3 0 DEC 2009

No. 15 or 1887.

From

LIEUTENANT-COLONEL T. M. WARD,

Acting Superintendent, Sind Revenue Survey.

To

## THE COMMISSIONER IN SIND.

Superintendent's Office,

Camp Ha'a, 10th January 1887.

Sir,

I have the honor to submit the Annual Progress Report of the Sind Revenue Survey and Settlement Department for the year 1885-86.

2. The following changes and promotions took place amongst the gazetted officers of the Department during the year:—

Mr. W. J. Wilkins retired from the service on the 3rd June 1886.

Mr. G. Berrie was promoted to the rank of Assistant Settlement Officer, from the 4th June 1886.

Messrs. W. S. Cole and W. D. Wilkins were promoted from the 3rd to the 2nd grade of Assistant Superintendent, from the 20th October 1886.

Mr. J. F. Nash proceeded on furlough to Europe for 18 months, from the 13th November 1885.

Mr. L. W. Seymour was absent on sick leave, from 2nd May 1885.

Mr. C. E. Biddulph was absent on medical certificate, from 17th March 1885.

Mr. W. D. Wilkins was absent on privilege leave, from 1st August to 20th October 1886.

Mr. W. S. Cole was absent on privilege leave, from 9th August to 12th October 1886.

Lieutenant-Colonel T. M. Ward, appointed by Government Resolution No. 5963, dated 20th August 1886, to act as Superintendent, Sind Revenue Survey, during the absence of Colonel Anderson, joined the Department on the 11th October 1886.

Jonp15993 30.12.09 3. At the close of the year the number of officers present with the Department was as under:—

Grade.	Present for duty.	Attached for duty.	On leave.	Total.
Superintendent	1	1		2
Assistant Settlement Officer	1	The section of		1
" Superintendents	5	· ·	3	8
Total	7	1	8	11

# Measurement.

4. Measurements, for original and revised Settlements, were carried on in the following Talukas:—

Karachi Coll	lectorate	{*Gho:	rabari—Original. chi ",	told
Hylierabad	1 10 10 10 10 10 10 10 10 10 10 10 10 10	The same of the same of the	our Khas—Revisio	<b>n.</b>
Shikarpur	, ,, ,, ,, ,,	*Ubar	aro "	

Total Miles

500.5

In the Talukas marked with an asterisk the survey of the whole Taluka was completed.

Besides the above some scattered measuring work was cleared off in the following Talukas which have been shown in previous reports as complete: this work having been rendered necessary on account of land having been taken up for cultivation subsequent to the completion of our regular operations:—

Ratadera—Jacobabad—Jati—Naushahra Abra—Mirpur Mathela—Badin—Tatta—Shahbandar—Tanda Baga—Hyderabad.

The survey in the Talukas of Tatta and Hyderabad was that of land formerly Jagir, but now lapsed to Government.

5. The following table shows the year's work for each Establishment :-

the residence at the second second

to the state of th

	of mea-			Measu	rements.	in order	2 3	ad.	
Superintending Officers.	e No.		Average No, of surers, No. of Villages, Survey Nos.		No. of Waslas.	Arable Acres.	Unarable Acres.	Total Acres.	Remarks.
1 2	3	4	5	6	7	8	9	10	
A Mr. B. G. Gilbert-Cooper	21.0	140	10,785	26,551	89,902	57,511	1,47,413		
C Mr. W. D. Wilkins	23.0	97	8,903	43,037	1,20,825	20,956	1,41,781	516 A.	
D Mr. W. A. Boulton	20.37	155	9,899	56,653	53,321	1,90,971	2,44,292	W 5 *	
E Mr. W. J. Wilkins	10:15		7,995	30,319	32,979		32,979		
F Mr. G. F. Mathieson	10:34		10,105	60,152	41,030		41,030	Estabash	
G Mr. G. Berrie	11.0	7	6,934	29,166	31,791	15,808	47,599	ments.	
H Mr. W. S. Cole	20.75	62	10,546	37,719	77,590	89,911	1,67,501	AW	
Total	116:61	461	65,167	2,83,597	4,47,438	3,75,157	8,22,595	2-75 P	
Previous year	179-0	490	84,879	4,30,049	4,48,291	11,17,250	15,65,541		
Decrease	62:39	29	19,712	1,46,452	853	7,42,093	7,42,946	-	

The decrease under each head is thus shown to be very considerable. It is, however, fully accounted for by the lesser strength of the Department, consequent on the contracted area of the Province which now remains to be dealt with. Column 3 of the above Statement shows the average number of measurers employed to have shrunk from 179 to less than 117.

