

to the end of March in the Roha Táluka, and then in April and May in the Máhim and Sháhápúr Tálukas.

The working days show an increase over the previous season of 4 per cent. The travelling days have increased by 4 per cent. owing to the establishment having been employed in four tálukas.

16. The "H" Establishment, under the immediate control of Nímtandár Swamirao Jairao Betgiri, worked in the Mahád, Roha and Máhim Tálukas.

The distribution of working and non-working days gives a percentage of the former, inclusive of in-door work, of 78 against 60 of the previous season, a very satisfactory increase of 18 per cent.

17. Nímtandár Hari Gopal Mavande was in charge of the "I" Establishment, which was employed in the Mahád Táluka up to the end of February 1899, and from then up to the end of the season in the Roha Táluka.

The working days show a gain in the present season of 9 per cent. or 86 against 77 of the previous season. The improvement in the number of working days is in great part due to the decrease of days spent in travelling.

18. The "J" Establishment (formerly designated the Phálñi Establishment) was in direct charge of Nímtandár Ramchandra Sakham Avchat and worked in the Mángaon, Bhiwñdi and Dahánu Tálukas.

The working days show an improvement of 3 per cent. compared with the previous season.

Ráo Sáheb Mankeshwar Gopal Mhaskar says that Nímtandár Ramchandra Sakham Avchat "exercised a judicious and careful control over his men and carried out his duties in a very satisfactory manner. The great outturn of his establishment is due to his tact in handling his men."

19. The amount of Phálñi done by each establishment, the average number of men employed and the cost per acre are given in the following table:—

Letter of Establishment.	Average strength.	Name of Supervising Officer.	Name of Survey Mámílatdár, Head Surveyor or Nímtandár.	PHALNIED.		Average area per Survey Number in Acre.	Average cost per Acre.
				Fields.	Acres.		
1	2	3	4	5	6	7	8
							Rs. a. p.
A ...	5-01	Messrs. W. D. Wilkins and J. A. McIver.	Ráo Sáheb Baburao Yeshwant Nerurkar, Survey Mámílatdár, and Nímtandár Ganpat Balaji Jaide.	9,933	13,325	1-34	0 2 9
	16-92	Messrs. A. G. Hudson and J. A. McIver.	Ráo Sáheb Baburao Yeshwant Nerurkar, Survey Mámílatdár.	42,326	52,446	1-23	0 3 3
	3-55	Mr. H. V. Sathe ...	Ráo Sáheb Sadashiv Amrut Brahme, Head Surveyor, and Nímtandár Ramchandra Anant Nimkar.	13,599	5,404	0-40	0 5 7
B ...	17-49	Ráo Sáheb Mankeshwar Gopal Mhaskar, Survey Mámílatdár.	Nímtandár Sakham Ladoji Mhapankar and Ganpat Balaji Jaide.	28,522	69,923	2-45	0 2 2
C ...	4-80	Mr. H. V. Sathe ...	Nímtandár Dhondo Narayan Gore.	12,638	6,323	0-50	0 4 8
	18-30	Ráo Sáheb Mankeshwar Gopal Mhaskar, Survey Mámílatdár.	Nímtandárs Dhondo Narayan Gore and Ramchandra Anant Nimkar.	47,317	87,732	1-85	0 1 10
	5-09	Messrs. W. D. Wilkins and J. A. McIver.	Nímtandárs Vishnu Gangadhar Jog and Vishwanath Narayan Dhamankar.	11,993	10,604	0-88	0 2 5
D ...	15-44	Messrs. A. G. Hudson and J. A. McIver.	Nímtandár Vishnu Gangadhar Jog.	41,075	49,833	1-21	0 2 8

Letter of Establishment.	Average strength.	Name of Supervising Officer.	Name of Survey Mamlatdar, Head Surveyor or Nintandar.	PHALNIED.		Average area per Survey Number in Acre.	Average cost per Acre.
				Fields.	Acres.		
							Rs. a. p.
E ...	6-28	Mr. A. G. Hudson and Mr. H. V. Sathe.	Rao Sâheb Gangadhar Wasudev Joshi, Head Surveyor.	12,965	6,517	0-50	0 4 8
	18-08	Rao Sâheb Mankeshwar Gopal Mhaskar, Survey Mamlatdar.	Rao Sâheb Gangadhar Wasudev Joshi, Head Surveyor, and Nintandars Mahadeo Shridhar Kher and Keshav Vaman Alekar.	36,278	70,126	1-93	0 2 2
F ...	6-21	Messrs. W. S. Cole, W. D. Wilkins and J. A. McIver.	Nintandar Antaji Laxuman Joshi.	13,627	10,634	0-78	0 2 4
	17-97	Messrs. A. G. Hudson and J. A. McIver.	Nintandars Antaji Laxuman Joshi and Ramchandra Anant Nimkar.	42,178	66,265	1-57	0 2 4
G ...	4-68	Messrs. W. D. Wilkins and J. A. McIver.	Nintandar Sakham Ladoji Mhapankar.	8,279	14,406	1-74	0 1 10
	18-65	Messrs. A. G. Hudson and J. A. McIver.	Rao Sâheb Sadashiv Amrut Brahme, Head Surveyor.	47,345	71,853	1-51	0 2 7
H ...	5-0	Messrs. W. S. Cole, W. D. Wilkins and J. A. McIver.	Nintandar Swamirao Jairao Betgiri.	6,542	8,175	1-25	0 3 7
	16-72	Messrs. A. G. Hudson and J. A. McIver.	Do. ...	44,783	56,336	1-25	0 2 7
I ...	3-43	Messrs. W. S. Cole, W. D. Wilkins and J. A. McIver.	Nintandar Hari Gopal Mavande.	5,744	7,337	1-28	0 3 7
	17-0	Messrs. A. G. Hudson and J. A. McIver.	Do. ...	41,485	55,517	1-33	0 2 7
J ...	9-94	.....	Rao Sâheb Mankeshwar Gopal Mhaskar, Survey Mamlatdar.	27,311	25,062	0-92	0 2 9
	18-45	Rao Sâheb Mankeshwar Gopal Mhaskar, Survey Mamlatdar.	Nintandars Ramchandra Sakham Achat and Mahadeo Shridhar Kher.	57,868	65,069	1-12	0 2 5
	61-99		Total for 1897-98 ...	1,22,681	1,07,786	0-88	0 3 1
	175-2		Total for 1898-99 ...	4,29,177	6,45,100	1-50	0 2 5

The upper line of figures is that of the previous season.

It is not easy to compare the cost per acre with that of previous seasons. Hitherto the field work has consisted of measurement classification and Phalni, whereas in the year under report Phalni work alone remained to be done. But taking the cost of the Phalni work of last year and comparing it with the present season, the average cost is 8 pies in favour of the current year or 2 annas and 5 pies against 3 annas and 1 pie in 1897-98.

It is especially difficult for me to comment on the outturn of work of one establishment compared with another. The most marked difference in outturn exists between the "B" and "J" Establishments; it appears that the "J" Establishment worked in a more level and open country than the "B" and the men forming the establishment were better and more experienced.

20. The areas of the different kinds of lands Phalned and the number of Pot numbers or Phalni Tukdas dealt with are as follows:—



No. S-457 of 1900.

From

THE SURVEY COMMISSIONER AND DIRECTOR,
LAND RECORDS AND AGRICULTURE,
Bombay.

To

THE SECRETARY TO GOVERNMENT,
Revenue Department,
Bombay.

Poona, 8th March 1900.

SIR,

In continuation of this office No. S-252, dated 9th ultimo, submitting the Annual Progress Report of this Department for the year ending 31st October 1899, I have the honour to append statements in the prescribed form showing the progress made in that year in the programme, submitted under Mr. Ozanne's No. S-1187, dated 20th May 1896, and approved by Government, and to make the following observations:—

Gujarāt Revenue Survey.—It will be seen that the only item requiring explanation is the short work under "Settlement," viz., the non-submission of the settlement proposals for the two talukas noted in the margin before 31st October last. The reasons for the delay have been explained by the Deputy Superintendent in paragraph 17 of his Progress Report for the year accompanying this office No. S-252, dated 9th ultimo. These proposals have since been submitted as will be seen from paragraph 12 of this office number referred to.

Anklesvar, Broach District.
Māndvi, Surat District.

Deccan Revenue Survey.—The circumstances connected with the completion of the work remaining in this Survey have already been fully reported to Government, and I may invite reference to paragraphs 18 and 19 of this office Progress Report (No. S-252, dated 9th ultimo) referred to above.

Konkan Revenue Survey.—The only work that remained to be done in this Survey under Mr. Ozanne's programme was the settlement of the Dāhānu Taluka, proposals for which were submitted during the year. As for the Phalni work I would invite reference to paragraphs 22 to 25 of this office Progress Report referred to above.

I have the honour to be,

Sir,

Your most obedient Servant,

W. P. SYMONDS,

Acting Survey Commissioner and Director,
Land Records and Agriculture.

STATEMENT No. 1.

*Progress of work in the Gujarát Revenue Survey.*WORK PROPOSED TO BE ACCOMPLISHED IN THE YEARS 1896-97 TO 1899-1900 AS PER
MR. OZANNE'S REPORT No. 8-1187, DATED 10TH MAY 1896.

WORK ACTUALLY ACCOMPLISHED IN THE YEAR.

District.	Táluka.	Government or Inám.	MEASUREMENT.				CLASSIFICATION.				SETTLE- MENT.		Date of Expiry of current Settlement.	District.	Táluka.	Government or Inám.	MEASUREMENT.				CLASSIFICATION.				SETTLE- MENT.		
			Field work.		Recess work.		Field work.		Recess work.		Number of Villages.						Field work.		Recess work.		Field work.		Recess work.		Number of Villages.		
			Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	For Original Settlement.	For Revision Settlement.					Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	For Original Settlement.	For Revision Settlement.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	13	
Panch Maháls.	Godhra ...	Government.	13	135	13	135	...	...	...	...	...	...	...	Surat	Bulsár ...	Government.	...	...	...	...	...	88	...	96	...	...
	Kálol ...		...	56	...	56	...	...	...	...	...	...	...		Párdi ...	Do.	...	...	...	...	...	79	...	79	...	...
	Hálol ...		9	...	9	...	...	...	...	...	...	...	...		Mándvi. ...	Do.	...	...	...	...	...	131	...	131	...	...
Surat	Bulsár ...		...	...	...	...	...	97	...	97	...	...	...		Broach	Chorási ...	Inám	...	...	...	...	...	...	...	...	2	...
	Párdi ...		...	...	...	...	...	79	...	79	...	...	...			Chikhli ...	Government.	...	...	...	...	...	...	...	...	...	60
	Mándvi ...		...	...	...	...	...	149	...	149	...	...	...			Broach ...	Do.	...	...	99	...	99	...	*64	...	...	...
Broach	Chikhli ...		...	...	...	...	...	...	...	...	...	...	60		1895-96.	Vágra ...	Do.	...	...	56	...	55	...	*25	...	...	...
	Broach ...		...	102	...	102	...	...	...	...	...	...	...		...	Amod ...	Do.	...	...	15	...	+14	...	*50	...	22	...
	Vágra ...		...	68	...	68	...	...	...	...	...	...	...		...	Ankleshvar .	Do.	...	...	51	...	+51	...	*55	...	...	...
Panch Maháls.	Amod ...		...	50	...	50	...	...	...	...	...	...	...		...	Kaira ...	Nadiád ...	Inám	...	...	...	...	...	...	...	...	...
	Jambusa ...		...	85	...	85	...	...	...	...	...	...	...		...	Godhra ...	Government.	...	135	...	134	...	...	...	...	...	...
	Ankleshvar .		...	102	...	102	...	...	...	...	...	...	...		...	Kálol ...	Do.	...	56	...	56	...	...	...	...	...	...

										1897-98.											1897-98.										
Broach	A'mod	...	...	...	...	...	*25	...	*25	...	1903-04.	Anklesvar	Do.	...	48	...	...	48	...	102	...			
	Jambusar	...	...	...	...	...	*43	...	*43	...	1904-05.	Jambusar	Do.	...	83	...	80	...	83	...	...								
	Broach	...	...	...	...	...	51	...	51	...	1899-1900	Broach	Do.	...	8	...	...	40	...	80	...			
	Vagra	...	...	...	...	...	34	...	34	...	1901-02.	Vagra	Do.	...	18	...	13	...	45	...	...								
	Ankleshwar	...	...	...	...	...	51	...	51	...	1900-01.	Amod	Do.	...	2	...	...	2	...	28	...			
Surat	Jalalpur	84	1897-98.																				
										1898-99.																					
Broach	A'mod	...	...	...	...	...	*25	...	*25	...	...	Panch Mahals.	Godhra	Do.	...	...	...	133	...	...	...							
	Jambusar	...	...	...	...	...	*42	...	*42	...	Dohad		Do.	...	37	...	37	...	37	...	...								
	Broach	...	...	...	...	...	...	...	...	102	Kalol		Government.	...	...	...	...	58	...	...	...							
	Ankleshwar	102																					
Surat	Bulsar	...	...	...	...	...	...	...	...	97	1898-99.	Do.	Kalol	Government.	...	...	...	...	...	58	...
	Pardi	...	...	...	...	...	...	...	...	79	1898-99.		Godhra	Do.	...	...	...	...	...	145	...
	Mandvi	...	...	...	...	...	...	...	...	149	1900-01.		Do.	Talukdari	...	...	...	...	...	31	...
											1899-1900.		Dohad	Do.	37									
Panch Mahals.	Halol	...	...	...	...	...	9	...	...	...	...	Broach	Broach	Government.	...	...	...	...	...	...	102
	Godhra	135	13	135	...	135		1902-03.	Vagra	Do.	68	...									
	Kalol	56	...	56	...	56		1899-1900.	Jambusar	Do.	85	...									
	Vagra	68	1901-02.		Bulsar	Do.	95									
Broach	A'mod	50	1903-04.	Surat	Pardi	Do.	...	1	...	1	...	1	...	79									
	Jambusar	85	1904-05.		Mandvi	Do.	...	1	...	1	...	1									
																				Jalalpur	Do.	84	...		

* Entire re-classification.

Note 1.—The fair maps of the villages marked † and the recess classification work of the villages marked * were not completed during the year ending 31st October 1897.

Note 2.—† These villages are not included in Appendix No. 1 to Gujarat Survey Progress Report.

W. P. SYMONDS,
Acting Survey Commissioner and Director,
Land Records and Agriculture.

STATEMENT No. 1.

Progress of work in the Konkan Revenue Survey.

