

The Editor Dnyanesh

107

ELEVENTH ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS
AND AGRICULTURE,

BOMBAY PRESIDENCY,

FOR THE YEAR 1893-94.

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No. $\frac{A}{8612}$ OF 1894.

FROM

E. C. OZANNE, ESQUIRE, I.C.S., M.R.A.C.,
Survey Commissioner, and Director,
Land Records and Agriculture,
Bombay;

TO

THE HON'BLE J. NUGENT, ESQUIRE, I.C.S.,
Chief Secretary to Government,
Revenue Department,
Bombay.

Poona, 26th November 1894.

SIR,

I have the honour to submit the Annual Report of the Department of Land Records and Agriculture for the year ending 31st October 1894.

2. During my short absence on privilege leave Colonel C. W. Godfrey, Superintendent, Konkan Survey, held charge.

3. As Director I visited Ahmadnagar and Sholapur to inspect the district survey offices; and during my tour in the Sátára District the district survey office was examined and the field and daftar work of some Circle Inspectors was tested and a report duly made to the Collector. The district survey office at Poona was also examined by me. At Surat, in consultation with the Agricultural Chemist to the Government of India, I selected a site for the new Surat farm. I served as member of the Famine Code Committee and of the Committee appointed to consider the proposed transfer of the Bombay Veterinary College to Poona.

My touring as Survey Commissioner necessitated by the requirements of the various surveys and of pending settlement proposals left little leisure for regular inspection tours to watch the working of the Land Record establishments.

I.—ORGANIZATION AND MAINTENANCE OF VILLAGE RECORDS.

4. No extension of the Circle Inspector staff has taken place. Though the Inspectors are at work in Ahmadabad, the survey records still remain ready for transfer at Surat, pending decision on the utilization of Broach as the depository for the records of all the Gujarát Collectorates. The arrears of correction work are, therefore, day by day accumulating. In Belgaum the location of the records in separate buildings as a safeguard against loss by fire has not yet been effected. The new record-room at Sholapur has been completed, and those at Poona, Dhulia and Sátára are nearly ready. At Ahmadnagar work is on the eve of commencement.

The Khándesh records have been moved to Dhulia from Málegaon and are temporarily located in the revenue record office, leaving ample accommodation at Málegaon for the Násik papers, though these will eventually go to Násik itself.

The survey records of recently settled tracts in Khándesh, Sholapur, Sátára and Poona have been duly handed over by the Survey to the Revenue Department.

Survey classes were not required, in all districts, but where they were held, advantage was taken in the Central Division to give further training to a few Inspectors, who, in spite of having passed at former classes, still showed the need of instruction.

The revised rules for the guidance of Circle Inspectors have been sanctioned by Government, but were not brought into force till towards the close of the year when vernacular translations were distributed. The revised rules for District Inspectors have not yet been finally approved by the Commissioners as also rules for regulating and systematizing the work of the District survey offices.

5. In prefacing my remarks on the work done by Circle Inspectors and on the test taken of that work, I have again to state that the Divisional Inspectors submitted their reports beyond the prescribed date. The reason was delay in receipt of district returns which exceeded a month in Násik and Belgaum.

6. *Crop, Waste and Boundary-mark Inspection.*—I append the usual table:—

District.	AVERAGE BY EACH INSPECTOR.						Average Area of occupied Numbers.		Average Area of inspected Numbers.	
	Number of days of actual Inspection.		Number of Villages inspected.		Number of Survey Numbers (occupied and waste) inspected per diem.		(Acres.)		(Acres.)	
	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.
1	2	3	4	5	6	7	8	9	10	11
Dhárwár...	60	59	45	44	8	8	12	11	11	10
Bijápur ...	57	60	43	44	7	8	16	16	15	14
Belgaum...	61	65	40	41	9	8	11	10	13	9
Kánara ...	69	32	46	38	9	6	2	2	2	2
Khándesh ...	72	80	50	54	8	11	10	10	9	9
Násik ...	75	82	41	42	10	11	9	8	8	7
Ahmadnagar ...	75	81	38	38	9	10	11	13	10	10
Poona ...	67	68	42	42	7	8	11	11	6	7
Sholápur...	59	71	33	35	7	9	20	20	18	16
Sátára ...	67	74	35	35	9	8	8	9	5	5
*Ahmadabad ...	79	...	33	...	13	...	4	...	3	...

*Staff introduced, 1893-94.

Under the rules in force there should have been about 80 days available for the inspection in the allotted period of 4 months, but, as the table shows, this average was not nearly reached in most districts, and there has been a decline in working days nearly everywhere. The improvement in Kánara is not real, but resulted from the authoritative curtailment of the inspecting season last year. Apart from the usual causes (*viz.*, sickness, urgent measurement work necessitating temporary stoppage of regular inspection, and absence of village officers at the Inspector's visit) the liberality with which leave in the working season was granted, and the employment of Inspectors on foreign duties seem to require enumeration. The stringent orders issued by the Collectors should eliminate the last-named cause. Sickness was very prevalent in Khándesh, Sholápur, Bijápur, Dhárwár and Kánara, but it is not clearly differentiated from casual leave and other absences. Leave in the working season cannot be stopped altogether, but it seems to be admitted that the survey tradition should be preserved:—that except on the score of sickness or very urgent private affairs absence from duty in the field season should not be permitted. Absence of village officers impeded work especially in Poona, Sholápur, Sátára, Belgaum, Bijápur and Dhárwár.

Avoidable leave intensifies the difficulty of providing fit substitutes. The opinion of the Khándesh Collector that it is preferable to leave a circle vacant than to fill it by an untrained man is perfectly sound. I said all that I have to say on the questions above noticed in the concluding remarks of my 19th paragraph last year.

Turning again to the table it is evident that the diminished period of inspecting days has not affected the number of villages inspected, but this means that the percentage of inspection was reduced.

The daily tale of work (columns 6 and 7) has fallen in over half the districts. This is not explained by the authoritative lowering of the task from 12 to 10 survey numbers a day, for the reduced standard was in force in 1892-93. To check the selection of small numbers inordinately, present orders require a minimum area outturn as well as a minimum number of fields. The opinion among District Inspectors is that the standard is still too high. The remedy lies with Collectors, who fix it according to the varying conditions of each district, but I think that a reduction all round is not shown to be necessary, and I notice that the Divisional Inspectors think so too. However, if improvement in the quality of inspection is shown, it is certain that on all sides fault for deficiency in amount will be readily passed over. It is satisfactory (columns 10 and 11) that the rule that average sized fields should be selected has been so generally observed.

The table next given shows how far the Inspectors have been able to check cultivation returns and watch the unoccupied waste to detect unauthorized cultivation or in the case of lands set apart for special or public purposes, any infringement of the conditions imposed:—

Inspection percentage Statement.

District.	Villages inspected per cent.		CROP INSPECTION.				WASTE INSPECTION.			
			Occupied Lands. Percentage inspected.				Unoccupied Lands. Percentage inspected.			
			On Survey Numbers.		On Area.		On Survey Numbers.		On Area.	
	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.	1893-94.	1892-93.
1	2	3	4	5	6	7	8	9	10	11
Dhárwár ...	91	87	7.4	7.6	7.1	6.7	19.9	20.4	15.4	15.6
Bijápur ...	90	90	5.5	6.3	5.3	5.8	20.5	22.6	16.8	18.4
Belgaum ...	91	92	6.9	7.1	8.2	6.0	19.5	21.5	17.6	17.0
Kánara ...	79	64	11.1	4.7	11.1	4.3	14.1	7.4	11.2	4.2
Khándesh ...	87	84	10.1	12.3	9.5	11.6	17.7	20.2	13.9	14.8
Násik ...	86	89	9.7	10.8	9.1	9.8	26.1	13.6	20.8	17.0
Ahmadnagar ...	92	93	8.7	10.4	7.7	8.1	30.5	29.3	24.7	24.6
Poona ...	82	82	6.0	6.7	3.7	3.8	27.5	30.6	18.7	20.9
Sholápur ...	88	94	6.6	10.6	5.9	8.3	32.0	36.9	33.6	28.4
Sátára ...	94	94	7.9	8.2	4.9	4.2	33.9	25.3	24.3	21.1
Ahmadabad ...	97	...	6.3	...	4.5	...	14.0	...	9.3	...

As stated last year all villages should be visited, for the rules provide for reduction in the amount of inspection when interferences are unavoidable. In Khándesh a large number of villages were left unvisited owing to urgent measurement work and attendance in the Civil Court. In Kánara the chief causes assigned are sickness and leave. In Poona and Belgaum absence of village officers is a conspicuous cause. Fines have been inflicted on village officers in some districts for negligence in this respect. Want of time is another of the causes assigned in Poona, and it may be that the charges are too heavy. The abolition of the Poona City Circle is being considered. In Sátára the Collector employed 3 Inspectors for a month to prepare the settlement jamábandi papers in time. This exceptional necessity seems fully to justify such action. On the whole the extent of the crop inspection is fair, though it is a little below last year's percentage. It is too low in Sholápur. If the Inspectors are strict to show-up all cases where the inspection has been deliberately fudged by the village officers, and keep in view the prime object of the inspection, *viz.*, to teach these officers how to improve their eye estimates, a short outturn will, no doubt, be readily accepted. I say this lest the Inspectors should think that their work is to be gauged solely by the percentage figures.

Waste inspection has been satisfactory in the Central Division except perhaps in Khándesh. There is a falling off in the Southern Division. The increase in Kánara is nominal. In Násik the apparent improvement is almost wholly accounted for by the smaller number of waste fields in the villages inspected, but the extent of inspection is nevertheless satisfactory. Encroachments, chiefly cases of unauthorized cultivation, were detected to an even larger figure (1,097) than the already large figure (933) of the previous year. In the Southern Division the number of cases rose from 193 to 314, more than half the total belonging to Kánara. Except in Kánara where the village officers reported 75 per cent. of the encroachments, even less help was received than in the previous year. It is remarked by one Collector that if Inspectors can detect encroachments village officers can, and therefore orders have been issued calling the Assistant Collectors to pay especial attention to the matter. Such attention should also be directed to prevent Inspectors from swelling the number of cases by including trivial cases. Such cases may be fully met by a warning, provided a note is recorded. By trivial cases I mean to refer to such cases as a slight unintentional encroachment on waste, but if the encroachment is continued after the warning it must be reported.

As to the quality of the registration of crops by the village officers, the

Name of the District.	Entries found correct.		Name of the District.	Entries found correct.	
	1893-94.	1892-93.		1893-94.	1892-93.
	Percentage.			Percentage.	
Dhárwár ...	51	46	Ahmadnagar ...	59	52
Bijápur... ..	42	42	Poona	66	57
Belgaum	48	44	Sholápur ...	51	56
Kánara	75	72	Satára... ..	72	66
Khándesh ...	72	69	Ahmadabad ...	89	...
Násik	73	77			

table marginally given indicates some improvement over last year, but in the first four districts where figures for 1891-92 are available, the standard of that year is not attained. Early in the season when the village inspection has not been completed, or where the village inspection

has been negligently delayed, the Inspectors are required to make their inspection in company with the village officers, so that these latter may not lose the opportunity for instruction. But it is not right to enter survey numbers thus inspected among numbers where the registration was found incorrect, as has this year been done in Belgaum and Kánara.

The high percentage of correctness in Kánara is attributed to the intelligence of the Shanbhogs, who are stipendiaries; but this is not the chief reason. In other districts of the Southern Division crop mixtures and a great variety of cropping in the same field make the registration far more intricate than in Kánara.

7. *Boundary-mark Inspection.*—The quality of the work done by the village officers is exhibited in a tabular form below. The standing orders are that the Inspectors are to examine the boundary-marks of every field of which they make the crop or waste inspection. This is the only supervision over the marks in private occupancies for which the Inspectors are made responsible:—

District.	MARKS FOUND IN DISREPAIR (PERCENTAGE).				District.	MARKS FOUND IN DISREPAIR (PERCENTAGE).			
	Omitted.		Wrongly shown as in repair.			Omitted.		Wrongly shown as in repair.	
	1893-94.	1892-93.	1893-94.	1892-93.		1893-94.	1892-93.	1893-94.	1892-93.
Dhárwár	58	62	31	24	Ahmadnagar ...	20	16	16	11
Bijápur	42	43	34	37	Poona	30	31	30	27
Belgaum	30	58	89	29	Sholápur	26	46	32	15
Kánara	67	55	11	18	Satára	18	33	23	14
Khándesh	21	31	25	12	Ahmadabad ...	3	...	14	...
Násik	14	14	16	47					

The table requires some explanation. The figures under "omitted" show details as to marks of numbers inspected in company with the village officers. Not nearly all of these can be supposed to be the marks in fields inspected early in the season and the large proportion of marks entered in this column must point to great delay in the village registration of crops during which by standing orders the marks should be examined.

Dhárwár has longest been supervised by Circle Inspectors, but the condition of marks is very bad, and the work of the village officers is clearly fudged. Násik shows marked improvement. The Inspectors found the village examination more complete except in Kánara and Ahmadnagar, but the result was that the evidence of carelessness or ignorance was increased, for the mistakes of the village officers (columns 4 and 9) were doubled in Khándesh and Sholápur and largely increased in some other districts. Watchfulness on the part of supervisors of the Inspectors' work may go to prove that they are too ready in doubtful cases to enter a mark as in disrepair. If the rules are over-strict in this matter, suggestions in the direction of relaxation will be considered. In the black soil plains of Dhárwár, the field marks annually sink below the standard size and are annually repaired later in the season than the date of the inspection. The knowledge of this fact may induce the village officers to be lax. Their duty is to enter such marks as in disrepair, because they are in disrepair at the date of inspection.

8. The test taken by the District Inspector and its result are shown below. All the Circles were visited except in five districts. It is not required that the percentage of villages visited should be high, because a careful inspection of an Inspector's work in one or two villages of a circle is sufficient to enable the District Inspector to judge the character of his work and correct misunderstanding on his part. Special attention to the columns showing quality of work is more important than scrutiny of the percentage columns in the table:—

District.	Number of Circles Visited per cent.	Percentages on villages inspected by Circle Inspectors.	CROP INSPECTION.		WASTE INSPECTION.		BOUNDARY-MARK INSPECTION.	
			Percentage on Circle Inspectors' work.	Quality of work found.	Percentage on Circle Inspectors' work.	Quality of work found.	Percentage on Circle Inspectors' work.	Quality of work found.
1	2	3	4	5	6	7	8	9
Dhárwár	89	2.59	1.37	86	1.33	100	1.45	99
Bijápur	100	4.76	4.08	83	3.58	87	3.99	94
Belgaum	83	3.16	1.04	44	0.91	83	1.13	74
Kánara	100	14.31	2.40	75	2.30	87	2.45	79
Khándesh	54	3.89	2.02	92	2.02	98	1.98	96
Násik	100	4.60	2.37	92	0.60	100	1.90	73
Ahmadnagar	67	5.15	2.28	76	1.66	97	2.17	98
Poona	78	10.17	5.07	83	8.74	94	5.53	90
Sholápur	100	7.81	3.03	78	4.63	100	2.97	98
Sátára	100	10.45	4.98	63	11.52	92	2.60	92
Ahmadabad	100	10.39	4.80	90	2.60	95	4.70	65

In Khándesh the death of the District Inspector, and in Ahmadnagar the vacancy in the office caused by a transfer have necessarily lowered the percentage of circles visited. The percentage test is fair in quantity especially in Bijápur, Poona, Sholápur and Sátára. The quality of crop inspection, as compared with the previous year, exhibits a satisfactory improvement, notably in Násik. The low standard of quality in Belgaum can hardly be credited, and I have to refer to the comments made last year. The figures of column 7 go to prove a careful examination of waste, and those of column 9 that the Inspectors were as careful in their boundary-mark work. Again I must urge that the work done indicates a very satisfactory performance by the Circle Inspectors. There are exceptions. In Bijápur one Inspector was removed from his post as inefficient, and in Sholápur two were punished by the Collector. As to the District Inspectors, I agree with the Divisional Inspector that the test in Belgaum is still below what it should be and that the District Inspector carried the right principle, that thoroughness of test is better than extent, too far.

9. *General Duty Inspector.*—The appointment of a Circle Inspector to this office in Khándesh as in other districts has been proved advisable. He is a classer, and has special responsibility as to all cases where field classing is requisite. These are not numerous. District Inspectors who are mostly selected from the Revenue Department cannot take an independent test of measurement and other technical work till they have learnt by experience. They, therefore, require the assistance of the General Duty Inspector, who is also used for urgent partition cases, for checking the correction of the classing record at the district survey office, and lastly for training Circle Inspectors.

In Bijápur the General Duty Classer was posted for four months to a circle. This was irregular, but it appears that this Inspector is inefficient for the special duties of his office. In Belgaum the Inspector was employed throughout the fair season on measuring land taken up for roads. In Ahmadnagar, Sholápur, Kánara and Dhárwár, the District Inspectors required the special technical assistance referred to above.

The appointment is an important one and as the General Duty Inspector has heavy travelling, he should be allowed code allowances instead of the ordinary permanent allowance of Circle Inspectors in charge of a circle. This has been proposed to the Commissioners and has presumably been placed before Government for sanction. Intime the post is unpopular.

10. *Check of the Village Census.*—The check was confined to one month (July) and to agricultural stock. I give a table similar to that shown in the Commissioner S. D.'s review last year of this section of my report :—

District.	Circles visited per cent.	VILLAGES FOR TEST IN THE CIRCLES VISITED.		Number of entries checked.	Percentage of correct entries.
		Total.	Test taken.		
Dhárwár	100	471	432	37,596	85
Bijápur	100	348	329	21,386	75
Belgaum	92	355	256	19,462	86
Kánara	100	329	249	12,890	84
Khándesh	92	632	601	38,236	85
Násik	89	...	379	68,514	92
Ahmadnagar	100	443	438	29,657	78
Poona	65	212	179	17,125	77
Sholápur	100	209	199	53,312	90
Sátára	69	246	231	23,669	88
Ahmadabad	100	434	118	10,746	93

In some districts the inspection was postponed by the Collector's order owing to very heavy rain till crop inspection is next undertaken. In Khándesh death and absence on leave shortened the number of available inspectors. In Belgaum two circles were vacant, as far as the check census is concerned, by the deputation of the Inspectors to measure land taken up for roads. The full assigned test was not completed in some districts (column 4) for various causes, one of which deserves notice, *i.e.*, the detention of Inspectors at the taluka after the end of June by non-receipt of village returns due much earlier. Inspectors somewhat naturally are not likely to bring such detention to notice with eagerness, and this is the greater reason why Mámlatdárs should insist on punctual submission of village returns. The percentage of correct entries is fair, but there is evidence that many village officers do not take the trouble to understand the instructions for compiling the figures. Except in Násik, Kánara and Sholápur, the check by District Inspectors has been good. In Násik the District Inspector claims that the rain made his visit impracticable. The superior check showed a fair standard of quality, with improvement in Belgaum, Kánara and Poona.

11. *Vital Statistics.*—A small marginal table shows that the correctness of

	Southern Division.	Central Division.
Births omitted	247	1,170
Deaths do.	73	658
Cause of death—		
(a) Omitted... ..	32	85
(b) Wrongly given...	56	343

the birth and death registers is directly improved by the Circle Inspectors. Errors and omissions are at once notified to the Deputy Sanitary Commissioners and are often notified in time to admit of a correction in the returns submitted by the officers of the Sanitary Department. Appreciation is shown by the Department, but regret is expressed that the registers in municipal towns are so carelessly kept. Circle Inspectors do not check the registers in Municipalities.

12. *Maintenance of Boundary-marks.*—The scope and object of the special examination of marks made during three months of the fair season were explained last year (report para. 15). I do not show a table similar to that admitted into his review by the Commissioner, S. D., because I think it more important on my part to record annual progress so that it may be gauged whether too much or too little time is devoted to this work. I have said that if all the villages are gone over twice or thrice during the currency of a 30 years' lease, there will be no risk of loss of the completed work of the survey. I now show the progress done in a slightly modified form :—

District.	Gross Number of Government Villages.	Inspection completed.	Seasons.	Average per Annum.
<i>Southern Division.</i>				
Dhárwár	1,289	580	7	83
Bijápur	1,011	667	7	95
Belgaum	913	201	3	67
Kánara	1,416	217	3	72
<i>Central Division.</i>				
Khándesh	3,223	999	2	499
Násik... ..	1,535	462	2	231
Ahmadnagar	1,226	271	2	135
Poona	1,005	154	2	77
Sholápur	665	171	2	85
Sátára	963	421	2	210

I propose, with the sanction of the Commissioners, to enjoin on the District Inspectors a register, *táluka* by *táluka*, in which each village should be entered as completed with succinct remarks as to the state of marks and as to whether re-inspection was done or not.

With this register I shall be able to enter the figures contained in the summary above more confidently.

The inspection nowhere extended to all circles, partly because the Inspector in charge was not considered competent to carry on such important work, and partly from other causes, *e.g.*, leave and sickness. In Khándesh three Inspectors were employed on *pot páhani* work during the period allotted for the "complete boundary-mark inspection." For this work it is essential that the Inspector should be fully competent, and if sickness or other cause makes a circle vacant at this season, it is generally imperative to leave the work in abeyance. Whatever is done must be done well, or it is practically useless. I trust that Collectors will concur in this remark and conduct the inspection accordingly. Inspectors who are not efficient would be much better utilized by being told off to help in circles where the Inspectors are efficient.

The call on the Inspectors' time to make miscellaneous measurements is becoming so incessant that it has been decided to give authority to the District Inspector to allot such portion of the complete boundary-mark inspection period to such work as may be absolutely necessary in each circle, and no more. It will have to be seen whether this will dangerously impede the progress of the boundary-mark work.

Except in Ahmadnagar the number of villages inspected has fallen. It may be there was more work in those which were completed, but in Dhárwár at least time was wasted by not taking up the work in the nearest village to that last disposed of.

About 75 working days are available, if miscellaneous work and other interferences do not diminish the period. But the actual number of days of inspection varied from 24 in Bijápur to 41 in Khándesh, where the District Inspector claims that more attention was paid to quality than to quantity. An outturn of from 200 to 300 marks a day at first inspection was first fixed as the standard, but it was reduced to 125 to 150 in the Central Division, and to 150 in the Southern Division: nowhere was the reduced standard reached. At the second inspection, marks not repaired in the interval are repaired by the Inspectors and the site of missing marks has often to be determined by measurement. At the second inspection the outturn must be smaller than at the 1st inspection, but it is very much smaller than it should be. In Kánara only two months are allotted, but by some mistake only one month was set apart this year. The Collector

thinks that the full three months should in futuro be allotted in this district by curtailment of other less important inspection duties.

Irregularities brought to light must be noticed to prevent their recurrence thus :—

(1) in one district marks the repair of which must be done at the expense of Government and which by rule should be repaired at once at the first inspection were left over till the second inspection; (2) notices must be issued to occupants who are responsible to repair the marks indicated at the first inspection before the second inspection. This important notice was neglected in some cases and the result was that the responsibility of occupants could not be enforced; (3) some Inspectors began a second village before completing the one under inspection.

With reference to the remark made as to over-haste in some districts in the 4th clause of paragraph 15 of my report last year, the Commissioner, C. D., ordered special enquiry and report. The Divisional Inspector has submitted his report, but I have not seen it. The Collector of Sátára, however, in his comments shows that when the work is in progress in hill tracts where there are few roads and comparatively few marks which come under the scope of the inspection, the pace is naturally fast.

As to the state of field marks, as ascertained by the inspection, the percentage of disrepair varied from 27 in Kánara to 63 in Ahmadnagar. No comment is needed then to prove the necessity of the inspection.

Repair of marks found in disrepair is the ultimate object of the inspection, and this seems to have been largely overlooked. There are heavy arrears in all districts even of marks for which Government is responsible for the repair. Ahmadnagar, Poona, Sholápur and Sátára show worst in this respect. Of marks for the repair of which private individuals are responsible, only 16 per cent. were repaired in Kánara between the first and second inspection. In other districts the figures are better, notably in Khándesh, where only 7 per cent. are reported to have been left in disrepair. The Inspectors are empowered to repair such marks on default of the occupant and to recover the cost. From 3 to 17 per cent. of marks, still in disrepair at the second inspection, were thus repaired by hired labour. Even with these powers given to Inspectors, a large number of private marks were left unrepaired. For this unsatisfactory result Mám-latdárs are greatly to blame for not keeping the Inspectors in funds. I am almost weary of reporting this neglect. The remedy does not lie with me. So heavy have these arrears of repair become that in Dhárwár the whole time of 13 Inspectors was taken up in repairing marks left over unrepaired from former inspections. But similar action must be initiated wherever there are arrears, or the object of the inspection will be defeated.

