muhammadan zamindars are free from debt. Their land is, as a rule, heavily mortgaged and much of it is passing into the hands of the bania.

Condition of the people.

10. Before proposing new rates for the villages under report it will be as well to consider what expenditure is incurred by landholders in putting to profitable use the facilities of irrigation which exist in the Malir lands.

Cost of irrigation.

The cost of utilizing the sub-surface flow by means of temporary wells is very small. I ascertained from repeated inquiry on the spot that wells can be sunk at an expenditure varying from 8 to 15 Rupees. They are in fact mere holes in the sand. The frame work and the apparatus for lifting and distributing the water can be purchased for Rs. 35. A temporary (kacha) well lasts about 4 years. Unprotected by masonry of any kind, the strain in lifting and the spill in the process of distributing the water gradually loosens the sand at the mouth and the well sooner or later falls in, only to be replaced by another at a short distance for which the same frame work, &c., can be again used. The total outlay in connection with a kacha well may be stated as between 40 and 50 Rupees.

As regards the irrigational channels (wangis) it is hard to arrive at even an approximate estimate of their cost. They are not constructed on any system. Some have year by year benefited by clearance and enlargement, and in their present condition could probably not be constructed at a less rate than Rs. 250 a mile. Others are narrow, straight-sided cuts which have cost comparatively little. The cost of construction may be broadly said to vary as much as from 50 to 250 Rupees a mile. The channels which follow the bed of the river for the whole or any considerable portion of their course, are expensive to maintain, because they get choked with silt when the river is in flood and have often to be renewed. Again, the expense of irrigation from channels depends greatly upon the extent of the area which can be brought under cultivation by their means. Some of the channels command a large area, while others only water a few acres.

In showing that any very close estimate of the cost to landholders of utilizing the water-supply by means of channels is impracticable, it has been made sufficiently clear that the attendant expenses are considerable and such as will call for special consideration in determining rates for land dependent upon a supply from channels. A special allowance on account of the cost of channel clearance in the Malir lands will be proposed further on in this report.

11. For assessment purposes I propose to divide the twelve Malir villages into two groups as shown below :—

Grouping.

1st Group.

1. Malh.
2. Maharan.
3. Thano.
4. Landhi.
5. Rerhi.
6. Sharabi.
7. Drigh.
8. Phihai.

2nd Group.

9. Bazar.
10. Darsano Chano.
11. Khakhar.
12. Sanro.

I would not have proposed any distinction in grouping were it not that of late the water-supply by means of channels in the villages of Bazar, Darsano Chano and Sanro has greatly deteriorated or has altogether failed and a considerable area has in consequence been thrown out of cultivation. In many cases landholders have incurred the expense of substituting well for flow irrigation. I think it is advisable in proposing new rates that these villages should be specially considered, and I have therefore placed them, together with the village of Kakhar, in a separate group. Khakhar is a poor village in which the occupied area is at present only seven acres.

Rates.

12. The rates I would beg to propose are as follows:—

								1st Group.	2nd Group.
<i>Kharif.</i>								Rs. A.	Rs. A.
Gardens of fruit-trees and vegetables	...	...	...	...	...	...	...	3 0	2 8
Lands under flow irrigation from channels	...	...	...	...	...	...	...	2 8	2 0
<i>Rabi.</i>									
Land under flow irrigation from channels	...	...	...	...	...	...	...	3 0	2 8
<i>Barani.</i>									
Kharif	...	...	...	...	...	...	...	1 4	1 0
Rabi	...	...	...	...	...	...	...	1 8	1 4

I have little to guide me in proposing rates for the Malir lands. There is no other tract of country in Sind with a similar system of irrigation. As far as I can ascertain, the only settled villages in which there is cultivation under temporary wells are Jhangar and Rohri of the Sehwan Taluka and Kohistan of the Tatta Taluka, but these villages are not to be compared in position and resources with those under report. For the land watered by temporary wells in the Sehwan villages, a rate of Rs. 2-8-0 per acre is levied under the revision settlement for that taluka, sanctioned in Government Resolution No. 7609, dated 27th December 1876, and Re. 1-12-0 annas is the rate specially sanctioned by Government Resolution No. 4254, dated 28th May 1884, for the same description of land in the village of Kohistan.