WORK PROPOSED TO BE ACCOMPLISHED IN THE YEARS 1896-97 TO 1898-99 AS PER MR. OZANNE'S REPORT No. S-1187, DATED 20TH MAY 1896.														WORK ACTUALLY ACCOMPLISHED IN THE YEAR.												
District.	Taluka.	Government or Inám.	MEASUREMENT.				CLASSIFICATION.				SETTLE- MENT.		Date of expiry of current Settlement.	District.	Taluka.	Government or Inám.	MEASUREMENT.				CLASSIFICATION.				SETTLE- MENT.	
			Field work.		Recess work.		Field work.		Recess work.		Number of Villages.						Field work.		Recess work.		Field work.		Recess work.		Number of Villages.	
			Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	For Original Settlement.	For Revision Settlement.					Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	For Original Settlement.	For Revision Settlement.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	13
Thána	Dáhanu ...	Government.	...	...	...	...	...	211	...	211	...	...	1893-94.	Kolába	Roha ...	Government.	...	...	...	...	...	...	...	...	...	146
	Bassein ...	Do.	...	...	...	...	...	...	...	...	...	88	1891-92.		Máhád ...	Do.	...	...	22	...	22	...	222	...	248	...
	Máhim ...	Do.	...	...	...	...	...	...	...	...	...	188	1892-93.		Mángaon ...	Do.	...	...	114	...	114	...	226	...	226	...
	Máhád ...	Do.	...	...	22	...	22	...	222	...	248	...	1891-92.		Bassein ...	Do.	...	...	...	...	...	...	...	...	...	88
Kolába	Mángaon ...	Do.	...	...	114	...	114	...	226	...	226	...	1891-92.	Thána	Máhim ...	Do.	...	...	...	...	...	...	...	...	...	188
															Dáhanu ...	Do.	...	...	65	...	65	...	211	...	...	...
Thána	Dáhanu ...	Government.	...	212	...	212	...	1	...	1	...	...	1893-94.	Thána	Váda ...	Do.	...	...	...	...	...	...	...	...	...	137
															Dáhanu ...	Government.	...	147	...	147	...	1	...	1	...	...
															Shihapur ...	Do.	...	...	...	...	...	67	...	46	...	256
															Sásette* ...	Do.	...	...	...	...	...	86	...	85	...	...
Kolába	Váda ...	Do.	...	...	...	...	...	...	...	...	...	137	1889-90.	Kolába	Bhiwandi* ...	Do.	...	...	...	...	...	185	...	186	...	...
	Roha ...	Do.	...	...	...	...	...	...	...	...	...	146	1891-92.		Kalyán* ...	Do.	...	...	...	...	...	39	...	39	...	...
															Bassein ...	Inám	...	...	...	...	...	...	...	3	...	
															Máhád ...	Government.	...	...	...	...	...	...	...	...	248	
															Mángaon ...	Do.	...	...	...	...	...	...	...	...	226	

STATEMENT No. 1.

Progress of work in the Deccan Revenue Survey.

WORK PROPOSED TO BE ACCOMPLISHED IN THE YEARS 1896-97 TO 1899-1900 AS PER
MR. OZANNE'S REPORT No. S.-1187, DATED 20TH MAY 1896.

WORK ACTUALLY ACCOMPLISHED IN THE YEAR.

District.	Táluka.	Government or Inám.	MEASUREMENT.				CLASSIFICATION.				SETTLE- MENT.		Date of expiry of current Settlement.	District.	Táluka.	Government or Inám.	MEASUREMENT.				CLASSIFICATION.				SETTLE- MENT.			
			Field work.		Recess work.		Field work.		Recess work.		Number of Villages						Field work.		Recess work.		Field work.		Recess work.		Number of Villages.			
			Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	For Original Settlement.	For Revision Settlement.					Number of Villages for Original Measurement.	Number of Villages for Revision Measurement.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	Number of Villages for Original Classification.	Number of Villages for Revision Classification.	For Original Settlement.	For Revision Settlement.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	1	2	3	4	5	6	7	8	9	10	11	12	13		
Násik	Kalvan	Government	...	90	...	90	1	80	1	80	...	...	.....								1896-97.					
Násik	Chándor	Inám	...	...	1	...	1	3	1	3	1	...	31st July 1883.	Násik	Kalvan	Government.	...	118	...	118	1	52	1	49	...	...
	Niphád	Do.	4	...	4	31st July 1886.										4	...	4
	Násik	Do.	1	...	1	Do.															
	Sianar	Do.	1	...	1	31st July 1897.															
Ahmednagar.	Malegaon	Do.	...	2	...	2	...	2	...	2	...	...	...												
	Akoiá	Inám	...	...	...	...	3	...	3	...	...	...	31st July 1883.													
	Jámkhed	Do.	...	...	...	...	1	...	1	...	...	...	...											
	Shrigonda	Do.	...	...	...	...	...	1	...	1	...	...	31st July 1883.													
	Karjat	Do.	...	2	...	2	...	2	3	2	3	...	Do.															
Khándesh	Nagar	Do.	...	1	...	1	...	1	...	1	...	...	...												
	Sangamner	Do.	...	3	...	3	...	3	...	3	...	...	31st July 1883.													
	Nevasa	Do.	...	1	...	1	...	1	...	1	...	...	Do.													
Poona	Taloda	Inám	...	1	...	1	...	1	3	1	3	...	31st July 1891.															
	Pimpalner	Do.	...	2	...	2	...	2	...	2	...	...	31st July 1898.													
	Dhulia	Do.	...	...	...	...	...	1	...	1	...	...	31st July 1892.													
Sátara	Khed	Inám	...	...	...	...	1	...	...	...	...	...	...									
	Bhimtadi	Do.	...	1	...	1	...	1	...	1	...	...	31st July 1886.													
	Haveli	Do.	...	2	...	2	...	2	...	2	...	...	31st July 1884.													
Sátara	Khatapur	Inám	...	3	...	3	...	3	...	3	...	...	31st July 1889.													
	Mán	Do.	...	2	...	2	...	2	...	2	...	...	31st July 1888.													
	Wai	Do.	...	9	...	9	...	9	...	9	...	...	31st July 1890.													
	Khatav	Do.	...	5	...	5	...	5	...	5	...	...	...												
	Koregaon	Do.	...	2	...	2	...	2	...	2	...	...	31st July 1889.													
	Sátara	Do.	...	1	...	1	...	1	...	1	...	...	.....												

STATE

Progress of work in the Gujarat,

WORK PROPOSED TO BE ACCOMPLISHED IN THE THREE SURVEYS IN THE YEARS 1896-97 TO 1899-1900 AS PER MR. OZANNE'S REPORT No. S. 1187, DATED 20TH MAY 1896.

Years.	MEASUREMENT.				CLASSIFICATION.				SETTLEMENT.	
	Field work.		Recess work.		Field work.		Recess work.		Number of Villages.	
	Number of villages for Original Measurement.	Number of villages for Revision Measurement.	Number of villages for Original Measurement.	Number of villages for Revision Measurement.	Number of villages for Original Classification.	Number of villages for Revision Classification.	Number of villages for Original Classification.	Number of villages for Revision Classification.	For Original Settlement.	For Revision Settlement.
1	2	3	4	5	6	7	8	9	10	11
GUJARAT										
1896-97 ...	22	598	22	598	...	325	...	325	...	60
1897-98 ...	...	...	...	...	...	204	...	204	...	84
1898-99 ...	...	...	...	...	...	67	...	67	...	529
1899-1900 ...	...	...	...	...	...	191	...	191	22	394
Total ...	22	598	22	598	...	787	...	787	22	1,067
DECCAN										
1896-97 ...	11½	129	11½	129	24	129	23	129	...	...
1897-98 ...	6	105	6	105	14	143	14	143	14	13
1898-99 ...	1	95	1	95	1	95	1	95	25	354
Additional work devolved since Mr. Ozanne's programme ...	5	4	5	5	8	5	8	5	...	...
Total ...	23½	333	23½	334	47	372	46	372	39	367
KONKAN										
1896-97 ...	...	136	...	136	...	659	...	685	...	276
1897-98 ...	...	212	...	212	...	1	...	1	...	283
1898-99 ...	...	...	...	...	...	...	...	...	...	942
Total ...	...	348	...	348	...	660	...	686	...	1,501
Grand Total ...	45½	1,279	45½	6,280	47	1,819	46	1,845	61	2,935

MENT No. 2.

Deccan and Konkan Revenue Surveys.

WORK ACTUALLY ACCOMPLISHED IN THE YEAR.

Years.	MEASUREMENT.				CLASSIFICATION.				SETTLEMENT.	
	Field work.		Recess work.		Field work.		Recess work.		Number of Villages.	
	Number of villages for Original Measurement.	Number of villages for Revision Measurement.	Number of villages for Original Measurement.	Number of villages for Revision Measurement.	Number of villages for Original Classification.	Number of villages for Revision Classification.	Number of villages for Original Classification.	Number of villages for Revision Classification.	For Original settlement.	For Revision Settlement.
1	2	3	4	5	6	7	8	9	10	11
SURVEY.										
1896-97 ...	...	412	...	409	...	492	...	328	2	61
1897-98 ...	27	227	27	130	27	477	27	210	...	...
1898-99 ...	1	...	1	...	1	...	1	424	...	360
1899-1900 ...	...	...	...	...	...	...	...	...	...	...
Total ...	28	639	28	539	28	969	28	962	2	421
SURVEY.										
1896-97 ...	...	118	...	118	8	52	8	49	...	...
1897-98 ...	6	272	6	90	14	121	14	123	40	288
1898-99 ...	18½	130	18½	130	25	197	25	197	22	160
1899-1900 ...	...	...	...	...	...	...	...	...	...	...
Total ...	24½	520	24½	338	47	370	47	369	62	448
SURVEY.										
1896-97 ...	...	201	...	201	...	659	...	474	...	559
1897-98 ...	...	147	...	147	...	379	...	357	3	730
1898-99 ...	...	...	...	...	...	1,228	...	...	...	212
Total ...	...	348	...	348	...	2,266	...	831	3	1,501
Grand Total ..	52½	1,507	52½	1,225	75	3,605	75	2,162	67	2,370

W. P. SYMONDS,
Acting Survey Commissioner and Director,
Land Records and Agriculture.



Annual Progress Reports.

Survey Progress Report of the Presidency
proper for the year ending 31st October
1899.

No. 3282.

REVENUE DEPARTMENT.

Bombay Castle, 25th May 1900.

Letter from the Survey Commissioner and Director of Land Records and Agriculture,
No. s.—475, dated 10th March 1900—Submitting the Annual
Progress Report* of the Revenue Survey Department of the
Bombay Presidency for the year ending 31st October 1899.

* No. s.—252, dated
9th February 1900.

Letter from the Survey Commissioner and Director of Land Records and Agriculture,
No. s.—457, dated 8th March 1900—Submitting, with his remarks, statements showing
the progress made in the completion of the operations of the Survey Department
during the year 1898-99.

RESOLUTION.—These reports record the closure of the operations of the
Deccan branch of the Survey and the measures taken towards winding up the
other branches. The work done was of a miscellaneous character, and it is
impossible to effect any useful comparison by tabular statistics, such as have
been compiled in previous years.

2. In Gujarát the establishments were reduced from three to two, and
were employed upon recess examination and settlement work. It is satisfac-
tory to learn that the recess examination work was completed in advance of the
estimate. Settlement proposals for four talukás were prepared and submitted,
and seven talukás only now await revision. The Survey Commissioner is confi-
dent of the full completion of the work before 31st October 1900, the date fixed
for the disbandment of the Gujarát branch of the survey. It was found
necessary owing to the famine to postpone certain miscellaneous field work in
connection with 15 villages, chiefly inám; it should be more fully explained
why the other miscellaneous measuring and classing work to which the Survey
Commissioner refers should be beyond the powers of the Land Records staff
about to be constituted. It is presumed, however, that the temporary additional
establishment, if any be absolutely required, will be confined to subordinates
working under the Superintendent of Land Records and Agriculture. The
necessity of appointing any special officer is not apparent. The Governor in
Council approves of the action taken by the Survey Commissioner for the com-
pletion of the Survey Record in the three talukás of the Panch Maháls, the
papers of which were destroyed in the fire of 1887.

3. In the Deccan the season's work was conducted on the same lines as
in other years. There were two parties comprising 58 men; measurement was
carried out in 181 villages and classification in 221. These villages were
scattered between 7 districts, and operations were necessarily retarded. Still
greater difficulty was experienced in the winding up of the recess work owing
to the disturbing effect of the virulent epidemic of plague in Poona. The
establishment was to have been disbanded on the 31st October, but these circum-
stances necessitated its continuance for two months further up to 31st December
last, and the retention of a few subordinates was also permitted up to the 31st
March last. As remarked by the Survey Commissioner, it will be the duty of
the Superintendent of Land Records and Agriculture to complete the small
amount of work that may remain unfinished. With the submission of the
proposals for the Pimpalner Taluka in January 1900, and certain Bhil tracts
which require special treatment, the settlement work of the Government villages
comprised in this survey is understood to be complete.

4. In the Konkan ten establishments were at work on Phálñi, that is, on the sub-division of occupancies in varkas and rabi lands; the outturn is reported to have been sufficient, and the character of the work done satisfactory. It has not however been made clear that making allowance for the difficulties occasioned during the monsoon by plague, the establishments have worked fully up to the standard actually realized in the Phálñi operations of the Murbád Táluka. Upon that standard Mr. Hearn's and Mr. Muir-Mackenzie's calculations as to the time required to complete Phálñi operations were based. Without further explanation any falling short of that standard cannot be regarded by Government as satisfactory. It is stated by Mr. Symonds that the estimates were partly vitiated by a clerical error whereby the work was underestimated to the extent of 1,00,000 units. It is difficult to understand this statement. On the contrary it may be inferred from the figures given in paragraph 27 of Mr. Hudson's report that the actual number of units of work is likely to fall appreciably short of the estimates. If this be so, the failure to finish during the rains the whole of the recess work resulting from the field operations of the year of report ought not to render impossible the completion of the remainder of the operations including fields, recess and "ákár" work within the prescribed period. Such proposals as Mr. Symonds may have to make for the retention of establishments beyond that period should be submitted at once with full explanations. Government however trust that Mr. Symonds will not fail to complete the whole of the work, including the ákár work, for which provision was made in the special estimates, by the 15th July next, the prescribed date.

5. The cost of the survey in each division is shown below and compared with the cost in 1897-98—

			Gujarát.	Deccan.	Konkan.	Total.
			Rs.	Rs.	Rs.	Rs.
1897-98	...	...	71,783	65,197	1,69,502	3,06,482
1898-99	...	...	58,839	73,762	1,36,389	2,68,990

The gradual contraction of the operations accounts for the decrease, though in the Deccan this was counteracted by the more expensive character of the work, and the necessity for temporarily strengthening the subordinate establishment.

6. It is difficult to judge of the rate of progress in the Marátha States Survey and of the difficulties experienced. While there was no change in the establishment employed or the method or the conditions of work, a considerable reduction in the outturn occurred in the year under report as compared with 1897-98. The figures are given below:—

				Measured Acres.	Classed Acres.
1897-98	...	...	...	1,95,691	1,61,749
1898-99	...	...	...	1,25,039	1,24,245

Mr. Symonds considers that credit is due to the Superintendent and his Assistant; Government however request that he will obtain the opinion of the Political Agent whether the dislocation of operations attributed to the plague could have been remedied by a more judicious or zealous management. The estimated amount of work remaining to be done and the probable date of its completion should at the same time be reported.