Even where the want of funds to pay hired labour is not the cause of delay and waste of time, such causes as combination on the part of villagers, often aided by the Government officers of the village, to prevent labourers working for the Inspectors are reported. The Mám-latdár under Section 125 of the Land Revenue Code can deal with such difficulties.

District.	Encroachments.	Marks fixed by measurement.
Dhárwár	160	3,743
Bijápur... ..	55	858
Belgaum	280	912
Kánara	37	119
Khándesh	192	55
Násik	142	107
Ahmadnagar	47	180
Poona	160	278
Sholápur	75	34
Sátára	792	163
Ahmadabad	121	94

During the progress of the complete boundary-mark inspection a considerable number of encroachments were detected presumably mostly due to wilful or neglectful disregard of marks, *e. g.*, encroachments on roads and waste set apart. The difficulty of the work is evidenced by the amount of measurement and use of field books to fix the site of missing or displaced marks. The reason for the inordinately high figure of Dhárwár has not been given.

Measurement and classing work performed by Circle Inspectors.

13. The usual table is shown below :—

Classes of Cases.	SOUTHERN DIVISION.				CENTRAL DIVISION.				NORTHERN DIVISION. (Ahmadabad.)			
	Arrears on 31st July 1893.	New cases received.	Cases disposed of.	Balance on 31st July 1894.	Arrears on 31st July 1893.	New cases received.	Cases disposed of.	Balance on 31st July 1894.	Arrears on 31st July 1893.	New cases received.	Cases disposed of.	Balance on 31st July 1894.
1. Partition of land under Court's decree ...	20	156	144	32	35	241	193	83	...	1	...	1
2. Sub-division on applications of occupants duly sanctioned ...	63	206	207	62	85	142	103	74	11	10	9	12
3. Disputes necessitating measurements of fields ...	52	148	138	62	207	271	259	219	73	52	41	64
4. Disputes requiring fixing of marks by field books ...	330	671	548	353	380	1,082	804	608	17	46	28	34
5. Encroachments ...	216	477	510	183	153	1,177	935	395	14	176	135	55
6. Measurement of alterations caused by alluvion and diluvion ...	105	198	221	62	32	91	80	43	3	26	12	17
7. Measurement of land required for public purposes—												
(a) Burial ground ...	59	139	147	51	7	30	18	19	2	7	6	3
(b) Tanks ...	8	16	19	5	...	6	5	1	...	...	...	...
(c) Roads ...	44	85	93	38	30	96	82	44	1	12	12	1
(d) Dharmshālas and other public buildings.	20	36	36	20	6	46	37	15	9	31	8	32
8. Measurement of land for building sites ...	90	281	303	68	47	901	706	242	33	143	116	61
9. Reclassification of Survey Nos. ...	...	4	4	...	2	15	10	7	1	1	1	1
10. Miscellaneous ...	250	620	667	203	715	3,203	2,901	1,018	85	93	75	63
Total ...	1,257	2,937	3,037	1,167	1,660	7,301	6,133	2,628	199	597	442	364

The figures of this table are compiled from a monthly return (Nikalpatrak) which hitherto has been submitted direct to Mámlatdárs, but to prevent confusion in classification, this return is now received by the Mámlatdár through the District Inspector with his comments. A comparison with the corresponding table in last year's report will show that new cases have increased by 7 per cent. in the Southern and by 62 per cent. in the Central Division, an increase which the remarks made last year show to have been anticipated. The disposal of work has fairly well kept pace with its increase, for cases disposed of have risen 6 and 90 per cent. respectively in the 2 divisions. The arrears are not excessive, except perhaps as regards partitions under decree of Court. With respect to these arrears, one cause may be noticed, viz., that often detailed instructions as regards the method of partition, are laid down by the Courts which are not in accordance with the law as declared in Section 113 of the Land Revenue Code. The Commissioners agree with me that in such cases a reference back to the Court should be made for revision of the decree in this respect, with an intimation that unless the provisions of Section 113 are strictly followed, the partition cannot be made by the Revenue Department. With so large an increase in partition cases it is probable that at the end of the year, the dates fixed for partition were still in the future in many cases. It has already been noticed in para. 12 above that the increase in measurement cases has necessitated the allotment of a specific portion of the complete boundary-mark inspection period to secure their timely disposal.

In the marginally noted table the percentage of test of measurement work

District.	NUMBER OF CASES TESTED			Percentage of District Inspector's test on Circle Inspector cases.
	By the District Inspector.	By the General Duty Inspector.	Total.	
Dhárwár ...	38	not	38	2.8
Bijápur ...	15	avail-	15	2.8
Belgaum ...	11	able.	11	1.9
Kánara ...	54	5	59	10.3
Khándesh ...	84	...	84	6.0
Nasik ...	8	23	31	3.7
Ahmednagar ...	35*	...	35	2.5
Poona ...	77	33	110	22.0
Sholápur ...	28	18	46	4.2
Sátára ...	14	90	104	12.0
Ahmadabad ...	17	...	17	4.0

* To be shared between the General Duty Inspector and the District Inspector. Details not given.

done by Circle Inspectors is shown, the test taken by the General Duty Inspector being taken as equivalent to that taken by the District Inspector. In the Survey Department a 10 per cent. test is considered essential, but the last column of the table shows that except in three districts the test was short. In Bijápur and Belgaum the General Duty Inspector was wholly employed during the field season in original measurement and other work. This should, if possible, be avoided. In other districts the test by the District Inspector

was made with the General Duty Inspector. It is important that the Divisional Inspector should arrange that deficient test in one year should be made up in the next. The percentage taken in Poona was more than necessary. As far as the test was made, it showed satisfactory work by the Circle Inspectors, though in some districts the work done by trained measurers of the Survey Department, now Circle Inspectors, was inferior to that accomplished by newly trained Revenue Subordinates. This of itself proves that the test is insufficient to ensure that all work shall be done under fear of test.

14. The amount brought to credit on account of pay and allowances of Inspectors employed on paid work on behalf of private individuals is shown marginally. The totals show an increase of nearly Rs. 900 over last year. I am not satisfied that the sum recovered is sufficient. Government have the right to charge the full cost of work done where it cannot be claimed as a right by occupants. The charges to be made have now been regulated by Government orders, and instructions have

District.	Amount.	District.	Amount.
	Rs.		Rs.
Dhárwái ...	240	Khándesh ...	47
Bijápur ...	129	Násik ...	233
Belgaum ...	193	Ahmadnagar ...	200
Kánara ...	157	Poona ...	357
		Sholápur ...	335
		Sátára ...	615
Total ...	719	Total ..	1,787

been issued to District Inspectors which will secure more substantial recoveries.

Miscellaneous work.

15. The miscellaneous work done by the Inspectors is shown in the table below:—

Classes of cases.	SOUTHERN DIVISION.				CENTRAL DIVISION.				NORTHERN DIVISION (Ahmadabad).			
	Arrears on 31st July 1893.	New cases received.	Cases disposed of.	Balance on 31st July 1894.	Arrears on 31st July 1893.	New cases received.	Cases disposed of.	Balance on 31st July 1894.	Arrears on 31st July 1893.	New cases received.	Cases disposed of.	Balance on 31st July 1894.
1. Prescribed by Rules ...	917	5,870	5,802	985	398	3,232	3,119	611	73	258	264	67
2. Not prescribed by Rules ...	85	783	834	54	134	861	903	92	86	140	156	20
Total ...	1,002	6,653	6,636	1,019	532	4,093	4,022	603	109	398	420	87

As stated last year, these figures practically show the correspondence work done by Circle Inspectors, that is, reports made on reference to them. I have again shown how large a proportion of this work has been imposed on the Inspectors by Mámlatdárs in contravention of standing orders. In some districts there is an appreciable improvement in this respect, but in Bijápur, Poona and Ahmadnagar the improvement is very small, and in Kánara, this unauthorized utilization of Circle Inspectors has actually increased. In all districts the Collectors have given strict orders that Circle Inspectors should not be employed on duties not prescribed in the rules, and the continuance of cases not prescribed by the rules, can only be viewed as wilful disobedience to the standing orders on the part of the Mámlatdárs.

District Survey Offices.

16. The work done by these offices is tabulated below:—

District.	Number of cases received necessitating correction in Survey Papers.	NUMBER OF A'KA'R BANDS.		Number of Maps and Field Books corrected.	Number of extracts from Field Books sent to Circle Inspectors.	Number of extracts from Survey Books supplied to Revenue Officers and Petitioners.	Number of Maps supplied to Village Officers.
		Corrected.	Remaining to be corrected on 1st August.				
Dhárwár	90	45	...	644	1,279	1,068	369
Bijápur	75	75	...	600	298	1	133
Belgaum	37	46	...	251	727	124	95
Kánara	78	130	15	828	661	219	184
Khándesh	119	56	12	234	102	157	21
Násik	242	137	91	499	...	4,243	60
Ahmadnagar	139	162	8	210	511	140	63
Poona	264	146	4	309	148	541	63
Sholápur... ..	34	32	2	32	306	298	85
Sátára	20	19	1	19	226	143	17

Ákárband correction has been done promptly except in Násik where the arrears are excessive. The figures are somewhat doubtful. Last year in Kánara the number of survey numbers for which corrected ákárbands were required was shown instead of the number of ákárbands to be corrected. Further, it is not certain whether column 3 includes the arrears of the previous year or not, in some districts; it clearly excludes them in others. The form requires amendment to show how far arrears have been disposed of. Column 6 has been left blank for two years successively in Násik which points to some misunderstanding not explained. An important modification as regards the arrangement of records has been made, in that, to facilitate correction, the papers of each village, both in the A and B divisions of the records have been put together. This rearrangement has been completed in the Bijápur District and is progressing rapidly in other districts, except in Ratnágiri where it has first to be decided what papers are to be kept permanently.

17. *Duplication of Survey Records.*—Special sanction for duplicating the field classification book was accorded; about a quarter of the work has been finished in the Southern Division at a cost of Rs. 2,830. In the Central Division this duplication had been mostly effected before the transfer of the records to the Revenue Department; what remains to be done is being done by an allotment from a similar grant for duplication of records sanctioned in the Survey Budget.

Fee receipts for work done in the District Survey Office are exhibited below in a classified form:—

District.	FEES ON ACCOUNT OF SUPPLY OF			Fees for making corrections in Survey Papers.	Total.
	Extracts from Survey Papers to applicants.	Extracts from Survey Papers to Circle Inspectors.	Village Maps.		
	Rs.	Rs.	Rs.	Rs.	Rs.
Dhárwár	47	106	466	13	632
Bijápur	3	29	43	...	75
Belgaum	2	64	57	...	123
Kánara ... ..	...	213	33	...	246
Total	52	412	599	13	1,076
Khándesh	30	1	14	11	56
Násik... ..	42	157	15	19	233
Ahmadnagar... ..	1	134	37	23	195
Poona	13	222	154	21	410
Sholápur	3	298	...	5	303
Sátára... ..	29	242	25	15	311
Total	118	1,054	245	94	1,511

Up to the present time no fee was charged for the corrections entailed in the survey records by sub-divisions and partitions made at the request of occupants for their convenience. The order that such fee should be levied has apparently not been attended to in the Southern Division except in Dhárwár. The charges shown in column 3 of the table are only permitted when they can be charged as expenses properly and reasonably incurred in refixing or replacing boundary-marks displaced or missing through negligence of private occupants.

The total recovery on account of fees has increased on the whole from Rs. 1,263 to Rs. 2,587, but the greater part of the increase comes from the Central Division where the Circle Inspector staff is new.

Ratnágiri.

18. The number of Inspectors has been raised from 18 to 26, that is, the full staff proposed has now been introduced with the reduction of one Inspector. In the two talukas of Málvan and Vengurla, the Inspectors have done regular duties. The other Inspectors were massed in Devgad and Rájápur to take the special test of boundary-marks required by rule 104 of the Rules under the Land Revenue Code from January to the end of May. Up to the end of December they were employed on miscellaneous measurements and other technical work. In the rains, the work of duplicating measurer's field books, necessitated by the destruction of the waslewar books (*vide* clause 8, para. 16 of the Annual Report for 1891-92) was continued. A General Duty Inspector was appointed from February and was employed throughout the field season in classing an alienated village.

The following table shows the amount of crop and waste inspection performed by the Inspectors of Vengurla and Málvan :—

No. of Villages in the Circle,		Crop Inspection,		Waste Inspection.	
		Number and Area of Survey Nos. inspected.		Number and Area of Survey Nos. inspected.	
Total.	Inspected.	Number.	Area.	Number.	Area.
			Acres.		Acres.
60	55	1,388	10,020	75	824
Percentage ...	77	9.3	6.4	21	16

The number of villages shown in column 1 exclude khoti villages where village Form 3 is not kept. The percentage of waste inspection on area is inadequate; 82 encroachments were detected, of which only 3 had been reported by the village officers. As to the result of the inspection, the estimate made by the village officers was only found fairly correct in 11 per cent. of the numbers, while 96 per cent. of the marks found out of repair had not been so shown in Village Form 3. The outturn of marks inspected daily averaged 38 against 64 last year. The decrease is due to an order directing the inspection to be confined to marks which come within the scope of complete boundary-mark inspection. 27 per cent. of inspected marks were found out of repair, but during the interval between the first and second inspection, 86 per cent. were repaired, 35 missing marks were replaced after measurement, and 58 encroachments were detected. It may be noticed that the encroachment cases are far fewer than in the previous year.

Census.—The village census was checked in 53 villages as against 10 last year; of the rest 13 are either uninhabited or keep no census register. Partition cases are dealt with in this district by a separate establishment of watap surveyors. 478 measurement cases as against 419 last year were disposed of by the Circle Inspectors. The arrears of measurement cases have increased from 35 to 113. The District Inspector found a considerable improvement, both in the amount of inspection and in its quality.

District Survey Office.

Number of cases received necessitating correction in Survey Records.	NUMBER OF AKÁRBANDS.		Number of Maps and Field Books corrected.	Number of extracts from Field Books sent to Circle Inspectors.	Number of extracts from Survey Books supplied to Revenue Officers and Petitioners.	Number of Maps supplied to Village Officers.
	Corrected.	Remaining to be corrected on 1st August.				
1	2	3	4	5	6	7
500	118	265	210	24	121	44

Ákárband correction has fallen still further into arrears, partly because the Divisional Inspector rightly insisted on the disposal of arrears in the regular order. The Collector personally examined the office and found its condition unsatisfactory. The Head Quarter Assistant was warned and the District Inspector ordered to keep a close supervision over the work of the office.

In future reports the figures for Ratnágiri will be incorporated with those of the other districts of the division.

19. *Divisional Inspectors.*—Mr. Young took leave for a year from March and was replaced by Mr. Forbes, whose services were lent by the Gujarát Survey. Mr. Lushington also took leave for 3 months in August, an Assistant Collector, Mr. Swifte, taking his office. The following table requires little comment:—

District.	NUMBER OF TALUKAS.		Total No. of Circles.	Dakars examined.	CROP, WASTE AND BOUNDARY-MARK INSPECTION.		COMPLETE BOUNDARY-MARK INSPECTION.		MEASURING.		Annual Census tested (No. of entries.)	Birth and Death Registers (No. of tested entries.)	No. of Villages in which Statistical Returns were checked.
	Total.	Visited.			In how many Circles.	Survey Nos. tested.	In how many Circles.	Marks tested.	In how many Circles.	Survey Nos. tested.			
<i>Southern Division.</i>													
Dhárwár	11	5	28	10	..	..	4	245	3	10	297	28	10
Bijapur	4	4	24	8	..	17	..	..	..	..	..	..	..
Belgaum	3	3	24	10	3	19	1	132	..	..	100	2	3
Kánara	3	3	23	10	4	16	..	..	1	4	..	..	..
Ratnágiri	8	8	8	..	..	..	..	..	..	..	..	..	..
Total current year ...	43	18	105	38	14	52	5	427	4	20	397	30	19
Total past year ..	43	15	105	47	22	129	11	1,300	8	11	..	..	..
<i>Central Division.</i>													
Khándesh	16	1	48	2	..	..	1	40	..	..	80	70	..
Násik	12	4	85	9	..	..	7	134	..	..	110	70	..
Ahmadnagar	11	4	33	4	3	29	2	44	3	..	45	49	..
Poona	8	2	23	4	4	36	..	..	3	..	59	66	..
Sholápur	7	5	19	9	4	25	1	16	1	..	28	49	..
Sátára	11	2	32	3	..	..	..	..	..	..	..	..	..
Total current year ...	65	18	190	31	11	90	11	234	6	...	322	313	...
Total past year ..	65	18	190	47	21	111	14	1,438	4	6	246	208	..

The urgent settlement duties of the Divisional Inspector made it impossible to inspect Ratnágiri this year. No test of the crop registration was made in Khándesh, Násik and Sátára either during the year under report or the previous year. In Sátára no field work at all was inspected, as a serious amount of time was taken up in enquiries as to pátasthal assessment complaints in the Shrigonda taluka of Ahmadnagar which prevented any but tests in the neighbourhood. Later on in the season the test of the complete boundary-mark inspection was impeded by the necessity of visiting a village in the Mádhá Taluka of Sholápur to take a regular test of measurement and classification preliminary to settlement. The test of measurement work done by Inspectors is so scattered that it has principally to be left to the District Inspectors, but the Divisional Inspectors carefully and systematically scrutinize the returns in each case. But in the cases where the District Inspectors are not experienced special attention was paid by field test. The District Inspectors of Sholápur and Ahmadnagar have now been declared fit to take independent test of measurement, while those of

Dhárwár and Kánara must still have the assistance of the General Duty Inspector. The work done by the Divisional Inspectors is perhaps a little less than in the previous year, not on account of diminished activity and energy, but by reason of unavoidable interferences.

All the District Survey Offices were examined by the Divisional Inspectors and more attention was paid to the examination of the records kept by Circle Inspectors. Memoranda of inspection were drawn up in each case and submitted to the Collector with such comment as appeared to me to be called for on my part. A useful form for reporting the results of examination of District Survey Offices with uniformity was introduced. Further a special form of report to make the Collector early cognizant of gross mistakes and negligence and the Divisional Inspector of the action taken by the Collector was approved by the Commissioners.

20. It appears desirable to summarize the opinions expressed by the Divisional Inspectors formed by test and returns :—

Central Division.—“Crop, waste, and boundary-mark test by Circle Inspectors generally satisfactory but little appreciable improvement on the part of village officers. Less improvement even in respect to the annual cattle census, but birth and death registers better kept. The condition of the District Survey offices is satisfactory, except the combined Násik-Khándesh office at Málegaon, but the laxness will disappear with the removal of the records to the immediate charge of the District Inspectors. As to the District Inspectors, Mr. Kirane (Sátára) has very carefully reviewed the returns. His review is full and quite to the point. His suggestions have always been judicious. Mr. Padhye's (Poona) review is unnecessarily prolix, although it contains some good suggestions and bears testimony to his zeal and ability. The reviews by Mr. Jacob Bápuji and Mr. Jagde (Khándesh and Sholápur) are generally satisfactory. Mr. Phadke (Ahmadnagar) is wanting in method in his report.”

Southern Division.—“There is a decided improvement in both field and book work among Circle Inspectors. The condition of the District Survey Offices is satisfactory, except Ratnágiri, where the correction work is greatly in arrears. More method has been insisted on. The District Inspectors have worked with energy, except Mr. Limaye of Belgaum, who has been lax in his measuring tests.”

21. *Revision Settlement.*—The proposals by the Divisional Inspector, S. D., for a small enhancement of rates in the Haliyál Táluka of Kánara, made last year, were considered premature by Government, and current rates were reguaranteed till 1905-06, by which time the effect on the tract concerned of the improved railway facilities will probably be more apparent. Current leases will expire in the Khed Táluka and the Mandangad Peta of the Ratnágiri District in the coming year. Preparation for proposals for the new lease demanded a lengthened tour in the district by the Divisional Inspector. He also settled a boundary dispute in the Chandgad Mahál of Belgaum.

In the Central Division, the Divisional Inspector submitted a settlement proposal for an isolated village in the Chopda Táluká of Khándesh. The settlement was sanctioned and introduced. The measurement and classification of an inám village in the Mádha Táluka of Sholápur were conducted by Circle Inspectors, and tested by the Divisional Inspector, who is preparing settlement proposals.

The Divisional Inspectors made crop experiments under the rules which will be noticed on in the Crop Experiment Report. They also paid close attention to the Circle Book compilation, the slow progress of which is commented on in Section II.

22. *Superior Test by Sub-divisional Officers and Mámlatdárs.*—Though the inspection return submitted by Mámlatdárs and officers in charge of sub-divisions has been amplified in the manner described in paragraph 11 of last year's report, by order of the Commissioners, the test taken of the work of Circle Inspectors has not been separately shown in the Dhárwár, Khándesh and Kánara Districts.

The extent of the test made in all the districts except Ahmadabad, where the return has not yet been prescribed, of the various duties of Circle Inspectors is shown thus :—

District.	SUB-DIVISIONAL OFFICERS.				MÁMLATDÁRS AND MAHÁLKARIS.			
	Subject of test.							
	Crop record.	Boundary marks.	Village Census.	Vital Statistics.	Crop record.	Boundary marks.	Village Census.	Vital Statistics.
	No. of Survey Numbers.		No. of Register entries.		No. of Survey Numbers.		No. of Register entries.	
Belgaum ...	203	214	70	45	1,229	1,361	1,163	660
Bijápur ...	258	444	337	235	265	290	117	350
Ratnágiri ...	121	227	89	...	54	191	...	2
Sátára ...	450	412	98	98	971	1,313	453	606
Sholápur ...	203	187	...	...	122	37	...	...
Ahmadnagar ...	283	581	471	432	318	792	95	253
Násik ...	98	187	94	643	389	517	178	596
Poona ...	175	233	61	124	...	...	...	...

Where the entries are blank, the figures are not distinguished from the figures of the direct check on the village officers. In Ratnágiri the figures are only for two talukas, others not possessing a village staff. In Sholápur the Mámlatdárs of Sângola and Sholápur took a test of the entire Birth and Death Register in 38 villages, and the subdivisional officer a similar special test in 123 villages. In some districts the extent of the test over Circle Inspectors by Mámlatdárs is evidently inadequate. The results of the test made will be gathered from the general remarks by Collectors which are quoted *in extenso* in the next paragraph.

23. I now append the remarks made by the Collectors on the working of the Kanungo staff during the year in their administration reports or in memorandums forwarding the annual returns relating to the Circle Inspectors' work. :—

Dhárwad.—“These results are much the same as they were last year; and show, as I stated last year, ‘the usefulness of these agricultural departmental subordinates and the altogether untrustworthy nature of the village officers’ work’. On the whole, the work, done, by the Circle Inspectors was ‘satisfactory; and their work was efficiently supervised and checked.

“I may note in this connection that I was serving as Assistant in this district ten years ago, *i.e.*, from December 1879 to March 1885: I noticed, since then, a marked change especially in two matters, (1) the holes dug close to boundary marks for earth for repairs. These holes *everywhere* disfigured the face of the country and endangered the safety of the boundary-marks. Such holes are now rarely to be met with. (2) The increase (temporary, no doubt, but very considerable) in the number of cases, about encroachments on the village site, roads, Government waste lands, &c.

“This is unquestionably due to the action of the Circle Inspectors. It is satisfactory that, in many matters, of which the above two are only examples, the new system has already borne permanent good fruit. The system was introduced here in the rains of 1884. The Pátils, Kulkarnis up till then, did not trouble their heads as a rule over the boundary mark inspection; while the inspection of Mámlatdár and General Duty Kárkuns was superficial. Their neglect, in this particular matter of pits and holes by boundary marks, caused me as Assistant much trouble and labour, that seemed thrown away. Now such inspection is one chief duty of Circle Inspectors; and village officers cannot well now shirk their duty, wholesale, as they used to do. While in the other matter, comparatively few encroachments on Government land used to come to light; and, when they did come to light, it was, as a rule, through accident. This is quite changed now; and has caused, a considerable though temporary increase of work.”

Bijápur.—“The staff of Inspectors as a whole, however, is not very satisfactory, but it is not easy to get it improved as inefficient men are not wanted elsewhere. * * * The District Inspector has performed his own duties throughout the year energetically.”

Belgaum.—“The Circle Inspectors were employed during the year on the duties prescribed under the rules and the amount of work done by them is expected to be on the whole satisfactory. * * * My slight personal acquaintance with the working of the Circle system and my recent arrival in this district make me diffident in venturing to offer any opinion on the subject. But I cannot help thinking that perhaps too much is expected from the Circle Inspectors and that the prescribed quantity of out-door work, can, in most instances, be done, if done at all, only in a hurried and perfunctory manner. I

am led to believe that a lighter task would probably be better done. However this may be, the admitted unpopularity of these out-door duties and the uniform failure to work up to the prescribed standard are significant facts for which some good but unexplained reason must exist and which it will be my endeavour hereafter to discover. The success of the system depends a good deal on the character and qualifications of the District Inspector. This district has been unfortunate in the officer selected to fill that important position and I have lately recommended his transfer to some post more congenial to his tastes and suitable to his capabilities."