In submitting proposals for assessing temporary wells in the last-named village, it was brought to the notice of Government that, in the rules for the administration of Irrigational Settlements, it is expressly laid down that lands watered from wells are not liable to any extra assessment on that account, and in the Resolution, No. 4254 of 1884, above quoted, sanctioning the proposals submitted, the distinction is drawn between assessment which represents a payment for the use of water and assessment which takes into account facilities of irrigation such as are known to exist in the Malir lands. The rate of 3 Rupees, which I have proposed in the Malir villages of the 1st group, for land with a water-supply easily utilized by means of temporary wells, is double my proposed rate for dry crop (barani) land. This difference in rating does not adequately represent the difference in value between the two descriptions of land; but the Malir lands are at present so very lightly assessed, that the imposition of a rate determined with reference to natural resources and general capabilities would cause a very great increase on present payments.

I have proposed for land watered from channels the same rates, *viz.*, Rs. 3-0-0 and Rs. 2-8-0 as those proposed for land watered from temporary wells. Ordinarily land with a flow supply, because the expenses of cultivation are so much less, is rated from 4 to 8 annas per acre higher than land with a lift supply and in foregoing the higher rate, due allowance would, in

my opinion, be made for the expenses, which, as shown in para. 10 of this report, are attendant on utilizing the water by means of channels in the Malir lands.

The rates I have proposed for barani lands are those sanctioned for all the coast talukas of the Karachi Collectorate.

13. The allowance for clearance of private canals usually granted in talukas under Irrigational Settlement is 3 annas per acre for lands under flow irrigation. Clearance. I would beg to propose that in consideration of the exceptional cost of clearance, explained in para. 10, of some of the irrigational channels in the Malir lands, I be permitted to grant allowance up to a limit of 8 annas per acre.

14. Accepting, for the purposes of estimate, the area of cultivation recorded by the classers of this Department, the following is the result of the application of the proposed rates to the cultivated area of the villages of each group. Estimated result of proposed rates.

	Acres.		Rs.	Rs.
1st Group.	Garden	2,024 @ Rs. 3 0=	6,072	
	Flow kharif	178 „ 2 8=	445	
	Do. rabi	1,121 „ 3 0=	3,363	
	Barani kharif	294 „ 1 4=	367	
	Total...	3,617		10,247
2nd Group.	Garden	436 „ 2 8=	1,090	
	Flow kharif	219 „ 2 0=	438	
	Do. rabi	... „ ... =	...	
	Barani kharif	24 „ 1 0=	24	
	Total...	679		1,552
Total Acres...		4,296	Total Rs...	11,799

Deduct—Estimated amount on account of channel clearance allowance, *vide* Rule 5 of the Rules for the administration of Irrigational Settlements, say,Rs... 606

Estimate of Net Collections Rs... 11,193

The village officers' cess is included in the above figures. The cess is one anna in the rupee and the collections of revenue should therefore amount to Rs. 10,535 and the cess to Rs. 658.

The area of barani cultivation accepted for the purposes of the estimate above given is exceptionally small and would no doubt be largely exceeded in years of favorable rainfall.

Appendix C. of this report shows the result of the application of the proposed rates to the cultivated area of each of the villages under report. Deducting the allowance for clearance of channels and the village officers' cess, the increase of revenue by the proposed rates would be 80 per cent. This increase may at first sight appear large, but it would be derived almost entirely from the valuable garden lands which are now so inadequately assessed. It will be remembered that, in the Malir lands, assessment, under the new Irrigational Settlement, will be levied on cultivated survey numbers only, instead of as now, on all land in occupation. At present the area of occupation exceeds the area of cultivation by 2,098 acres.

The new rates are in themselves very moderate, the extreme lightness of the present rates precludes an enhancement such as would fully assess the land for its value and its inherent advantages combined.

15. The Appendices to this report consist of—

A.—A sketch map of the portion of the Malir Tapa which it is proposed to bring under survey settlement.

B.—Nominal list of villages showing the groups in which each is placed.

C.—Statement showing the result of the application of the proposed rates to the cultivated area of each village and showing also the area at present in occupation and the assessment levied thereon.