7. Mr. Fforde concluded his service in the Department with much credit to himself and assistance to Government. Besides submitting, as Superintendent, several carefully considered settlement reports, he superintended with success as Survey Commissioner the difficult experiment of framing a record of rights in selected villages and submitted a valuable report on the subject. Mr. Hudson also has shown creditable energy in the submission of the settlement reports, and Government hope that he will be able to complete the Phálñi work by the prescribed date. Mr. Young accomplished a large amount of work in a commendable fashion and cannot be deemed blamable for the necessity which arose for the

retention of a portion of the Deccan Survey establishment beyond the fixed period. His settlement reports have been marked by their completeness and the judgment displayed. The officers of the Gujarát Survey have also worked on the whole with commendable rapidity and punctuality. The reputation of the Department has been satisfactorily maintained under the judicious administration of Mr. Symonds, who has had substantial difficulties to surmount in successfully winding up the operations of the several surveys.

8. The next Progress Report will be the last furnished by the Survey Department, and should comprise a résumé of its origin and development, of its system of operation and principles of assessment, and of the notable results which it has achieved.

H. S. LAWRENCE,
Under Secretary to Government.

To

The Commissioner, N. D.,
The Commissioner, C. D.,
The Commissioner, S. D.,
The Commissioner in Sind,
The Survey Commissioner and Director of Land
Records and Agriculture,
All Collectors in the Presidency proper,
The Private Secretary to His Excellency the
Governor,
The Conservator of Forests, N. C.,
The Conservator of Forests, S. C.,
The Conservator of Forests, C. C.,
The Accountant General,
The Public Works Department of the Secretariat,
The Political Department of the Secretariat.
The Government of India,
The Secretary of State for India. } By letter.

With copies of the
reports of the Survey
Commissioner and
Director of Land Re-
cords and Agriculture
and of the Deputy
Superintendents.

No. of 1900.

Copy forwarded for information and guidance to

Letter of Establishment.	Rabi.		Varkas.	
	Pot Number.	Acres.	Phalni Tukdas.	Acres.
1	2	3	4	5
A	5,255	7,120	37,071	45,326
B	1,891	2,802	27,131	67,121
C	2,954	6,432	44,363	81,300
D	2,871	2,783	38,204	47,050
E	4,120	7,376	32,158	62,750
F	2,148	4,005	40,030	62,260
G	1,406	1,218	45,939	70,635
H	2,510	2,450	42,273	53,886
I	1,868	1,523	39,617	53,994
J	12,674	19,884	45,194	45,185
Total ...	37,197	55,593	3,91,980	5,89,507

21. The distribution of days in each Establishment shows the following percentage:—

Letter of Establishment.	Phalni.	Test.	Sickness.	Non-co-operation.	Rain.	Travelling days.	In-door work.	Leave and other days.	Total.
1	2	3	4	5	6	7	8	9	10
A ...	64	3	12	1	...	10	3	7	100
B ...	68	6	7	1	...	7	3	8	100
C ...	74	6	1	1	...	9	2	7	100
D ...	71	5	2	1	...	10	3	8	100
E ...	71	6	2	...	...	11	3	7	100
F ...	71	5	2	1	...	11	2	8	100
G ...	71	5	2	1	...	11	3	7	100
H ...	71	5	3	1	1	11	2	6	100
I ...	73	5	1	...	1	8	8	4	100
J ...	75	5	2	1	...	8	3	6	100

The sick days are very heavy in the "A" Establishment, due to three men having been absent on sick leave for long periods. In the "B" Establishment, also, these days are high, but this, too, is accounted for by two men having been absent on sick leave for a month each.

22. The distribution of working and non-working days of the ten Establishments for the season is as follows:—

Working days—

Phalni ...	...	...	...	70.87
Tests ...	...	...	...	5.21
In-door work	...	...	...	3.04
				<u>79.12</u>

Non-working days—

Sick ...	...	...	...	3.49
Villagers not co-operating	...	...	...	0.91
Rain ...	...	...	...	0.23
Travelling	...	...	...	9.45
Leave and holidays	...	...	...	6.80
				<u>20.88</u>
Total ...				<u>100.00</u>

The working and non-working days under the head Phalni operations in the previous season were 74.18 and 25.82 respectively. It will be noticed, therefore, that an improvement is recorded for this season.

23. The amount of test taken on the work of the men is given in the following table :—

Letter of Establishment.	TEST BY EUROPEAN OFFICERS, SURVEY MAMLATDARS, HEAD SURVEYORS AND NIMTANDARS.							
	FOR RABI.				FOR VARKAS.			
	Fields.	Acres.	Average area of fields tested.	Average difference per field between test and original work.	Fields.	Acres.	Average area of field tested.	Average difference per field between test and original work.
	2	3	4	5	6	7	8	9
1				Rs. a. p.				Rs. a. p.
A ...	13 478	3 672	0·2 1·4	... 0 0 1	1,041 3,753	1,407 4,208	1·4 1·1	... 0 0 6
B ...	44 204	42 463	1·0 2·2	0 0 2 0 0 5	1,891 2,778	772 6,217	0·4 2·2	0 0 2 0 0 4
C ...	149 336	59 852	0·4 2·5	0 0 2 0 0 3	1,173 5,070	650 9,168	0·6 1·8	0 0 3 0 0 2
D ...	16 241	7 265	0·4 1·1	... ...	1,438 3,462	1,291 4,141	0·9 1·1	0 0 2 0 0 2
E ...	22 405	15 747	0·7 1·8	0 0 3 0 0 2	1,288 3,301	819 6,441	0·6 1·9	0 0 4 0 0 4
F ...	62 139	53 74	0·9 0·5	... ...	1,582 4,258	1,361 5,807	0·9 1·3	0 0 2 0 0 2
G ...	28 206	48 139	1·7 0·6	... 0 0 3	1,399 5,330	1,567 7,841	1·2 1·4	... 0 0 2
H ...	57 243	75 220	1·3 0·9	0 0 1 ...	678 3,881	882 5,074	1·6 1·3	......
I ...	85 222	131 189	1·5 0·8	... ...	646 4,265	867 5,196	1·3 1·2	0 0 2 0 0 3
J ...	252 1,407	261 2,151	1·0 1·5	... ...	2,165 4,585	2,273 5,084	1·0 1·1	... 0 0 2
Total for 1897-98 ...	728	694	1·0	0 0 1	13,161	11,889	0·9	0 0 1
Do. 1898-99 ...	3,881	5,772	1·4	0 0 1	40,683	59,177	1·4	0 0 3
Grand Total for Rabi and Varkas combined 1897-98 ...	13,829	12,583	0·9	0 0 1				
Do. 1898-99 ...	44,564	64,949	1·4	0 0 2				

The upper line of figures is that of the previous year.

The total average test on Rabi was 10·0 per cent. of Pôt numbers and 10·3 per cent. of the area ; and of Varkas 10·0 per cent. of Phálai Tukdas and 10·0 per cent. of the area. Of the two combined, 10·0 per cent. of Pôt numbers and Phálai Tukdas, and 10·0 per cent. of their area was tested.

24. The percentage of test taken on the work of each establishment is as follows :—

Letter of Establishment.	RABI.				VARKAS.			
	Work done.		Tested per cent.		Work done.		Tested per cent.	
	Pôt Numbers.	Acres.	Pôt Numbers.	Acres.	Phálai Tukdas.	Acres.	Phálai Tukdas.	Acres.
1	2	3	4	5	6	7	8	9
A ...	5,255	7,120	9	9·4	37,071	45,326	10	9·2
B ...	1,391	2,802	15	16·5	27,131	67,121	10	9·2
C ...	2,954	6,432	11	13·2	44,363	81,300	11	11·2
D ...	2,871	2,783	8	9·5	38,204	47,050	9	8·8
E ...	4,120	7,376	10	10·1	32,158	62,750	10	10·2
F ...	2,148	4,005	6	1·8	40,030	62,260	11	9·3
G ...	1,406	1,218	15	11·4	45,939	70,635	12	11·1
H ...	2,510	2,450	10	8·9	42,273	53,886	9	9·4
I ...	1,868	1,523	12	12·4	39,617	53,994	11	9·6
J ...	12,674	19,884	11	10·8	45,194	45,185	10	11·2
Total ...	37,197	55,593	10	10·3	3,91,980	589,507	10	10·0

25. Appendix VI gives details of differences between test and valuations arrived at by the men. In 44,564 fields tested, 129 had a difference of over two annas, which gives a percentage of 0.29. The errors discovered at test are of each establishment, as follows :—

Letter of Establishment.				Errors up to 1 anna.	Errors up to 2 annas.	Errors over 3 annas.	Total.
1				2	3	4	5
A	...	...	...	94.40	4.77	0.83	100
B	...	...	...	97.69	2.31	.....	100
C	...	...	...	98.30	1.40	0.30	100
D	...	...	...	97.46	2.11	0.43	100
E	...	...	...	98.84	1.11	0.05	100
F	...	...	...	95.32	4.59	0.09	100
G	...	...	...	98.33	6.34	0.33	100
H	...	...	...	99.66	0.34	.....	100
I	...	...	...	98.42	1.47	0.11	100
J	...	...	...	98.18	1.27	0.55	100

26. It will be seen from Appendix VII that the Phalni work of 1,231 villages was completed in the field and the recess examination of 689 villages was disposed of up to the 31st October 1899. In consequence of the severity with which plague was raging in Poona from June onwards, it was impossible to engage the usual number of temporary hands to assist in the examination of recess work, it was fortunate, therefore, that it was possible to retain the men at Head-quarters up to the 9th December 1899.

27. The following table will show how far the estimate regarding Varkas Phalni which accompanied Mr. Hearn's letter No. 1140 of 11th August 1897, has been done :—

Name of Táluka.				Units estimated to be remaining.	Units actually found to remain.	How many villages remain.
1				2	3	4
Mángaon	...	...	...	2,90,294	2,10,322	<i>Nil</i>
Mahád	...	...	...	4,27,050	3,74,268	<i>Do.</i>
Roha	...	...	...	1,06,180	86,801	<i>Do.</i>
Alibág	...	...	...	50,000	47,409	2 villages.
Máhim	...	...	...	99,010	1,00,930	33 <i>do.</i>
Dahánu	...	...	...	2,09,432	2,00,731	18 <i>do.</i>
Shahápur	...	...	...	2,63,647	1,05,698	92 <i>do.</i>

The units actually found to remain in the first three tálukas referred to above are less than the estimated units, while in Máhim Táluka 1,920 more units than estimated have been found, and, besides, 33 villages still remain to be Phalniéd.

28. Maps Appendix VIII gives details regarding Village Maps supplied to Village officers. 180 Village Maps were sent to the Government Photoinco Department to be printed.

Maps were supplied as follows :—

40 to applicants.
664 to the Forest Department.
166 to the Revenue Authorities.

29. Appendix IX shows the cost of the operations for the year under report. There is a decrease in the year's expenditure on account of the entire

Survey operations of Rs. 1,11,606. The cost of Phalni operations was Rs. 96,658 if the later amount is deducted from the former, a net decrease will be found of Rs. 14,948. There is a decrease of Rs. 16,413 under the head of Assistant's pay against Survey operations, while there is an increase for Phalni alone of Rs. 275. The average of the two is a decrease of Rs. 16,138. The decrease of Rs. 16,413 is due to the transfer of Messrs. W. D. Wilkins, J. A. McIver and H. V. Sathe to other duties. Mr. H. V. Sathe was appointed on special duty, and the amount of Rs. 2,717 for his pay has been separately shown in column 6 of the Appendix. The increase of Rs. 533 in the pay of the Survey Commissioner is owing to the appointment of Mr. W. P. Symonds to act as Survey Commissioner in place of Mr. A. Brownlow Fforde.

30. Appendix X shows the area Phalned together with the total expenditure and cost per acre of the Survey operations. The total expenditure in British territory, together with the share of the Survey Commissioner's pay, and that of his Establishment, distributed under four different heads, is given below :—

No.	Head of expenditure.	Annual cost.	Rateable proportion of Nos. 5 and 6.	Total cost.
1	2	3	4	5
		Rs. a. p.	Rs. a. p.	Rs. a. p.
1	Phalni...	77,691 0 0	18,966 5 10	96,657 5 10
2	Settlement ...	...	32,794 5 9	32,794 5 9
3	Miscellaneous ...	4,073 0 7	...	4,073 0 7
4	Revision of Survey Manual ...	2,864 13 6	...	2,864 13 6
	Total ...	84,628 14 1	51,760 11 7	1,36,389 9 8
5	Deputy Superintendent's salary and expenses of his office.	37,932 11 7		
6	Share of pay of Survey Commissioner and his office.	13,828 0 0		
	Total ...	51,760 11 7		
	Grand Total ...	1,36,389 9 8		

The average cost per acre of the season's work is as follows :—

Description.	Phalni.
1	2
	Rs. a. p.
For Survey in British Territory ...	0 2 5

31. The average cost of Phalni operations per acre was in—

	Annas.	Pies.
1896-97 ...	2	0
1897-98 ...	3	1
1898-99 ...	2	5

32. Twenty-five men were lent to other departments. The work on which they were employed, and the periods for which they were lent, are tabulated below :—

Department in which employed.	Number of men.	Period of employment.		Total period of each.
		From	To	
1	2	3	4	5
				Y. m. d.
Partition of estates under the Collector of Ratnágiri.	1	1st November 1898	31st Octo. 1899.	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	13th January 1899.	Do. ...	0 11 19
Agricultural Department in the Ratnágiri District.	1	1st November 1898.	Do. ...	1 0 0
Agricultural Department in the Kólába District.	1	Do. ...	Do. ...	1 0 0
Forest Department ...	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
Sávantvádi ...	1	Do. ...	Do. ...	1 0 0
Native States Survey ...	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
	1	Do. ...	Do. ...	1 0 0
Hubli Municipality ...	1	Do. ...	Do. ...	1 0 0
Deccan Survey ...	1	1st May 1899	Do. ...	0 6 0
	1	26th Do. ...	Do. ...	0 5 6
	1	Do. ...	Do. ...	0 5 6
	1	29th Do. ...	Do. ...	0 5 3
Total ...	25			

The previous year showed 24 men.

Settlement.

33. Appendix XI is a detailed statement of the progress attained in the Settlement branch of this Survey.

During the year under report Revision Survey rates were introduced in 137 Government villages of the Váda Táluka, in 188 Government villages of the Máhim Táluka and in 255 Government villages of the Sháhápúr Táluka, all in the Thána District.

Váda.

Government Resolution No. 2424, dated 7th April 1899.

Máhim.

Government Resolution No. 1488, dated 24th February 1899.

Sháhápúr.

Government Resolution No. 3014, dated 1st May 1899.

Sanction to the introduction of these rates was given in the Government Resolutions quoted in the margin.

34. The result of the settlements just referred to is given below.

Collector ate.	Táluka.	Government or Inám.	Original or Revision Survey.	Number of Villages.	Former Revenue.	Revised Demand.	Increase	Decrease.
1	2	3	4	5	6	7	8	9
					Rs.	Rs.	Rs.	
Thána ...	Váda ...	Government ...	Revision ...	137	44,990	60,678	15,688	...
	Máhim ...	Do. ...	Do. ...	188	1,14,620	1,65,216	50,596	...
	Shahápur ...	Do. ...	Do. ...	255	1,13,696	1,38,051	24,355	...
	Total ...			580	2,73,306	3,63,945	90,639	

During the year under report, proposals for revision settlement were submitted for sanction by Mr. A. G. Hudson in respect to the Dahánu Táluka of the Thána Collectorate. This has brought to a completion all the revision settlements outstanding in the Konkan.