Kánara.—"On the whole I think they (Circle Inspectors) work as well as might be expected, but instances of neglect are not unfrequent. Mr. Shesho Shrinivas, the new District Inspector, displayed great activity and did a great deal towards getting the arrears of partition cases cleared off, and his work and energy deserves a special commendation."

Ratnágiri.—The present Collector, Mr. Doderet: "It is apparent that there is room for improvement in the work of the Circle Inspectors. Mr. Dume has satisfactorily supervised their work during the year under report and made them work better in some respects than in the previous year."

Mr. Drew.—"Village officers there are scarcely any. I do not think that I have fined any, but several Circle Inspectors mostly 5 or 10 rupees at a time. They have not yet discovered that they have to keep to the rules, and that more regularity is required from them than from the old Bhág-kárkuns. In Vengurla and Málvan they work as in other districts, with a special routine for the district. The rest were employed in copying tipan books until November. Then some were sent to each táluka to dispose of prakarnas till end of December or later in some cases, and after that they were employed in Devgad and Rájápur on boundary-mark inspection."

Khándesh.—"The examination of birth and death registers, &c., was regularly done and on the whole the Inspectors have worked well. But there are not enough of them. There ought to be 2 or 3 spare ones to take the places of those ill or on leave. * * * Mr. Jacob Bápuji has worked keenly himself and makes, I think, a good head to the establishment in the district. * * * The Mámlatdárs have not yet, I think, thoroughly realized their relations towards the Circle Inspectors and their duties in the way of supervising them, but I hope that things will be better in this respect during the coming season."

Násik.—"I observe that remarks are made that Circle Inspectors are not of as much assistance as they might be. My experience of their work being limited to only a few individuals, I offer my observations with the utmost reserve. I venture to think that while they are already useful in survey work where such is necessary and in reporting encroachments and irregularities their chief use will be in training the village officers and particularly the Kulkarnis to more systematic and accurate work. In other words the use of a Circle Inspector lies rather in teaching a Kulkarni to do the work well than in doing bits of the work well himself. To take an example from their first duty. Both kharif and rabi crops are sown in rows with another crop either separate or sown in the third, fourth &c., up to say, the ninth row, or there may be a sprinkling of one crop throughout a main crop or edge or corners or portions sown differently. I found that the Circle Inspector worked on a rule and that the half dozen fields he had done were elaborately down in his field book. When I turned to the Kulkarni he had become nothing the wiser from the Circle Inspector's visit. The Kulkarni had treated the respective areas of half a dozen fields sown with the same main crop and at the same regular interval with the same subsidiary crop in half a dozen different proportions and would do the same next year. It was perfectly easy to teach him to take a definite proportion wherever he found a field under those conditions. Under their agricultural enquiry Circle Inspectors make painstaking notes, but the practical result of their usefulness would be more speedily evident if for each village they drew up the few simple main rules necessary to attend to when estimating crop areas, submitted them to Mámlatdár and so to Collector for approval, and the Kulkarnis were taught to work by these rules. It requires no more skill or time to use an accurate fraction than an inaccurate one. I refrain from doing more than allude to the subject."

Ahmadnagar.—"The work of the Circle Inspectors and village officers shows improvement and is generally good. Any irregularity on the part of Circle Inspectors and village officers brought to notice by the local officers is immediately inquired into and dealt with on the merit of the case. There appears to be sufficient check over the work of this class of officers and as besides all is prescribed to be performed within a fixed period they have no means of neglecting it. * * * The six months that Mr. Phadke has held office the Collector has found him working hard and moving actively in his charge and has replied to references referred to him with punctuality."

Poona.—"It is now more than two years since the new system of agricultural inspection was introduced into the district and on the whole it may be said to be working well. * * * The work of the Circle Inspectors themselves has been satisfactorily supervised by the District Agricultural Inspector and by the

Mámlatdárs and the Assistant Collectors. I consider the Circle Inspectors a very useful class of Government servants and it is to be regretted therefore that they do not as a rule like their work, and that it is generally looked upon as too hard. It is rather soon yet to give a definite opinion, but I incline to think that the staff is undermanned. * * * Of the District Agricultural Inspector Mr. Pádhye I am glad to say that he continues to work to my satisfaction."

Sholápur.—"It is now two years since the introduction of the Circle Inspectors' staff into this district and I am in a better position for giving an opinion on the manner in which they have as a class worked during the period. I think they have performed their duties satisfactorily and the Divisional and táluka officers who send me monthly returns of the test taken of their work are of the same opinion. The General Duty Kárkuns, part of whose work is now done by the Circle Inspectors, were as a body untrained in the duties of measurement and classification. The work of partition which had hitherto been performed by the Huzúr Surveyor alone and which was certainly more than one man could punctually and efficiently perform, is, however, still somewhat behind hand, but it is to be hoped that improvement in this respect will follow as the men become more familiar with their duties and the routine of the Department more settled. * * * The transfer of Mr. Jacob Bápuji was a great loss to the district. Mr. Jagde, who has succeeded him, is not yet fully qualified in survey work, but he is intelligent, hardworking, and I am quite satisfied with the way in which he has performed his duties."

Sátára.—"On the whole the agricultural staff has shown increased efficiency during the past year, though, as was only to be expected, there is much room for improvement. From what I have seen of the District Inspector Mr. Kirane's work I think that he takes much interest in it and does his best to raise the standard of work among his subordinates. * * * I may mention that some of the Circle Inspectors who have been drafted from the Revenue Department do not take kindly to their work and would return to their former duties if allowed to do so. This, however, is only to be expected when the change from the sedentary work of the Revenue Department to the field work of the Agricultural Department is borne in mind."

Ahmadabad.—"The Circle Inspectors not being supplied with a Gujaráti translation of the Circle Inspector's Rules, their work was not systematically done. During the current year, however, a great improvement is expected in it. The settlement of the question as to where the survey records should be located has been a great hindrance in the work of the agricultural staff. In November the work of the District Inspector as such commenced. Since then up to the end of June 1894 he inspected 45 villages in which he took test of the Circle Inspectors' work of inspection of crop, waste land and boundary-marks. He also settled some boundary disputes. In two cases, one of bhátta land and the other of river-side land, he was deputed to make survey of lands."

I have no special comment to make on these remarks except that it is evident that the Revenue Officers are taking far more interest in the work of the Inspectors and are therefore showing appreciation of the special organization. I still think that the system of recruitment demands radical change and trust that the comments made in paragraph 19 of my last year's report will be discussed by the Commissioners in Committee when the Collectors have reported on them to the Commissioners.

II.—ANALYSIS OF DISTRICTS WITH REFERENCE TO SECURITY FROM FAMINE.

24. *Bombay Famine Code.*—The code was drawn up in 1883 by a committee on which I served as Secretary. A revision committee appointed at the instance of the Government of India, of which I was a member, met in January 1894 and submitted a revised code, which has met with the approval of the Government of Bombay.

25. *Circle Book.*—This compilation corresponds closely with the Pargana Book of the North-West Provinces and was accepted at the Simla Conference as a satisfactory method of ledgering village statistics. The duty of annually compiling the required figures is imposed on Circle Inspectors and the distribution of printed forms has been limited to districts equipped with that staff, save that in Ratnágiri only two tálukas have a village staff, without which it is useless to attempt the Circle Book. The information is all available from táluka and village registers and, therefore, the compilation is made at the táluka headquarters in September and October. The progress made is not great; for, the distribution was rather late and some doubts were raised as to the method of

compilation. Still, I think that more should have been done. Most progress is reported from Bijápur, Belgaum and Poona. I propose next year to show progress in a tabular form.

III.—COLLECTION OF REVENUE AND RENTAL IN PRECARIOUS TRACTS.

26. Owing to the good rabi season, following an average year, there was no necessity to adopt measures under the Famine Relief Code except in Násik, "where two or three road works were conducted in and near the Peint taluka to afford relief to persons reported to be in want of work owing to the short crop of *nágli*," the principal food grain of the táluka. No remission was required on account of failure of crops, and the revenue was collected with even more ease than in the previous year, the number of notices served declining appreciably. There appears a striking contrast with respect to the practice of issuing notices in the marginally named districts as compared with the other Deccan and Karnátak Collectorates. In the latter notices are unfrequent and bear an insignificant percentage on the number of revenue payers, but in the former the reverse is the

case. Thus in Poona six occupants per hundred received notices and in Nagar nine; while in Sholápur and in the Karnátak the percentage nowhere reached one per cent. This may be, to a small extent, accounted for by the more provident and independent character of the Jain and Lingáyat cultivators of the Karnátak, as compared with the Deccan Kunbis. But speaking generally the contrast cannot be due to a difference in climate or material conditions. For Sholápur, for example, is far inferior in these respects to Sátára. The contrast is worthy of consideration by the Commissioners. The number of distraints of moveable property fell from 416 to 115. In Bijápur, the Collector attributes a fall of 81 per cent. to special injunctions that the village officers should remind the occupants of their responsibilities. In Sátára there were 45 distraints, all of which were removed except one. On the other hand, the number of cases in which a fine was levied under section 148, Land Revenue Code, rose from 9 to 58, the increase being conspicuous in Sátára and Bijápur. In the former district it was found necessary to exact these penalties from certain persons in the Karád táluka, who, though well-to-do, deliberately neglected to pay their assessment in proper time. In the latter district, occupants in the Sindgi táluka have established a habit of keeping back their dues until they are pressed and a lesson was needed.

In a very few cases (19 as against 15 in the previous year) land was forfeited. Bijápur (11 cases) and Násik (8 cases—acres 484, assessment Rs. 329) were the only districts concerned. The Bijápur forfeitures were the result of the previous year's outstanding balance in Sindgi and were unavoidable as it was shown that the holders no longer possessed adequate means for cultivation.

IV.—MEASURES OF PROTECTION, including :—

- (1) *Fodder Reserves and Arboriculture,*
- (2) *Extension of Communication,*
- (3) *Irrigation.*

(1).—*Arboriculture.*

Bábhul Plantations.

27. The subject of fuel and fodder reserves was dealt with by Dr. Voelcker in his report as a subject of prime importance. His recommendations are in accordance with the efforts made by the Agricultural Department as far back as 1883-84, which were approved in the Government Resolution referred to in paragraph 12 of my report of that year. I have not ceased to press the matter on the attention of District Officers. A perusal of the marginally quoted paragraphs of my annual reports will show how little has been done. Ahmadabad alone appears to have recently taken advantage of the concessions offered in favour of bábhul plantations in Government

Report 1884-85, para, 33.
 " 1886-87, para. 12.
 " 1889-90, para, 22.

Resolution No. 6282, dated 5th August 1892, and now has about 6,000 acres of *unassessed* waste under *bábhul*, where the produce is shared between Government and the lessee in the proportion of 11 to 5, the lessee meeting all the expenses incidental to cultivation, fencing, &c. The demand for *bábhul* fuel for the flourishing mills of Ahmadabad is increasing and acts as a stimulus to the formation of these fuel and fodder reserves. Government has again declared its readiness to grant concessions in *assessed* land, when occupants are willing to establish *bábhul* plantations.

(3).—*Irrigation.*

28. The scarcity of 1891-92 has induced further consideration as to methods of affording protection against scarcity. Government has again pressed the necessity for the inclusion in the programme of relief works of petty irrigation schemes, such as small tanks for direct irrigation as well as for supplementing the water-supply of wells by percolation, and for the strenuous encouragement by *takávi* advances of the construction of wells.

29. Apart from the high cost of manuring and of weeding, which of itself often prevents the ordinary *rayat* from utilizing existing facilities for irrigation, saline efflorescence is an evil attendant upon irrigation in black soil which the cultivator has to contend with. This is a question of large importance in upper India, but even in Bombay it is of sufficient importance to demand study. In Dhárwár a considerable area of land irrigated by the Asundi Tank has deteriorated. Drainage is being tried. The *reh* patches under the Nira and Mutha Canals have been inspected by the Agricultural Chemist to the Government of India, and samples of soil and water taken for analysis. Dr. Leather will

1. *Prosopis glandulosa* (Mesquit bean).
2. *Broussonetia papyrifera* (paper mulberry).
3. *Atriplex nummularia* (salt bush).
4. *Sesbania Ægyptiaca* (Jait).
5. Barilla.
6. Date-palm.

revisit these lands in January next. In the salt lands of Kaira, the marginally noted trees which are reported to have grown with some success in the *usar* lands of the North-West Provinces were tried, but so far without success. In Karáchi the paper

mulberry has been grown in salt land, but it does not seem to have effected any improvement in the soil. An application from the Deccan Paper Mills for canal water at a reduced rate for experimental cultivation of *sabai* grass has been favourably entertained, the concession being limited to fifty acres for five years at half lucerne rates with certain conditions. Of the seven drainage channels in the Vágra and Jambusar *tálukas* of the Broach district, the construction of which was sanctioned in 1886 (paragraph 36 of the report for 1885-86), three channels have been completed and Government have expedited the completion of the remainder.

V.—AGRICULTURAL EXPERIMENTS, INCLUDING FARMS.

A.—*Experimental Farms.*

Poona Farm.

30. The report for 1893-94 was published early in October.

As noticed last year the primary object of the farm is instruction to the agricultural students of the College of Science. It is also a dairy farm on which large attention is rightly devoted to the growth of fodder, to compare outturn, cost of cultivation and feeding value of the best fodder crops and to fix a rotation between cereals and pulses, suitable for adoption on a pure dairy farm. Among the sorghums, the *sundhia* (*S. cernuum*), introduced from Gujarát, has maintained the high position assigned to it last year, though the common Deccan variety (*nilva*) ran it close. Reana Luxurians or teosente was slower in growth, and apparently takes more out of the soil. A large quantity of *sundhia* seed has been sent from the Nadiád seed-store for sowing on the Ahmadnagar and Bábugarh Remount Farms. Two varieties of *dolichos* (*val* and *chola*, *D. lablab* and *D. catiang*) are excellent rotation fodder crops to alternate with the millets.

Imphee (*S. saccharatum*) is inferior as a fodder millet, but its value, despite its inferiority in yield, has yet to be gauged when feeding experiments are insti-

tuted. This remark applies with greater force to two introduced American sugar sorghums, Amber and Collier, which are under trial as sugar-producers in some special cane experiments to be noticed presently. Guinea grass is the best continuous fodder crop when ample water is at hand. Further experience points to a confirmation of the opinion given last year, that the mixed crop of guinea grass and lucerne will prove of great value. By itself lucerne cannot combat its enemies. Its cultivation in the neighbourhood of Poona is declining, and no doubt will decline unless some check to its liability to disease is found. Where low damp land is put under fodder, the newly imported Mauritius water-grass will succeed. It does not compete on equal terms with guinea grass, where canal irrigation is available. It is the chief fodder grass of Ceylon, and has shown its worth under suitable conditions in India.

Mr. Mollison has proved that the giant variety of bajri common in Gujarát can to a certain and perhaps a large extent supersede the ordinary Deccan variety. It yielded 20 per cent. better than the local bajri, but seems to demand good land, while bajri is the Deccan kharif cereal for thin land.

Three species of wild cottons are under trial, *G. arboreum* from the Punjáb, *G. stocksii* from Sind, and *G. wightianum* from West Rájputána. A fourth variety, recently discovered by Dr. Watt, will be added. Practically nothing is expected from these trials, but they may nevertheless throw light on the history of cotton in India.

The propagation of potatoes from the absolute seed has reached the fourth year, and there is promise of valuable varieties, but the tubers have not yet reached full size.

Further dealings with cotton and potatoes on the farm will be more appropriately dealt with under the special sections assigned to these important subjects.

An especially important series of experiments has this year, with the confidence that due assistance will be received from the Agricultural Chemist, been inaugurated on suitable land at Mánjri, 8 miles from Poona. Cane is interdicted for sanitary reasons on the farm, which also is unsuited for careful comparative trial. It is better too to study cane in the centre of cane cultivation, so that valuable results may secure prompt imitation. It would be out of place here to discuss the objects of the trials in detail. The printed farm report must be referred to. It is sufficient to say that we have now taken up an investigation in which many capitalist farmers are interested all over India. The attempt is more ambitious than any trial hitherto undertaken. The objects may be enumerated :—

To study the most economic system of manuring cane, and especially to ascertain the most profitable manner in which bone manure can be used; to test various methods in cultivation whereby the yield of sugar may be increased; to acclimatize newly imported varieties of the sugarcane from Mauritius, and to compare sugar sorghums with cane as sugar producers. With the co-operation of the Irrigation Department, the economic utilization of canal water has been included among the subjects of trial.

Dr. Leather has promised cordial assistance, and it is clear that the assistance of chemical analysis is of great moment. But it has not so far been within his power to meet the demands of the trials with requisite promptness. As the investigation was commenced with the approval of the Simla Conference of 1893, I look to the Imperial Department of Agriculture to ensure satisfactory conduct of the trials, as far as the help of the Agricultural Chemist and his Assistant is essentially necessary.

The Dairy.

31. The working of the Poona Farm as a model dairy farm has been most satisfactory during the year under report. It was not till the close of the year that possession of the stock farm at Mánjri as an adjunct to the Poona Farm was secured, but in spite of the heavy cost of feeding dry cattle and young stock at Poona, the financial results of the dairy were very good. The profits of the dairy more than met the whole cost of the Poona Farm, and as the Mánjri station will more than pay its expenses, I think that it will be admitted that no charge of extravagance can be brought against the Department.

One object of the dairy has been secured. It is evident that with good management pure dairy farms will pay in India. The initiative taken by the Department with respect to improved methods in dairying has already had far-reaching results, and has stimulated private enterprise in many directions, but it will not rest till private dairy farms have been opened by capitalists.

The ultimate object is the improvement of milking breeds of cattle. Results in this direction must be necessarily slow, but possibilities are great as can be judged by the recorded yields of well selected buffaloes and cows under liberal but judicious feeding. Nevertheless, it is not supposed that the bright future will come when even village cows will yield abundant and rich milk. The future of improved milch breeds depends on the extension of dairy farms, on which alone profitable management of improved milch animals can be guaranteed.

Surat Farm.

32. This farm is to replace the Bhadgaon farm, the disposal of which was noticed last year. A small area of 14 acres, as the nucleus of a farm on the model of the Poona Farm, has been purchased close to Surat. Other land will be rented, and special trials will be made in the neighbourhood, where the results will be best in evidence. In fact the establishment of stations such as the Mánjri station, within a distance to allow of supervision and control from the main farm, is considered preferable to the establishment of large farms, where some trials at least must be conducted under unsuitable conditions. The land which has been bought is under fallow cultivation, and the stocking of the farm has been postponed till April on account of want of budget provision. The conditions of Surat differ materially in some respects from those of Poona, but on the other hand the Surat breed of buffaloes is excellent, and Surat is the most suitable locality for trials with the Gir breed of milch cows which do not give results which can be considered adequate in the Deccan. The market gardening near Surat is remarkable, and may on close study suggest useful subjects for trial. But the selection of Surat was decided on account of the facilities for systematic investigation of cotton. At the same time, it is sufficiently near the magnificent cultivation of Navsári, Gandevi and Bulsár, to place those tracts within its ken. Surat is within range of a greater variety of cultivation than any other city in Bombay.

Nadiád Farm.

33. The working of this private farm is carried on with the ready advice and frequent inspection of the Superintendent of Farms. There is no special result to record this year. It is hoped that the vacancy caused by the resignation of the Superintendent will soon be filled. In my opinion, no result will be satisfactory if the Committee does not provide a whole time Superintendent. The seed-store had a successful year.

Hyderabad Farm (Sind).

34. This farm continues under the management of the District Local Board which has started a dairy. A question is under consideration whether the farm area should not be converted into a Commissariat Farm.

Empress Gardens.

35. The management of these gardens remains under the Agri-Horticultural Society of Western India. Two vineries (Násik and acclimatized European), accommodating 66 vines each, have been established on the most approved methods. Sales of agricultural produce have lessened in proportion to the extension of plantations of fruit trees, which are not yet in bearing. There was also a decline in the sale of exotic seeds, owing partly to increased competition on the part of local nurserymen, and partly to the unsatisfactory germination of imported seeds. The Society has determined to obtain, as far as possible, acclimatized seed from the Himálayan seed-stores. The receipts were Rs. 5,814 as against Rs. 6,400; and the expenditure Rs. 8,619, as compared with Rs. 8,974; the net cost (Rs. 2,805) was thus within the limit of Rs. 3,000 up to which Government have engaged to make good any deficiency.

The immediate supervision of the gardens is still exercised by the Joint Secretaries Messrs. Mollison and N. Padamji, assisted by several members of the Society.

B.—Experiments on various Indigenous and Exotic Products.

36. *Wheat*.—The further grant last year for Muzáffarnagar wheat for the Nára valley was not used owing to early closure of the irrigation channel. Only acclimatized seed was sown, and if the reported figures are correct, it would seem that further trial is not promising. This view is supported by the yield figures, and the reported greater liability of the introduced variety to weevil.

37. *Rape-seed*.—Sind has also made an effort to introduce an improved variety of rapeseed. Last year purchases were made up to over Rs. 500, and a sanction for Rs. 3,000 has been accorded this year. Results have not yet been intimated.

38. *Cotton*.—Ten acres in the Nára valley were sown with acclimatized American cotton. The experiment is not promising. The same remark applies to the seed sown in the Ahmadabad district. Suakim cotton was tried in several places at the request of a Bombay firm with unsatisfactory results. This variety was sown on the Poona Farm side by side with Broach and Varádi cotton. The latter both yielded well, but the fibre was coarse and harsh. Bolls have been selected from these crops, and also from fields of Broachi and Lália near Surat. All are sown together now in Poona. Mr. Mollison does not expect results of value, holding that the safest method of improving cotton is to pedigree each variety in its own locality by selecting the best bolls from the best plants, and sowing year by year the seed from the best bolls from the best plants in the ripe crop. This is the method to be adopted at the Surat Farm.

39. *Strawberries*.—The Saháranpur introductions are not thriving at Mahábaleshvar.

40. *Indigo*.—The attempts to revive indigo at Junágad and in the Mahi Kántha continue, and the subject is being taken up at Sholápur by a capitalist farmer.

41. *Utilization of Bones*.—The loss of manure by export is still on the increase, as bones (1,888 tons more than last year) have been exported from Bombay at advanced prices. Another bone-meal factory has been opened at Hubli in the Dhárwár district. Nearly half the outturn has gone to the coffee plantations in Malabár. This is a move in the only satisfactory direction towards check on exportations beyond the seas. The Mánjri trials, it is hoped, may add bone manure to the scant supply of available manure for cane. But it will have to be shown that as manure the profit exceeds the export profit. At all events, there are by-products in the bone factories, for which the manure demand is apparently to be met at a low cost. The manufacture of sulphuric acid at the Mundhwa Paper Mills encourages the hope of an early profitable utilization of bones as manure.

C.—Crop Diseases and Pests.

Potato disease.

42. The efforts made to stamp out the ring disease have not yet been fully successful. The produce of imported English seed begins to degenerate after the 3rd year in respect to its power of resistance. The Superintendent of Farms believes that farm-yard manure is a fruitful source of infection. The manure pit is also a receptacle for household refuse. With this refuse bits of diseased potatoes are sure to find their way into the pit and there multiply the disease spores to be distributed with the manure. The potatoes imported during the year (para. 30, last year's report) were grown on the Poona Farm in the hot weather with artificial manures only and the crop was absolutely free from disease, though a crop of Italian potatoes grown on clean land close by was so infected as to be useful only for immediate consumption. The monsoon crop from English seed just lifted which is intended for distribution for seed has also been grown in the same way. This crop is expected to amount to about 20 tons, all of which will be distributed to potato growers at about Rs. 90 per ton as compared with the average cost price, Rs. 250, of imported seed.

Entomology.

43. The year under report was remarkably free from insect pests, the appearance of locusts having been reported only in one or two season reports from Shikárpur and Thar and Párkar.

The Government of India have arranged for the issue of a series of Pictorial Lesson-sheets, describing the most prominent agricultural insect pests of India and intended for instruction in schools. Two sheets describing the locust and the wheat weevil have already been issued and are being prepared for distribution in the vernaculars of this Presidency.

The Government of India have also arranged to publish a complete conspectus of insects affecting crops in India. A preliminary conspectus designed to secure further information and to correct local vernacular names by which the more destructive insect pests are known, was circulated among selected officials and non-officials. Their replies have been forwarded to the Compiler.

It is also proposed, agreeably to the recommendation made by the Simla Conference of 1893, to arrange that Mr. E. C. Cotes, the Entomologist of the Indian Museum, should travel for a period of four months in the year with the object of local investigation.