16. I would beg to recommend that the above proposals have effect from the revenue year 1889-90.

I have the honor to be,

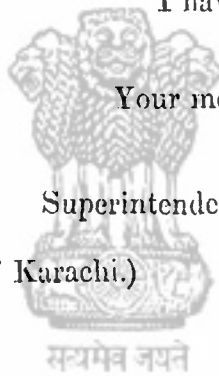
Sir,

Your most obedient Servant,

H. K. DISNEY,

Superintendent, Sind Revenue Survey.

(Through the Collector of Karachi.)



APPENDIX B.

Nominal list of villages into which the surveyed portion of the Malir Tapa of the Karachi Collectorate is divided showing the groups in which each is placed.

No.	Names of Villages.
<i>1st Group.</i>	
1.	Landhi.
2.	Sharabi.
3.	Rerhi.
4.	Phi hai.
5.	Drigh.
6.	Thano.
7.	Maharan.
8.	Malh.
<i>2nd Group.</i>	
9.	Darsano Chano.
10.	Khakhar.
11.	Sanro.
12.	Bazar.



H. K. DISNEY,
Superintendent, Sind Revenue Survey.

APPENDIX C.

Statement showing for the undermentioned villages of the Malir Tapa of the Karachi Collectorate, the area of cultivation recorded at the survey in the year 1887-88, and the assessment thereon, according to the proposed Irrigational Settlement. Also for the same year the area held on leases with the assessment thereon according to present rates.

Number	Name of new Village	Name of old Village from which formed.	Estimated actual cultivation in 1887-88.				Assessment on cultivation on preceding column as per Irrigational Settlement proposed.	Area held under lease in 1887-88 according to new survey registers.	Previous to Settlement.		Percentage difference by proposed rates.		Remarks.
			Area irrigated by kacha wells (Wats).	Area irrigated by channels (Wangabs).	Band Barani land.	Total cultivation.			Area held in 1887-88 as recorded by the Mukhtakar.	Total assessment on area in preceding Col. 10.	Increase.	Decrease.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1st Group.													
1	Landhi	Portion of Malir	120	408	9	537	1,526	840	840	823	85	...	
2	Sharahi	Do.	3	160	74	237	581	518	518	425	37	...	
3	Rerhi	Do.	4	...	15	19	31	45	45	28	11	...	
4	Phirai	Do.	13	217	89	259	739	424	424	396	87	...	
5	Drigh	Do.	12	...	...	12	36	77	77	77	...	53	
6	Thaxo	Do.	1,034	514	102	1,650	4,751	1,891	1,891	1,842	158	...	
7	Maharan	Do.	1	...	55	56	72	175	175	88	...	18	
8	Malia	Do.	837	...	...	837	2,511	1,261	1,261	1,150	122	...	
Total of the 1st Group Villages			2,924	1,299	294	3,617	10,247	5,251	5,231	4,809	116	...	
2nd Group.													
9	Darsano Chano	Portion of Malir	280	94	12	386	900	563	563	523	72	...	
10	Khakhar	Do.	1	...	6	7	8	7	7	7	14	...	
11	Sauro	Do.	112	49	6	167	384	306	305	305	26	...	
12	Lazar	Do.	43	76	...	119	269	287	287	212	23	...	
Total of the 2nd Group Villages			436	219	24	679	1,552	1,163	1,163	1,047	48	...	
Grand Total			2,460	1,518	318	4,296	11,799	6,394	6,394	5,856	102	...	

H. K. DISNEY,
Superintendent, Sind Revenue Survey.

No. 1362 of 1889.

REVENUE DEPARTMENT.

From

C. B. PRITCHARD, ESQUIRE, C. S., C. S. I.,
Commissioner in Sind.

To

H. K. DISNEY, ESQUIRE,
Superintendent, Sind Revenue Survey.

Commissioner in Sind's Office,
Karachi, 18th April 1889.