35. The expenditure of advances on account of the erection of boundary marks, and pay of flag-holders and chainmen was as follows :—

Total advances including previous year's balance.	Amount recoverable.	Amount debitable to Government.	Balance for which Vasuli Patraks are not ready.
1	2	3	4
Rs.	Rs.	Rs.	Rs.
22,617	11,394	550	10,673

The reasons for the large figures in column 4 are the same as have already been given in paragraph 26, and the Vasuli Patraks will be prepared at the same time as the recess examination of the villages concerned is disposed of.

36. As there was no measurement or classification done in the season under report, no Assistant or Deputy Collectors were instructed in these branches.

37. Ráo Sáheb Mankeshwar Gopal Mhaskar has placed on record his opinion of the manner in which the Head Surveyors and Nimtandárs under his supervision performed their duties and his remarks have been embodied in this report. Ráo Sáheb Mankeshwar Gopal Mhaskar himself appears to have carried out his work consistently and steadily. His experience of Phalni operations has rendered him of considerable assistance to me during the time I have acted as Deputy Superintendent.

38. At the beginning of the field season, Mr. A. G. Hudson, Deputy Superintendent of this Survey, left head-quarters, and proceeded to Mahád Táluka, where he examined the work of six Phalni establishments till about the 20th of March 1899. Towards the end of March he proceeded to Mángaon and thence on to Indápur in that táluka, where he examined the work of four Phalni establishments under Ráo Sáheb Mankeshwar Gopal Mhaskar, Survey Mám-lat-dár. At the end of April he proceeded to Váda Táluka of the Thána Collectorate and in the beginning of May commenced the introduction of revision rates into that táluka. On the 7th May he visited the Máhim Táluka and from 19th idem introduced the revision rates into that táluka. On the 24th May he moved up to Khodáda in the Mokhada Petha and on the 26th May introduced the revision rates into that petha, and after completing this returned early in June to head-quarters at Poona for the "rains."

J. A. McIVER,

Acting Deputy Superintendent, Konkan Survey.

Annual Progress Reports.

Survey Progress Report of the Presidency
proper for the year ending 31st October
1900.

No. 4365.

REVENUE DEPARTMENT.

Bombay Castle, 25th June 1901.

Letter from the Survey Commissioner and Director of Land Records and Agriculture,
No. s.—469, dated 27th March 1901—Submitting
* No. s.—253, dated 12th February 1901. the Annual Progress Report* of the Revenue
Survey Department of the Bombay Presidency for the year ending 31st October
1900.

RESOLUTION.—During the year to which this report relates the Gujarát and Konkan Surveys were wound up, and so much of the work done was of a miscellaneous nature that comparison with previous years is not possible.

2. The Gujarát Survey was wound up by the prescribed date, the 31st October 1900. It had been found possible to dispense with one of the two parties at the end of February. The programme of field work was duly carried out. The work of this nature which remained unfinished was mostly connected with inám and tálukdári villages and was delayed by the famine. Mr. Cole finished his share of settlement work, but Mr. Mehta's employment on famine duty prevented his completing the Jambusar report till 31st December 1900. The miscellaneous settlement and report work remaining is small and can be disposed of by the Superintendent of Land Records and Agriculture, Northern Division. Government approve of the postponement of work proposed by Mr. Symonds in paragraph 10 of the report, as the rates will be based on those which may be sanctioned for the Government villages of the tálukas concerned. The Governor in Council concurs in Mr. Symonds' opinion that Messrs. Cole and Mehta deserve commendation for the complete manner in which they have disposed of their work within the time allowed to them.

3. The only work belonging to the Survey Programme which remained to be accomplished in the Deccan is in connection with a few inám villages. Arrangements for this work have been made by orders communicated in Government Resolutions Nos. 4107, dated 29th June 1900, and 519, dated 26th January 1901.

4. The working season of the Konkan Survey was materially curtailed by the unhealthiness of the tálukas in which phálni work was to be carried on. The whole of the work was, however, completed, and the survey closed on the 15th July 1900, the date fixed by Government. In the circumstances, the phálni work done was considerably less than in the previous year. Sufficient notes do not seem to have been left by Mr. Hudson regarding the character of the work done by the parties. A very considerable amount of test-work was however accomplished, and the results appear to have been on the whole satisfactory. The cost of the phálni settlement increased very largely from 2 annas 5 pies to 5 annas 1 pie per acre, but for reasons stated by the Survey Commissioner a comparison with the results of previous years is misleading.

5. A considerably larger area was both measured and classified in the Marátha States Survey than in the previous year, but the amount of measurement is a good deal short of that performed in 1897-98. The reason given for the very small percentage tested out of the total area classed may be satisfactory. But some explanation seems to be required why the Superintendent has not tested more than about 400 acres. A definite date should be fixed for the completion of this survey.

6. The decrease of Rs. 63,460 in the cost of the surveys was due to the reductions of establishments and contraction of work.

Rev 980

7. The presumption stated in paragraph 40 of the report is correct.

8. The work of all officers has been satisfactory and loyally directed to the conclusion of operations by the dates fixed. It has been a satisfaction to the Governor in Council that he has been able to provide employment for the great majority of the officers and for many of the subordinates whose appointments were abolished with the termination of the survey operations.

9. For reasons stated in paragraph 38 of his report the Survey Commissioner has omitted to furnish the *resumé* called for by Government in paragraph 8 of Government Resolution No. 3282, dated 25th May 1900. This omission is to be regretted. The principles of assessment and the system pursued by the Survey Department in its operations have, it is true, been fully described in the Survey Manual about to be published. But the results achieved are not summarised in the Manual, and a brief notice of them, with some explanation of the methods by which they had been attained, and mention of some of those able officers to whose labours those results have in the main been due would have been eminently appropriate in a report dealing with the final winding up of the Department.

10. The value of the services rendered to the State by the Survey Department can hardly be exaggerated. At the time when the existing system was introduced, that is to say, about 60 years ago, Government were still confronted with the formidable problem of settling upon an equitable and workable basis the revenue demand for a vast number of small holdings. Several modes of settlement, based on pre-existing practice, had been tried; some of them, such as the Pringle settlement, had disastrously failed. Out of the prevailing confusion the principles of the existing system of survey settlement were evolved by the genius of Messrs. Wingate and Goldsmid, the authors of the celebrated Joint Report. Upon the principles laid down in that report has been founded a system of land tenure and assessment admirably adapted to the requirements of the widely varying conditions of the different parts of the Presidency. Under the system of measurement and classification by subordinate agency, subject to the test of technically trained and skilled supervising officers, methods were employed by which the area of every one of these small holdings could be measured, and the relative productive capacity of the soil estimated with scientific accuracy. By the system of grouping the relative economic and climatic advantages of different tracts were duly taken into account. In this manner the equitable distribution of the assessment was secured. The rates charged at the original settlement per acre of land occupied were in many instances extraordinarily low as compared with those previously levied. But as anticipated by the framers of the system the effect of the fixed tenure and of a certain and moderate assessment was at once seen in a rapid expansion of cultivation, which even at the low rates of assessment sanctioned yielded a large increase of revenue. The extensive areas of waste land existing at the time when the system was introduced have been employed largely for the growth of crops valuable for export purposes. Despite the check occasioned by many bad seasons and several disastrous famines and notwithstanding the heavy burden of indebtedness with which the agricultural population was saddled from the first, the value of land and the prosperity of the country and with them the revenue have steadily increased. When the first leases of 30 years expired, it was found possible to increase the assessment by very substantial amounts; but the enhancements have with rare exceptions been borne without difficulty. The Survey Department has cost the State from first to last many lakhs of rupees. But the outlay has been repaid over and over again. One peculiar merit of the system deserves mention. By the division of the whole culturable area into what may be called units of assessment, the extension of cultivation was made to carry with it an increase of revenue, while the revenue payer was placed in a position to ease his burden by giving up the occupation of lands unprofitable to him. The extensions of cultivation which have occurred have thus been profitable to the State no less than to the individual; whereas under a zamindari or kindred system, the State would have gained nothing however much cultivation had extended throughout the whole of 30 years' leases. But it has not been only as a revenue producing instrument that the Survey Department has proved its usefulness. The system to which the valuation of soils has been reduced is in many respects unique, and has resulted in a record

of that valuation complete for innumerable small parcels of land. Probably no other province or country is possessed of any similar record. Its chief and immediate value for administrative purposes is that it enables field operations to be entirely dispensed with in all future settlements. The change of assessment can be decided for a whole tract on a review of its economic conditions and revenue history and the people are saved from all the uncertainty and harassment consequent upon inquiry into the circumstances of individual holdings. The greatest credit attaches to the founders of this system, which has stood the test of experience and practical application in the most satisfactory manner. Developments have been introduced, but in no particular have the principles, and in very few have even the individual rules and directions laid down in the Joint Report, been widely departed from. For the intelligent and sound application of the rules to innumerable varieties of climate, soil and agriculture, the Government has had to depend on the integrity, skill and intelligence of the officers and subordinates of the Department, who deserve the warmest acknowledgment for the untiring devotion and zeal which they have displayed in the performance of their laborious duties. The technical knowledge and the intimate acquaintance with the rural economy of the country acquired by the principal officers of the Survey Department have been of the greatest advantage to Government. Several of the Heads of the Department, besides its famous founders, Colonel Francis, Colonel Anderson, Mr. Theodore Stewart and Mr. Ozanne, have shown administrative ability and judgment of an exceedingly high order. Other officers such as Major Preston, Mr. Pedder and Mr. Beyts of the older generation, Mr. Fletcher, Colonel Godfrey and Mr. Hearn of more recent years, have left on record reports of high value regarding the economic condition and productive capacity of the various parts of the Presidency in which they served. Among the native subordinates not a few attained a high degree of skill in the valuation of soils. Mr. Symonds has the credit of guiding the operations to a satisfactory close. While recognizing that the work for which the Department was constituted has been completed, the Governor in Council cannot but regret that the technical knowledge and skill which the members of it had acquired to the great advantage of the administration will be no longer available.

P. J. MEAD,

Under Secretary to Government,

To

The Commissioner, N. D.,
 The Commissioner, C. D.,
 The Commissioner, S. D.,
 The Commissioner in Sind,
 The Director of Land Records and Agriculture,
 All Collectors in the Presidency proper,
 The Private Secretary to His Excellency the Governor,
 The Conservator of Forests, N. C.,
 The Conservator of Forests, C. C.,
 The Conservator of Forests, S. C.,
 The Accountant General,
 The Public Works Department of the Secretariat,
 The Political Department of the Secretariat,
 The Editors' Table, Bombay,
 The Editors' Table, Poona,
 The Editors' Table, Dhárwár,
 The Editors' Table, Belgaum,
 The Editors' Table, Karáchi,
 The Government of India,
 The Secretary of State for India. } By letter.

With copies of the reports of the Survey Commissioner and Director of Land Records and Agriculture, and of the Assistant and Deputy Superintendents.

No . of 1901.

Copy forwarded for information and guidance to

ANNUAL PROGRESS REPORT

OF THE

REVENUE SURVEY DEPARTMENT

For the Year ending 31st October 1900.

[Indian Price—5 Annas.]
[English Price—6 Pence.]

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No. ^{S.}₂₅₃ OF 1901.

From

W. P. SYMONDS, Esq., I. C. S.,
Survey Commissioner and Director,
Land Records and Agriculture, Bombay ;

To

J. W. P. MUIR-MACKENZIE, Esq., M.R.A.C., I. C. S.,
Chief Secretary to Government,
Revenue Department, Bombay.

Poona, 12th February 1901.

SIR,

I have the honour to submit the Progress Report of the Bombay Revenue Survey Department for the year ending 31st October 1900. The Department was under my charge throughout the year. This is the last report which will be submitted in the present form. A brief annual review of survey work proper will be sufficient in future.

2. The subjoined statement shows the strength and constitution of the Department :—

Survey.	Number of Establishments.	Number of Officers in charge of Establishments.		Rank of Head of Survey.	Dates on which parties were disbanded.
		Europeans.	Natives.		
Gujarāt	2	1	2	Deputy Superintendent.	One by the end of February 1900 and the other on 31st October 1900. 31st December 1899.
Deccan	2	1	1		
Konkan	9	...	...
Marāṭha States ...	3	1	3	Superintendent.	15th July 1900.

Gujarāt Survey.

3. The operations of this survey were supervised by Mr. W. S. Cole, Deputy Superintendent, throughout the year. The Progress Report is submitted by Mr. P. R. Mehta, Assistant Superintendent, for reasons explained in paragraph 4 of the report. Mr. Mehta was employed on Famine duty in addition to his duties as Assistant Superintendent under Government memorandum No. 90, Famine, dated 26th September 1899.

4. As explained in paragraph 6 of the previous year's report, the recess work was completed in advance of the estimate, the only work remaining to be accomplished being that under the head of settlement. It was thus found feasible to reduce the establishments (paragraph 3 of Mr. Mehta's report) as also to undertake the additional work referred to in paragraphs 6 to 9 of the same report (*vide* also paragraphs 11 and 12 of this office report for last year.)

5. The work referred to in paragraph 6 of Mr. Mehta's report had to be done under Courts' decree and was undertaken at the request of the Collector under Section 113 of the Land Revenue Code. The details regarding the work referred to in paragraph 7 of Mr. Mehta's report have already been fully explained in paragraphs 9 and 10 of this office report for last year and the action taken in

connection with it has been approved by Government in Resolution No. 3282, dated 25th May 1900, Revenue Department, reviewing that report. The work mentioned in paragraph 9 of Mr. Mehta's report has been more than once explained in previous reports. That referred to in paragraph 8 of the report explains itself.

6. To turn to settlement work, it will be seen from paragraph 15 of Mr. Mehta's report that Mr. Cole duly completed his share of the work. Mr. Mehta however owing to his employment on Famine duty was unable to complete his share by the prescribed date. He and his office were therefore retained till the end of December 1900 to complete this work (paragraph 2 of Government memorandum No. 7640 of 5th December 1900, Revenue Department, and paragraph 3 of this office No. S-2408, dated 12th December 1900). Mr. Mehta has recently reported that he has finished the writing of the Jambusar report, the only one remaining to be submitted, and as soon as the Appendix Q is completed in the Broach Record Office the report will be sent to the press for printing. It will thus be seen that the whole of the settlement work laid down in the programme has been accomplished.

7. The table giving the usual details of work and cost of the survey is appended:—

Measurement.

Year.	MEASURED.			Average cost per acre.	TESTED.		Average error per cent.	
	Fields.	Wallas.	Acres.		Fields.	Acres.	Acres.	
				Rs. a. p.			A.	G.
1898-99	31	296	131	...	4 (18.3)	12 (16.1)	0	4
1899-1900	1,501	11,677	2,318	...	152 (10.1)	175 (7.5)	0	7
Increase	1,470	11,381	2,187	...	148	163	0	3
Decrease ... ..	...	...	...	...	...	...	...	...

Classification.

Year.	CLASSED.		Average cost per acre.	TESTED.		Average difference.	
	Fields.	Acres.		Fields.	Acres.	Soil.	Water.
			Rs. a. p.				
1898-99	31	131	...	10 (30.0)	30 (22.9)	...	...
1899-1900	1,501	2,318	...	217 (14.4)	243 (10.5)	...	...
Increase	1,470	2,187	...	207	213	...	...
Decrease ... ..	...	...	...	...	...	...	...