- 6. The work entered against the E F & G Classing E tablishments was done by measurers attached to them. Besides the ordinary measurement operations referred to in para 4 the Establishments were employed during a part of the year on various scattered pieces of work of an unusual character which require notice. One Establishment was employed during 3 months of the cold weather in measuring all the Jagir lands and collecting information as to the cultivation and tenure of Government lands situated in the Kohistan or Hilly Region of the Karachi Collectorate; two were occupied in measuring up the scattered pieces of cultivation which lie amongst the sand hills of the Thar and Parkar Desert; and one was employed in measuring the 1st and 2nd Class Jagirs in one Taluka—an experimental measure taken in hand with the view of testing the advisability of similar operations being extended to all Jagirs in Sind. Much of this work being new to the men employed, some time was consumed in teaching them what was required, and a further loss of time was necessarily incurred in travelling, owing to the work now under mention being in all cases in scattered positions. Still, however, the average outturn per man exceeded that of last year, as will be seen from the next para.
- 7. The average above referred to for the year under report is contrasted with that of the previous year in the statement below:—

	Area	per	man	measured	1884-85 1885-86	Nos. 474 560	Acres. 2,505 3,837
前がないない		27			Increase		1,332
		THE PARTY			THOLOGOO	00	T,002

This increased average appears to be mainly attributable to the unusually large size of the fields measured in the Thar and Parkar District: in Umarkot they averaged 11 acres and in the Chachra Taluka 17.

8. The subjoined statement shows in abstract the test taken of the work entered in para 5 shove:—

		Tested	by Ass	istant.	Teste	d by N resters.	ative	To	otal Tes	st.	rement	
Establishment,	Superintending Officers.	Survey Nos.	Acres.	Average error.	Survey Nos.	Acres.	Averag error.	Survey Nos.	Acres.	Average error.	Percentage of measurement as regards Nos.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13
A C	Mr. B.G. Gilbert-Cooper Mr. W. D. Wilkins	473	7,664	17		100 s	A. G. 	715 473	7,664	17	7 5	
E	Mr. W. A. Boulton Mr. W. J. Wilkins Mr. G. F. Mathieson	529	2,969	18	1,334 1,161	5,306 5,304	15	703 1,334 1,161	5,306 5,304	15	17	Classing es-
H	Mr. G. Berrie	408	•••	22	1,037	4,567 764	1 1	1,037 506	Sector !		5	J et
M(l)	Total	2,125	19,502	17	3,804	16,976	17	5,929	36,478	17	9	

The figures in column 11 of the above statement show that the general accuracy of the work was very satisfactory. The amount of test was sufficient but perhaps somewhat less than is usual in the case of the C & H Establishments.

9. Form No. 2 attached gives in detail the result of the test of each Establishment. The number of fields examined of which the difference between test and original measurement exceeds 2 per cent. is a very small proportion of the whole number tested.

19., The distribution of days in each Establishment is given below :-

			Percer of Ye	tage ear		Marsa Mar	Percent	age o	f Fiel	d sea	son.			18 1.
Establishment.	Superintending Officers.	In Field.	In Recess.	Measurement.	Boundary mark Inspection.	Measuring Boundary disputes, base lines, &c.	Sickness.	Non-co-operation.	Rain.	Travelling.	Indoor Work.	Leave, holidays, &c.	Remarks.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
•	A	Mr. B.G. Gilbert-Cooper	54	46	70	9	8				11	•••	2	
	C=	Mr. W. D. Wilkins	57	43	62	12	10		2	•••	10		4	age (1)
	D	Mr. W. A. Boulton	56	44	53	10	16		4		13		0 4	
	E	Mr. W. J. Wilkins	56	44	45	3	36	•		•••	11	•••	5	1 4 3
	F	Mr. G. F. Mathieson	54	46	53	3	38	1	•••		1		4	Classing es-
	G	Mr. G. Berrie	58	42	42	1	45				10		2	Class
	H	Mr, W. S. Cole	55	45	56	11	24				7		2	*
20		Average	. 56	44	, 55	7	25		1		9		3	
		Previous Year	54	44	51	12	56	1	1		7		2	
		Increase	2		4		***	1			2		1	
	***	Decrease					1	1	3					

There is but little difference between the averages of the year now reported on and the previous one, the most important being that more days were devoted to actual measurement in 1885-86 than in 1884-85.