D.—Takávi Advances.

44. The following table is similar to that given last year :—

Province.	1892-93.			1893-94.		
	Under the Land Improvement Act.	Under the Agriculturists' Loans Act.	Total.	Under the Land Improvement Act.	Under the Agriculturists' Loans Act.	Total.
Gujarát	20,950	9,014	29,964	17,680	19,217	36,897
Deccan	154,849	16,381	171,230	81,810	18,954	100,764
Karnátak	85,853	26,868	112,221	320,610	3,935	324,545
Konkan	25,230	10,083	35,313	32,955	12,887	45,842
Sind	32,295	106,270	138,565	56,500	57,474	113,974
Total	319,177	168,116	487,293	509,555	112,467	622,022

Note.—The figures for 1892-93 are those published in the Jamábandi Reports.

The figures show a satisfactory advance of 27 per cent., but it is worth notice that the increase in loans for permanent improvements is nearly 60 per cent. The fall in advances for seed and cattle is principally due to a favourable season. Such advances will of course fluctuate with season, and the progress of takávi advances towards popularity must be gauged rather by the increase in loans for lasting works. The Government takávi loans show a tendency to affect the rates of interest for private loans. This effect is checked by old debt which prevents many anxious applicants for takávi from risking a break with the Sávkár.

Lowering the rate of interest was advocated last year by the Collector of Broach, on the ground that private loans are occasionally granted on more favourable terms than Government loans when the security is good. But there is a strong reason against such a step. The ordinary establishments must be strengthened to give due attention to the increased demand for takávi and to ensure proper administration of this special work. Permanent success depends very largely on careful and systematic enquiry. Government sanctioned the charge of establishment in Belgaum in 1889-90 (see report of that year, paragraph 35) as a tentative measure. I think that it is time to ask for a distinct ruling that such a charge is legitimate, and that it should be authorized in any district where takávi loans have been popularized. The table indicates fluctuations in the various provinces. Gujarát is still behind-hand, but even here there is a fair advance. The increased demand is due to efforts made in Broach to induce rayats to take loans for seed and cattle, and in Surat to extend well irrigation. In the Deccan there is a considerable fall, especially in loans under the Land Improvement Act. The fall is most striking in Sholápur and Poona. The season was no doubt good in Sholápur, but the further explanation that the most pressing wants have been met does not seem sound. Four-fifths of the sums advanced in the Deccan were

for the construction or repair of wells. The most surprising expansion took place in the Karnatak. The present Collector of Dhárwár (Mr. Fairlie Muir) was Collector of Belgaum in 1889-90 when that district forged ahead of all others. It is also encouraging to notice that the advances were largely for permanent improvements, such as clearance of grass-bound land. In the Konkan, Kánara alone took half the total. In this district there is scope for much increase still in the direction of new spice gardens. In Thána it is urged that the land is too extensively in the hands of money-lenders and non-cultivating landlords to allow of improvement, as long as the landlords are so apathetic. The tenants dare not risk independent action. It must be stated in limitation of this general remark that there are many exceptions among landlords as is proved by the annual increment of new rice land and the extension of fruit trees in the varkas areas, but such landlords do not need to borrow.

In Ratnágiri the Collector has directed the exploitation of a dozen villages of each taluka to ascertain the reasons why takávi is not solicited. In Sind the loans are well appreciated, but the increased demand in Shikárpur and Hyderabad was insufficient to counterbalance the decrease elsewhere, attributed to the early closure of the Nára canal, and previous bad seasons.

As hitherto regularly reported, abuses of the facilities offered by the Government are inappreciable.

E.—Improved Agricultural Implements.

45. The only implements newly tried during the year at the Poona Farm were Ransome's Turn-wrist plough and a Swedish wheel plough. It is not supposed that either of these implements will be used by the ordinary rayat. Their use is special and their value, for the heavy and speedy tillage so necessary in sugarcane cultivation, is likely to be appreciated by sugarcane cultivators with capital. The American Planet Jr. hoe and plough continues to be regularly used in the cultivation of guinea grass, potatoes and cane on the Government farms. Outside the farms, the work done by the Sibpur plough is reported from Broach to be appreciated and in Karáchi the Beheea mill is finding purchasers.

F.—Wheat and Cotton Trade.

46. The fall last year in wheat exports from Karáchi is in strong contrast with the figures of the year under report. Karáchi has outstripped Bombay. Purchasers no doubt were attracted to the cheaper market of Karáchi, especially as prices have fallen. The trade in wheat flour continues to increase. In Europe, Great Britain and Belgium are as yet the only purchasers. The bulk of exports of flour went to the Mauritius, Aden, Arabia, Ceylon and the East African Coast.

Though cotton exports for all India show advance, there is a temporary decline in this Presidency in spite of larger exports from Karáchi. The exports to the United Kingdom showed a further fall, while those to Germany, Belgium and Italy improved considerably. The trade in Indian cotton seems to be steadily shifting from the United Kingdom to the Continent of Europe where the short-stapled Indian cotton is used in spinning the stout yarn used in the clothing of the artizan and peasant classes. The exports to Japan, also declined.

The imports of Egyptian cotton, which is presumably required for spinning finer counts of yarn in the local mills, fell by nearly 50 per cent. This fall is attributed to the closure of the mints and the consequent dislocation of exchanges with China.

47. The official forecasts for cotton, wheat and oil-seeds on the whole show a smaller divergence from the actuals, as far as area is concerned.

VI.—HORSE AND CATTLE-BREEDING AND VETERINARY ESTABLISHMENT.

Civil Veterinary Department.

48. The Government of India are considering a revised Civil Veterinary Department scheme according to which, if sanctioned, the Superintendent, Civil

Veterinary Department, Bombay, will have the assistance of four Senior Veterinary Assistants as Divisional Inspectors, and *each* district will be equipped with two Veterinary Assistants, one to hold charge of the dispensary at head-quarters and the other to be an itinerating officer for the district. The annual report of the Civil Veterinary Department has been drawn up in the amplified form noticed last year. It embodies a detailed notice of shows, outbreaks of cattle disease and grant-in-aid dispensaries.

Horse-breeding.

49. During the year under report Baluchistán was made into a separate charge. The Superintendent visited 12 districts in the Presidency and Baluchistán, Káthiáwár and Mahi Kántha. The administration of the department in Bombay reflects the highest credit on Veterinary Captain Morgan whose relations with District Officers have continued most cordial.

There were 73 stallions on the register at the close of the year, but the number actually at stud work was 63·22, the remainder being at the Ahmadnagar depôt for acclimatization. The Superintendent experienced great difficulty in obtaining pure-bred large-boned Arabs. Though the number of mares covered has slightly fallen, the average per stallion is greater but still not high enough.

Produce statistics are uncertain. But the Superintendent has admitted that the low figures are not wholly due to incorrect registration in the activity shown to get rid of worn-out animals and uncertain foal getters.

The percentage of casualties (5·4) is stationary. There is strong evidence of the ill success of the usual type of Norfolk trotter in the quality and suitability of his progeny.

Remounts purchased indicate a fair improvement. These are mostly no doubt the produce of Government stallions, but proof is available only as regards 25 per cent. Parchment certificates are being substituted for flimsy paper. Castration of mis-shapen colts has not progressed. The cost of keep shows a saving of Rs. 28 per stallion but is still high and irregular.

Mule-breeding is popular in Sind and is gaining popularity in Gujarát and the Deccan. There are 24 donkey stallions. The produce returns are more uncertain in the case of mules than of horses. The cost was Rs. 14 per stallion less than in the preceding year.

The establishment of mule runs is a clear necessity.

Some important rulings by Government demand record. District officers interested in horse-breeding are now permitted to take a stallion on tour, and the Inspectors of the Civil Veterinary Department travel with pony and donkey stallions when possible. Preference over Norfolk trotters is being given to English Thorough-breds and to Arabs. The branding rule is being relaxed. The certificate by qualified District Officers is accepted for one covering only in lieu of the Superintendent's brand. A visitors' book has been prescribed for each stallion stand. The amended form for securing more correct registration of mares and their produce is still under consideration.

Veterinary Dispensaries.

50. New dispensaries have been opened at Surat and Jalgaon, the latter being the second in the Khándesh district. A dispensary has been sanctioned for Sholápur but accommodation has not yet been provided.

Qualified Veterinary Assistants are not available to meet the increased demand. It is believed that no Veterinary Graduate has yet been secured for Dhárwár though the dispensary was sanctioned in July 1893. The transfer of the Itinerating Assistant at Belgaum has caused another vacancy for which no incumbent has been found. The Hyderabad Local Board has sought to ensure its full complement of trained men by deputing a student to the Veterinary College. The paucity of qualified Assistants was felt in Ratnágiri where none was available to respond to an urgent call caused by an outbreak in September last.

The question of moving the Veterinary College to Poona has delayed the conversion of the Veterinary Hospital attached to the College of Science into a grant-in-aid dispensary.

The working of the dispensaries has been satisfactory as the following figures tend to show :—

Year.	Number of Dispensaries open.	Total Animals treated.	PERCENTAGES SHOWN ON TOTAL ANIMALS TREATED.					
			Cured.	Relieved.	Died.	Returned incurable.	Results unknown.	Remaining under treatment at end of year.
1890-91	4	2,503	51.1	19.2	3.2	2.6	21.5	2.4
1891-92	4	2,628	54.0	16.3	2.9	2.8	21.6	2.4
1892-93	6	4,466	70.3	10.2	2.9	2.9	11.3	2.4
1893-94	9	9,843	74.89	9.99	3.09	1.88	7.80	2.35

Veterinary Captain Morgan thinks that the Veterinary Assistants have been active and prompt in dealing with outbreaks of contagious disease and to a certain extent successful in showing how precautionary measures should be taken when outbreaks occur, but regrets that the number of castrations reported (18) is so small. As far as horse-breeding is concerned this is one of the chief duties of the Veterinary Assistants. The Superintendent found the Dhulia and Karáchi dispensaries in an unsanitary state and the accommodation for in-patients in the Belgaum and Karáchi dispensaries and also in the new dispensary at Nadiád insufficient.

Cattle-disease.

51. Reports of outbreak of contagious and infectious diseases in the new form noticed last year have been received by the Superintendent, Civil Veterinary Department, during the latter half of the year. The following statement shows the information thus secured :—

District.	ANTHRAX.		RINDERPEST.		PLEURO-PNEUMONIA.		CHARBON SYMP. TOMATIQUE.		FOOT AND MOUTH DISEASE.		TOTAL.	
	Attack-ed.	Died.	Attacked.	Died.	Attacked.	Died.	Attack-ed.	Died.	Attacked.	Died.	Attacked.	Died.
Kolába ... ..	...	...	500	227	1,215	800	...	...	1,068	111	2,783	1,138
Ahmadabad ...	106	95	...	...	...	...	204	202	...	...	310	297
Kánara ... ..	...	..	288	120	...	...	...	...	...	...	288	120
Násik ... ..	...	...	122	51	...	...	28	21	55	...	205	72
Poona ... ..	...	...	122	72	...	...	...	...	53	...	175	72
Belgaum ... ..	...	...	20	4	...	...	...	...	...	...	20	4
Nagar ... ..	...	...	...	...	...	...	...	...	146	...	146	...
Total ..	106	95	1,052	474	1,215	800	232	223	1,322	111	3,927	1,703

Note.—No reports were received from Sind.

In the majority of the cases help was given by Veterinary Assistants in charge of dispensaries or those specially requisitioned from Bombay. Foot and mouth disease broke out also in Bombay where a special temporary establishment was entertained for its suppression.

The Glanders and Farcy Act will soon be applied to Násik, and it is under contemplation to extend the Act to the towns of Ahmadnagar and Bán-

Under instructions from the Government of India, the Assistant to the Inspector General, Civil Veterinary Department, has been entrusted with the preparation of a conspectus of the various diseases to which animals in India are most subject with a view to the preparation of a completer manual to be furnished with coloured maps showing the geographical distribution and comparative prevalence of each disease. Provincial Veterinary officers have been asked to assist.

Horse Shows, including Agricultural Shows and Exhibitions.

Province.	Locality.
Deccan	Poona.
Sind	{ Shikárpur. Nausháhro.
Gujarát	Rájkot.
S. M. Country ...	Chinchli.

52. Five shows were held during the year. The Ahmadabad Show was cancelled owing to outbreak of cattle-disease. The shows at Ahmadabad have not been successful and it is proposed—though not decided—to substitute a nursery in Gujarát or Káthiáwár.

The Poona Show compared very favourably with previous Shows, but was not nearly as good as the Deccan Show held at Ahmadnagar in 1892. In that year 569 horses were exhibited, of which two-fifths were drawn from Poona, Sholápur, Sátára, Phaltan and Hyderabad, whereas even the smaller number (320) of exhibits at the Poona Show came from the Poona district alone. In other respects also the Nagar Show was superior. Government has ruled that the Deccan Show shall be held at Nagar in 1894 and again in 1895 on the ground that there is clear evidence of decadence in Poona as a centre for horse-showing, if not for horse-breeding also.

The Shikárpur Show was the most successful on record. The exhibits were more numerous and the standard of quality in all classes except those for ponies and donkey mares was exceptionally high. The class for mules, despite of a decline in numbers, was specially excellent. The show is growing popular among trans-frontier tribesmen. This year Afghánistán and Baluchistán together contributed more than half of the number exhibited, owned almost all the remounts in the show-yard, and carried off nearly $\frac{2}{3}$ of the number and amount of prizes.

The Nausháhro Sub-division Show, held this year at Moro, was an improvement on the former show, both as regards numbers and quality. The funds were wholly provided by local bodies, but Government have promised to consider the question of an annual grant when the show has become a permanent institution.

The Rájkot Show, held after an interval of three years, was a decided failure. Rájkot is not a good centre; a change of locality for the Káthiáwár Show is thus probable.

The Chinchli Show showed advance in numbers but not in standard. Veterinary Captain Peacocke, whose services were lent by Government, has made valuable suggestions for improving horse-breeding in the Southern Marátha Country. For the first time, the Belgaum District Local Board contributed Rs. 250 to the show fund.

The reports on shows are now drawn up on an uniform plan prescribed by Government.

VII.—AGRICULTURAL STATISTICS.

A.—RAINFALL.

53. The detailed analysis of the rainfall in each district will be found in the appended tables (pages i—xiii). The fall of the year is contrasted with the average fall and the fall of the preceding year in the table below:—

Rainfall at District Head-quarters.

No.	District Head-quarters.	ANNUAL RAINFALL ENDING 31ST DECEMBER.					
		Average of eleven years ending 1892.	1892.		1893.		
			Fall.	Rainy days.	Fall.	Rainy days.	
		Inches.	Inches.	No.	Inches.	No.	
1	DECCAN.	Dhulia (Khándesh) ...	27·61	27·87	49	24·77	41
2		Násik ...	33·74	35·14	60	39·38	54
3		Ahmadnagar ...	26·87	42·16	63	25·55	42
4		Poona ...	36·60	45·19	57	32·12	48
5		Sholápur ...	32·78	39·28	57	33·35	47
6		Sátára ...	45·30	43·47	80	43·96	72
7	KARNATAK.	Belgaum ...	51·49	64·01	94	49·67	84
8		Bijápur ...	26·68	35·37	63	28·95	49
9		Dhárwár ...	33·19	37·26	68	32·84	73
10	KONKAN.	Kárwár (Kánara) ...	129·20	154·56	130	111·98	108
11		Ratnágiri ...	106·99	137·60	108	87·99	97
12		Alibág (Kolába) ...	91·77	117·42	97	80·38	90
13		Thána ...	102·50	131·62	100	93·95	98
14	GUJARAT.	Surat ...	46·64	55·15	60	45·45	51
15		Broach ...	39·71	39·12	52	52·24	47
16		Kaira ...	38·02	58·45	47	41·17	54
17		Godhra (Panch Maháls) ...	40·71	44·72	47	49·02	48
18		Ahmadabad ...	27·95	51·18	48	43·75	55

The salient feature of the season was the unusual downpour in May and June followed by a prolonged break in July which affected the kharif crops considerably. The rabi harvest was, however, very good owing to excellent showers in October.

Deccan.—The heavy ante-monsoon showers allowed very early sowing of cotton in Khándesh and timely sowing of rice, nágli, &c., in the western tracts bordering on the Sahyádris. In June the rain, though somewhat excessive in places, was on the whole seasonable and adequate for kharif. The seedling crops, however, considerably suffered during the prolonged break in July. In August and September the fall was normal and beneficial. The showers of October were throughout favourable for the standing kharif crops and for rabi sowing. The rabi crops, though good on the whole, were exposed to unseasonable rain and cloudy weather at the harvest time.

Karnátak.—The kharif sowing rain in June was deficient in the black soil talukas of Belgaum and Dhárwár and the whole of Bijápur resulting in a contracted area of kharif crops.

Konkan.—The monsoon did not fairly set in till the second week of June, but the heavy showers of May sufficed for early sowings. The June rain, though seasonable, was too heavy. In July the break delayed transplantation. From August onward rainfall was generally seasonable and sufficient except in the upland talukas of Kánara and especially in the north of Thána where late rices suffered from short supply of moisture at the time of maturing. November rain was heavy in Kánara and damaged kharif crops which were ready for the sickle.

Gujarát.—The incessant and heavy rain of June and early July retarded kharif sowings. Here the July break was very welcome for late sowing and for resowing crops washed out by floods earlier in the season as well as for healthy growth of early sown crops. In August and September conditions were generally favourable. Very little rain fell in October and the break was favourable for reaping of early rice, bájri, &c., and sowing of rabi crops. In

November rain was too heavy in Ahmadabad and in most places slightly injurious to cotton, jowári and pulses, but on the other hand it was especially beneficial to the rabi crops. Cotton was further damaged by cloudy weather in February, especially in Broach.

B.—PRICES.

54. *Price Inspectors*:—In paragraph 2 last year I noticed the experimental introduction of a system of price inspection to make the price current returns more accurate for all the purposes for which such statistics are useful, but principally to check wilful or negligent mis-quotations as regards prices on which grain and fodder compensation is assessed under Military regulations.

A short notice of the work done and the results secured seems needed. The inspection covers 39 stations, divided between the two Inspectors. Between January and November 1893 all stations but Asirgarh were visited. In the next year ending 31st October 1894 all stations were again inspected. The cost incurred and the days devoted to inspection were:—

Year.	Pay.	Travelling.	Total.	Days of inspection.
	Rs.	Rs.	Rs.	
1893	2,335	894	3,229	132 per Inspector.
1894	3,056	981	4,037	126 do. do.

Neither of the Inspectors yet receives the full pay of the appointment. They were made to exchange divisions on 1st April 1894. The total amount expended averages Rs. 330 per mensem. I proceed to show that the cost has been very small in comparison with results secured, firstly in improved registration, and secondly in reasonable reduction of the cost of compensation.

I look on the former as the more important, because the latter follows as a natural result, where over-payments are made and passed on the authority of official mis-quotations. Moreover correct returns are needed for many other purposes than the assessment of compensation.

55. The inspection made has proved very general neglect of the instructions laid down for the strict observance of officers responsible for the price register. The standing order that the clerk who visits the bazár at fixed dates should be competent, and that he should note the names of dealers on whose statements he relies for price quotations, has been largely evaded. In three stations the evasion was very indefensible, as prices were taken down from the statements of village officers alone, the clerk not even visiting the bazár. In others the Police were called on to report prices to the officer responsible for correct figures. The order that quotations should be for "fair average" quality was specially given to prevent the known tendency of pressure to show high prices for those special articles, with which the compensation claims are most concerned. Such pressure is undoubtedly brought to bear by contractors and by sepoys, who, on the other hand, are quick to detect and correct any tendency in the opposite direction. Abnormal variations in quoted prices of the same grain in adjacent stations were a marked feature in the "Prices Current" published before the subject of prices was taken in hand. It is a prime object of the instructions and the inspection to eliminate such variations, which, in great measure, are not due to misconception, but to wilful action where supervision is lax. Improvement is more due in this respect to the inspection than to the instructions, for the officers responsible are not able, as a rule, to bring any personal knowledge to bear. This knowledge is rapidly acquired by special auditors travelling from one station to another, and making prices their special study at each halt. But strict supervision is not made unnecessary on the part of responsible officers merely because the help of Inspectors is provided. The visits of the Inspector must be infrequent, and the standing order that a well distributed irregular test to keep the price clerk always under fear of test must be taken, is included prominently in the printed instructions. This order has often been wholly disregarded, or has been carried

out in a perfunctory and useless manner. Much confusion in prices has long existed owing to the use of capacity measures in the major part of the Presidency. Quotations are required in figures of weight. The capacity ser varies very greatly in different localities. The weight of the contents of the same ser measure also naturally varies according to the specific gravity of the grain and the closeness with which it packs in the measure.

Station.	Equivalent in tolas of contents of local capacity Ser.	Equivalent in tolas of contents of local capacity Ser found in use.
Alibág	89	25
Sirur	117	105
Sátára	118	80
Bijápur	140	100
Bombay	57	87

was rice in husk. It will be noted that in every case the error resulted in over-quotation of prices.

It must not be supposed that errors or irregularities detected and pointed out by the Inspectors, even though intimated to the officers concerned in a memorandum of inspection issued under my signature, were at once amended. It is a matter of regret that a repetition of mistakes thus brought to light was very frequently noticed at the second inspection.

I can only in a few cases show direct financial results of the inspection. In most cases it can, however, be judged by the character of the mistake corrected. But a few specific instances afford direct proof of saving, by reason of the inspection, apart from efforts on the part of responsible local officers.

Two of these cases have already been reported to Government in January last, which showed that the check taken at the Sirur station put a stop to a monthly over-payment of Rs. 200, and that at the Sátára station the incorrectness of the scale equivalents would have entailed a larger over-payment, had not the mis-quotation of prices of wheat flour necessitated the selection of rice instead as the standard of calculation. A third case was reported at the same time in which an over-payment of no less than Rs. 2,100 a month was checked at the Poona station, but here the mis-quotations were numerous and not accountable for by a specific miscalculation of equivalents alone. Since the dates of the reported cases just noticed, a grave mis-quotation of the price of wheat flour in the Bombay station was detected. This check caused a payment of compensation less by Rs. 2,051 from June 1894 than the amount which would have been disbursed on "Price Current" quotations uncorrected.

The financial effect of these important cases is that the inspection, which costs Rs. 330 a month, has at least saved Rs. 4,350 a month without in the least infringing on the privileges accorded by regulations for the grant of compensation for dearness of grain and forage. I was able to report in January that the system of check has been successful, that it merits imitation in other Presidencies, and that it has afforded an indirect but valuable aid in gauging the correctness of prices specially recorded for settlement and other administrative purposes.

56. Discussion on the subject took place in October 1893 at the Simla Conference of officers of the Departments of Land Records and Agriculture, with the result that the Bombay system was not approved. Bombay is the only Presidency in which the "Monthly Price Current" is prescribed for military purposes, and its position is, therefore, somewhat different from that of other provinces. Nevertheless I recorded a strong dissent to the resolutions passed, except as regards the curtailment of the system, more largely affecting other Presidencies than Bombay, of price certificates by District Officers. In Bombay these are already reduced to a minimum by the existence of the "Monthly Prices Current."

C.—AGRICULTURE.

57. The special information regarding wholesale prices required for Imperial purposes under Government Resolution No. 6273, dated 30th August 1893, has been received from 52 selected trade centres, and will be duly compiled for the first time for the year under review in the Government of India Form B.

The fallow return has reached its second year. It exhibits some improvement in accuracy.

The marginally noted districts were late in the submission of agricultural

District.	Date of receipt.
1. Broach	17th September...
2. Kaira	19th do. ...
3. Kolába	Do. do. ...
4. Ratnágiri	27th do. ...
5. Násik	28th do. ...
6. Karáchi	10th October ...
7. Thar and Párkar	Do. do. ...
8. Shikárpur	15th do. ...

statistics. During the last 5 years Ratnágiri, Thána and Thar and Párkar have figured 4 times, and Násik and Khándeshi 3 times in the marginal list. Thána and Khándesh, however, were punctual in the year under report.

Return No. I.—Details of area.

58. The figures for gross area (which include villages on privileged tenures but exclude feudatory and tributary States) in the Presidency as well as in Sind are still uncertain.

District.	Square Miles.
Belgaum	+148
Poona	+68
Kolába... ..	-8
Ratnágiri	+4
Sholápur	-3
Ahmadabad	+2

In the Presidency the area returned is about 200 square miles more than last year. The chief variations are exhibited in the margin. In Belgaum an approximate area for the Here Jághir has been included. In Poona the estimate of unsurveyed villages claims to be more correct than heretofore. In Násik four Jághir villages have lapsed to Government.