Cost.

Year.	Measurement.	Classification.	Settlement.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.
1898-99	29,038	29,801	.....	58,839
1899-1900	29,712	25,394	55,106
Increase	25,394	.....
Decrease	29,038	89	.....	3,733

8. Mr. W. S. Cole, the Deputy Superintendent, and his Assistant, Mr. Mehta, are entitled to credit for completing not only the work shown in the programme laid down for the Gujarát Survey, but also a considerable amount of additional work as detailed above. The survey was wound up on the prescribed date, i.e., 31st October last, after which Mr. Cole proceeded on furlough granted him under Government Resolution No. 6832, dated 30th October 1900, Revenue Department. Mr. Mehta, whose appointment was extended till the end of December last for reasons explained above, has since proceeded on privilege leave granted him under Government, Revenue Department, Notification No. 8219 dated 29th December 1900.

9. The miscellaneous work remaining in the Gujarát Districts on the abolition of the survey establishment is detailed in paragraph 16 of Mr. Mehta's report. Items 4 to 7 (under the head of field work) have already been fully explained by this office in paragraph 7 of last year's report. Item 3 is only office work, i.e., the separation of records of Tálukdári Estates, and has been inadvertently taken to be field work by Mr. Mehta. Regarding this, as also items Nos. 1 and 2, particulars have been given in extracts from letters Nos. 528 and 555, dated 19th and 25th June 1900, from the Deputy Superintendent, Gujarát Survey, appended to this office letter No. S-1228, dated 4th July 1900, printed with Government Resolution No. 4560, dated 19th idem, Revenue Department. (This letter also deals with the points raised in paragraph 1 of the Government Resolution reviewing last year's progress report, quoted above). Regarding item No. 4, the Tálukdári Settlement Officer in his letter No. 573, dated 21st December 1900, to the address of the Superintendent, Land Records and Agriculture, N. D., stated that the villages in question being "Udhad" the introduction of the regular survey and assessment into them was not necessary, as laid down by Government in Government Resolution No. 2576, dated 15th April 1890, and added as follows:—"As for a survey on the valuation system, it is lawful for the Governor in Council to direct such survey of a Tálukdári Estate under Section 4 of the Tálukdári Act, but the cost thereof would have to be borne by Government unless the survey operations have been ordered under Section 216 of the Land Revenue Code on the written application of the holders of such villages. Under present circumstances, however, I am not inclined to have the survey operations of these villages re-opened without a fresh sanction of Government, which I think it is not necessary to apply for." Under the circumstances the Superintendent, Land Records and Agriculture, N. D., proposed that the work should be struck off the programme and the matter is under reference to the Collector. Regarding items Nos. 6 and 1, the Collector has not up to date intimated his decision. The other work has been commenced by the establishment retained in accordance with the proposals made in this office letter No. ^A₃₅₁₅, dated 21st September 1900.

10. With regard to the report work, there appears to be no objection to the settlement reports under items 3, 4, and 5 being deferred for the present as proposed by Mr. Mehta. The Superintendent, Land Records and Agriculture, N. D., has been asked to take up the other items and visit the Mehvasi villages mentioned under item No. 7 during the present touring season.

Deccan Survey.

11. This branch has already been disbanded and the only work remaining is the survey and settlement of Inám villages as explained in paragraph 19 of last year's report. The survey of these Inám villages could not be undertaken up to date as the party retained for the Akráni Survey, by whom it is to be carried out, was engaged in November and December last in helping the Konkan Survey establishments in handing over the records to the Land Records establishment and since last month has been employed in the Poona Land Record office in working off some of the arrears in that office. The Collector of Khándesh says that survey operations in the Akráni pargana should be postponed till about the middle of March as the Talátis will be busy over census work and unable to assist the party in carrying on the operations. The matter is still under discussion. Settlement work, as explained in the paragraph of last year's report referred to above, also remains to be done in certain Inám villages. The number of these villages, as explained in the same paragraph, is given in this office. No. S-24, dated 5th January 1900, printed in the preamble of Government Resolution No. 573, dated 25th idem. Out of these, settlement proposals for 12 villages (7 original and 5 revision) have since been submitted. The proposals

for 7 villages were prepared by Mr. McIver, Acting Deputy Superintendent, Konkan Survey, in pursuance of orders contained in Government memorandum No. 131-P, dated 13th July 1900, Revenue Department. The settlement work remaining in the other Inám villages will be completed in the manner proposed in paragraphs 9 to 12 of this office letter No. $\frac{A}{3515}$, dated 21st September 1900.

Konkan Survey.

12. Mr. Hudson continued in charge of this survey except for about two months in 1899 when he was on privilege leave and again for three months (from 1st August to 31st October) when owing to ill-health he proceeded on furlough granted him under Government Resolution No. 4375, dated 10th July 1900. During his absence, Mr. McIver acted for him, on the latter occasion in addition to his own duties as Forest Settlement Officer, Kolába. Mr. H. V. Sáthe, who was acting as Assistant Settlement Officer in the Deccan Revenue Survey, on the abolition of that survey on the 31st December, 1899, reverted to his appointment of Assistant Superintendent, Konkan Survey, and resumed charge of his special duty in connection with the revision of the Survey Manual from 1st January, 1900. Mr. Sáthe continued on this duty till 31st August 1900, after which date he proceeded on two years' furlough granted him under Government Resolution No. 5195, dated 22nd August 1900, Revenue Department. The number of parties at work was ten as in the preceding year. One party was retained at headquarters throughout the year and the others till 9th December, 1899, for reasons already explained in paragraph 25 of last year's report. The survey of the village of Kotimbe, taluka Karjat of the Kolába District, was undertaken under the orders contained in Government Resolution No. 5661, dated 15th August 1899, Revenue Department. With the exception of this small amount of measurement and classification work the season's operations consisted of phalni or the sub-division of occupancies in varkas lands in 806 villages comprised in the talukas noted in the margin.

(1) Pen	Kolába.
(2) Panvel ...	...	...
(3) Alibág ...	...	...
(1) Bassein	Thána.
(2) Váda ...	...	...
(3) Sháhápur ...	...	...
(4) Máhim ...	...	...
(5) Dáhanu ...	...	...

13. The outturn and cost of the survey are exhibited in the following tables:—

Measurement.

Year.	MEASURED.			Average cost per Acre.	TESTED.		Average difference. Acres.
	Fields.	Waslas.	Acres.		Fields.	Acres.	
				Rs. a. p.			
1898-99 ...	...	...	...	...	...	...	...
1899-1900 ...	888	3,919	1,252	0 2 11	38 (4·3)	123 (9·8)	...
Increase ...	...	...	...	...	...	...	...
Decrease ...	...	...	...	...	...	...	...

Classification.

Year.	CLASSED.		Average cost per Acre.	TESTED.		Average difference. Acres.
	Fields.	Acres.		Fields.	Acres.	
			Rs. a. p.			Rabi Varkas.
1898-99 ...	...	...	...	...	...	...
1899-1900 ...	590	805	0 4 0	40 (6·8)	25 (3·1)	...
Increase ...	...	...	...	...	...	...
Decrease ...	...	...	...	...	...	...

Phalni.

Year.	CLASSED.		Average cost per Acre.	TESTED.		Average difference.
	Fields.	Acres.		Fields.	Acres.	
			Rs. a. p.			Rabi. Varkas.
1898-99 ...	429,177	645,100	0 2 5	44,564 (10·3)	64,943 (10·0)	1 pie 3 pies.
1899-1900...	174,908	280,820	0 5 1	19,822 (11·1)	29,090 (10·3)	... 2 do.
Increase ...	...	...	0 2 8	...	...	...
Decrease ...	254,269	364,280	...	25,242	35,859	1 pie.

Cost.

Year.	Measurement.	Classification.	Phalni.	Settlement.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1889-99 ...	...	...	96,657	32,794	6,938	1,36,389
1899-1900...	228	200	89,572	34,681	6,756	1,31,437
Increase ...	228	200	...	1,887	...	...
Decrease ...	...	...	7,085	...	182	4,952

The outturn being not for a whole season cannot fairly be compared with that of the previous year. In view, however, of the smaller number of men employed and the greater loss of time in travelling, the outturn appears satisfactory.

14. The Deputy Superintendent had to submit reports regarding phalni

- | | | |
|--------------|-----|-----------|
| (1) Alibág | ... | } Kolába. |
| (2) Pen | ... | |
| (3) Panvel | ... | |
| (4) Roha | ... | |
| (1) Sálsette | ... | } Thána. |
| (2) Kalyán | ... | |
| (3) Bhiwandi | ... | |
| (4) Bassein | ... | |
| (5) Váda | ... | |
| (6) Sháhápur | ... | |
| (7) Máhim | ... | |

settlements for the tálukas noted in the margin, and the head-quarter establishment was fully occupied in working out the phalni assessments and preparing the papers. It was thus necessary to have some of the "Akar" work and "Vasuli Patraks" prepared along with the other recess work by the field establishments, and a sufficient number of temporary hands not being available owing to the plague-scare the work has mostly been completed by the regular establishments

assisted by men transferred from the Deccan Survey and recalled from other Departments. All these causes have contributed towards increasing the cost per acre. Excluding the expenditure on "Vasuli Patraks" and "Akar work" as proposed in paragraph 2 of this office letter No. S.-2725, dated 12th November, 1895, printed in the preamble of Government Resolution No. 10217, dated 26th December, 1895, Revenue Department, the actual cost chargeable to holders of occupancies of 3 acres and less on account of phalni operations undertaken under Government Resolution No. 7900-A, dated 30th October 1897, has amounted to only Re. 0-2-6 per acre.

15. The test applied, which includes that of the supervising officers, was ample. The whole of the remaining field recess and "Akar" work connected with the phalni was accomplished and the survey closed on the 15th July 1900, the date prescribed by Government. The only work that remained over was of a miscellaneous nature incidental to the winding up of the survey, and for doing this proposals were submitted in this office No. S.-1228, dated 4th July, 1900, and were sanctioned by Government in Government Resolution No. 4560, dated 19th July, 1900, Revenue Department. The temporary establishment sanctioned for doing this work was discharged on the 31st October last, a few hands only being retained to hand over the records to the Land Record Establishment and to dispose of the dead stock and render the final accounts of the survey up to the end of January, 1901. Care has been taken to keep the expenditure for the whole period within the amount finally sanctioned under Government Resolution No. 8020, dated 20th December 1900, Revenue Department.

16. The work referred to in paragraph 35 of Mr. McIver's report is the miscellaneous work detailed in paragraph 6 of this office letter No. S.-1228 of 4th July 1900 referred to above. The whole of this work was accomplished with the exception of part of item No. (7), which could not be done, as the records had to be handed over to the Land Record Establishment. It can be done by that agency when "Suds" are received from taluka offices for purposes of correction, &c., in the ordinary manner. The only other work remaining in this survey is the calculation of revision assessments for three talukas named in the margin, as also their phalni settlement. The revision settlement proposals for these talukas are before Government and on receipt of Government orders on the proposals, this work can also be undertaken by the Land Record Staff with the aid of the head-quarter establishment under the Superintendents, Land Record and Agriculture, proposed in this office letter No. A.-3515, dated 21st September, 1900, and sanctioned under Government Resolution No. 519, dated 26th January, 1901.

- | | |
|-----------------|-----------|
| (1) Mahad ... | } Kolaba. |
| (2) Mangaon ... | |
| (3) Dahanu ... |  | Thana. |

17. Mr. Hudson and the establishments under him appear to have accomplished satisfactorily a large amount of work. Besides this, Mr. Hudson was deputed to the Khed Taluka of the Ratnagiri Collectorate to make enquiries in the field and report on the classification of rice lands in that taluka, under Government Resolution No. 2584, dated 24th April 1900. His report on the subject was forwarded to Government under this office No. S.-2342, dated 27th June 1900, on which orders were issued in Government Resolution No. 5711, dated 12th September 1900, R. D. The work of the Survey Mamlatdar, Mr. Mhaskar, who assisted the Deputy Superintendent in the administrative charge of the establishments, was found highly satisfactory. Mr. Nerurkar, another Survey Mamlatdar, has also done creditably. Both these officers reverted on the abolition of this survey to their substantive appointments in the Revenue Department.

Maratha States Survey.

18. This survey continued in charge of Mr. J. C. Whitcombe. The number of establishments remained the same, the average strength of measurers employed slightly increasing and that of classers slightly decreasing. As heretofore, the work of measuring and classing was carried on simultaneously, the classers following the measurers. The ground covered was 72 villages of the

	Measure-	Classifica-
	ment.	tion.
1. Torgal State ...	26	26
2. Alta Taluka ...	14	14
3. Shirol Taluka ...	4	4
4. Gad Hinglaj Taluka .	15	36
5. Panhata Taluka ...	13	9
	72	89
	—	—

Kolhapur State for measurement and 89 for classification as detailed in the margin. The work in the Shirol and Alta talukas as stated by the Superintendent was "the separation, measurement and demarcation of different descriptions of Inam lands, which had to be left over at the time of survey operations for enquiry and decision by the Darbar."

19. The following tables show the usual details :—

Measurement.

Year.	Measured.			Average cost per acre.	Tested.		Average error per cent. Acres.
	Fields.	Wastias.	Acres.		Fields.	Acres.	
				A. p.			A. g.
1898-99 ...	26,805	155,875	125,039	2 11	2,580 (18·0)	3,098 (10·0)	0 18
1899-1900 ...	(a) 9,803	116,072	43,598	} 2 8	1,776 (18·1)	4,864 (11·2)	0 21
	(b) 6,775	...	107,477				
	16,578	116,072	151,075				
Increase ...	...	...	26,036	...	...	1,766	0 3
Decrease ...	10,227	39,803	...	0 3	804	...	...

(a) Area actually measured.

(b) Area confirmed without actual measurement.

Classification.

Year.	Classed.		Average cost per acre.	Tested.		Average difference.	
	Fields.	Acres.		Fields.	Acres.		
			A. p.			Soil.	Water.
1898-99 ...	25,531	124,245	1 6	404 (17·7)	403 (15·3)	1 pie	...
1899-1900 ...	(a) 1,545	22,127	} 1 2	334 (21·6)	437 (2·0)	2 pies	1 pie
	(b) 16,608	145,239					
	18,153	167,366					
Increase ...	...	43,121	...	...	34	1	1
Decrease ...	7,378	...	0 4	70	...	...	...

(a) Area actually classed.

(b) Area confirmed without actual classification.

The outturn shows a decrease in the number of fields, but this is more than counterbalanced by the considerable increase in the area measured and classed.

Working days show an increase of 1·41 per cent. for measurers, but for classers a decrease of nearly 5 per cent. This decrease was due to loss of time under the head of (1) leave and holidays, (2) travelling and (3) sickness. The loss under the last two heads was unavoidable.

20: The test taken, which includes that of measurement work by the Assistant, was ample and satisfactory. In classification the number of survey numbers tested was more than sufficient, but the area tested amounted to only 2·0 per cent. Mr. Whitcombe observes that "the large area reclassified this year accounts for the decrease in the percentage of acres tested."