11. The Field season as usual extended over the period between the 1st November and 15th May. The health of both Officers and men was on the whole good, and no epidemic or general unhealthiness of any district occurred so as to interfere materially with the progress of the work.

# Classification.

12. The three Classing Establishments were employed during the whole season in preparing the following Talukas for the introduction of temporary settlement:—

Shikarpur Co	ollectora	te	Mirpur Mathela. Ubaura.
Hyderabad	13		Badin.
Karachi	77 J	138	Jati. Shahbandar.

The field work of all these Talukas except Shahbandar was completed, and settlement reports for them have been subsequently submitted.

13. The work of the three Establishments fully employed, and of one partly employed in so-called classification is contrasted below with that of the previous year, and shows an increase under every head veept that of "arable acres":—

£8.	11.	Jo	d 100	Cl	assification	on.		
Establishments.	Officers in charge.	Average No. classers.	Villages.	Survey Nos.	Arable Acres.	Unarable Acres.	Total Acres.	Remarks.
1	2	3	4	5	6	7	8	9
D	Mr. W. A. Boulton	6.0	97	7,185	40,011		40,011	
E	Mr. W. J. Wilkins	16.90	200	31,147	1,28,329	12,51,744	13,80,073	
F	Mr. G. F. Mathieson	16.70	170	29,765	1,13,899	3,88,609	5,02,508	
G	Mr. G. Berrie	[16.0	150	26,719	1,14,367	3,46,490	4,60,857	
	Total	55.60	617	94,816	3,96,606	19,86,843	23,83,449	1
	Previous year	48.0	394	86,448	4,13,520	7,26,111	11,39,631	
	Increase	7.60	223	8,368	109	12,60,732	12,43,818	
	Decrease				16,914			

The large increase under the head of "Unarable acres" is chiefly in the outturn of the E Establishment which was employed in the Mirpur Mathela Taluka of the Shikarpur Collectorate, where the area of uncultivated land is very extensive.

14. The average work performed by each classer in the field is contrasted below for the last two years:—

Average per	man for 1884-85	Nos. 1,801 1,705	Acres. 23,742 42,868	
and the second	Increase	,,	19,126	
a print the man dis-	Decrease	96	,	

THE STREET, STREET

Last year's work shows therefore a smaller number of fields classed by each man, with a corresponding increase of area.

15. The subjoined statement gives the test taken by the Assistants of the work entered in the statement contained in para 13. The detail of the test is given in Appendix No. 6.

	The state of the s	11.74	Amount o	of test.	学生"。	ifica- Nos.	
Establishment.	Officers in charge.	Nos.		Averag per R	ge error lupee.	e of class s regards	Rēmarks.
Establ		Surrey	Acres.	Soil.	Water.	Percentage of classifica- tion test as regards Nos.	
1	2	3	4	Б	6	7	8
D	Mr. W. A. Boulton	621	3,622			9	
E	Mr. W. J. Wilkip	7,171	32,771			23	
F	Mr. G. F. Mathieson	4,566	23,372			15	
G	Mr. G. Morrie	4,137	19,561		•••••	15	era, a cara
- General	Total	16,495	79,326			17	

16. Subjoined is a Statement of the distribution of days in the Classing Establishments:—

*		Percen of ye	atage		P	ercenta	ge of fi	eld seas	on.				
Establishments.	Officers in charge.	In field.	In Recess.	Classification.	Boundary mark inspection.	Measuring boundaries, &c.	Sickness.	Non-co-opera- tion,	Rain.	Travelling.	Indoor work.	Leave, holidays,	Remarks.
1	2	3	4.	5	6	- 7	8	9	10	11	12	13	14
6	Mr. W. A. Boulton	33	67	36	2	51		555991 4		5		2	
E	Mr. W. J. Wilkins	56	44	45	10	30	2	(a)( <b>***</b> *)(b)	•••	8		5	
	Mr. G. F. Mathieson	54	46	44	4	41	1	Sep <b>res</b> 630		3	3	4	
G	Mr. G. Berrie	. 58	42	37	17	36	1			7		- 2	
	Ayerage	.50	50	[44	8	39	ada 1	1	***	6	-1	3	egitt.
	Previous year	56	44	39	136	39	Q		1	7	1	3	13000
3. 林	Increase		6	а			7 1	1		1110	***	134	
	Decrease	6			· 2				1	1	•••		0

The differences between the figures for this year and last are unimportant, and do not call for special notice.