SIR,

With reference to your No. 305 of 1889, dated the 6th instant, submitting proposals for the settlement of ten villages of the Malir Tapa, I have the honor to request that you will furnish me with further information regarding the rates which you propose to levy. The proposals contained in para. 13 of your report are as follows :—

	1st Group.	2nd Group.
<i>Kharif.</i>	Rs. A.	Rs. A.
Gardens, fruit-trees and vegetables.....	3 0	2 8
Lands under flow irrigation from channels. .	2 8	2 0
<i>Rabi.</i>		
Lands under flow irrigation from channels. .	3 0	2 8
<i>Barani.</i> सयमेव जयते		
Kharif.....	1 4	1 0
Rabi	1 8	1 4

As there is no special mention of land under well irrigation, it is presumed that all land irrigated from wells has been placed under the head "gardens." But is it the case that only garden crops are grown under wells? Suppose, for instance, that a crop of juari was grown under well irrigation, under what head would the assessment be levied? Similarly, if garden crops were grown under flow irrigation in the kharif season, would you propose to place upon the land the rate prescribed for gardens, or that prescribed for kharif under flow irrigation? I would suggest the following classification :—

1. Gardens (under any form of irrigation).

Kharif.

2. Under well irrigation.
3. Under flow irrigation from channels.
4. Barani.

Rabi.

5. Under well irrigation.
6. Under flow irrigation.
7. Barani.

If the "gardens" are of a permanents character, it appears to me that sufficient difference has not been made between the rates for "gardens" and those for ordinary cultivation. But if all the irrigated land is capable of producing garden crops, from time to time, it would perhaps be advisable not to impose any differential rate on account of the kind of crop grown.

2. Although the rates may in themselves be light when the quality of the soil, the irrigational facilities, and the position of the villages are taken into consideration, yet I am of opinion that it would be unjustifiable to make so large an increase as 80 or 90 per cent. in the assessment at one time. I request therefore that you will submit a revised table of rates by which the increase will be reduced to 50 per cent. The new rates will be introduced for a period of five years, and at the end of that time the rates may be enhanced if a further increase is considered desirable.

I have the honour to be,

Sir,

Your most obedient Servant,

C. B. FRITCHARD,
Commissioner in Sind.



No. 337 OF 1889.

From

H. K. DISNEY, ESQUIRE,
Superintendent, Sind Revenue Survey.

To

C. B. PRITCHARD, ESQUIRE, C. S. I.,
Commissioner in Sind.

*Superintendent's Office,
Karachi, 23rd April 1889.*

SIR,

I have the honor to acknowledge receipt of your No. 1362, dated 18th April 1889.

2. I beg to state that, in my proposals for the settlement of the villages of the Malir Tapa, all land irrigated from wells has been placed under the head "Gardens." The supply from wells is constant and allows of a succession of garden crop. A little juari is grown in garden land but, it may be said, only for purposes of fodder, the crop being cut in its green state and not allowed to come to ear. As the water-supply is quite under the control of cultivators and admits of a succession of crops, there would appear to be no necessity to impose a differential rate on account of the kind of crop grown.

3. In land irrigated from channels, as I have pointed out in para. 4 of my proposals for the settlement of the Malir lands, the supply varies. Some channels, in years of scanty rainfall, become dry in January or February, allowing only of a kharif crop being grown, and here the kharif rate for flow should be levied.

A kharif rate on well cultivation would at times be suitable as providing for the contingency of a well falling in before a second crop could be taken.

4. In a classification of rates it would seem necessary to specify "gardens of fruit-trees." Some fruit-trees, mangoes for instance, from the time the underflow has been tapped, require no help from irrigation and with a classification affecting only irrigated gardens, unirrigated fruit-trees might escape assessment.

5. I beg as directed in para. 2 of your letter under reply, to submit a revised table of rates, by which the increase on present assessment in the Malir lands will be reduced to 48 per cent. The amended rates bring the increase as near as it can well be brought to the limit prescribed by you. Under the explanation given in the preceding para. I have ventured to alter, under the head of "gardens," the classification suggested by you. The revised rates are as follows :—

					1st Group. 2nd Group.			
					Rs.	as.	Rs.	as.
1.	Gardens of fruit-trees	...	...	..	2	8	2	0
<i>Kharif.</i>								
2.	Under well irrigation	...	...	...	2	0	1	10
3.	„ flow irrigation from channels	...	...	...	2	0	1	10
4.	Barani	...	...	...	1	4	1	0
<i>Rabi.</i>								
5.	Under well irrigation	...	...	...	2	8	2	0
6.	„ flow	...	...	...	2	8	2	0
7.	Barani	...	...	...	1	8	1	4