21. The monsoon work was all completed. Regarding this Mr. Whitcombe observes as follows :—"The Department was to some extent crippled owing to the services of 4 experienced classers having been temporarily lent to the Deccan Revenue Survey, to the deaths* and resignation† of (5) men, as well as to the prevalence of plague which necessitated the men leaving the city of Poona and dwelling in huts some miles away, in consequence of which the recess examination of the previous seasons' work was protracted until the 15th November 1899."

* 4 { 3 from plague.
 † 1 from cholera.
 + 1 —
 — 4
 5

22. In addition to the usual survey work the Darbár required that a special plan of the land on which the fair is held annually in the Inám village Chinchli in the Rajbag Mahál of the Shirol Táluka should be prepared showing "the localities reserved for stalls of different trades, or for other purposes as marked out, as well as the roads within the limits of the land." This map has accordingly been prepared with an index "duly numbered 1 to 94 stating opposite each number the purpose for which the land is required."

23. The cost of the operations under all heads is shown in the following table:—

Year.				Measurement.	Classification.	Settlement.	Miscellaneous.	Total.
				Rs.	Rs.	Rs.	Rs.	Rs.
1898-99	...	...	...	22,882	11,759	10,978	...	45,619
1899-1900	...	...	...	25,431	12,511	10,095	...	48,037
Increase				2,549	752	...	...	2,418
Decrease				...	...	883	...	...

24. The distribution of cost between the States affected, as far as the year under report is concerned, may be briefly exhibited thus:—

Name of State.				Measurement.	Classification.	Settlement.	Total.
				Rs.	Rs.	Rs.	Rs.
Kolhápúr State	...	...	...	25,431	12,511	9,957	47,899
Ichalkaranji State	...	...	...	...	...	138	138
Total				25,431	12,511	10,095	48,037

* 7 villages.

† 41 do.

48

25. During the year under report, original* and revised† survey rates were introduced into 48 villages of the Azra Táluka of the Ichalkaranji State and revision survey rates into one village of the Shirol Táluka of the Kolhápúr State respectively with the following results:—

State.				Number of Villages.	Former Revenue.	Revised Demand.	Increase.
				Rs.	Rs.	Rs.	Rs.
Azra Táluka...	...	...	...	48	29,310	38,371	9,061
Shirol do. ...	...	...	...	1	5,391	6,641	1,250
Total				49	34,701	45,012	10,311

26. Information regarding the estimated amount of work remaining to be done and the probable date of its completion has already been furnished in this office report No. S-1228, dated 4th July, 1900, printed with Government Resolution No. 4560, dated 19th July, 1900, Revenue Department.

27. On the whole the year's results reflect credit on Mr. Whitcombe and his Assistant.

Summary.

28. As usual, I append a summary of the work of all the surveys taken together, except the Marátha States Survey.

29. In the following table is shown the classified cost of the surveys :—

Surveys.	Measurement.	Classification.	Phalni.	Settlement.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gujarát ... ..	...	...	...	29,712	25,395	55,107
Deccan ... ..	...	...	...	...	...	18,986
Konkan	228	200	89,572	34,681	6,756*	1,31,437
Total	228	200	89,572	...	...	2,05,530
Total for 1898-99 ...	29,703	42,777	96,657	85,575	14,278	2,68,990
Increase ... ..	...	...	...	...	...	...
Decrease	29,475	42,577	7,085	...	...	63,460

* Inclusive of the amount (of Rs. 3,696-8-0) on account of the revision of the Survey and Settlement Manual.

This net decrease of Rs. 63,460 is made up as follows :—

	Rs.
Gujarát Survey ... ..	... .. —3,732
Deccan Survey ... ..	... .. —54,776
Konkan Survey ... ..	... .. —4,952
Net decrease	—63,460

29. The Deccan Survey was abolished on 31st December 1899. The chief cause of the decline in expenditure is of course the reduction of establishment on fulfilment of the programme for each survey. The cost of phalni operations will be partly recovered from the occupants for whom the phalni is done.

30. The charge against each survey of the pay and allowances of the Survey Commissioner and his office, debitable to survey during the last two years, is shown in the following statement :—

Year.	Gujarát.	Deccan.	Konkan.	Total.
	Rs.	Rs.	Rs.	Rs.
1898-99	5,650	6,148	13,828	25,626
1899-1900	5,586	6,325	13,289	25,200
Increase ... ..	...	177	...	...
Decrease	64	...	539	426

31. The measurement and classification work done being very limited, the usual tables showing the cost per square mile and the details of each survey have been omitted.

32. The following tables show the details for phalni work :—

Year.	Area phalnid.	Cost per Acre.	Cost per square mile.
	Acres.	Rs. a. p.	Rs.
1898-99	645,100	0 2 5	97
1899-1900	280,820	0 5 1	203
Increase ... ..	.....	0 2 8	106
Decrease	364,280	.....	...

Survey.			
Gujarát ... ..	.....	.....	...
Deccan... ..	.....	.....	...
Konkan	280,820	0 5 1	203
Total	280,820	0 5 1	203

The causes to which the increase in the average cost per acre is attributable are explained in paragraph 13 above.

33. During the year under report the only settlement introduced was that according to phalni in the Murbád Táluka of the Thána Collectorate. The result of this settlement was an increase of Rs. 3,185 in the assessment of rabi and varkas lands of the táluka.

34. The following table is given corrected and brought to date as usual :—

District.	Former Revenue.	Revised Demand.	Immediate Increase.	Percentage Increase.
	Rs.	Rs.	Rs.	
Ahmedabad	8,74,265	10,99,018	2,24,753	25·7
Kaira	13,30,021	15,32,057	2,02,036	15·2
Panch Maháls... ..	1,10,427	1,11,934	1,507	1·4
Surat	7,43,442	8,37,738	94,296	12·7
Thána	8,85,424	12,10,231	3,24,807	36·7
Khándesh	29,69,635	38,62,109	8,92,474	30·5
Násik	11,29,770	14,69,723	3,39,953	30·1
Ahmednagar	11,76,900	15,12,309	3,35,409	28·5
Poona	9,72,165	12,81,699	3,09,534	31·8
Sholápur	8,56,924	11,49,492	2,92,568	34·1
Sátára	13,19,568	17,17,891	3,98,323	30·2
Kolába	7,33,534	10,00,271	2,66,737	36·3
Belgaum	11,05,172	14,36,165	3,30,993	29·9
Dhárwár	13,01,363	18,88,696	5,87,333	45·1
Bijápur	8,56,355	10,79,438	2,23,083	26·0
Total	1,63,64,965	2,11,88,771	48,23,806	29·5

35. The following statement gives details of settlements introduced into Inám and Jágíir villages with the sanction of the Survey Commissioner. It does not include the settlements introduced in the tracts being dealt with by the Marátha States Survey :—

Name of District	Name of Taluka.	No. of Villages.	Nature of Settlement.	Old collections.	Revised Assessment.	Increase.	
						Rs.	Per cent.
					Rs.		
Belgaum ...	Khánápur ...	6	Original ...	907	1,088	181	20.0
Khándesh ...	Nandurbár ...	3	Revision ...	7,255	9,130	1,875	25.8
Sátára ...	Jávli ...	3	Original ...	888	2,005	1,117	125.5
	Do. ...	5	Revision ...	2,911	4,337	1,426	49.0
Miraj Mala ...	Gudegeri ...	15	Revision ...	69,930	51,758	...	...

Judi Settlement and Scale Remuneration.

36. During the year under report the "Judi Tharav" has been made in 736 villages as compared with 683 of the previous year, and proposals for the revised scale remuneration have been prepared for 678 as against 878 in the previous year. The records of the latter work shows a decrease. As has been explained in previous reports, the progress of this work is impeded by the difficulties experienced by Revenue officers in supplying information to this office owing to the pressure of Famine and Plague work. It is expected that the lost ground will be recovered during the current year. As stated in paragraph 51 of last year's report, the necessary proposals regarding the establishment to be retained for doing this work have since been made in this office No. $\frac{A}{3616}$, dated 21st September 1900, and sanctioned by Government in Government Resolution No. 519, dated 26th January 1901, Revenue Department.

The usual table is given below.

Name of Taluka.	Total Number of Villages	Revision Settlement year.	Arrears of		Name of Taluka.	Total Number of Villages	Revision Settlement year.	Arrears of	
			Judi Settlement.	Revised Scale Remuneration.				Judi Settlement.	Revised Scale Remuneration.
1	2	3	4	5	1	2	3	4	5
<i>Bijápur.</i>					<i>Násik—</i>				
Muddebhál ...	4	1896-97	...	4	continued.				
<i>Belgaum.</i>					Chandor ...	6	1899-1900	6	6
Belgaum ...	2	1896-97	...	2	Yeola ..	23	1899-1900	2	23
Khánapur ...	6	1900-1901	6	6	Peint ...	1	1898-99	1	1
Total ...	8	.....	6	8	Málegaon ...	148	1899-1900	135	148
<i>Sátára.</i>					Báglaui ...	139	1899-1900	71	139
Válva ...	107	1896-97	105	107	Total ..	380	.....	223	380
Jávli ...	17	{ 1899-1900...2 }	9	17	<i>Khándesh.</i>				
Sátára ...	6	{ 1900-1901...5 }	...	6	Sindkhed ...	17	{ 1898-94...(12) }	3	17
Pátan ...	86	1895-96	...	86	Nandurbár ...	3	{ 1894-95... (2) }	3	3
Karád ...	77	1895-96	1	77	Táldoda ...	81	{ 1895-99... (3) }	4	81
Total ...	293	.....	115	293	Sháháda ...	153	{ 1896-1897 }	...	...
<i>Ahmednagar.</i>					Shirpur ...	103	{ 1899-1900...152 }	11	153
Kopargaoon ...	3	1899-1900	3	3	Dhulia ...	185	{ 1900-1901... 1 }	1	103
Total ...	3	.....	3	3	Total ...	542	.....	57	185
<i>Poona.</i>					<i>Thana.</i>				
Khed ...	4	{ 1892-93 ... 3 }	4	1	Kalyán ...	44	{ 1895-96... 43 }	...	44
Purandhar ...	1	{ 1900-1901 1 }	1	1	...	...	{ 1897-98... 1 }	...	...
Total ...	5	.....	5	2	Paasein ...	3	1898-99	...	3
<i>Násik.</i>					Váda ...	137	1899-1900	...	137
Niphád ...	4	1899-1900	4	4	Máhim ...	189	1899-1900	1	189
Nándgaon ...	59	{ 1896-97 ... 45 }	4	59	Sháhápur ...	255	1899-1900	51	255
		{ 1897-98... 9 }			Total ...	628	.....	52	628
		{ 1899-1900...5 }			<i>Kolaba.</i>				
					Pen ...	8	1894-95	...	8
					Roha ...	87	1898-99	...	87
					Total ...	95	.....	...	95

37. During the year owing to pressure of Famine work no Junior Civilians could be spared for instruction in survey matters.

38. With reference to paragraph 8 of Government Resolution No. 3282, dated 25th May 1900, Revenue Department, on last year's progress report I would beg to be allowed to refer to the "Introduction" to the revised edition of the Survey Manual, a proof copy of which has already been laid before Government. Government do not presumably desire me to travel over the same ground again in the very limited time left at my disposal. The whole of this compilation is now complete and a proof of the last portion will shortly be submitted to Government. Messrs. Whitcombe, Young and Sâthe deserve commendation for the labour bestowed by them on this work.

39. At the end of March, the necessary reductions in the survey establishment in this office will be made as sanctioned in Government Resolution No. 519, dated 26th January 1901, Revenue Department, and the Personal Assistant, Mr. Anjangaonkar, will revert to the place of Mámlatdár in the Revenue Department, the extra appointment in this office created under Government Resolution No. 5414, dated 20th July 1897, Revenue Department, being abolished from that date. Mr. Anjangaonkar's assistance has been invaluable in the difficult work consequent on the winding up of the Department, in arranging for the disposal of work left outstanding, in drafting the reports and financial proposals to be laid before Government, and in facilitating the future employment of the staff reduced.

40. It is presumed that the Director, Land Records and Agriculture, will from the 1st April next continue to exercise general control over the work of the Marátha States Survey and over the work of the Government of India Party employed on the Survey of Forests in the Bombay Presidency and that he will continue to supervise all survey work in the Presidency Proper.

41. In conclusion, I have to acknowledge the steps taken by the Divisional Commissioners to provide appointments for survey subordinates thrown out of employ. The District Judge, Sátára, also has kindly taken several survey men to fill up vacancies in his Department. There are still a number of men who have not been provided for. A revised list of these men will shortly be issued and circulated to the Divisional Commissioners.

I have the honour to be,

Sir,

Your most obedient Servant,

W. P. SYMONDS,

Survey Commissioner and Director,
Land Records and Agriculture,

PROGRESS REPORT

OF THE

GUJARAT REVENUE SURVEY

For the Year ending 31st October 1900.

PROGRESS REPORT OF THE GUJARAT REVENUE SURVEY
FOR THE YEAR ENDING 31st OCTOBER 1900.

No. 84 of 1900.

Broach, 25th November 1900.

Mr. W. S. Cole, the Deputy Superintendent, remained in charge of this survey during the year under report.

2. Mr. P. R. Mehta, Assistant Superintendent, was employed on famine duty, throughout the year, in connection with fodder and cattle operations, in addition to his settlement duties.

3. Of the two remaining survey parties one was disbanded on 29th February 1900 in accordance with the programme of work laid down in Government Resolution No. 5753-A., dated 23rd July 1898. Head Surveyor Azam Jethalal Gulabchand retired on pension on the same date. The charge of the remaining establishment was held by Head Surveyor Azam Mohanlal Ishwardas.

4. The Gujarát Revenue Survey was disbanded on the 31st ultimo and Mr. W. S. Cole proceeded on furlough the day following. As the statistical tables of expenditure and outturn of work could not be completed before that date the Deputy Superintendent was not able to submit this report before his departure. The duty of preparing and submitting the same was, therefore, entrusted to me.

Field Work.

5. I have the honour to report that the programme of field work submitted to Government last year (*vide* Survey Commissioner and Director of Land Records and Agriculture's letter No. S.-252, dated 9th February 1900, forwarding the last year's Progress Report) was duly completed before the disbandment of the survey.

6. Three classers were employed, under the supervision of Azam Mohanlal Ishwardas, on the survey of the Inámi village of Alwa, táluca Kapadvanj, throughout the year. The village comprises 2,318 acres. The cost of the survey amounted to Rs. 650-6-3, which will be recovered from the Inámdár.

7. A party of twelve classers was employed from 13th February to 10th March in Jhálod, Dohad and Hálol under Azam Mohanlal Ishwardas to class certain survey numbers for tank water assistance which could not be separately deduced from the original records. The work lasted nearly a month and the total number of survey numbers examined amounted to 2,568.

8. In addition to the work mentioned above it was found necessary to bring up to date the village maps of these three tálukas. Since the time of their revision settlement about 20 years ago, survey parties were deputed on several occasions to break up over-sized numbers; to measure and make corrections in the records necessitated by the changes in forest demarcation and other miscellaneous work. Under the circumstances it was found necessary to bring up to date and prepare for re-printing maps of 222 villages.

9. The work of copying partially burnt records of the five tálukas noted in the Survey Commissioner and Director of Land Records and Agriculture's letter quoted in paragraph 5 was also duly completed.