In Sind, on the whole, the total differs little, but the large increases in Karáchi and Hyderabad and the corresponding decreases in Shikárpur and Upper Sind Frontier deserve marginal notice. Large transfers from Karáchi to Shikárpur have been made. This last cause, combined with exclusion of alienated areas now forming separate alienated *dehs* (villages) and rectification of error, explains the decrease under Shikárpur. The new *dehs* formed in the progress of survey chiefly account for the large increase in the number of villages.

District.	Square Miles.
Karáchi	+93½
Shikárpur	-75½
Hyderabad	+9
Upper Sind Frontier	-3½

Area of available Statistics.—In the Presidency there is a net increase of

District.	INCREASE OR DECREASE OF	
	Villages.	Area.
	No.	Acres.
Khándesh	-½	-1,266
Poona	+1	+939
Sholápur ... ..	..	-1,809
Sátára... ..	-1	+1,381
Kolába	+4	-4,077
Ratnágiri	+21	+35,161

24½ villages or 30,469 acres. In Ratnágiri alone 21 villages claim recognition among the tracts able to return fairly accurate figures of cultivation. In Kolába 4 villages have been surveyed for the first time. In Sátára one village has been struck off for reasons not specified. The variations in areas in these two districts do not correspond with the variations in villages owing chiefly to the changes due to the progress of survey. Survey changes are also noticeable in Poona and Sholápur, and in the former district modification is also due to disforestation. The difference in Khándesh is the net result of transferences of villages between the "non-available" and "available" heads.

In Sind the progress of survey and the formation of new *dehs* (villages) which are now taken on account, explain the noticeable increase in all districts except Shikárpur where there is a small decrease by reason of transfers to Karáchi.

Non-reporting Villages.—In the Presidency 1,576 Government villages with an area of 4,215 square miles and 819½ alienated villages covering 1,921 square miles do not return agricultural statistics. The total number of such

villages has been diminished by 24½ as explained in detail above. The alienated villages are all unsurveyed, and the Government villages are under special tenures. The numbers of Government and alienated villages of "non-available" statistics in Sind are 81 and 2 respectively.

Return No. II.—Cultivated *i. e.* Occupied and Uncultivated *i. e.* Unoccupied Area.

59. For comparison with last year, variations in this and other returns are shown for all districts in the Presidency proper. Ratnágiri, hitherto excluded, has been included this year, as the Collector has now definitely fixed the villages for which statistics are to be admitted. In Sind no comparison can yet be made on account of changes in the area of available statistics. These are particularly large in the year under review :—

Detail.				AREA IN ACRES (000 OMITTED)		Percentage increase or decrease.
				1892-93.	1893-94.	
A.—Cultivated Area—						
Gross cropped area	...	...	...	25,943	25,407	—2·0
Cropped more than once	...	...	...	780	710	—9·0
Net cropped area	...	...	...	25,163	24,697	—1·8
Current fallows	...	...	...	4,756	5,316	+11·8
		Assessed	...	29,830	29,925	+0·3
		Unassessed	...	89	88	—1·1
		Total A	...	29,919	30,013	+0·6
B.—Uncultivated Area—						
Available for Cultivation	...	Assessed	...	1,129	1,052	—6·8
		Unassessed	...	758	703	—7·2
Not available for cultivation...	...	Forest	...	6,773	6,832	+0·6
		Others	...	5,194	5,203	+0·2
		Total B.	...	13,854	13,790	—0·5
		Grand Total	...	43,773	43,803	+0·07

The "gross area cropped" shows a net decrease of 2 per cent., while the decrease under "area cropped more than once" is 9 per cent. and under "net cropped area" 1·8 per cent. In the marginal table a comparison is made for all districts, mainly to show variations in the cropped area which fluctuates with the season. It will be seen that there is a general decrease in the net cropped area with a closely corresponding increase under "current fallow" in all districts. In Gujarát excessive early rain, but in the other provinces a long break in July, resulted alike in a contraction of the kharif area which could not be made up by extension of cultivation in the rabi season. In the Karnátak, especially in Bijápur, last year's favourable sowing rain following a scarcity in the previous year, caused an abnormal increase in the area sown. In Poona and Khándesh a more correct registration of fallow added to the conditions of the season combined to exhibit a smaller cropped area.

This last cause appears to be the only explanation of the decreased fallow of Dhárwár. In Ratnágiri the increase in columns 2 and 3 is due to new area transferred from the head of "non-available statistics."

District.	Acres (000 omitted).		
	Net area cropped	Current fallow.	Culti- vated, <i>i. e.</i> , occupied land.
Ahmadabad ...	— 13	+ 12	— 1
Kaira ...	— 5	+ 6	+ 1
Pauch Maháls ...	+ 2	+ 5	+ 7
Broach ...	+ 2	...	+ 2
Surat ...	— 6	+ 8	+ 2
Khándesh ...	— 16	+ 22	+ 16
Násik ...	— 73	+ 85	+ 12
Abmadnagar ...	— 61	+ 71	+ 10
Poona ...	— 94	+104	+ 10
Gholápur ...	— 70	+ 71	+ 1
Sátára ...	— 47	+ 47	...
Belgaun ...	— 28	+ 30	+ 2
Bijápúr ...	— 68	+ 78	+ 10
Dhárwár ...	+ 9	— 9	...
Thána ...	— 4	+ 1	— 3
Kolsba ...	+ 4	+ 4	+ 8
Ratnágiri ...	+ 3	+ 14	+ 17
Ksnara ...	...	+ 1	+ 1
Total ...	—465	+560	+ 95

Decreases under cropped area being nearly counterbalanced by increases under "current fallow," the cultivated, *i. e.*, occupied land, shows a small increase of 0.6 per cent., which must be due to extended occupation except where due to modification in area of "available statistics." Such modification is large in Ratnágiri and Kolába, but insignificant elsewhere. This matter is further discussed under para. 61 below. In Poona the occupied area is increased by 10,000 acres at the expense of land "not available for cultivation;" but the circumstances are not explained.

As regards "area cropped more than once," noticeable increases are found in the three northern districts of Gujarát, where moisture left by early excessive rain and favourable late rains induced cultivation of second crops after rice and maize. The large decreases in Surat and Násik, on the other hand, are due to deficient late rains; elsewhere, they are explained partly by irregular rain and partly by injury from rats and caterpillars.

60. The following is the summarized information afforded by the fallow return:—

Details of "current fallow" (percentages).

Province.	Total fallow on occupied area.	FALLOW ON TOTAL FALLOW.					
		Fallow in rotation.	Grass land.	Grass-bound land.	Rab land.	Land unsown on account of season.	Other fallow.
Gujarát ...	22.58	20.41	30.05	1.53	0.01	13.71	34.29
Deccan ...	14.65	30.19	21.49	4.19	1.45	9.44	33.24
Karnátak ...	13.05	10.44	28.91	23.60	0.01	3.82	33.22
Konkan ...	45.20	35.41	18.81	3.98	28.53	1.04	12.23
Total ...	17.71	25.64	24.00	7.24	6.03	7.63	29.46

No reference to the figures returned last year is made, because the return in its first year was palpably inaccurate. Apparently the figures now shown are more correct. Land left unsown on account of season shows an increase in all provinces in response to the irregularity of the season, and is especially large in Gujarát. The area of fallow under the miscellaneous head in that province has been reduced to a credible extent. Both Gujarát and the Deccan show increase in fallow in rotation.

61. *Uncultivated Area.*—Under the head "Uncultivated," *i. e.*, unoccupied land, decrease is noticeable in the Panch Maháls, the Deccan, Bijápur and Kolába. In the Panch Maháls it is due to new lands taken up for cultivation. Elsewhere, the reduction in uncultivated area appears side by side with decrease in net cultivation and is nearly equal to the excess of fallow over that decrease. It is, therefore, presumed that new land taken up for cultivation under a prospect of good season was subsequently left fallow under the irregularity of rainfall.

Assessed cultivable waste shows a decrease of 77,000 acres or 6.8 per cent., while unassessed cultivable waste is reduced by 55,000 acres or 7.2 per cent.

District.	Variation in acres ('000 omitted).
Khándesh ...	+40
Thána ...	+10
Poona ...	+3
Sátara ...	+2
Kánara ...	+2

Land under Forest has increased by 59,000 acres or 0.8 per cent. Large increase is noticed in Khándesh, Poona and Thána, as noted in the margin.

62. The present condition of each district is shown clearly by the table below, which is annually included in this report—not so much to indicate variations, though these are evident if the table of any year is compared with those of other years, as to show the gradually contracting margin for future occupation especially and the other main features of returns Nos. I and II combined:—

No.	District.	Percentage on gross area, of areas for which Statistics are not available.	PERCENTAGE ON NET AREA FOR WHICH STATISTICS ARE AVAILABLE, OF AREAS.				Forest.
			Cultivated, i. e., occupied.		Uncultivated, i. e., unoccupied.		
			Net cropped.	Current fallows.	Available for cultivation.	Not available for cultivation.	
A.—PRESIDENCY PROPER.							
<i>I.—Gujarát.</i>							
1	Ahmadabad	1.0	57	21	3	18	1
2	Kaira	8.3	75	6	7	12	...
3	Panch Maháls	12.7	39	16	13	9	23
4	Broach	1.9	63	8	3	26	...
5	Surat	2.4	47	24	6	18	5
Average ... { 1893-94 ...		4.4	56	17	6	17	4
{ 1892-93 ...		4.4	57	16	6	17	4
<i>II.—Deccan.</i>							
6	Khándesh	10.5	60	3	14	12	11
7	Násik	4.2	55	11	3	9	22
8	Ahmadnagar	2.5	65	10	2	10	13
9	Poona	2.4	60	14	...	12	14
10	Sholápur ... ..	...	72	13	1	8	6
11	Sátára	7.4	58	17	1	9	15
Average ... { 1893-94 ...		5.0	61	11	4	10	14
{ 1892-93 ...		4.8	63	9	5	10	13
<i>III.—Karnátak.</i>							
12	Belgaum	5.6	61	14	3	6	16
13	Bijápur	0.7	77	10	3	5	5
14	Dhárwár	2.5	73	8	2	7	10
Average ... { 1893-94 ...		2.8	71	11	2	6	10
{ 1892-93 ...		1.8	72	9	3	6	10
<i>IV.—Konkan.</i>							
15	Thána	3.1	21	21	5	31	22
16	Kolába	3.5	30	24	3	21	22
17	Ratnágiri	83.3	30	33	2	33	2
18	Kánara ... ..	...	9	4	2	8	77
Average ... { 1893-94 ...		25.4	19	16	3	20	42
{ 1892-93 ...		25.8	19	15	4	23	39
Average A. { 1893-94 ...		8.2	56	12	4	12	16
{ 1892-93 ...		8.0	58	11	4	12	15
B.—SIND.							
19	Karáchi	29.1	7	8	17	66	2
20	Hyderabad ... ..	...	16	24	39	19	2
21	Shikárpur	2.2	17	19	43	15	6
22	Upper Sind Frontier	32.0	24	34	23	15	4
23	Thar and Párkar ... ..	...	7	11	5	75	2
Average B. { 1893-94 ...		11.0	11	16	23	47	3
{ 1892-93 ...		11.9	12	15	23	47	3
Average for the Presi- dency ... { 1893-94 ...		9.3	40	13	11	25	11
{ 1892-93 ...		9.5	40	12	12	25	11

The above table has appeared in the Annual Report since 1885-86. It may be stated that since that date the cultivated, *i. e.*, occupied area has slowly but surely risen from 66 to 68 per cent. of the total; that the area fit for cultivation and at the disposal of applicants has gradually declined from 8 to 4 per cent., half of which has been absorbed in Forest and the remainder in occupation. Forests have received a further increment of 1 per cent. from the unoccupied area, not available for cultivation.

If the provincial figures are examined, it will be seen that occupation has secured a small increment in all districts, except Surat, in which it is stationary, and the Panch Maháls where the percentage has risen from 44 to 55 per cent. In the latter district the available area has fallen 28 per cent.; for, besides its contribution of 11 per cent. to occupation it has added 17 per cent. to Forest.

In the Deccan and Karnátak the occupied area has risen by 2 and 4 per cent. respectively, the rise (1 per cent.) in the Konkan being a little less. The area available for cultivation has decreased by 4 per cent. in the Deccan and Karnátak, and by 3 per cent. in the Konkan, that which has not gone into occupation having been absorbed into Forest. The chief change took place in the Panch Maháls in Gujarát and in Khándesh in the Deccan, where the occupied area has risen by 3 per cent., a very large rise if the extent of Khándesh is borne in mind. With respect to these two districts a perusal of the remarks below the table in the report for 1885-86 will show what strides have been made. It is evident that the Panch Maháls is beginning to relieve the congestion of Gujarát in a small degree at all events.

Return No. III.—Crops.

63. The character of the rainfall has been described above as very irregular; it has already been shown that the result was a decrease in the gross cropped area of 2 per cent. This decrease was most marked in food crops, owing to the specially unfavourable features of the season as affecting bájri and its row crop, tur. Rice alone held its usual place. The diminished area of kharif food-crops was made up in some degree by the successful sowings of rabi jowári.

Conditions favoured a larger area of cotton everywhere and of oil-seeds, though, as will be seen, the harvest was not in proportion to area sown:—

Table to show effect of season on area sown.

PRESIDENCY PROPR.				
Crops.	Area in Acres (000 omitted).		Increase per cent.	Decrease per cent.
	1892-93.	1893-94.		
Jowári	7,123	7,411	5.5	...
Bájri	5,451	4,055	...	25.6
Paddy	1,667	1,721	3.3	...
Wheat... ..	1,918	1,986	3.5	...
Others... ..	1,742	1,737	...	0.3
Total, Cereals ...	17,901	16,910	...	5.5
Tur	809	569	...	29.6
Gram	762	820	7.6	...
Others... ..	1,644	1,401	...	14.3
Total, Pulses ...	3,215	2,790	...	13.2
Tobacco	68	90	32.3	...
Sugarcane	68	83	22.0	...
Oil-seeds	1,501	1,950	29.9	...
Cotton	2,702	3,075	13.6	...
Food Crops, Total ...	21,344	19,954	...	7.0
Non-Food Crops, Total ...	4,600	5,453	18.5	...
Total, Crops ...	25,944	25,407	...	2.0

District.	Acres (000 omitted).		
	Kharif.	Rabi.	Net variation.
Ahmadnagar	+1	+269	+270
Sholapur	-1	+241	+240
Poona	-4	+146	+142
Dharwar	-164	+12	-152
Belgaum	-197	+104	-93
Bijapur	-352	+317	-35

Jowári.—Increase 5·5 per cent. The rabi sowings were unusually large. Jowári is the chief early cereal in the Karnátak and the sowing rain was unfavourable; but rabi jowári proved a very successful staple in the districts shown marginally.

District.	Acres (000 omitted).	District.	Acres (000 omitted).
Ahmadnagar	-375	Khándesh	-70
Sholapur	-228	Ahmadabad	-64
Poona	-212	Sátára	-50
Bijapur	-163	Kaira	-44
Nasik	-144	Belgaum	-33

Bájrí.—Bájrí is always a kharif crop. The marginal figures indicate well the direction in which the season acted.

Paddy.—Increase of 54,000 acres or 3·3 per cent., fairly distributed over all districts but largest in Kaira (21,000 acres). The heavy rain in May and June encouraged a large area under this crop in districts where rice is not grown continuously as in the Konkan.

District.	Acres (000 omitted).	District.	Acres (000 omitted).
Dharwar	+54	Ahmadabad	-42
Ahmadnagar	+48	Bronch	-25
Bijapur	+32	Surat	-20
Belgaum	+26	Poona	-16
Nasik	+12	Sholapur	-6

Wheat.—Wheat shared the benefit of ample and timely rabi rains, especially in the North Deccan and Karnátak; but in Gujarát the rains in September-October were too heavy to allow of seasonable sowing. The decrease in the South Deccan districts is partly due to a preferential sowing of rabi jowári which is sown before wheat.

Crop.	Acres (000 omitted).
Kodra	+9
Vari	+7
Barley	-5
Ragi	-2
Others	-13

Other Cereals.—It appears sufficient to show the variations in minor cereals for the Presidency instead of district by district.

District.	Acres (000 omitted).	District.	Acres (000 omitted).
<i>Tur.</i>		<i>Gram.</i>	
Bijapur	-82	Bijapur	+22
Sholapur	-50	Sátára	+11
Ahmadnagar	-30	Belgaum	+8
Belgaum	-26	Ahmadabad	+7
Dharwar	-19	Panch Maháls	+7
Poona	-14	Kaira	+6
Nasik	-12	Sholapur	+6
Sátára	-9	Dharwar	+0
		Násik	-12

Pulses.—The success of bájrí practically rules that of tur, as the table shows. While gram—a rabi pulse—is always sown largely with moisture late in the season. In Násik, wheat and jowári appear to have occupied land which would otherwise have been put under gram.

District.	Acres.
Belgaum	+5,240
Sholapur	+3,618
Ahmadnagar	+3,069
Khándesh	+2,850
Kaira	+2,132
Sátára	+1,744
Bijapur	+801
Dharwar	+835

Tobacco.—Gives a large increase of 22,000 acres or 32 per cent. The increase is general, as shown in the margin, and is explained partly by high prices inducing cultivators to grow tobacco.

District.	Acres.
Poona	+4,674
Sátára	+2,737
Nasik	+1,608
Belgaum	+1,443
Sholapur	+1,187
Dharwar	+919
Khándesh	+879
Ahmadabad	+657

Sugarcane.—Increase is general, the total increase being 15,000 acres or 22 per cent. The increase is chiefly due to rotation and abundance of rain. The large increase indicates a very considerable investment, which must have paid handsomely.

Oil-seeds.—Exhibit the greatest increase (449,000 acres or 30 per cent.) of all

Crop.	Acres (000 omitted).
Sesame	+8
Linseed	+166
Castor	+18
Safflower	+164
Niger	+58
Ground-nut	+22
Others	-7

crops, especially, marked under linseed, safflower, niger and ground-nut. A brisk export demand was added to the inducement of seasonable rains. Sesame and linseed have been specially dealt with in the forecasts. As these are specially important the following detailed notice appears advisable.

Sesame.—Shows a net increase of 8,000 acres or 2·7 per cent., mainly in Khândesh and Násik, the principal sesame-growing districts of the Deccan. Elsewhere, the area has generally decreased. In Gujarát, the excessive rain in September arrested the growth of earlier sown fields and also checked later sowings.

Linseed.—The area under linseed denotes a marked expansion in all districts where it is grown. It is a delicate crop liable to many mishaps, but the large demand and favourable rabi season operated in the direction of a large extension.

Ground-nut.—In some districts this crop is gradually assuming a position of first importance, especially in Sátára, where its permanent area is fast increasing.

Cotton.—Shows an increase of 373,000 acres or 13 per cent. The increase is

District.	Acres (000 omitted).
Bijápúr	+115
Dhárwár	+96
Ahmadabad	+70
Belgaum	+59
Brosch	+40
Surat	+31
Sátára	+4
Ahmadnagar	-34
Khândesh	-10
Sholápur	-6

chiefly confined to Gujarát and the Karnátak where cotton is sown as a late crop. In Gujarát jowár and bájri damaged by excessive June rain were replaced by cotton. A small decrease in the Deccan districts, where cotton is an early crop, was due to unseasonable sowing rain. In Khândesh the area would have been larger but for damage by excessive rain which made it pay to plough up the land and sow later kharif crops or rabi pulses.

Potato.—The area under this crop is 10,600 acres against 8,700 acres of last year. The increase of 1,900 acres is chiefly confined to Ahmadnagar (+1,100 acres) and Poona (+1,000 acres) which grow 89 per cent. of the total area under potatoes. The increase in Poona is general with the notable exception of Khed Táluka where potato cultivation has most advanced. This is accounted for by continuance of the ring disease, the efforts to stamp out which, have not yet been permanently successful as noticed in paragraph 42. The demand for potatoes is steadily increasing and the supply from Khed having fallen short, it is quite probable that the consequent high prices may have led cultivators to bring more land under potato in parts where the disease has not been so rife.

Green Fodder.—The important crops under this head are lucerne and hot weather jowári, both of which have decreased. Lucerne is grown in Poona (381 acres), Ahmadnagar (218 acres), and Thána (244 acres) alone. Hot weather jowári has decreased from 18,145 acres to 17,074 acres. Gujarát shows a small increase (1,500 acres), which has been more than counterbalanced by a decrease (2,100 acres) in the Deccan and (900 acres) in Karnátak.

Kharif and Rabi Crops.—The details given in the appended table show variations at a glance and give the main features of the seasons :—

Year.	AREA IN ACRES (000 OMITTED).			
	Kharif.		Rabi.	
	Cereals.	Pulses.	Cereals.	Pulses.
1892-93	12,246	2,235	5,655	980
1893-94	10,038	1,771	6,872	1,019
	-2,208	-464	+1,217	+39

64. I now give the usual tables showing the distribution of crops. Statement A shows the distribution of the principal crops in each district. Sind is included in this statement. Statement B shows the proportion which the area of each crop in each district holds with respect to the gross area of that crop in the Presidency proper:—

A.—Distribution of Crops—Percentages shown on District Areas.

No.	District.	FOOD CROPS.									NON-FOOD CROPS.			TOTAL.			
		Cereals.							Pulses.	Others.	Cotton.	Oil-seeds.	Others.	Food Crops.	Non-food Crops.		
		Jowari.	Bajri.	Paddy.	Wheat.	Coarse Grains.	Others.	Total.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
A.—PRESIDENCY PROPER.																	
I.—Gujarat.																	
1	Ahmadabad	23	13	7	14	5	1	63	11	1	21	3	1	75	25		
2	Kaira	9	25	18	2	25	1	79	13	1	1	2	4	93	7		
3	Panch Mahals	1	10	16	6	12	24	69	21	...	...	9	1	90	10
4	Broach	16	3	8	13	1	...	36	11	3	47	2	1	50	50		
5	Surat	21	1	20	5	8	...	55	15	2	21	6	1	72	28		
Average ...		{ 1893-94 ...		16	13	11	9	10	4	62	13	1	19	4	1	78	24
		{ 1892-93 ...		18	14	10	11	10	4	67	12	1	15	4	1	80	20
II.—Deccan.																	
6	Khandesh	15	20	1	9	1	...	46	10	...	35	7	2	56	44		
7	Nasik	6	33	3	16	9	...	67	13	...	8	15	1	81	19		
8	Ahmadnagar	39	23	...	11	2	...	76	12	1	8	9	1	87	13		
9	Poona	37	29	3	5	4	1	79	10	2	...	6	1	91	9		
10	Sholapur	61	10	1	2	...	...	76	9	1	1	12	2	85	15
11	Satara	27	23	2	4	8	1	70	19	1	1	7	2	90	10		
Average ...		{ 1893-94 ...		81	23	2	8	3	...	67	12	1	9	10	1	80	20
		{ 1892-93 ...		26	30	2	7	4	...	69	13	1	9	7	1	83	17
III.—Karnatak.																	
12	Belgaum	34	10	6	6	10	1	67	12	1	12	5	3	80	20		
13	Bijapur	50	10	...	6	2	...	63	7	...	15	9	1	75	25		
14	Dharwar	23	...	7	13	8	...	56	10	1	25	5	3	67	33		
Average ...		{ 1893-94 ...		39	7	4	8	6	...	64	9	1	13	6	2	74	26
		{ 1892-93 ...		42	10	4	7	5	...	69	11	1	13	5	2	80	20
IV.—Konkan.																	
15	Thana	...	...	64	...	21	...	85	8	2	...	3	2	95	5
16	Kolaba	...	...	59	...	32	...	91	6	1	...	2	...	98	2
17	Ratnagiri	...	...	36	...	42	...	73	10	5	...	5	...	93	7
18	Kanara	...	...	78	...	3	...	81	3	9	...	...	7	93	7
Average ...		{ 1893-94 ...		...	...	63	...	85	7	3	...	3	2	95	5
		{ 1892-93 ...		...	...	62	...	86	7	3	...	3	2	95	5
Average A. ...		{ 1893-94 ...		29	16	6	6	6	1	66	11	1	12	8	2	78	22
		{ 1892-93 ...		28	21	6	7	6	1	6	12	1	10	6	2	62	18
B.—SIND.																	
19	Karachi	17	8	35	13	...	4	77	7	2	...	13	1	86	14		
20	Hyderabad	11	34	19	7	...	...	71	3	1	...	13	3	75	25
21	Shikarpur	18	1	24	31	...	...	74	14	1	1	9	1	89	11
22	Upper Sind Frontier	85	7	6	9	...	...	86	6	...	...	33	...	62	38
23	Thar and Parkar	1	69	16	1	...	...	87	3	1	4	4	1	91	9
Average ...		{ 1893-94 ...		14	24	21	15	...	1	75	7	1	3	12	2	63	17
		{ 1892-93 ...		17	25	19	16	...	1	73	6	2	2	11	1	66	14
Average for the Presi-		{ 1893-94 ...		27	17	8	9	5	1	67	11	1	11	8	2	79	21
dency.		{ 1892-93 ...		23	22	8	8	5	1	70	12	1	9	6	2	83	17

B.—Distribution of Crops—Percentages shown on Presidency Area.