#### Recess work.

17. The whole of the recess work for the year was completed during the required date: the recess season was as usual, from the 15th May to 31st October.

## Settlement.

18. During the year under report temporary settlements were proposed for the following Talukas, and the maps, village registers, &c., of all those that were sanctioned from 1886-87 were furnished to the Revenue Department before the close of the year:—

Shikarpur Co	llectora	. { Ubaura	ect from 1886-87.
Hyderabad	33	Badin (116 villages)	Administrative section (CA)
,,	,,	" (54 villages) … } With effe	act from 1887 SS
Karachi	,,	Jati	ect from 1001-00.

Proposals were also submitted for the settlement of the Kohistan portion of the Karachi District, but these proposals have not at the time of writing been approved.

- 19. Reports were also furnished for the measuring operations effected in the Desert portion of the Thar and Parkar District, and on the measurement of the Jagirs of the 1st and 2nd class, both of which operations were carried on during the Field season as experimental measures, as noticed in para. 6 above.
- 20. The maps, registers, &c., of the Hyderabad Taluka, for the settlement of which, from 1886-87, sanction was received last year, were prepared and furnished to the Mukhtyarkar during the year under report.
- 21. Consequent on the introduction of Settlement the strength of Tapadars has been much increased and in accordance with the orders on the subject, propositions for new charges, &c., have up to date been submitted for the following Talukas; these have all been sanctioned with the exception of those for the Mirpur Mathela and Ubaura Talukas.

Karachi Collectorate ... 

Manjhand.
Tatta.
Mirpur Batora.
Sijawal.

Guni.
Hyderabad.
Tando Allahyar.
Hala.
Shahdadpur.
Naushahra.
Kandiara.
Mora.
Badin (for 116 villages).

Naushahra Abra. Ratadera. perfect, and do not co Larkana. Kambar. Labdarya. Nasirabad. Shikarpur Collectorate Mehar. Kakar. Ghotki. Shikarpur. Mirpur Mathela. Ubaura. (Shahdadpur. Jacobabad. Frontier District Thul. Maps, Lithographic Work, &c. During the year the following maps have been issued to the revenue authorities :-Lithographic Copies. Shikarpur Collectorate....... { Ghotki, maps of 135 villages. Shikarpur, ,, 71 Hyderabad ,, ...... Hyderabad, Frontie District ..... Thul, 75 ,, Besides the above, hand copies of the following have been prepared and Mukhtyarkars for immediate use preparatory to the issue of printed maps :-Shikarpur Collectorate ....... Shikarpur Mathela, 108 , Shikarpur, ,, 15 ,, Hyderabad ,, {Hyderabad, ,, 12 ,, Badin, ,, 116 ,, the enterior Palatics; there has Frontier District...... Thul, ,, 5 ,, 23. The following Taluka maps were prepared and having been photozipcographed, copies were issued to all the offices in which they are required :-Hyderabad Collectorate...... Hyderabad (Shikarpur. Ghotki. Shikarpur (Kakar.

24. In addition to the copies of the village registers usually supplied to the Collector and Mukhtyarkars, copies for the use of Tapadars of the following Taluka have been prepared and issued:—

Hyderabad Collectorate ...... Hyderabad

# Tybun the word signal odd and Cost of the Survey. is a cost foreign !

25. The cost of the survey for the year was as follows:—

volum anw

whole of the year under report the derive w J. W. M. Anderson, the late Superingendent.	Tenous to send:
Sind Survey charges	
Share of expenditure on paid labourers	
chargeable to Government	30,699
Total Cost	1,92,440

26. There is a saving on the sanctioned grant for the year as follows:—

	Contraction of the Contraction o	
	Saving	27,057
Deduct Sind Survey	charges	1,61,741
Sanctioned grants .		1,88,798
		Rs.