10. As the work done during the year under review was of a miscellaneous character, the usual statistical tables, comparing it with the work performed in previous years, could not be compiled and have been omitted. The usual number of appendices showing the detail of the work done during the year are submitted herewith.

11. During the year under report, 580 village maps were sent to the Photoincino Office for printing and 100 copies were printed and returned. The charges in connection with this and other miscellaneous work amounted to Rs. 2,028 as compared with Rs. 3,759 in the previous year.

12. The total number of forms printed for the use of this survey amounted to 58,620 as compared with 66,675 in the preceding year. The total cost of the establishment in connection with the above work amounted to Rs. 2,932-11-0 against Rs. 1,220-3-0 in the previous year. Maps of 1,267 villages were mounted on cloth and supplied to the taluka and village officers.

13. The details of advances for the erection of boundary marks are given below as required in Government Resolution No. 694, dated 7th January 1891:—

Total advance.	Of which recoverable.	Debited to Government.
Rs.		Rs.
160	160

14. The expenditure relates to marks erected in villages the measurement of which was completed in previous years and the work of erecting the boundary marks was left to the taluka authorities.

Settlement Operations.

15. During the year under report Mr. W. S. Cole submitted revision settlement proposals for the Khálsa villages of Kálol, Godhra, and Mándvi; and Mr. P. R. Mehta submitted those for the Khálsa villages of Anklesvār and A'mod. The latter officer has also submitted, since the 31st of the last month, revision settlement proposals for the Vágra Taluka. Only one taluka, viz., Jambusar, now remains to be reported upon. I was entrusted with the work, but owing to my deputation on famine duty to North-Western and Central Provinces I was unable to take it in hand. I hope to submit the report by the end of December 1900. During the year the Deputy Superintendent introduced the revised rates in the Khálsa villages of the Olpád Taluka. The results of the proposed settlements are tabulated below:—

Collectorate.	Taluka.	Number of villages.	Total acres.	Assessed acres.	Previous year's collection.	Assessment according to revised rates.	Increase.	Decrease.
					Rs.	Rs.	Rs.	Rs.
Surat ...	Mandvi ...	153	154,554	90,509	1,51,062	1,63,662	12,600	...
Panch Maháls	Kálol ...	58	85,832	31,323	54,043	66,731	12,688	...
	Godhra ...	145	227,327	88,301	54,499	65,666	11,167	...
	Anklesvar ...	102	184,518	101,269	4,31,232	4,10,173	...	21,059
Broach ...	A'mod... ..	50	96,506	58,847	2,64,925	2,74,137	9,212	...
	Vágra ...	68	189,006	88,367	3,07,023	2,87,694	...	19,429
	Total ...	576	937,743	458,616	12,62,784	12,67,963	45,667	40,488

16. As has been explained in the Survey Commissioner and Director of Land Records and Agriculture's letter quoted above, some field work, mostly connected with Inámi and Talukdári villages, could not be undertaken during the year on account of the prevailing famine in Gujarát. In the list given below is shown the amount of work which remains to be completed:—

Field Work.

1. Measurement and classification of the village of Váv in the Parántij Taluka.

2. Measurement and classification of lands lapsed to Government in the Inámi villages of Atáli and Sureli in Kálol.

3. Separation of Talukdári estates in the villages of Sitvára, Antroli and Moed in Parántij.

4. Survey of the Tálukdári villages of Rania Khodwád and Gájna of the Kaira District sanctioned in Government Resolution No. 2855, dated 1st May 1882, Revenue Department.

5. Classification of five villages of the Umetha Darbár as per Government Resolution No. 2744, dated 9th May 1898.

6. Survey of the six Mehvási villages of the Parántij Táluka of the Ahmedabad District.

7. Partial survey of the village of Dholera, táluka Dhandhuka, of the Ahmedabad District.

Settlement.

1. The duplication of the akarbandhs of Olpád and Jalápor.

2. The preparation and duplication of the akarbandhs of Bulsár, Párdi, Mándvi, Kálol, Godhra, Broach, Anklesvar, A'mod, Vágna and Jambusar. Of these, the revision settlement proposals for Bulsár have been already sanctioned and the preparation of its akarbandhs can be taken in hand at once by the Agricultural Department.

Report Work.

1. Revision settlement report on the Inámi village of Dákor in Thásra.

2. Original settlement report on Sahijpur Bogha, Kujád and Memnagar, táluka Daskrohi.

3. Revision settlement report on the leasehold villages of the Patádárs of Tándá, Katwára and Chandwána in Dohad.

4. Original settlement report on the tálukdári villages of Vadi-Valavpur in Godhra.

5. Original settlement report on the tálukdári villages of Mehtral in Godhra.

6. Original settlement report on the Inámi village of Alwa in Kapadvanj.

7. Original settlement report on the Mehvási villages of Parántij.

8. Enquiry into the causes of relinquishments in Daskrohi, Mátar and other tálukas. This question has not yet been finally decided by Government; but as an establishment has been provided for the current year to do the outstanding field work and the work necessitated by the famine operations of last year, it will be convenient to take it up immediately, as otherwise the Agricultural Staff will not be able to cope with it.

9. Settlement reports on villages shown in the above statement of outstanding field work.

As regards Items Nos. 4 and 5 I am respectfully of opinion that they may be left over till the report on Godhra, which has been already submitted, has been sanctioned. The report on the Patádári villages of Dohad can also be conveniently postponed for the present and taken up along with the second revision of that táluka which will fall due in 1904.

17. The subjoined statement gives the expenditure of the survey for the year under report. The total expenditure amounted to Rs. 55,106 against Rs. 58,838 in the previous year, or a decrease of Rs. 3,732, due mainly to the reduction in the strength of the survey parties :—

Heads.					Actual Cost.	Rateable proportion of Nos. 5 and 6.	Total Cost.
					Rs. a. p.	Rs. a. p.	Rs. a. p.
1. Measurement	...	...	...	...	.....	.....	.....
2. Classification	...	...	...	...	.....	.....	.....
3. Settlement	...	...	...	...	12,939 0 9	16,772 11 6	29,711 12 3
4. Miscellaneous	...	...	...	...	14,207 14 10	11,186 11 6	25,394 14 4
					27,146 15 7	27,959 7 0	55,106 6 7
5. Deputy Superintendent's salary and expenses of his office					22,373 7 0	.....	.....
6. Proportion of Survey Commissioner's office and his salary					5,586 0 0	.....	.....
Total					27,959 7 0	.....	.....
Grand Total					55,106 6 7	.....	.....

18. The financial results of the Gujarát Revenue Survey in Khálsa villages since the introduction of the revised rates are tabulated below :—

Collectorate.	Táluka.	REVENUE OF GOVERNMENT AND ALIENATED LAND IN		Difference.	Total increase since settlement.
		the year prior to settlement.	1899-1900.		
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Ahmedabad.	Dholka ...	1,87,766 13 5	2,03,227 8 5	15,460 11 0	2,88,925 8 9
	Dhandhuka ...	55,225 14 1	69,984 7 0	14,758 8 11	1,65,234 1 10
	Daskrohi ...	3,34,656 12 6	3,75,010 3 4	40,353 6 10	5,74,974 0 2
	Viramgám ...	1,63,648 1 0	1,94,113 5 8	30,470 4 8	3,93,109 11 5
	Parántij ...	1,23,459 14 4	1,25,014 11 10	1,554 13 6	81,634 11 3
	Sánand ...	1,46,420 5 2	1,47,788 1 4	1,367 12 2	45,935 6 10
	Total ...	10,11,172 12 6	11,15,138 5 7	1,03,965 9 1	15,49,813 8 3
Kaira.	Mátar ...	2,65,370 7 9	2,70,689 4 7	5,318 12 10	54,818 6 9
	Mehmadabad ...	2,31,417 5 0	2,51,895 12 0	20,478 7 0	1,29,056 10 0
	Borsad ...	3,29,080 4 0	3,58,788 11 0	29,708 7 0	1,22,671 13 0
	Nadiád ...	3,44,640 14 0	3,79,186 15 7	34,546 1 7	1,48,651 15 4
	Thásra ...	2,01,366 2 2	2,08,840 15 0	7,474 12 10	49,216 13 2
	Kapadvanj ...	1,54,767 12 0	1,54,687 12 0	*80 0 0	70 0 0
	Anand ...	3,63,682 2 0	4,05,230 7 0	41,548 5 0	1,80,159 14 0
	Total ...	18,90,324 14 11	20,29,319 13 2	1,38,994 14 3	6,84,645 8 3
Surat.	Bárdoli ...	4,22,751 0 0	4,58,831 0 5	36,080 0 5	1,10,626 0 10
	Chorási ...	1,98,883 8 9	2,16,284 7 8	17,400 14 11	53,106 2 7
	Chikhli ...	2,13,260 13 11	2,21,643 3 7	8,382 5 8	8,382 5 8
	Total ...	8,34,895 6 8	8,96,758 11 8	61,863 5 0	1,72,114 9 1

* Decrease.

P. R. MEHTA,
Assistant Superintendent,
Revenue Survey Gujarát.

PROGRESS REPORT

OF THE

KONKAN REVENUE SURVEY

For the Year ending 31st October 1900.

PROGRESS REPORT OF THE KONKAN REVENUE SURVEY FOR THE YEAR ENDING 31st OCTOBER 1900.

No. 1190 OF 1900.

*Konkan Survey Deputy Superintendent's Office,
Poona, 31st October 1900.*

Changes and Promotions.

Mr. J. A. McIver, Acting Deputy Superintendent, relinquished charge of his duties in the Konkan Revenue Survey on the 26th December 1899 and proceeded to Kolába District to join his appointment as Dalhi Settlement Officer, Kolába.

2. Mr. A. G. Hudson, Deputy Superintendent, Konkan Revenue Survey, on his return from privilege leave received charge of his duties from Mr. J. A. McIver on the 26th December 1899.

3. Mr. H. V. Safhe, Assistant Superintendent, on special duty in connection with the revision of the Survey and Settlement Manual, was transferred to the Konkan Revenue Survey from January 1900.

4. Mr. A. G. Hudson, Deputy Superintendent, was promoted to the 1st Grade of Deputy Superintendent, Konkan Revenue Survey, from 17th April 1900 (*vide* Government Resolution No. 2572 of 24th April 1900).

5. Mr. Hudson was granted nine months' furlough from the 1st August 1900 to the 31st March 1901 under Government Resolution No. 4375 of 10th July 1900, and Mr. J. A. McIver was put in to act as Deputy Superintendent from the 1st August to the 31st October 1900, in addition to his duties as Forest Settlement Officer, Kolába.

Strength of Survey and Duration of Working Season.

6. The Konkan Field Party consisted of nine establishments as per margin, which were employed from the 10th December 1899 to the 15th April 1900 on Varkas Phalni operations.

Letter of Establishment.	Number of men.	Letter of Establishment.	Number of men.
B	9	H	8
C	7	I	8
D	9	J	9
E	8		
F	8		
G	8	Total	74

One establishment (th^t A), consisting of 63 men, was retained at Headquarters under the immediate control of Survey Mámlatdár Baburav Yeshwant Nerurkar to complete in-door work (*vide* paragraph 25 of Survey

Commissioner's Report No. S.-252, dated 9th February 1900, forwarding Progress Reports of the several Survey Parties to Government.)

7. The A, D, G, F, H and I Establishments were supervised by the Deputy Superintendent in person, and, where necessary and possible, field tests were taken by him.

8. Ráo Sáheb Mankeshwar Gopal Mhaskar, Survey Mámlatdár, supervised the B, C, E and J Establishments.

9. The A Establishment under the control of Ráo Sáheb Baburav Yeshwant Nerurkar, Survey Mámlatdár, remained in Poona, as stated above, in order to work off all arrears of in-door work, and it was also kept supplied with recess work as fast as the parties in the field could furnish it.

10. The B Establishment worked in the Alibág, Pen and Panvel Tálukas. Nimitandár Sakharam Ladoji Mhapankar remained in direct charge up to the 15th July 1900. The percentage of working days is the same as last year. The outturn of work was good, when it is considered that the previous field season was one of seven months and the present was limited to less than five. The work and conduct of the Nimitandár was good.

11. The C Establishment under the direct control of Nimitandár Dhondo Narayan Gore worked in the Pen and Panvel Tálukas.

The distribution of working and non-working days give a percentage of the former of 78 against 80 of the previous season. The reason of this appears to be that two men were sick during two months of the short season. No report has been received nor remarks recorded as to the manner in which the Nimitandár handled his men.

12. The D Establishment was controlled by Nimitandár Vishnu Gangadhar Jog and worked in the Sháhápúr Táluka up to the end of April. The working days show an increase of 7 per cent. over the previous year. There is an improvement in sick days.

13. The E Establishment was in charge of Head Surveyor Gangadhar Vasudev Joshi. It carried out Phalni work in the Panvel Táluka and was employed there until the end of March, when it was moved up to Head-quarters. The percentage of working days is the same as last year, which is creditable in so far as there is an increase of 5 per cent. in sick days.

14. The F Establishment under Nimitandár Antaji Laxuman Joshi worked up to the end of March in the Sháhápúr Táluka. An increase of 2 per cent. in the working days is recorded, which is chiefly attributable to a decrease in days taken up in travelling.

15. The G Establishment was under the control of head Surveyor Sadashiv Anant Bramhe. It was employed until the end of February in the Bassein Táluka, and then completed the Phalni of the Uran petha by the end of March. An improvement is recorded under sick days, In-door work, Gaon Harkat and Travelling.

16. The H Establishment in charge of Nimitandár Swamirav Jairav Betgiri was employed until the end of January in the Váda Táluka and from then to the end of April in the Máhim Táluka. The working days show a gain in the present season of 4 per cent.

17. The I Establishment under the immediate control of Nimitandár Hari Gopal Mavande worked until the end of March in the Váda Táluka and then moved up to Head-quarters.

The working days show an improvement of 2 per cent. compared with the previous season.

18. The J Establishment was in charge of Nimitandár Ramchandra Sakharám Avachat. It was employed on Varkas Phalni in the Panvel Táluka up to the end of February. It then moved up to the Dáhánu Táluka of the Thána District, where it also was employed on Varkas Phalni. Under instructions from the Survey Commissioner 3 men were sent in March to carry out the measurement and classification of the Inám village of Kotimba in the Karjat Táluka, which was completed by the end of March.

The working days show a decrease of 5 per cent. when compared with the previous season. The cause of this is found in the increase in travelling days of 3 per cent. and in sick days of 2 per cent.

It is much to be regretted that no remarks have been left on record concerning the manner in which the various officers in direct charge of establishments carried out their duties during the field season and up to the 15th July, when the establishments were broken up.