No.	District.	Food Crops.									NON-FOOD CROPS.			TOTAL.	
		Cereals.							Pulses.	Others.	Cotton.	Oil-seeds.	Others.	Food Crops.	Non-food Crops.
		Jowári.	Bájl.	Paddy.	Wheat.	Coarse grains.	Others.	Total.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>I.—Gujardt.</i>															
1	Ahmadabad ...	4.5	4.4	5.6	9.0	4.7	10.5	5.3	5.3	4.9	9.8	2.6	2.3	5.3	6.6
2	Kaira ...	0.8	4.7	7.8	1.0	13.4	2.2	3.5	3.5	2.4	0.3	0.7	6.8	3.5	1.0
3	Panch Mahála ...	0.1	1.1	4.0	1.2	3.4	40.9	1.8	3.2	0.5	...	2.0	1.3	2.0	0.8
4	Broach ...	1.3	0.3	0.9	3.8	0.5	...	1.2	2.3	6.7	5.9	0.6	1.1	1.4	5.3
5	Surat ...	1.5	0.2	6.3	1.3	2.9	0.3	1.8	2.3	3.4	3.6	1.6	1.2	1.9	2.8
	Total ... { 1893-94 ...	8.2	10.7	24.6	17.2	23.9	62.9	13.6	17.1	17.9	22.6	7.7	13.7	14.1	16.5
	... { 1892-93 ...	9.2	10.1	23.2	22.3	22.4	61.3	14.0	14.4	20.9	20.2	9.3	11.8	14.1	16.0
<i>II.—Deccan.</i>															
6	Khândesh ...	6.4	14.9	1.8	13.4	1.4	2.7	8.3	10.7	4.9	34.6	11.5	14.2	8.6	24.8
7	Násik ...	1.7	15.2	3.2	16.6	11.4	2.8	7.9	9.0	10.1	2.1	15.0	3.6	8.1	6.8
8	Ahmadnagar ...	14.5	10.0	0.7	14.3	2.8	8.1	12.0	11.7	4.8	1.9	13.2	6.6	11.9	6.4
9	Poona ...	10.3	14.8	3.9	5.0	6.3	6.5	9.8	7.5	13.8	0.1	8.5	6.0	9.5	3.5
10	Sholápur ...	17.4	5.2	1.5	2.6	0.2	11.0	9.5	7.0	5.3	0.3	13.7	3.6	9.1	5.7
11	Sátára ...	6.5	12.3	2.3	3.1	9.5	7.7	7.3	12.0	10.7	0.3	6.5	10.0	6.0	3.2
	Total ... { 1893-94 ...	56.8	78.4	13.4	55.0	31.6	32.8	54.8	57.9	49.6	39.3	68.5	47.9	55.2	50.4
	... { 1892-93 ...	50.9	78.1	13.4	54.7	33.5	34.3	54.4	58.3	44.0	46.5	68.1	47.7	54.8	53.6
<i>III.—Karnatak.</i>															
12	Belgaump ...	8.2	4.2	6.5	5.5	11.5	3.9	7.0	7.5	8.4	6.7	4.6	14.0	7.1	6.5
13	Bijápur ...	18.7	6.0	0.8	8.9	2.8	0.4	11.1	7.0	2.9	13.9	12.6	3.7	10.5	12.7
14	Dhárwár ...	6.1	0.1	9.2	13.4	11.0	...	7.1	7.5	5.4	17.5	5.0	15.3	7.1	12.8
	Total ... { 1893-94 ...	35.0	10.9	16.5	27.8	25.3	4.3	25.2	22.0	16.7	38.1	22.2	33.0	24.7	32.0
	... { 1892-93 ...	39.9	11.8	16.3	23.0	24.8	3.9	26.6	24.7	17.7	33.3	20.4	33.6	25.9	29.1
<i>IV.—Konkan.</i>															
15	Thána ...	...	...	17.5	...	6.6	...	2.4	1.3	2.9	...	0.9	1.7	2.2	0.4
16	Kolába ...	...	...	13.9	...	8.5	...	2.2	0.9	1.2	...	0.3	0.3	2.0	0.2
17	Ratnágiri ...	...	...	2.8	...	3.6	...	0.6	0.5	2.5	...	0.4	0.7	0.6	0.2
18	Kánara ...	...	...	11.3	...	0.5	...	1.2	0.3	9.2	...	...	8.7	1.2	0.3
	Total ... { 1893-94 ...	...	...	45.5	...	19.2	...	6.4	3.0	15.8	...	1.6	6.4	6.0	1.1
	... { 1892-93 ...	...	...	46.6	...	19.3	...	6.0	2.6	17.4	...	2.2	6.9	5.6	1.3
		100	100	100	100	100	100	100	100	100	100	100	100	100	100

65. **Outturn of Crops:**—The following table gives the anna valuation of the outturn of the principal crops in each district. The valuation (by Mámledárs) purports to conform to the prescribed standard, by which 16 annas represent an average crop. The table must, however, be taken as representing a merely approximate estimate, for, the anna estimates are in most cases very low, partly because in many districts the 16-anna standard for an average crop is not customary and because the agricultural knowledge of the Revenue Officers who prepare the returns from local estimates is not sufficient to enable them to make due additions required by the fixed standard. The Collector of Bijápur views the estimates made by the Mámledárs as altogether too low. He emphatically asserts that there has not been a more generally favourable season in Bijápur within the memory of men still living. Similar comment no doubt would hold good in the case of other districts.

Approximate Anna Valuation of Principal Crops in each District, 1893-94.

No.	District.	AVERAGE ANNA VALUATION.										
		Jowári.	Bájl.	Paddy.	Wheat.	Kodra.	Rag.	Yarl.	Tur.	Gram.	Cotton.	
<i>Gujardt.</i>												
1	Ahmadabad ...	6	5	11	12	8	7	13	10	12	10	
2	Kaira ...	9	12	13	12	12	11	10	8	10	10	
3	Panch Mahála ...	5	8	13	9	8	9	6	9	11	9	
4	Broach ...	9	7	8	13	5	4	6	8	10	8	
5	Surat ...	11	8	12	11	12	10	8	9	8	8	
<i>Deccan.</i>												
6	Khândesh ...	12	13	12	13	11	9	12	13	13	11	
7	Násik ...	13	12	12	13	...	8	9	8	13	11	
8	Ahmadnagar ...	11	10	10	12	7	10	9	9	10	9	
9	Poona ...	13	11	11	9	9	10	10	7	11	9	
10	Sholápur ...	11	6	9	11	3	6	6	7	9	6	
11	Sátára ...	12	10	10	8	4	9	9	9	13	14	

* Maize.

No.	District.	AVERAGE ANNA VALUATION.									
		Jowári.	Bájrí.	Paddy.	Wheat.	Kodra.	Rájdí.	Vari.	Tur.	Gram.	Cotton.
<i>Karnátak.</i>											
12	Belgáum	11	10	9	12	9	10	10	10	12	9
13	Bijápur	12	9	10	12	9	8	9	4	13	10
14	Dhárwar	9	5	6	14	6	10	9	9	13	9
<i>Konkan.</i>											
15	Thána	10	...	13	...	13	11	11	10	11	...
16	Kolába ... ..	...	...	11	...	6	8	8	9	8	...
17	Ratnágiri ... ..	...	...	11	...	10	10	10	10	8	...
18	Kánara	12	...	13	...	...	13	12	4	8	...
<i>Sind.</i>											
19	Karáchi... ..	11	10	10	9	...	10	11	...	10	11
20	Hyderabad	12	12	10	9	...	16	16	16	8	12
21	Shikárpur	10	10	13	11	...	...	...	...	10	10
22	Upper Sind Frontier	10	12	13	14	...	16	...	...	16	15
23	Thar and Párkar	11	11	11	10	...	...	...	...	...	10

Note—In the above table the valuations are calculated on the standard by which 16 annas represent an average crop.

The outturn was on the whole fairly good in quantity though slightly damaged in quality by unseasonable rain at the harvest time in both kharif and rabi crops. Jowári and bájrí were much below average in Gujarát and the Karnátak, while fair in the Deccan. Paddy, wheat and gram were much better. Cotton was on the whole only fair.

66. *Fruit Trees.*—I append the usual table. The effort to show valuable figures for fruit-trees has not been very successful. If the figures reported during the last five years could be trusted, mango, cocoanut and date-palm appear to be steadily increasing. Trees in forest and village sites are not included in this enumeration.

NUMBER OF FRUIT TREES.

(000 omitted.)

No.	Province.	Mango.	Tamarind.	Jack.	Cocoanut.	Toddy-palm.	Date-palm.	
1	Gujarát	526	120	4	7	241	523	
2	Deccan	843	66	10	8	1	124	
3	Karnátak	379	110	21	72	...	1,082	
4	Konkan	522	40	162	1,654	98	13	
Total for the Presidency Proper. {		1893-94	2,270	336	197	1,741	340	1,742
		1892-93	2,220	328	184	1,752	347	1,708
			+50	+8	+13	-11	-7	+34
5	Sind	190	...	...	1	...	152
Grand Total {		1893-94 .	2,460	336	197	1,742	340	1,894
		1892-93 .	2,405	328	184	1,753	347	1,862

The enumeration includes an estimate of trees of special local value in particular districts; thus:—

Trees and Districts.	Number.	Trees and Districts.	Number.
1.—Moha (<i>Bassia Latifolia</i>).		5.—Hirda (<i>Terminalia chebula</i>).	
Kaira	130,515	Ahmadnagar	13,088
Panch Maháls	93,931	6.—Fig (<i>Ficus carica</i>).	
Khándesh	60,369	Poona	60,249
Broach	1,899	Násik	3,686
Násik	751	Shikárpur	1,112
2.—Betelnut (<i>Areca catechu</i>).		Ahmadnagar	847
Kánara	8,614,157	Surat	800
Dhárwár	163,937	Hyderabad	603
Ratnágiri... ..	39,035	Karáchi	233
Kolába	9,494	Belgaum	70
Thána	5,606	7.—Vine (<i>Vitis vinifera</i>).	
3.—Ráyan (<i>Mimusops Indica</i>).		Poona	54,740
Kaira	72,094	Násik	40,170
Panch Maháls	4,043	Shikárpur	25,868
Broach	2,541	Ahmadnagar	16,703
4.—Keshew-nut (<i>Anacardium occidentale</i>).		Khándesh	6,777
Kánara	110,464	Upper Sind Frontier	362
Ratnágiri... ..	23,747	Hyderabad	345
Thána	5,358	Karáchi	224

Return No. IV.—Irrigation.

67. The net area irrigated in the year under report was 3·4 per cent. of the net area cropped in the Presidency Proper. In Sind it was 86·2 per cent. Last year the corresponding figures were 8·18 and 86·7 per cent., respectively.

The variations under the principal sub-heads are shown below:—

Irrigated Area.

Number.	Detail.	PRESIDENCY PROPER.			
		Acres (000 omitted.)		Increase per cent.	Decrease per cent.
		1892-93.	1893-94.		
A.—Area Irrigated.					
1	Irrigated from canals	123	140	13·8	...
2	Do. tanks, wells, &c.	679	699	2·9	...
3	Total Area Irrigated	802	839	4·6	...
B.—Crops Irrigated.					
4	Rice	149	137	...	8·1
5	Wheat	197	176	...	10·7
6	Sugarcane	67	82	22·4	...
7	Other crops	501	541	7·9	...
8	Total crops irrigated	914	936	2·4	...

Notes.—The difference between totals, A and B is due to the inclusion, in the latter, of the area cropped under irrigation more than once.

Districts.	ACRES (00 OMITTED),		
	Canals.	Tanks and wells.	Net variation.
Ahmadabad .	-2	-101	-103
Kaira ...	-19	-26	-45
Khándesh ...	+3	+48	+51
Násik ...	+67	-43	+24
Ahmadnagar.	-53	+191	+138
Poona ...	+47	+9	+56
Sholápur ...	+17	+71	+88
Satára ...	+104	+37	+141
Belgaum ...	+1	+30	+31
Bijápur ...	+8	-25	-17
Dhárwár ...	...	-30	-30
Thána ...	...	+24	+24
Kánara ...	...	+8	+8

*Marked variations in the areas irrigated from various sources are noted in the margin. In Gujarát there is a decrease under both canal and well irrigation. As the rain in the early part of monsoon was very heavy and again in September-October, the cultivators stood less in need of extraneous help. Besides this, there was some contraction in the area of irrigated rice. The Deccan, on the other hand, notably increased its canal as well as its well irrigation. Insufficient rain for kharif sowing and abundant water in wells and nallahs due to the favourable late rain encouraged irrigation from both these sources.

In Ahmadnagar the explanation of the decrease under the area of canal irrigation is that extensive preparations for using wells were made when the kharif rains looked unpromising and that the cultivators preferred to go on with wells rather than apply for canal water. The districts which show decrease under "tanks and wells" are Násik, Bijápur and Dhárwár. The decrease in Násik is not explained but it is probably due to shrinkage in the area of irrigated wheat and pulses and to increase under canals. In Dhárwár the decrease was caused by a large reduction in irrigated rice. In Bijápur abundant ante-monsoon and late rains induced people to put more land under dry-crop.

Among irrigated crops sugarcane shows a large increase, which is general as noted under Return No. III. Wheat, on the other hand, shows a fall of 21,000 acres, almost equally distributed among the Deccan districts. A decrease of 12,000 acres under rice is confined to Ahmadabad, Kaira and Dhárwár.

Return No. V.—Agricultural Stock.

68. Cattle increased 5·2 per cent. The result of the enumeration under the principal heads is shown in the following table:—

Agricultural Stock.

Detail.	PRESIDENCY PROPER.			
	(000 omitted.)		Increase per cent.	Decrease per cent.
	1892-93.	1893-94.		
Plough Cattle	3,232	3,283	1·6	.....
Breeding Bulls	21	22	4·8	.....
Cattle for other purposes	142	155	9·1	.....
Milch Cattle	2,796	2,911	4·1	.....
Young Stock	2,066	2,314	12·0	.....
Total Cattle	8,257	8,685	5·2	.....
Horses and Ponies	145	153	5·5	.....
Sheep	1,888	1,957	3·1	.....
Goats	1,574	1,655	5·1	.....
Ploughs	1,112	1,118	0·5	.....
Carts	500	516	3·2	.....

Note.—Changes in the figures of sheep and goats reported last year are due to subsequent corrections.

The district variations are noted below:—

No.	District.	Plough Oxen.	Cows.	Shee- buffaloes.	Young Stock.	Total Cattle.	Sheep.	Goats.
1	Ahmadabad...	-7,744	+3,380	+2,128	+10,242	+9,308	-1,410	-4,635
2	Kaira ...	+1,921	+214	+2,501	+4,902	+9,273	+1,809	-5,371
3	Panch Maháls ...	+622	+620	+967	+9,014	+11,208	-1,454	-91
4	Broach ...	+1,350	+814	+1,529	+1,099	+5,460	-628	+1,310
5	Surat ...	+2,044	+201	+683	+2,885	+6,366	+407	-281
6	Khándesh ...	-4,852	+7,079	+4,649	+13,668	+24,679	-221	+18,837
7	Násik ...	+1,796	+625	+1,195	+7,070	+12,281	+10,557	+7,190
8	Ahmadnagar ...	+6,321	+9,642	+1,651	+18,245	+38,733	-6,478	-10,311
9	Poona ...	+15,602	+12,845	+3,144	+30,519	+64,665	+20,389	+19,321
10	Sholápur ...	+1,821	+5,316	+446	+16,142	+22,486	-6,623	+1,860
11	Sátára ...	+4,546	+7,246	+3,800	+28,579	+45,996	+6,674	+17,590
12	Belgaum ...	+5,738	+6,505	+5,029	+29,789	+47,354	+858	+4,752
13	Bijápur ...	+14,131	+18,564	+6,067	+41,450	+80,975	-15,910	+7,200
14	Dhárwár ...	+7,816	+9,418	+8,275	+27,849	+53,190	+61,263	+22,652
15	Thána ...	-2,488	-1,581	+656	+2,791	+4,278	+78	+937
16	Kolába ...	-649	-1,307	+174	-482	-2,458	+30	+707
17	Ratnágiri ...	+1,293	+235	+526	+1,357	+3,416	+4	-591
18	Kánara ...	-2,060	-4,198	-1,280	+2,270	-7,070	+233	-14

Cattle.—All districts in the Presidency Proper, except Kolába and Kánara, report a general increase under cattle, pointing to an abundant supply of fodder and water. The increase in the Deccan is most marked. In Ahmadabad, an increase was secured despite losses by reported disease. Takávi advances made during the year have no doubt also somewhat contributed to the increase. In Kolába and Kánara, the reported losses of agricultural stock by disease, have been considerable, which may, in part, explain the net decrease; but it must be constantly borne in mind that the Konkan is visited by large herds from above *gháts* and if the registration does not rigorously exclude cattle belonging to other districts, there will, as now, continue to be variations, explicable only by carelessness in registration. Among cattle, the increase under young stock is prominent, being 12 per cent.

Sheep and Goats.—Sheep show an increase of 69,000 or 3·1 per cent. Goats increased only 5 per cent. against 13·6 per cent. last year. This reduction in percentage is mainly caused by the correction of an error detected in Gujarát. The decrease of these animals in the Panch Maháls is attributed to the departure of workmen employed on the Godhra-Rutlám Line with their goats and cows. But the usual remark as to the roving habits of the herdsmen which render the enumeration of sheep and goats very difficult and thus defective, must be repeated.

Horses and Ponies.—Increased 5·5 per cent., noticeably in Khándesh and Ahmadnagar (+1,800, each), Poona (+1,400), Sholápur (+1,000) and Bijápur (+1,000).

D.—CROP EXPERIMENTS.

69. The number of experiments conducted during 1893-94 amounted, as shown in the margin, to 134 as against 120 in the previous year. Of these, 44, were from the Northern Division and 45, each, from the Central and Southern Divisions. These are reported on separately.

Sind has instituted crop experiments under the standing rules modified with special reference to the conditions of the Province. At the request of the Commissioner in Sind the reports are to be scrutinized in my office before tabulation by the Commissioner.

E.—FORECAST OF SEASON, 1894-95.

70 The monsoon broke on the Kánara Coast on 3rd June and advanced with abnormally high winds unusually quickly into Upper India. Consequently heavy rain fell earlier than usual in Gujarát and Káthiáwár, while in the Deccan and Karnátak the kharif sowing rain was very scant, especially in the Sholápur and Bijápur Districts and the adjoining talukas of the neighbouring districts.

July rain was injuriously excessive in Gujarát where kharif sowing was greatly retarded and seedlings of early sown crops were damaged in most places. Unusually high floods in the Tápti were reported at this time. Conditions changed from August. The Deccan and Karnátak Districts, especially Bijápúr and Sholápur, received excellent rain, while there was a clear fortnight's break in Gujarát, which improved prospects everywhere. September rain, though deficient in kharif tracts of the Deccan and Karnátak, was very favourable in the rabi tracts. Rain at the end of October, however, was again abnormally heavy and cyclonic in Gujarát, being as much as 16 inches at Surat, and considerably damaging kharif crops ready for harvest as well as newly sown rabi crops. It was also injurious to cotton and bájri in Khándesh, and to rice in the Konkan. Elsewhere, in the Deccan and Karnátak, it proved, on the whole, beneficial to rabi prospects, especially in Dhárwár, where it was badly wanted.

VIII.—TRADE AND TRADE STATISTICS.

71. I extract the following from the Annual Reports (separately submitted) on Rail and Road-borne traffic:—

Year.	PRESIDENCY PROPER.				SIND.				
	External Trade.		Local Trade.	Total Trade.	External Trade.		Local Trade.	Total Trade.	
	Imports.	Exports.			Imports.	Exports.			
Maunds, 1 maund = 82½ lbs. (00000 omitted).									
Average	324	102	293	719	86	21	68	175	
1892-93.	342	112	300	754	57	27	51	135	
1893-94.	385	118	329	832	110	27	92	229	
Increase + or decrease — over average	+61	+16	+36	+113	+24	+6	+24	+54	
Increase + or decrease — over last year	+43	+6	+29	+78	+53	...	+41	+94	

The total trade of the Presidency Proper during 1893-94 was 15·72 per cent. above average and 10·34 per cent. above last year; while the total trade of Sind showed a still greater expansion of 30·86 and 69·63 per cent. as compared with average and with last year, respectively.

The road-borne trade was, as usual, registered at six selected posts.

IX.—ARCHÆOLOGY.

72. No reports on the subject have been received from the District Officers under Government Resolution No. 1672, dated 13th April 1889, General Department.

X.—MINERAL STATISTICS.

73. The annual return of minerals and the new return of mineral concessions prescribed under Government Resolution No. 8927, dated 4th December 1893, Revenue Department, were, as usual, submitted to the Government of India in April last. Under the recent orders of the Government of India (Government Resolution No. 6785, dated 13th August 1894, Revenue Department), these returns will, in future, be submitted to the Reporter on Economic Products, Calcutta.

The terms of the license granted to Mr. Nelson to prospect diamonds and precious stones in Bijápúr, noticed in the last year's report, were settled and approved by the Government of India (Government Resolution No. 386, dated 16th January 1894, Revenue Department) during the year.

XI.—COLLECTION FOR THE IMPERIAL INSTITUTE AND THE INDIAN MUSEUM.

74. This year's collection of articles consisted of samples of *salep* (the dried tubers of various species of orchis) for the Imperial Institute and a sample of *Gymnema sylvestris* leaves and specimens of local churns for the Indian Museum.

CONCLUSION.

75. Mr. Mollison, the Superintendent of Farms, made two tours, one in North Thána and the other in the villages surrounding Surat, to study garden cultivation in those tracts. In the Surat tour he also studied the Gujarát Survey system classification of soils. In his second visit to Surat, Mr. Mollison selected a site for buildings to be erected on the new Surat Farm. The working of the Poona Farm and the Ganeshkhind Gardens was under his close supervision, and the newly instituted sugarcane experiments at Mánjri have been under his special care. He also conducted the duties of Joint Secretary to the Empress Gardens under the Agri-Horticultural Society of Western India. He reviewed the reports of Horse, Cattle and Agricultural Shows and studied and prepared, as last year, the review of crop experiments for the annual report thereon. He also personally made three crop experiments and gave lectures for the prescribed courses at the College of Science. Some lectures were also given in cattle-breeding and dairying to the students of the Bombay Veterinary College who paid a visit to the Poona Farm.

Mr. Mollison's now ripe experience has fully shown the value of expert assistance to the Director and is clear evidence of the wisdom of the decision at the last Simla Conference that instead of giving facilities to Revenue officers to acquire scientific and practical knowledge of agriculture at Cirencester or elsewhere, it is better to import trained experts. The Resolution of the Conference to which I refer was worded as follows:—

“That, in the opinion of the Conference, it is essential in the interests of agricultural improvement that there should be in each province a highly trained technical assistant to the Director of Agriculture, and that unless or until natives sufficiently well trained and qualified are available, he should be a European expert.”

The work of the combined offices of Survey Settlement and Land Records (with Agriculture) has in no degree decreased. It is only due to the cordial assistance received from Mr. Mollison and from my Personal Assistants Ráo Bahádur Ichhárám Bhagwándás and Ráo Sáheb Hari Vináyak Sáthe that I have been able to keep work up to date. The Superintendents have done their work with their usual energy, and in spite of frequent indents from outside for men trained in the office, the standard of work has not deteriorated.

I have the honour to be,

Sir,

Your most obedient Servant,

E. C. OZANNE,

Survey Commissioner and Director,

Land Records and Agriculture,

Bombay.

STATISTICS.

A.—RAINFALL.

EXPLANATORY REMARKS.

Rain Periods and their dates.

Early Rains	...	...	...	...	...	1st January—10th April.
Ante-Monsoon—						
11th April to 4th June	...	{	Ashvini	...	...	11th April—24th April.
			Bharani	...	...	25th April—8th May.
			Krittika	...	...	9th May—22nd May.
			Rohini	...	...	23rd May—4th June.
Monsoon-Kharif—						
5th June to 14th August	...	{	Mrig	...	...	5th June—19th June.
			Ardra	...	...	20th June—3rd July.
			Punarvasu	...	...	4th July—17th July.
			Pushya	...	...	18th July—31st July.
			Ashlesha	...	...	1st August—14th August.
Monsoon-Rabi—						
15th August to 21st Oct.	...	{	Magha	...	...	15th August—27th August.
			Purva	...	...	28th August—10th September.
			Uttara	...	...	11th September—24th September.
			Hast	...	...	25th September—7th October.
			Chitra	...	...	8th October—21st October.
Late Rains—						
22nd Oct. to 30th Nov	...	{	Svāti	...	...	22nd October—3rd November.
			Vishákha	...	...	4th November—17th November.
			Anurádha	...	...	18th November—30th November.
December.						