- 27. The unadjusted balance at the commencement of the year was Rs. 3,54,585-5-9. Bills for Rs. 1,54,744-5-5 were sent in during the course of the year; and at the close the balance against this Department, including the advance received during the year (Rs. 97,725-11-6), tood at Rupees 2,97,566-11-10.
- 28. Since the close of the year bills for Rs. 91,501-13-5 have 'een sent in for adjustment, and I hope during the next few months to be able to submit bills for Rs. 21,706 more. On submission of the bills last referred to, there will remain no arrears of boundary mark accounts that can be adjusted; the balance that will then remain will be on account of Talukas still in progress, and for them the accounts cannot be made out until the whole of the measurement, &c., is completed and the Talukas ready for settlement.
- 29. The cost per acre for the year is shown below compared with that of the previous year:—

	1884-85.		1885-86.		86.	
	Rs.	AS.	Ps.	Rs.	As.	Ps.
Measurement		10 10 TO THE REAL PROPERTY.	9	0	2 0	5
Both operations	0	2	6	0	2	11

The cost per acre may be expected to have reached in 1884-85 about the lowest figure attainable, and slight fluctuations above and about that figure may be anticipated for the future. In the year under report the cost incurred per acre was a little higher than has been the case for the last two or three years.

30. The usual appendices, Nos. 1 to 14 are attached to this report, and gives all the necessary information regarding the year's work.

- 31. A sketch map is hereto attached showing the lands brought under revision and temporary settlements up to date, and the land measured but not yet brought under settlement.
- 32. During the whole of the year under report the Survey was under the charge of Colonel J. W. M. Anderson, the late Superintendent.

An All of a higher man from the property of the company of the com

al like reason I to propose no stalina elemente propieta a messagua de la librar el la mante de la companya de La rivole de la companya de la comp La rivole de la companya de la comp

If hereafter that all it has the principalities and the collection of the description of the all the second of

lasti dhin keringarun melek diredhe i megali milimpe ma kempa P. All

At another than the body are body and are both the server of their real real real terms of the server and the server of the serve

her two a plat of ballactic one Al

I have the honour to be, Sir, Your most obedient Servant,

T. M. WARD, Lieut.-Colonel, Acting Superintendent, Sind Revenue Survey.

REVENUE DEPARTMENT.

Commissioner's Office,

On the Indus, 10th February 1887.

# Submitted to Government.

- 2. There is very little which calls for remarks by the Commissioner. The work of the Department has progressed satisfactorily in all respects, and the results have been very concisely stated by the Acting Superintendent.
- 3. The number of officers present for duty at the close of the year was seven as compared with eight, at the close of last year; there was also a considerable decrease in the average number of measurers employed, and, as might be expected, a proportionate decrease in the outturn of work done by the Department.
- 4. The survey of two talukas was completed during the year, and carried on in three others, and besides this scattered measuring work was done in ten talukas and the Kohistan of the Karachi District.
- 5. The outturn of measuring work per man shows a large increase over last year, the percentage test rose from eight to nine, and the average error discovered fell from twenty-one guntas per acre to seventeen, results which cannot but be regarded as very satisfactory.
- 6. The work of the classing establishments is also satisfactory and the field-work of four talukas was fully completed by them, and hat of a fifth partially.
- 7. Proposals for a temporary settlement of four talukas were submitted during the year. Reports were also submitted regarding operations in Thar and Parkar and in Kohistan, and on the experimental measurement of Jagirs of the first and second class in the Tando Bago Taluka. The work of supplying maps and registers, and submission of proposals for revision of Village Tappadars' charges was also kept up to date.
- 8. The sanctioned grant for the Sind Survey this year was Rs. 1,88,798, as against Rs. 2,07,349 in the previous year, and the result of the year's working shows a saving of Rs. 27,057 on the grant allotted.
  - 9. The unadjusted balance at the close of last year was Rs. 3,54,585-5-9, and this was reduced during the year, so that the closing unadjusted balance stands at Rs. 2,97,566-11-10, and bills for a further sum of Rs. 91,501-13-5, have been sent in since the close of the year.
  - 10. The cost of measurement and classification operations per acre has risen from two annas six pies in the previous year, to two annas eleven pies in the present, which is attributed to ordinary fluctuation.
- 11. The Commissioner would only add that the work of the Department appears to have been thoroughly satisfactory, and to reflect credit on Colonel Anderson, who was in charge during the year, and his Assistants.