19. The amount of Phalni done by each establishment, the average number of men employed and the cost per acre are given in the subjoined table :—

Establishment.	Average strength.	Name of Supervising Officer.	Name of Survey Mamlatdar, Head Surveyor or Nimitandár.	PHALNIED.		Average area per Survey Number in Acre.	Average cost per Acre.
				Fields.	Acres.		
1	2	3	4	5	6	7	8
							Rs. a. p.
A	16-92	Messrs. Hudson and McIver.	Rao Sáheb Paburao Yeshwant Nerukar and Nimitandár Ramchandra Anant and Narso Trimbak.	42,326	52,446	1-23	0 3 3
B	17-99	.....	.....	26,522	69,923	2-45	0 2 2
C	8-57	Rao Sáheb M. G. Mhaskar, Survey Mamlatdar.	Nimitandárs Sakharām Ladoji and Ganpat Balaji Jaide.	18,722	26,869	1-44	0 5 1
	18-30	Rao Sáheb M. G. Mhaskar, Survey Mamlatdar.	Nimitandárs Dhondo Narayan and Ramchandra Anant.	47,317	87,732	1-85	0 1 10
	7-48	Do.	Nimitandár Dhondo Narayan Gore.	17,231	26,971	1-57	0 4 4
D	15-44	.....	.....	41,075	49,893	1-21	0 2 8
E	8-95	Messrs. Hudson and McIver.	Nimitandár Vishnu Gangadhar Jog.	15,842	35,303	2-23	0 3 3
	18-8	.....	Head Surveyor Gangadhar Vasudev, Nimitandárs Mahadev Shridhar Keshav Vamon Aleka, Head Surveyor G. V. Joshi.	36,278	70,126	1-93	0 2 2
	8-18	Rao Sáheb M. G. Mhaskar, Survey Mamlatdar.	Head Surveyor G. V. Joshi.	21,406	25,285	1-18	0 5 2
F	17-97	Messrs. Hudson and McIver.	Nimitandárs Antaji Laxman Joshi and Ramchandra Anant Ninkar.	42,178	60,265	1-57	0 2 4
	8-43	Do.	Nimitandár Antaji Laxman Joshi.	17,006	39,955	2-35	0 3 5
G	18-05	Do.	Head Surveyor Sadashiv Amrut Bramhe.	47,343	71,853	1-51	0 3 7
H	7-66	Do.	.....	24,606	19,222	0-78	0 7 6
	16-73	Do.	Nimitandár Swamirav Jairam Betgeri.	44,783	60,330	1-26	0 2 7
I	8-31	Do.	.....	19,806	41,011	2-07	0 3 4
	17-0	Do.	Nimitandár Hari Gopal Mavande.	41,486	65,517	1-33	0 2 7
J	8-48	Do.	.....	15,840	34,253	2-16	0 4 1
	18-45	.....	Nimitandárs Ramchandra Sakharām and Mahadev Shridhar Kher.	57,868	65,069	1-12	0 2 5
	9-32	Rao Sáheb M. G. Mhaskar, Survey Mamlatdar.	Nimitandár Ramchandar Sakharām Avachat.	24,449	31,951	1-31	0 4 6
	175-02		Total for 1898-99	429,177	645,100	1-50	0 2 5
	74-38		Total for 1899-1900	174,908	280,820	1-61	0 5 1

N.B.—The upper line of figures is that of the previous season.

No reasonable comparison can be made between the cost per acre this season with that of previous seasons. The field season was $2\frac{1}{2}$ months less than last year. The expense of preparing Vasuli Patrahs of amounts to be recovered from the occupants of Phalni Tukdas of less than 3 acres has been included in the cost per acre this year, as the work was done by the Field Establishments; no work of this kind was done previously by Field Establishment; it was carried out by the Head-quarter staff.

20. The outturn of work does not admit of comparison because of the shortness of the present season :—

Letter of Establishment.			Rabi.		Varkas.		Total.	
			Pot Number.	Acres.	Phalni Number.	Acres.	Numbers.	Acres.
1			2	3	4	5	6	7
A	...	...	...	...	...	...	...	...
B	...	...	1,372	1,204	17,350	25,665	18,722	26,889
C	...	...	456	337	16,775	26,634	17,231	26,971
D	...	...	41	27	15,801	35,276	15,842	35,303
E	...	...	3,428	4,659	17,978	20,626	21,406	25,285
F	...	...	125	15	16,881	39,940	17,006	39,955
G	...	...	4,753	2,922	19,853	16,300	24,606	19,222
H	...	...	5,750	9,245	14,056	31,766	19,806	41,011
I	...	...	1,060	1,280	14,780	32,973	15,840	34,253
J	...	...	5,016	8,895	19,433	23,056	24,459	31,951
Total	...	...	22,001	28,584	1,52,907	2,52,236	1,74,908	2,80,820

21. The distribution of days in each Establishment shows the following percentage :—

Letter of Establishment.	Phalni.	Test.	Sickness.	Non-co-operation.	Rain.	Travelling days.	In-door work.	Leave and other Holidays.	Total.
1	2	3	4	5	6	7	8	9	10
A	...	...	...	...	...	...	...	...	...
B	68	6	2	1	...	12	3	8	100
C	72	6	4	...	...	6	2	10	100
D	80	3	...	...	...	10	...	7	100
E	72	5	7	...	...	8	...	8	100
F	75	3	2	...	...	9	...	11	100
G	72	4	1	...	...	10	2	11	100
H	77	3	2	...	...	11	...	7	100
I	76	4	...	...	...	12	2	6	100
J	69	6	4	...	...	11	...	10	100

22. The distribution of working and non-working days of the 9 Establishments for the season is as follows :—

		1898-99.	1899-1900.
<i>Working days.</i>			
Phalni	...	70.87	73.35
Boundary dispute	...	5.21	4.40
In-door work	...	3.04	0.88
Total	...	79.12	78.63
<i>Non-working days.</i>			
Sick	...	3.49	2.50
Villagers not co-operating	...	0.91	0.09
Rain	...	0.23	...
Travelling	...	9.45	10.04
Leave and Holidays	...	6.80	8.74
Total	...	20.88	21.37
Grand Total	...	100	100

The working and non-working days in the previous season were 79.12 and 20.88 respectively. There is therefore a slight loss this year. The items which make the increase in the non-working days are "Travelling" and "Leave and Holidays."

23. The amount of test taken on the work of the men is given in the following table :—

TEST BY EUROPEAN OFFICERS, SURVEY MAMLATDARS, HEAD SURVEYORS AND NIMTANDARS.								
Letter of Establishment.	FOR RABI.				FOR VARKAS.			Average difference per field between test and original work.
	Fields.	Acres.	Average area of fields tested.	Average difference per field between test and original work.	Fields.	Acres.	Average area of fields tested.	
1	2	3	4	5	6	7	8	9
				Rs. a. p.				Rs. p. p.
A.	478	672	1'4	0 0 1	3,763	4,208	1'1	0 0 6
B.	204	463	2'3	0 0 5	2,778	6,217	2'3	0 0 4
C.	226	200	88'5	0 0 2	2,068	2,703	130'7	0 0 2
D.	336	853	2'5	0 0 3	5,070	9,168	1'8	0 0 3
E.	56	33	58'9	0 0 1	2,026	2,806	138'5	0 0 3
F.	241	265	1'1	...	3,463	4,141	1'1	0 0 3
G.	3	3	100'0	...	1,345	2,870	213'4	0 0 2
H.	405	747	1'8	0 0 2	3,301	6,441	1'9	0 0 4
I.	450	526	116'9	0 0 5	2,174	2,594	119'3	0 0 3
J.	189	74	0'5	...	4,268	5,807	1'9	0 0 3
K.	3	1	33'3	...	1,552	2,998	193'2	0 0 1
L.	206	139	0'6	0 0 3	5,330	7,841	1'4	0 0 2
M.	528	317	60'0	...	2,342	1,958	83'6	0 0 2
N.	243	220	0'9	...	3,881	5,074	1'3	...
O.	486	897	184'6	...	1,384	3,346	241'8	0 0 1
P.	222	189	0'8	...	4,265	5,196	1'2	0 0 3
Q.	85	134	157'6	...	1,469	3,130	213'1	0 0 2
R.	1,407	2,151	1'5	...	4,585	5,094	1'1	0 0 2
S.	511	1,124	220'0	...	2,614	3,450	132'0	0 0 2
Total for 1898-99 ...	3,881	5,772	1'4	0 0 1	46,683	59,177	1'4	0 0 3
Do. 1899-1900 ...	2,348	3,235	137'8	...	16,974	25,855	152'3	0 0 2
Grand Total, for Rabi and varkas combined, 1898-99 ...	44,564	64,949	1'4	0 0 2				
Do. 1899-1900...	19,322	29,090	150'6	0 0 2				

N. B.—The upper line of figures is that of the previous year.

The total average test on Rabi was 11'0 per cent. of Pot Numbers and 11'32 per cent. of the area; and of the Varkas 11'0 per cent. of Phalni Tukdas and 10'25 per cent. of the area. This shows that ample test was taken.

24. The percentage of test taken on the work of each establishment is as follows :—

Letter of Establishment.	RABI.				VARKAS.			
	Work done.		Tested per cent.		Work done.		Tested per cent.	
	Pot Number.	Acres.	Pot Number.	Acres.	Phalni Number.	Acres.	Phalni Number.	Acres.
1	2	3	4	5	6	7	8	9
A. ... ..	...	...	...	...	...	...	...	...
B.	1,372	1,204	16	16'61	17,350	25,665	12	10'53
C.	456	337	12	9'79	16,775	26,634	12	10'54
D.	41	27	7	11'11	15,801	35,276	9	8'14
E.	3,428	4,659	13	11'29	17,978	20,626	12	12'58
F.	125	15	2	6'67	16,881	39,940	9	7'51
G.	4,753	2,922	11	10'85	19,853	16,300	12	12'01
H.	5,750	9,245	8	9'70	14,056	31,766	10	10'53
I.	1,060	1,280	8	10'47	14,780	32,973	10	9'49
J.	5,016	8,895	10	12'64	19,433	23,056	13	14'96
Total ...	22,001	28,584	11	11'32	152,907	252,236	11	10'25

25. Appendix VI gives details of difference between test and valuations arrived at by the men. In 19,322 fields tested, 17 had a difference of over 2 annas, which gives a percentage of 0.090. The errors discovered at test are of each establishment as follows:—

Letter of Establishment.				Errors up to 1 anna.	Errors up to 2 annas.	Errors over 2 annas.	Total.
1				2	3	4	5
A	...	...	...	...	...	...	...
B	...	...	...	95.77	4.23	...	100
C	...	...	...	98.22	1.44	0.34	100
D	...	...	...	99.04	0.96	...	100
E	...	...	...	96.95	2.86	0.19	100
F	...	...	...	99.68	0.26	0.06	100
G	...	...	...	98.88	0.98	0.14	100
H	...	...	...	99.47	0.53	...	100
I	...	...	...	98.01	1.99	...	100
J	...	...	...	99.71	0.29	...	100
Total				98.87	1.54	0.09	100

26. It will be seen from Appendix VII that the phalni work of 806 villages was completed in the field, and the recess examination of 806 villages was disposed of up to the 15th July 1900.

27. Appendix VIII gives details regarding village maps supplied to village officers. 740 village maps were sent to the Photozinc Department to be printed.

Maps were supplied as follows:—

- 59 to Applicants.
- 47 to the Forest Department.
- 102 to the Superintendent, Bombay Forest Surveys.
- 1,869 to the State Karbhari of Janjira State.
- 2,516 to the Chief of Bhore State.
- 169 to the Revenue Authorities.

28. Appendix IX shows the cost of the operations for the year under report. The cost of Phalni operations was Rs. 89,737. There is a decrease of Rs. 6,921 under the head of Assistants' pay and contingent charges for stationery, instruments, dead stock, &c., against phalni operations.

29. Appendix X shows the area phalned together with the total expenditure and cost per acre of the survey operations. The total expenditure in British Territory, together with the share of the Survey Commissioner's pay and that of his establishment distributed under five different heads is given below.

No.	Head of expenditure.	Annual cost.	Rateable proportion of Nos. 5 and 6.	Total cost.
1	2	3	4	5
		Rs. a. p.	Rs. a. p.	Rs. a. p.
1	Measurement	428 4 2	.....	428 4 2
2	Settlement	.....	34,515 4 10	34,515 4 10
3	Miscellaneous	3,059 15 0	.....	3,059 15 0
4	Phalni	68,510 15 0	21,226 4 11	89,737 3 11
5	Revision of Survey Manual	3,696 8 0	.....	3,696 8 0
	Total	75,695 10 2	55,741 9 9	1,31,437 3 11
6	Deputy Superintendent's salary and expenses of his office.	42,452 0 9		
7	Share of pay of Survey Commissioner and his office.	13,289 0 0		
	Total	55,741 9 9		
	Grand Total	1,31,437 3 11		

The average cost per acre of the season's work is as follows:—

	Rs.	a.	p.
For Survey in British Territory	...	0	5 1

30. The average cost of phalni operations per acre was in—

		Annas.	Pies.
1897-98	...	3	1
1898-99	...	2	5
1899-1900	...	5	1

Settlement.

31. Appendix XI is a detailed statement of the progress attained in the settlement branch of this survey.

During the year under report phalni rates were introduced in 169 Government villages of the Murbád Táluka of the Thána District. As the proposals for the revision settlement of the Mahád, Mángaon and Dáhánu Tálukas of the Kolába and Thána Districts are before Government, the revision survey rates still remain to be introduced.

32. The expenditure of advances on account of the erection of boundary marks, and pay of flag holders and chainmen was as follow:—

Total advances, including previous year's balance.	Amount recoverable.	Amount debitable to Government.	Balance for which Vasuli Patraks are not ready.
1	2	3	4
Rs.	Rs.	Rs.	Rs.
21,921	20,722	1,199	....

33. As there was no measurement or classification done in the season under report, no Assistant or Deputy Collector were instructed in these branches.

34. Under the orders of the Survey Commissioner the establishments were kept in Poona until December 9th, 1899, because the tálukas in which Phalni had to be done were all unhealthy. Mr. McIver, who was Acting Deputy Superintendent when the establishments took the field, remained in Poona until the return of Mr. A. G. Hudson from privilege leave on December 25th (Mr. McIver was thus able to take up his appointment as Dalhi Settlement Officer immediately after Christmas holidays). Early in January 1900 Mr. Hudson examined the work of the "F" Establishment in Sháhápur Táluka. The Survey Commissioner then decided on the immediate announcement of varkas phalni rates of Murbád Táluka. The Collector of Thána was not in favour of this step and referred the matter to the Commissioner, N. D. While this was under reference the Survey Daftardár at Poona and the Mámlatdár at Murbád were getting things ready for the rates to be announced early in February. In order to be in touch with both parties, the Deputy Superintendent moved camp to Kalyan in the latter half of January, and, in order to be on the spot early in February, moved into Murbád and gave out the rates from the 9th to 15th, the Commissioner, N. D.'s consent having arrived before the work was commenced. The next establishment of which the field work was examined was the "G" in Bassein Táluka. Early in March a move was made further north to Kelva-Máhim Táluka where the work of the "H" Establishment was in progress. The next move was to Dáhánu Táluka where the work of the "J" Establishment was examined.

About the middle of March the establishments commenced to return to head-quarters after completing the phalni field work. As each establishment finished its phalni recess work it was put on to assist in Akar work.

On the 25th April the Deputy Superintendent proceeded to Khed Táluka of the Ratnágiri Collectorate to report on the classification, and remained there doing tests in the field until the end of May. During his absence Ráo Sáheb Mankeshwar Gopal Mhaskar supervised the establishments at head-quarters.

35. The Nimtandár in charge of the head-quarter office has been instructed to report what work out of the programme exactly remained over and is handed over with the survey records to the Land Records Establishment.

J. A. McIVER,

Acting Deputy Superintendent, Konkan Survey.