The average given in the tables is that for eleven years ending 1892, except for very few stations. The rainy days are compared with last year only.

The anna valuation given in the remarks is on the basis of 16 annas representing an average crop.

Synopsis of Rainfall Summary, 1893-94.

District.	KHARIF.		RABI.		General Remarks as to Rain.
	Rain.	Harvest.	Rain.	Harvest.	
West Khándesh ...	Seasonable, but excessive for cotton.	Fairly good ...	Seasonable, but injurious at harvest time.	Fairly good ...	Above average.
East Khándesh ...	Do. ...	Fair ...	Do. ...	Fair ...	Below or upto average.
Násik ...	Seasonable, but prolonged break in July.	Fairly good ...	Do. ...	Fairly good ...	Upto or above average except in east.
Ahmadnagar ...	Do. also break in October	Fair ...	Do. ...	Fair ...	Average.
Poona ...	Sufficient, but irregular.	Do. ...	Do. ...	Do. ...	Do.
Sholápur ...	Do. ...	Do. ...	Do. ...	Do. ...	Upto or above average.
Sátára ...	Seasonable, and sufficient.	Fairly good ...	Do. ...	Good ...	Slightly below or upto average.
Belgaum ...	Seasonable but prolonged break in July and September.	Fair ...	Do. ...	Fairly good, but poor in Khándapur.	Upto or above average.
Bijápur ...	Scant in the beginning.	Good ...	Do. ...	Good ...	Above average.
Dhárwár ...	Sowing rain deficient.	Fairly good, but rice poor.	Do. ...	Do., but cotton only fair.	Upto or above average.
Kánara ...	Seasonable and sufficient except above Gháts.	Fair, but rice poor in Kárwár and north-east.	Seasonable ...	Fair ...	Below or upto average.
Ratnágiri ...	Seasonable, but in July.	Fair ...	Do. ...	Do. ...	Below average.
Kolába ...	Seasonable and sufficient.	Fairly good ...	Do. ...	Do. ...	Nearly average.
Thána ...	Do. except in north.	Good, except late rice.	Do. ...	Do. ...	Above average except in north.
Surat ...	Excessive sowing.	Fair, but cotton and rice poor.	Do., but cloudy weather at harvest time.	Fairly good ...	Upto or above average.
Broach ...	Do. ...	Do. ...	Do. ...	Fair ...	Above average.
Kaira ...	Do. Uttara injurious to bájri.	Fair ...	Do. ...	Do. ...	Do.
Panch Maháls ...	Do. ...	Do. but maize poor.	Do. ...	Do. ...	Do.
Ahmadabad ...	Do. also injurious at harvest time.	Rice fair; Juár, bájri poor.	Do. ...	Do. ...	Above or upto average.

West Kha'ndesh, 1893.

Rain Periods.	DHULIA.		PIMPAL- NER.		NANDUR- BÁR.		NAVÁPUR.		TALODA.		SHÁHÁDA.		SHIRPUR.		SINDKHE- DA.		AMALNER.		PÁROLA.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.		In.		In.		In.		In.		In.		In.		In.		In.		In.	
Early Rains ...	1.19	4	0.12	...	0.11	1	...	...	0.04	...	0.14	1	0.81	3	0.79	3	1.49	4	2.93	6
Ante-Monsoon ...	0.87	3	4.70	4	1.47	4	2.48	3	3.63	5	3.08	4	0.94	2	0.82	3	1.80	4	3.57	3
Monsoon-Kharif ...	12.60	23	11.75	20	21.60	36	43.22	41	30.23	44	27.24	32	20.30	26	20.30	27	11.93	26	15.45	25
Monsoon-Rabi ...	7.75	9	4.76	13	15.20	14	12.10	19	10.68	14	7.16	12	9.89	16	9.02	11	6.99	14	4.01	10
Late Rains ...	2.86	3	2.49	3	3.49	4	3.51	4	0.66	2	0.63	3	2.58	3	1.88	3	2.45	2	1.17	2
Total ...	24.77	41	23.82	39	41.07	59	60.31	67	45.23	65	38.31	52	34.59	50	32.82	47	24.66	50	27.13	46
Average ...	27.61	40	24.37	36	32.91	46	35.08	64	32.90	59	30.09	55	28.77	46	21.53	36	23.35	39	32.51	60

General characteristics.—A hilly and rugged tract, except where the wide black-soil plains extend on either side of the Tápti and its tributaries. Rainfall very heavy in the Dángs.

Remarks.—The total rain exceeded average except in three tálukas. The welcome ante-monsoon showers promised an early and full cotton season, but the sowing of the later kharif crops was hindered by a continuance of the Mrig rains into Ardra (late June). In July the rain was generally normal. The break at the end of that month was required. Cotton suffered from excessive rain in August. The fall in September was less and more intermittent, thus favouring growing crops and the rabi sowing. The useful Hast rain in early October was too heavy for bájri and cotton, and this was followed again by injurious harvest showers in early November. But for cloudy weather and unseasonable rains in February the rabi would have been excellent. As it was, the early and late crops were reduced a good deal below average, being estimated from 10 to 14 annas.

East Kha'ndesh, 1893.

Rain Periods.	CHÁLIS- GAON.		PÁCHO- RÁ.		BHAD- GAON.		EBAN- DOL.		CHOP- DA.		JAL- GAON.		JÁM, NER.		BHU- SÁVAL.		EDAL- ABAD.		SÁVDA.		YÁVAL.		RÁVER.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.	
Early Rains ...	2.97	5	1.91	3	3.18	5	1.42	5	1.03	5	1.98	6	1.39	3	3.20	6	3.64	7	4.12	8	3.17	6	4.03	6
Ante-Monsoon ...	4.23	3	4.20	5	3.02	5	3.92	7	5.92	6	2.12	5	3.06	5	2.57	7	1.97	4	3.64	10	4.00	7	3.75	4
Monsoon-Kharif ...	12.67	22	18.43	32	14.81	24	12.81	26	14.64	25	16.42	32	19.27	29	19.10	30	14.09	23	15.76	28	14.53	24	11.77	13
Monsoon-Rabi ...	10.30	19	8.46	17	8.52	13	5.14	9	8.39	11	8.30	12	10.80	22	7.01	12	13.00	21	13.43	16	6.12	17	11.09	16
Late Rains ...	0.99	2	0.95	3	1.12	3	1.91	3	2.45	4	2.17	2	3.14	4	2.15	3	0.57	2	1.08	3	2.09	4	1.32	4
Total ...	31.13	51	34.00	51	30.65	49	25.10	50	32.42	51	30.99	57	36.36	63	34.03	53	33.27	57	33.23	65	29.91	53	31.96	47
Average ...	36.91	59	34.33	59	30.09	66	25.17	59	32.42	49	36.20	57	37.23	66	36.32	56	30.14	45	32.33	48	29.90	45	32.21	56

General characteristics.—In the north, high hills of the Sátputas. The southern and western portions are also hilly, but the hills less high and continuous. Drainage by the Tápti, the Girna and the Purna. Rainfall larger than in the West Kha'ndesh, but less certain.

Remarks.—The rain was rather below than above average. It was sufficient, but not well timed. The early showers favoured early cotton and the preparation of land for all kharif crops. In mid-June the fall was more than sufficient, necessitating a resowing of cotton in places. August received rain, seasonable for all but cotton. Though the rabi sowings began under favourable showers, the rain in Hast was deficient. November rain did considerable injury to bájri as well as cotton. This unfavourable kharif harvest rain was followed by clouds in February, which were equally unseasonable for the rabi. Rice was a poor crop, and the estimated yield of other crops (10 to 12 annas) is even lower than in West Kha'ndesh.

Na'sik, 1893.

Rain Periods.	NA'SIK.		IGATPURI.		SINNAR.		NIPHAD.		YBOLA.		NANDGAON.		MA'LEGAON.		SATA'NA.		KALVAN.		CHANDOR.		DINDORI.		PEINT.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
Early Rains ...	0.23	1	...	...	0.10	...	0.11	1	0.72	1	0.74	2	0.21	1	0.24	1	0.08	...	0.43	1	0.91	2	0.03	...
Ante-monsoon ...	3.53	4	3.09	5	2.25	7	3.32	8	2.68	7	3.15	6	0.06	6	4.05	5	0.30	8	5.63	7	4.00	8	1.22	3
Monsoon-Kharif ...	29.95	33	113.38	66	20.41	32	19.06	24	13.48	20	9.72	17	7.22	23	13.30	19	20.47	30	15.57	28	29.93	39	65.48	58
Monsoon-Rabi ...	5.12	14	34.86	39	3.58	10	3.37	11	2.81	6	6.07	17	6.60	10	4.30	7	6.42	18	4.03	10	4.03	10	17.08	30
Late Rains ...	0.50	2	1.13	1	0.29	3	0.92	3	1.24	4	0.75	2	1.20	3	3.14	3	1.19	3	1.45	3	2.30	4	0.64	2
Total ...	39.38	54	152.46	111	26.63	51	26.78	47	20.93	38	21.03	44	21.35	43	25.09	35	37.06	59	23.01	49	42.43	63	115.03	63
Average ...	33.74	60	141.10	110	29.05	51	25.97	51	24.76	49	34.11	48	25.24	40	25.10	42	29.67	53	31.41	64	33.08	58	95.71	64

General characteristics.—The district is divisible into the Desh (or open country) and the Dangs (near the Sahyadris with heavy rainfall and primitive cultivation). The west portions of Na'sik, Dindori and Igatpuri and the whole of Peint belong to the Dangs.

Remarks.—In the east the fall was somewhat below average, but conditions were the reverse in the west. Everything went well for kharif till the useful break at the end of June was prolonged far into July in the eastern (rabi) talukas. This made some of the kharif sowings too late, and the late sown kharif did not receive enough rain in September. The last rain, though light, was most copious in the rabi talukas where it was most needed. The kharif harvest was reduced by the November rain, which nevertheless was good for standing rabi. The kharif yield was up to average in the central tracts but somewhat reduced (10 to 12 annas) in both the east and west. Rabi was full average in Na'sik, Niphad, Baglan and Kalvan, but elsewhere only 10 to 12 annas.

Ahmadnagar, 1893.

Rain Periods.	1 NAGAR.		2 PA'RNBE.		3 SHRIGONDA.		4 KARJAT.		5 JA'MKHED.		6 SHEVGAON.		7 NEVA'SA.		8 RA'HURL.		9 KOPARGAON.		10 SANGAMNER.		11 AKOLA.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
Early Rains ...	1.33	1	0.21	1	1.22	2	2.29	1	2.01	4	0.63	1	2.17	1	0.27	1	0.61	1	0.03	...	0.53	1
Ante-Monsoon ...	5.97	9	6.93	11	10.26	6	8.30	6	4.30	9	4.75	5	4.10	6	5.80	7	4.81	5	5.80	7	3.14	6
Monsoon-Kharif ...	7.11	14	13.47	23	6.20	10	7.45	12	8.63	19	7.35	19	5.99	16	8.00	19	13.10	20	13.13	20	21.01	27
Monsoon-Rabi ...	10.59	16	6.75	15	9.73	16	9.17	14	21.74	23	10.20	24	9.58	19	5.82	12	8.43	16	8.53	8	8.37	9
Late Rains ...	0.58	2	0.62	2	0.70	1	0.38	1	0.43	1	0.92	3	1.29	4	1.22	3	1.39	3	0.97	4	1.09	4
Total ...	25.55	42	27.98	52	28.16	35	21.59	34	37.21	55	23.85	51	23.13	46	21.11	42	29.54	45	23.35	39	30.03	46
Average ...	26.87	63	26.71	63	22.35	40	24.95	40	31.75	64	28.50	54	26.21	50	26.02	49	29.11	49	23.26	47	24.96	53

General characteristics.—(1) Desh—Godavari valley (talukas 6 to 9): rich alluvial plains growing much wheat. Rainfall very uncertain. Bhima and Ghor valley (talukas 3 and 4) alluvial, but less fertile. Rainfall more capricious. Good year exceptional. Talukas 1, 2, 5 and 10 lie between these valleys. Alternation of bare hill and treeless plain with occasional fertile well-wooded tracts. Rain more regular. (2) Dangs—Half Akola has very heavy rain, half abuts on the Desh. The record shows the fall of the plain portion.

Remarks.—This district on the whole received more rain than usual in the talukas where insufficient rainfall is the rule. e. g., Shrigonda and Kopargaon, but it was ill distributed. Kharif sowings were made very late by continuous heavy rain in June, after promising earlier prospects. The July fall was scant and the standing crops were in distress till early September. The last rain was only moderately heavy, and it was followed by a dry period of six weeks. This made the unusual rain at the end of November especially valuable. Rabi (12 annas) was better than kharif (8 to 10 annas).

Poona, 1893.

Rain Periods.	POONA.		PAUD.		VADGAON.		LONA'VLA.		KHED.		GHODA.		JUNNAR.		SIRUR.		SA'GVAD.		BA'RA'-MATH.		DHOND.		INDA'PUR.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.	
Early Rains ..	..	..	..	..	..	..	..	..	..	..	..	0.36	1	0.16	1	..	..	0.31	2	0.76	2	1.29	4	
Ante-Monsoon ..	4.08	7	1.46	5	2.85	7	6.19	7	4.14	7	2.26	6	1.89	4	9.43	9	5.61	6	13.48	10	5.90	7	6.81	8
Monsoon-Kharif ..	20.53	26	46.61	52	31.72	36	153.50	66	19.83	28	24.49	32	27.83	32	8.26	18	12.09	23	8.00	12	7.44	14	6.02	16
Monsoon-Rabi ..	5.88	11	12.06	25	7.08	23	47.44	43	8.57	10	7.22	14	6.21	18	8.69	13	9.55	15	11.81	18	5.05	13	9.19	19
Late Rains ..	1.03	4	0.64	1	0.91	2	1.15	2	1.05	1	1.32	2	0.77	2	0.09	..	1.00	2	0.75	4	2.51	2	0.24	1
Total ..	32.12	48	60.67	83	46.16	68	208.28	119	28.59	46	35.88	54	37.06	57	26.63	41	29.15	47	34.35	46	22.26	38	23.55	48
Average ..	36.60	57	67.22	81	57.74	74	171.50	119	25.03	53	32.87	63	34.49	59	24.47	53	26.08	69	24.57	61	..	43	26.38	57

General characteristics.—The district varies from a heavy certain rainfall to a most scant capricious one. Sure rain is enjoyed by the west portions of Junnar, Khed, Haveli and all of Mával. A moderate but regular rainfall characterizes the central belt, while the Bhimthadi and Indápur talukas are uncertain and irregular like the adjoining talukas of Sholápur.

Remarks.—The aggregate of rain was nowhere much below average, and in some talukas, owing to unusually heavy ante-monsoon downpours, was above average. The rain was irregular. The kharif sowings were late, and felt the break in July, which also brought rats and caterpillars. Both in August and September the supply was scant. Later rains were more satisfactory. The yield of both kharif and rabi was considerably under average, say from 9 to 13 annas, for in places the crops were somewhat better than in Sirur and Indápur where the deficiency of the late rains was most conspicuous.

Shola'pur, 1893.

Rain Periods.	SHOLA'PUR.		BA'RSI.		MA'DHA.		KARMA'LA.		PANDHARPUR.		SA'NGOLA.		MA'LSIRAS.			
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.		
	In.		In.		In.		In.		In.		In.		In.			
Early Rains	3.45	4	8.89	8	2.91	7	2.13	3	1.89	4	1.80	2	0.73	1
Ante-Monsoon	6.74	10	4.92	7	8.42	7	8.03	10	4.88	8	6.03	12	8.19	9
Monsoon-Kharif	8.40	13	12.03	18	8.81	16	8.76	18	8.32	14	6.66	11	4.03	13
Monsoon-Rabi	14.50	19	11.58	19	10.22	19	13.10	21	13.54	23	12.65	18	12.58	19
Late Rains	0.26	1	1.37	3	0.60	2	0.24	1	1.16	2	0.82	2	0.65	2
Total	33.35	47	33.79	55	31.06	51	32.35	53	29.79	51	27.96	45	26.18	45
Average	32.78	57	35.67	66	31.81	61	27.66	55	29.01	60	23.17	57	23.36	58

General characteristics.—The isolated taluka of Bári is richest, and has the surest rain; but the rainfall is scanty all over the district, and very capricious.

Remarks.—The rainfall was well up to average throughout, and above average in Málsiras and Sángola, but it was irregular. More than enough fell before the time for the usual monsoon rains, and the early monsoon rains were also very heavy. The kharif crops were put in under favourable conditions, and did not suffer so much from the long break in July as elsewhere in the Deccan. The kharif harvest would have been very good but for injurious rain in October (Chitra). The Hast and Chitra rain favoured rabi, but the late crops suffered much from most unseasonable rain in February. The kharif outturn was below average, especially in Karma'la and Málsiras. Rabi was fair (8 to 12 annas).

Sátára, 1893.

Rain Periods.	SA'TA'RA.		KOROGAON.		WA'I.		KHANDÁLA.		MEDHA.		MALCOLM-PETA.		PA'TAM.		KARÁ'D.		PETA.		SHIRA'LA.		DARIVÁDI.		VADUJ.		VITA.		TÁSGAON.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
Early Rains ...	In. 0'08	...	In. ...	...	In. ...	...	In. ...	...	In. ...	...	In. ...	...	In. 0'12	1	In. ...	...	In. 0'08	...	In. ...	...	In. 0'49	2	In. 0'20	1	In. ...	...	In. 0'26	1
Ante-Monsoon ...	4'60	10	5'31	11	6'73	6	4'05	8	5'19	9	8'46	9	8'37	11	7'69	8	4'99	5	7'49	10	3'92	11	7'46	13	6'07	11	3'64	8
Monsoon-Kharif ...	27'07	35	13'77	29	14'79	28	12'28	21	66'23	46	198'51	69	47'60	40	13'00	27	9'10	18	16'78	30	5'69	15	7'61	18	8'41	19	9'72	21
Monsoon-Rabi ...	11'23	23	8'23	17	6'76	15	5'50	14	12'30	23	79'42	52	11'71	29	11'42	18	8'78	15	8'08	21	9'83	16	10'71	16	9'60	19	10'00	22
Late Rains ...	0'88	4	0'15	1	0'67	3	0'88	4	1'45	5	1'42	4	0'73	2	1'56	3	0'36	3	0'68	3	1'25	3	0'60	2	...	...	0'54	2
Total ...	43'96	72	27'46	58	27'95	52	22'71	45	85'17	88	285'81	134	68'53	92	33'67	56	23'25	41	33'93	64	21'18	47	26'38	50	24'08	47	24'10	54
Average ..	45'30	80	30'02	74	34'58	68	23'40	55	76'21	87	292'59	129	75'81	93	36'43	76	30'01	65	42'30	69	22'98	57	24'50	65	26'13	67	26'52	64

General characteristics.—Western Belt—Parts of Jávi, Pátan, Wái, Sátára and Válva, hilly. Regular and heavy rainfall. Central Belt—East portions of above and all Korogaon and Karád. Rich, well-watered valleys. Eastern Belt—The rest chiefly a waving plain and of poor land. Uncertain rainfall. But south portion of Tásgaon rich, well-wooded plains.

Remarks.—In the south and East the fall was somewhat below average, but elsewhere normal in amount or more than usual. The early promises were very good, and the break at the end of June most seasonable, but scant rain in July, and long breaks encouraged rats and caterpillars. The August and September rain was somewhat light, especially in the north-east. The general and heavy rain of Hast and Chitra was everywhere seasonable and sufficient. The kharif yield is somewhat underestimated at from 10 to 12 annas. The rabi harvest only suffered from cloudy weather and rain in February, and may be taken to have reached close on 14 annas. The February rain was accompanied by extraordinary hailstorms in Khatáv táluka, which caused loss of life among human beings as well as cattle.

Belgaum, 1893.

Rain Periods.	BELGAUM.		CHANDGAD.		KHA'WA'PUR.		SAMPGAON.		SAUNDATTI.		MURGOD.		GOKA'K.		CHIKODI.		HUKERI.		ATHNI.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
Early Rains ...	In. 0'77	2	In. 1'81	5	In. 2'75	1	In. 0'20	2	In. 0'68	1	In. 0'01	...	In. 1'88	3	In. 1'05	2	In. 3'72	3	In. 0'41	1
Ante-Monsoon ...	8'81	10	5'61	8	6'26	10	8'63	8	8'58	8	6'13	10	6'84	6	4'15	7	1'96	6	8'03	13
Monsoon-Kharif ...	21'06	40	62'25	58	35'31	47	9'61	25	5'84	17	8'01	22	4'74	11	15'68	28	9'02	21	9'34	22
Monsoon-Rabi ...	14'06	23	21'03	36	16'30	33	11'14	25	10'62	18	10'30	17	17'10	16	14'15	23	14'39	17	12'39	21
Late Rains ...	4'97	4	1'98	5	5'12	6	8'06	3	8'04	4	3'53	3	2'59	3	1'79	4	2'09	4	1'17	3
Total ...	49'67	84	92'68	112	65'74	97	27'64	63	23'71	48	27'97	52	33'15	41	36'82	64	31'18	50	31'24	59
Average ...	51'49	94	107'26	107	67'27	92	29'15	67	24'78	54	26'64	71	26'72	62	29'28	71	26'79	54	24'07	51

General characteristics.—Near the Sahyádris the rain of the south-west monsoon is very constant and heavy (Belgaum and Khánápur). Further east, Chikodi, Gokák and Sampgaon, it is fitful. The eastern tálukas show a fitful fall, but this is supplemented by a scanty supply from the north-east monsoon (which comes generally in October and later).

Remarks.—There was no deficiency in the total fall, and indeed the average was exceeded in the north, notably in Athni. In the rice tracts the early rains were unusually abundant. Other kharif crops received good sowing showers. Prolonged breaks in July induced rats and caterpillars, but good rain came in August except in Athni. The light fall in September made the standing kharif suffer and delayed rabi sowings. Early October brought good rain. Falls in November injured rice and jowári, ready for the sickle. It benefitted the rabi, but this was again checked by unseasonable harvest rain. The season was irregular, and can only be called fair, while rice in Khánápur was poor. Rice is estimated between 8 and 12 annas, jowári and hájri between 10 and 14 annas, while outside Khánápur (4 to 6 annas) the rabi may be taken as between 10 and 14 annas also.

Bija'pur, 1893.

Rain Periods.	BIJA'PUR.		INDI.		SINDGI.		BA'GA-VA'DI.		MUDDER-BIHAI.		BA'GALKOT.		BILGI.		BA'DAMI.		HUNGUND.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.		In.		In.		In.		In.		In.		In.		In.		In.	
Early Rains ...	2.49	5	1.86	4	2.70	6	1.82	7	1.45	3	3.24	3	2.93	3	1.66	3	2.01	4
Ante-Monsoon...	4.04	10	3.90	9	1.99	9	7.56	7	5.24	9	4.73	9	5.02	8	7.18	10	2.87	8
Monsoon-Kharif ...	5.63	11	9.65	22	7.84	19	10.47	17	12.53	20	8.94	17	7.97	18	7.22	23	7.60	16
Monsoon-Rabi...	15.13	20	23.48	23	11.13	25	14.33	24	20.85	25	15.42	24	12.79	16	18.88	27	10.93	19
Late Rains ...	1.66	3	1.18	3	0.82	4	1.47	3	1.56	4	2.07	2	2.63	3	1.70	3	2.05	3
Total ...	28.95	49	40.07	60	34.48	62	35.65	58	41.63	61	4.40	55	31.34	48	30.64	65	25.46	49
Average ...	26.63	63	23.10	58	31.28	66	26.73	57	27.62	63	26.03	55	23.71	54	23.56	62	23.29	58

General characteristics.—This district receives its rain from both the south-west and the north-east monsoon. Hungund enjoys an even and generally sure rainfall. Bágalkot and Bádámi fare well as a rule. The rich plains of the Krishna and Don valleys are uncertain. The north talukas of Bijápur, Indi, and Sindgi have capricious and light rainfall.

Remarks.—Fall well above average and though not as heavy as elsewhere in the beginning, it was better distributed, and more seasonable for the wants of the district. The break in July brought rats, but it was not protracted. August gave good rain for standing kharif and for cotton sowing. The rain in September was favourable and though the October rain was excessive for kharif, it did great good to rabi. The rabi harvest would have been bumper but for the unseasonable harvest rain. The reports of yield tend to show a crop considerably below average, but they are not consistent with the facts noticed, and the Collector goes so far as to say that there has not been a more generally favourable season within the memory of living man.