6. The following is the result of the application of the revised rates to the cultivated area of the villages of each group :—

		Acres.		Rs.	Rs.
1st Group.	1.	Gardens of fruit-trees	862 @ Rs. 2	8 =	2,155
		<i>Kharif.</i>			
	2.	Under well irrigation	...	...	...
	3.	„ flow irrigation from channels.....	178	„ 2 0 =	356
	4.	Barani	294	„ 1 4 =	367
		<i>Rabi.</i>			
	5.	Under well irrigation	1,169	„ 2 8 =	2,923
	6.	„ flow „	1,114	„ 2 8 =	2,785
	7.	Barani	...	...	...
			3,617		8,586
2nd Group.	1.	Gardens of fruit-tress	101	„ 2 0 =	202
		<i>Kharif.</i>			
	2.	Under well irrigation	...	...	...
	3.	„ flow irrigation from channels.....	219	„ 1 10 =	356
	4.	Barani	24	„ 1 0 =	24
		<i>Rabi.</i>			
	5.	Under well irrigation	335	„ 2 0 =	670
	6.	„ flow „	...	...	...
	7.	Barani	...	...	...
			679		1,252
		Total Acres...	4,296	Total Rs...	9,838
		Deduct—Estimated amount of clearance allowance.....	„	...	606
				Estimate of net collections Rs.	9,232

The village officers' cess is included in the above figures. The cess is one anna in the rupee, and the collections of revenue should therefore amount to Rs. 8,689 and the village cess to Rs. 543.

I append a statement showing the result of the application of the revised rates to the cultivated area of each of the villages under report. Deducting the allowance for channel clearance, and the village officers' cess, the increase of revenue by the proposed revised rates would be 48·38 per cent.

I have the honor to be,

Sir,

Your most obedient Servant.

H. K. DISNEY,
Superintendent, Sind Revenue Survey.

APPENDIX C.

Statement showing for the undermentioned villages of the Malir Tapa of the Karachi Collectorate, the area of cultivation recorded at the late survey in the year 1887-88, and the assessment thereon, according to the proposed Irrigational Settlement. Also for the same year the area held on leases with the assessment thereon according to present rates.

Number.	Name of new Village.	Name of old village from which formed.	Estimated actual cultivation in 1887-88.				Assessment on cultivation on preceding column as per Irrigational Settlement proposed.	Area held under lease in 1887-88 according to new survey registers.	Previous to Settlement.		Percentage difference by proposed rates.		Remarks.
			Area irrigated by kacha wells (wais).	Area irrigated by channels (wangis).	Barani land.	Total cultivation.			Area held in 1887-88 as recorded by the Mukhtiyarkar.	Total assessment on area in preceding Col. 10.	Increase.	Decrease.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1st Group.													
1	Landhi	...	120	408	9	537	1,262	840	840	823	53	...	...
2	Sharabi	...	3	160	74	237	499	518	518	425	17	...	...
3	Rebhi	...	4	...	15	19	29	45	45	28	4	...	...
4	Phibai	...	13	217	39	269	624	424	424	396	58	...	...
5	Drigh	...	12	...	...	12	30	77	77	77	...	61	...
6	Thano	...	1,034	514	102	1,650	3,978	1,891	1,891	1,842	116	...	...
7	Maharan	...	1	...	55	56	71	175	175	88	...	19	...
8	Malh	...	837	...	...	837	2,099	1,261	1,261	1,130	85	...	...
Total of the 1st Group Villages			2,024	1,299	294	3,617	8,586	5,231	5,231	4,809	79	...	...
2nd Group.													
9	Darsano Chano	...	280	94	12	386	725	563	563	523	39	...	...
10	Khakhar	...	1	...	6	7	8	7	7	7	14	...	...
11	Sauro	...	112	49	6	167	310	306	306	305	2	...	...
12	Bazar	...	43	76	...	119	269	280	287	212	...	1	...
Total of the 2nd Group Villages			436	219	24	679	1,252	1,136	1,163	1,047	20	...	...
Grand Total			2,460	1,518	318	4,296	9,838	6,387	6,394	5,856	68	...	...

H. K. DISNEY,
Superintendent, Sind Revenue Survey.

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Superintendent Sind Per: S.