H. N. B. ERSKINE, Commissioner in Sind.



No. 3088.

REVENUE DEPARTMENT.

## Bombay Castle, 18th May 1887.

Memorandum from the Commissioner in Sind, No. 347, dated 10th February 1887 — Forwarding, with his remarks, the annual progress report of the Acting Superintendent, Sind Revenue Survey, for the year 1885-86.

RESOLUTION .- Owing to a considerable reduction in the number of mea-

	Survey Nos.		Arable area in acres.	Unarable area in acres.	
1885-86			65,167	447,438	375,157
1884-85			84,879	448,291	1,117,250

surers employed the area measured during the year under review was as shown in the marginal table much less than in the previous year. Four measuring establishments, besides the measurers attached to three classing establishments, worked throughout the year. Some miscellaneous work was done by there in parts of ten talukas, and regular measurement operations were carried on in

the tálukás of Ghorabari and Karáchi in the Karáchi District, of Mirpur Khás and Tando Alahyár in Hyderabad and of Ubauro in Shikárpur. The survey of only the first and last named tálukás was completed.

2. From paragraph 8 of the report it appears that 9 per cent. of the survey numbers were tested by superior officers who discovered an "average error of 17 gunthás." This result is very satisfactory.

3. Three so called classing establishments were employed to oughout the year. Their work consisted of preparing for the introduction of a temp and settlement the talukas of Mirpur Mathelo and Ubauro in Shikarpur, Badin in Hyderabad and Jati and Shahbandar in Karachi. The field work in all of these, except the last, was completed before the close of the year, and settlement reports were

		Survey Nos.	Arable area in acres.	Unarable area in acres.	
1885-86		94,816	396,606	1,986,843	
1884-85	 	86,448	413,520	726,111	

submitted, the proposals contained in which have since been sanctioned. A fourth establishment was "partly employed" in so called classification: but it is not clear where that establishment worked. The area dealt with was as shown in the marginal table, considerably larger in the year under review than in the previous year: but the increase was confined to unarable land

and was chiefly in the Mirpur Mathelo Taluka in which the uncultivated area is very extensive. 17 per cent. of the survey numbers were tested, but the amount of error is not stated. It is probable that as in the previous years the test was confined to division of land, examination of record of occupancy, &c., but it so this should have been mentioned.

4. The total cost of the survey for the year was Rs. 1,92,440, made up of two items, viz., Rs. 1,61,741 for establishment and contingencies, and Rs. 30,699 on account of the Government share of the cost of erecting boundary marks. The former item being less by Rs. 27,057 than the sanctioned grant, Colonel Ward states that a saving of this amount was effected. It does not appear, however, from the present report what amount, it any, was separately sanctioned for boundary marks. An explanation of the man reshould be submitted by the Acting Superintendent of Survey. In future more detailed information should be given

about the unadjusted balances which, though a material reduction in them was effected during the year, amounted at its close to no less than Rs. 2,97,566-11-10, while directly after the close of the year additional bills for Rs. 91,501-13-5 were sent in. The cost of the survey per acre was 2 annas 6 pies for measurement and 5 pies for classification as compared with 1 anna 9 pies and 9 pies respectively in the previous year. An increase of 43 per cent, in the cost of measurement and a decrease of 44 per cent. in that of classification can hardly be termed ordinary fluctuations.

The result of the year's work is satisfactory.

J. DE C. ATKINS, Under Secretary to Government.

The Commissioner in Sind.

The Superintendent, Sind Revenue Survey,

The Survey and Settlement Commissioner,

The Accountant General,

The Public Works Department of the Secretariat, Irrigation,

The Editors' Table, Bombay,
The Branch Editors' Table, Poona, care of the Collector of Poona,

The Editor and Proprietor, Dhárwár Vritt, for his own use and for circulation to other editors of newspapers in Dhárwár,

The Government of India,

The Secretary of State for India. By letter.

No.

of 1887.

Copy for arded for information and guidance to