Dha'rwa'r, 1893.

Rain Periods.	DHA'R- WA'R.		MUGUD.		HUBLI.		KAL- GHATGI.		BANKA- PUR.		HA'NGAL.		KOD.		RA'NEBEN- NUR.		KARAJGI.		GADAG.		MUNDARGI.		NAVAL- GUND.		NARGUND.		RON.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.	
Early Rains ...	0.35	1	0.43	2	0.84	2	3.25	2	1.15	2	0.19	1	0.70	1	1.05	1	0.79	2	0.73	4	0.31	1	2.17	3	2.00	2	1.36	4
Ante-Monsoon ...	9.54	14	9.85	14	6.46	12	6.13	12	4.09	10	3.67	8	1.40	4	5.58	8	4.08	8	3.07	10	6.48	13	5.91	10	6.65	9	4.17	9
Monsoon-Kharif ...	8.22	28	9.01	29	11.43	27	11.93	40	8.05	30	18.60	39	9.40	39	5.79	13	9.11	21	9.19	15	3.76	11	4.89	9	9.04	13	8.89	17
Monsoon Rabi ...	11.60	20	14.41	23	14.29	24	15.96	24	11.55	22	11.86	26	8.93	17	9.41	17	13.77	22	11.63	20	10.26	14	11.71	22	16.32	22	13.45	26
Late Rains ...	2.63	4	1.85	3	1.44	4	2.34	3	2.34	3	6.01	3	3.75	3	4.43	3	3.66	5	2.45	4	3.27	5	2.60	4	3.01	7	1.84	4
Total ...	32.34	73	35.55	76	34.48	69	39.61	86	27.18	69	39.33	78	24.18	60	26.26	44	31.41	59	27.07	53	24.08	44	27.18	43	37.03	53	29.71	60
Average ...	33.19	68	30.73	70	28.09	61	36.41	84	25.42	71	41.41	79	20.11	55	24.63	33	25.15	64	25.71	53	20.11	43	28.51	61	26.10	42	23.10	53

General characteristics.—The district is composed of hilly tracts—the mallád growing rice and hill grains (Hángal, Kalghatgi and Kod) and the black-soil plains growing cotton and wheat (Gadag, Ron, Navalgund and Hubli), or cotton but no wheat (Karajgi and Ránebennur). The Dhárwa'r and Bankápur talukas are partly mallád. The soil of the mallád is red and gravelly, but the rainfall is steady and comparatively heavy. It is more sure and seasonable the further to the west. The proverb says: 'Good rain won't give a big crop, nor will bad rain bring famine.' This is in comparison to the fertile black-soil plains, where with good seasonable rains the produce is very large, but where the fall is irregular and uncertain, and where there is always risk of drought.

Remarks.—The total rain was nowhere noticeably below average. The season opened well. In July sowings were somewhat retarded, and early sown crops were distressed. In August relief came and cotton was favourably sown. The deficiency of September rain made itself seriously felt to the rice and other kharif crops. Hast and Chitra gave good rabi rain. Scant falls in September and unseasonable rain in November combined to give a poor rice crop (say 6 annas). The other kharif staples were fair (9 to 14 annas), and the yield of rabi with cloudy weather in February was about the same. Cotton was considerably below average in spite of early promise.

Ka'nara, 1893.

Rain Periods.	KA'RWAR.		ANKOLA.		KUMTA.		HONAVAR.		BHATKAL.		HALIYA'L.		SUPA.		YELLA'PUR.		MUNDGOD.		SIRSI.		SIDDA'PUR.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
Early Rains	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..
Ante-Monsoon	12.85	7	9.89	7	7.65	6	9.25	9	8.63	9	6.12	9	5.75	9	8.32	11	2.38	7	9.00	10	7.42	8
Monsoon-Kharif	65.99	58	87.45	63	92.93	61	103.67	65	97.79	65	16.15	44	43.29	57	45.68	50	18.41	39	54.43	61	66.46	61
Monsoon-Rabi	30.67	39	37.81	43	31.95	43	33.31	43	44.05	47	17.07	33	21.73	39	22.19	30	13.70	35	24.35	42	29.26	42
Late Rains	2.47	4	2.43	4	4.48	5	3.40	4	5.15	5	2.21	6	7.58	6	4.03	5	2.18	6	4.44	5	4.25	5
Total	111.98	108	137.58	117	137.01	115	149.63	121	155.62	126	43.73	97	79.16	112	81.81	113	37.13	88	93.60	122	107.77	119
Average	129.20	130	134.76	131	151.88	127	148.02	126	155.01	137	49.27	94	99.52	102	102.66	107	43.92	90	103.45	110	112.21	111

General characteristics.—A hilly and thickly wooded district, divided into two parts by a broken and irregular range of hills. The low land or coast tract has the heavier rainfall; in the upland the fall rapidly decreases with the distance from the Sahyadri crest.

Remarks.—Above ghats the fall was distinctly below average. The deficiency of rain in July retarded transplantation of rice. Though the rain was good in early August, there was again a deficiency in the later part of that month, especially in the upland talukas. In September similar conditions continued, for Uttara and Hast were light. Later in Chitra prospects improved. The rice crop was damaged by harvest rain, and is estimated at 13 annas, but it was much poorer in the Karwar taluka, and in the north-east of the district. The rain was seasonable for crops above ghats, but insufficient, and these crops were below average.

Ratna'giri, 1893.

Rain Periods.	RATNA'GIRI.		VENGURLA.		MA'LVAN.		DEVGAD.		RA'JA'PUR.		SANGA-MEHWAR.		CHITPLUR.		GUNA'GAR.		KHEP.		DA'POLI.		MANDANGAD.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
Early Rains	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..	In.	..
Ante-Monsoon	8.42	6	7.09	7	6.20	3	10.32	4	11.90	6	11.75	6	11.34	8	10.81	6	9.72	6	8.98	5	10.73	5
Monsoon-Kharif	59.54	55	60.26	52	60.12	51	54.74	50	84.31	64	92.52	63	86.84	65	64.96	56	87.35	61	90.63	60	109.18	62
Monsoon-Rabi	19.67	34	22.63	31	17.66	28	17.88	28	27.65	42	40.54	48	38.03	40	20.65	33	43.78	43	36.12	40	37.55	37
Late Rains	0.36	2	1.87	2	1.59	3	0.31	2	1.05	5	0.10	..	0.50	2	0.16	1	0.24	2	0.03	..	0.92	2
Total	87.99	97	91.85	92	85.57	85	83.28	84	124.91	117	144.95	117	136.71	115	92.58	96	140.09	111	125.76	105	152.38	106
Average	103.09	108	118.13	114	100.87	113	95.23	106	149.55	119	162.52	121	155.74	123	107.74	104	147.48	118	146.59	116	163.87	117

General characteristics.—The district is formed by a narrow belt of low land; though hilly, and rugged as a whole, the valleys are more open near the Sahyadris than towards the centre, and these again fall into nearly level plateaus towards the centre. The rainfall is abundant and regular, being considerably heavier inland than on the coast.

Remarks.—The regular monsoon fall was somewhat late, and the after rain in July and August was hardly up to requirements. Again the lateness of the rain in Chitra retarded reaping. Rice, the chief crop, is estimated at only 10 annas, and harik at even less; but it is questionable whether these estimates are justified. Nevertheless it is clear that the total fall was below the mark.

Kolába, 1893.

Rain Periods.	ALIBÁG.		PANVEL.		URAM.		KARJAT.		MÁTHURÁ'N.		KHA'LÁ'PUR.		PEN.		ROHÁ.		MÁNÓAGÓN.		MÁ'HÁ'D.		
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	
	In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.
Early Rains ..	0.06	..	0.45	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ante-Monsoon ..	3.74	4	3.57	5	2.68	3	4.88	5	6.61	5	6.95	4	1.77	4	4.86	5	4.94	4	4.36	5	5
Monsoon-Kharif ..	60.70	57	92.01	61	64.06	59	101.81	61	156.67	64	93.44	62	88.05	58	64.59	63	75.02	62	101.33	61	61
Monsoon-Rabi ..	13.88	29	26.59	35	17.38	29	35.72	35	60.88	45	38.48	37	27.43	41	31.31	39	35.73	37	38.12	39	39
Late Rains ..	..	..	0.11	1	..	..	..	..	..	..	..	..	..	..	0.08	..	0.08	..	0.43	2	2
Total ..	80.38	90	123.73	103	84.11	88	142.41	101	214.36	114	138.87	103	117.25	103	100.84	107	115.77	103	144.24	107	107
Average ..	91.77	97	121.59	100	99.85	95	130.81	103	224.93	127	133.12	106	121.92	111	127.67	108	136.16	114	138.95	118	118

General characteristics.—A rugged belt of country from 15 to 30 miles broad. Rainfall abundant and regular, being heaviest in parts towards the Sahyádris.

Remarks.—Only Panvel, Karjat, and Máhád received a full average supply of rain. The early rain was seasonable, but that of the latter end of June somewhat excessive. In August and September, rain was not only seasonable, but sufficient, except in Alibág. The Hast and Chitra showers were light. There was no harmful harvest rain. Kharif 12 annas, except nágli and vari, which were a little poorer. The rabi reached 10 annas.

Thána, 1893.

Rain Periods.	THÁNA.		KALYÁN.		MURDÁD.		SHÁ'HÁ'PUR.		MORHÁ'DA.		BRIWDL.		BASSEIN.		VÁDA.		MÁ'HIM.		DÁ'HÁ'ND.		UMBAR-GAON.		
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	
	In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.
Early Rains ..	..	..	..	..	..	..	..	..	0.08	..	..	..	..	..	0.21	1	0.05	..	0.08	..	..	..	..
Ante-Monsoon ..	2.03	3	2.64	3	7.52	4	7.93	4	2.68	5	3.21	4	2.76	3	3.64	4	4.17	4	1.72	3	..	..	..
Monsoon Kharif ..	71.39	57	87.85	60	89.69	52	94.59	56	99.49	61	86.70	56	65.14	49	78.67	51	45.49	46	54.37	39	54.15	44	44
Monsoon-Rabi ..	20.18	37	20.15	39	26.01	34	26.27	36	22.94	33	25.33	33	18.47	26	24.21	31	10.43	22	7.33	22	8.51	22	22
Late Rains ..	0.35	1	0.26	1	0.13	..	0.69	2	0.48	2	..	..	0.16	1	..	..	0.60	2	0.24	1	..	..	..
Total ..	93.95	98	110.90	103	123.35	90	129.48	98	125.67	101	117.24	93	86.53	79	106.73	87	60.73	74	63.72	65	62.66	66	66
Average ..	102.50	100	106.98	95	104.96	95	110.84	103	102.26	105	107.70	95	82.16	87	96.50	101	61.24	71	75.00	82	69.15	73	73

General characteristics.—Inland, the district is well watered and well wooded. Rainfall abundant, being considerably more inland than on the coast and less towards the north than towards the south.

Remarks.—Fall almost everywhere decidedly above average. The first monsoon rains were a little late, and in places too copious. In July, however, and in August the falls were seasonable. Rice suffered from the lightness of the Hast rain, especially in the north. Rice was good (14 annas), and early rices even better. Hill grains 10 annas, and garden crops nearly up to average.

Surat, 1893.

Rain Periods.	SURAT.		OLPAD.		RANOR.		MANDVI.		BANDOLI.		VALOD.		JALALPUR.		CHIKRI.		BULSA.		PARDI.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
Early Rains	In. 0°10	1	In. ..	..	In. ..	..	In. 0°04	..	In. 0°03	..	In. ..	In. 0°02	..	In. ..	In. 0°09	..	In. 0°03	..	..	..
Ante-Monsoon	0°17	1	..	..	..	..	0°06	..	0°29	1	0°12	1	..	..	0°58	3	0°01	..	0°25	1.
Monsoon-Kharif	35°45	36	33°00	26	35°31	32	49°48	45	52°00	46	51°00	51	30°24	37	50°11	49	45°41	47	01°72	53
Monsoon-Rabi	9°26	13	11°19	10	9°65	11	14°48	17	11°34	16	11°30	15	7°04	14	12°33	20	8°59	18	8°37	22
Late Rains	0°47	1	0°18	1	0°32	1	1°77	2	0°54	1	1°23	2	1°18	1	1°40	1	0°66	1	0°24	1
Total	45°45	61	44°37	37	45°28	44	65°83	64	64°19	64	64°61	67	39°38	52	73°72	73	64°70	66	70°63	77
Average	46°64	60	37°54	60	45°51	62	58°28	65	58°68	73	61°83	72	02°61	71	72°37	75	70°84	71	80°07	83

General characteristics.—Western portion all along the coast poor sandy soil; central belt with rich soil and moderate rainfall; further to the east Dangs with heavy rainfall but light soil. As a rule, rain lighter on the coast than inland.

Remarks.—The fall was below the mark in three talukas, and full average elsewhere. There was excessive rain in the end of June, washing out seedlings and manure. Again heavy falls in July, though favourable to rice transplantation, were too heavy for cotton and jowar. The total absence of rain in October reduced the kharif yield, and the November rain at harvest acted in the same direction. The rabi crops, though helped by the late rain, did poorly from want of rain in October and from cloudy weather in February. Season only fair. Estimate of kharif and rabi from 8 to 12 annas.

Broach, 1893.

Rain Periods.	BRACH.		ANKLESVAR.		HANSOT.		VAGRA.		A'MOD.		JAMBUSAR.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
Early Rains	In. 0°29	1	In. 0°11	..	In. ..	..	In. 0°10	1	In. 0°18	1	In. 0°22	1
Ante-Monsoon	0°69	1	0°26	1	0°14	..	0°42	1	0°14	1	0°07	..
Monsoon-Kharif	44°15	29	36°98	30	29°70	24	40°46	28	26°83	24	39°53	26
Monsoon-Rabi	6°61	14	5°08	10	7°24	17	6°28	12	5°13	14	6°01	15
Late Rains	0°59	2	0°98	3	0°36	1	0°56	2	0°32	2	1°54	3
Total	52°24	47	41°31	44	37°44	42	47°81	44	32°60	42	47°97	45
Average	39°71	52	36°57	47	33°95	44	29°02	42	37°88	39	34°51	45

General characteristics.—Rich alluvial plains growing cotton and wheat. Rainfall moderate but sure, being, as a rule, more plentiful in the Broach Taluka. The rainfall is supplemented by heavy dews from October to December.

Remarks.—Except in A'mod the total fall considerably exceeded average. The sowing rain in June too heavy. The break following was too short and on it supervened another burst of heavy rain. After a useful break in August, a seasonable fall came in late August. The September fall was light, but gentle and useful both to standing crops and to rabi preparations. Rabi was favoured by the light rains of October and November, but standing kharif would have been better without it. The rabi standing crops suffered from cloudy weather in February and March, especially in Vagra, where the loss was greatest by reason of the greater extent of cotton. Wheat did well, (13 annas) but other crops not above 10 annas, and some as low as 7.

Kaira, 1893.

Rain Periods.	KAIRA.		MESHMAD- ABAD.		MÁTAR.		NADIÁD.		KAPADYANJ.		THÁSRA.		A'NAND.		DORSAD.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.		In.		In.		In.		In.		In.		In.		In.	
Early rains	0·22	1	0·34	2	0·43	2	0·41	2	0·32	1	0·29	2	0·09	..	0·10	..
Ante-Monsoon	0·18	1	0·23	1	0·17	1	0·35	2	..	..	0·22	1	0·31	1	0·09	..
Monsoon-Kharif	28·22	29	34·35	30	28·90	29	38·45	30	37·56	35	34·08	33	34·03	31	35·42	33
Monsoon-rabi	10·59	14	13·73	16	9·09	11	11·60	15	11·84	16	11·99	12	14·03	19	9·40	18
Late Rains	1·96	3	2·21	3	2·04	3	1·60	4	2·99	3	1·00	3	1·25	3	1·06	3
Total ..	41·17	48	50·86	52	40·63	46	52·41	53	52·73	55	47·58	51	50·51	54	46·07	54
Average ..	38·02	47	34·29	53	35·92	43	37·63	53	35·14	50	33·70	50	35·61	51	36·80	53

General characteristics.—The District is mostly one unbroken alluvial plain. In the north and north-east patches of rich rice land; the centre, a tract of most fertile soil yielding the choicest crops; and westward a bare, though well cultivated, tract of rice land.

Remarks.—Fall conspicuously above average all-over the district. The early kharif showers were heavy and continuous. There was a valuable though deferred break in July, and excellent and seasonable rain in August. There was no later check to the kharif, till the storm of the third week in November, which harmed ripe crops. This improved rabi prospects after the light fall of Hast, but as elsewhere, the cloudy weather of February did equal harm. The anna estimates of the staple crops are:—Rice 13 annas; wheat, kodra and bajri 12 annas; cotton and gram 11 annas; jowár 10 annas; tur 8 annas; and oil-seeds as low as 4 annas.

Panch Mahals, 1893.

Rain Periods.	GODHRA.		KÁLÓL.		HÁLÓL.		DORAD.		JHÁLÓD.		JAMBUGHODA.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.		In.		In.		In.		In.		In.	
Early Rains	0·62	2	0·60	1	0·49	1	0·90	1	0·24	1	0·03	..
Ante-Monsoon	1·23	3	0·57	3	0·04	..	4·27	3	1·88	3	1·18	2
Monsoon-Kharif	25·67	33	33·55	33	38·62	36	24·70	32	30·32	36	30·62	41
Monsoon-Rabi	10·90	14	14·61	16	13·70	16	17·70	17	12·23	16	19·30	19
Late Rains	0·60	2	1·71	4	0·65	2	1·37	2	1·63	4	1·05	3
Total ..	49·02	54	51·04	57	53·50	55	48·94	55	46·40	60	52·18	65
Average ..	40·71	47	39·69	44	43·39	58	29·60	45	30·16	49	48·56	53

General characteristics.—Rainfall lighter and later in the east than in the western division.

Remarks.—Fall considerably above average throughout. The sowing rain too heavy. The July break was seasonable, but the heavy falls of August were more incessant than elsewhere in Gujarát. Maize was distressed. Similar incessant rain was experienced in September, when early crops were ripening. In October the break was timely, but again in November, the falls were too copious for kharif crops. Outturn estimates, rice 13 annas, and other crops 8 to 10 annas, except maize, an important staple in this district, which was very poor (say 5 annas).

Ahmadabad, 1893.

Rain Periods.	AHMADABAD.		PARA'NTIJ.		MODA'SA.		SA'WAND.		VIRANGA'M.		DHOLEA.		DHANDHUKA.		GOCHA.	
	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.		In.		In.		In.		In.		In.		In.		In.	
Early Rains...	0.25	2	0.13	1	0.35	2	0.49	2	0.43	1	0.34	2	0.17	1	0.41	1
Ante-Monsoon ...	0.02	...	0.11	...	0.82	2	0.31	1	0.46	1	...	...	0.53	1	0.05	...
Monsoon-Kharif ...	30.77	34	34.50	31	45.47	27	28.82	27	18.77	23	25.44	26	13.06	20	14.53	21
Monsoon-Rabi ...	10.70	16	14.44	17	12.00	12	12.25	16	12.17	10	7.89	13	10.12	18	7.34	12
Late Rains ...	2.01	3	2.05	3	2.29	3	2.95	4	3.75	3	2.84	3	2.38	4	3.23	3
Total ...	43.75	55	51.23	52	60.93	57	45.82	50	35.58	38	35.51	44	26.20	44	25.76	37
Average ...	27.06	48	27.25	50	33.78	56	27.96	53	23.98	47	24.19	45	27.43	47	25.70	40

General characteristics.—Except in the hilly parts of Modása, where the supply is sometimes considerable, the rainfall throughout the district is generally very light.

Remarks.—The excessive rain of the year was most marked in Ahmadabad, except in the talukas adjoining Káthiáwár. The heavy rains of June lasted far into July. The general break in August was too protracted in Dhandhuka. Again heavy rain fell in September when some kharif was ripe. The deficiency in amount in Dhandhuka was made up in early October. The irregularity of the season was again marked by abnormally heavy rain in November. The net result was a very fair rabi crop, owing to less cloudy weather late in the season, but poor kharif cereals on dry crop land (6 to 8 annas). Rice was fair, 11 annas.

STATISTICS.

B.—AGRICULTURAL.

I.—Area of Available Statistics.

II.—Area, Cultivated and Uncultivated.

III.—Crops.

IV.—Irrigation.

V.—Agricultural Stock.

II. A.—Details of "Fallow."

III. A.—Details under Khari'f and Rabi Crops.

III. B.—Principal Fruit-bearing Trees.

II.—Area Cultivated and Uncultivated, 1893-94.

No.	District.	Total area as in columns 5, 6, 7 & 8 of Return No. 1.	CULTIVATED AREA.						UNCULTIVATED AREA.					
			Gross area cropped.	Deduct area cropped more than once.	Remainder net area cropped.	Add current fallows.	Total columns 5 and 6.	Details of column 7.		Available for cultivation.		Not available for cultivation.		Total columns 10 to 13.
								Assessed land.	Unassessed land.	Assessed land.	Unassessed land.	Forest.	Others.	
1		2	3	4	5	6	7	8	9	10	11	12	13	14
A.—BOMBAY PRESIDENCY PROPER.		Acres.												Acres.
I.—Gujarāt.														
1	Ahmadabad ...	{ Rayatwari ... 1,054,100 Other Government ... 1,264,899 Alienated ... 93,916 Total ... 2,417,885	{ 702,238 652,470 61,202 1,415,910	{ 29,226 6,156 186 34,567	{ 674,112 646,314 61,017 1,381,343	{ 111,889 343,727 37,819 493,435	{ 785,901 990,041 98,836 1,874,773	{ 782,984 989,226 98,836 1,871,046	{ 2,917 815 ----- 3,732	{ 63,141 ----- ----- 63,141	{ 11,117 6,922 ----- 18,039	{ 21,649 ----- ----- 21,649	{ 172,299 267,906 80 440,278	{ 269,199 274,629 80 543,107
2	Kaira ...	{ Rayatwari ... 757,876 Other Government ... 178,299 Alienated ... ----- Total ... 936,124	{ 591,557 161,947 ----- 753,504	{ 44,341 5,414 ----- 49,755	{ 547,216 156,533 ----- 703,749	{ 44,707 6,089 ----- 50,796	{ 591,923 162,822 ----- 754,545	{ 591,450 162,593 ----- 754,043	{ 473 29 ----- 502	{ 65,878 253 ----- 66,131	{ 1,231 22 ----- 1,253	{ ----- ----- ----- -----	{ 98,794 15,401 ----- 114,195	{ 165,903 15,676 ----- 181,579
3	Panch Mahals ...	{ Rayatwari ... 626,401 Other Government ... 198,178 Alienated ... 72,564 Total ... 897,143	{ 320,680 76,862 41,895 439,437	{ 74,765 8,348 6,558 89,689	{ 245,915 68,494 35,349 349,748	{ 34,742 82,392 29,020 146,154	{ 280,657 150,886 64,359 495,902	{ 276,841 150,640 64,359 491,840	{ 3,816 246 ----- 4,062	{ 60,731 1,065 672 61,403	{ 58,378 1,065 ----- 59,443	{ 186,339 16,730 ----- 203,069	{ 40,296 29,497 7,533 77,326	{ 345,744 47,292 8,205 401,241
4	Broach ...	{ Rayatwari ... 917,023 Other Government ... 1,179 Alienated ... ----- Total ... 918,202	{ 578,644 843 ----- 579,487	{ 668 ----- 668	{ 577,976 843 ----- 578,819	{ 74,309 300 ----- 74,609	{ 652,285 1,143 ----- 653,428	{ 643,798 1,143 ----- 644,941	{ 8,487 ----- 8,487	{ 20,614 ----- 20,614	{ 1,821 ----- 1,821	{ ----- ----- ----- -----	{ 242,308 86 ----- 242,399	{ 264,738 86 ----- 264,774
5	Surat ...	{ Rayatwari ... 1,014,589 Other Government ... 12,341 Alienated ... 5,254 Total ... 1,032,084	{ 525,784 5,723 3,804 535,311	{ 47,972 472 16 48,460	{ 477,812 5,251 3,789 486,851	{ 250,211 4,445 1,192 255,848	{ 728,023 9,996 4,980 742,699	{ 725,773 9,696 4,974 740,442	{ 2,251 ----- 6 2,257	{ 32,231 659 131 33,020	{ 23,042 759 ----- 23,801	{ 45,434 ----- 45,434	{ 180,859 1,128 143 182,130	{ 286,566 2,545 274 289,385
II.—Deccan.														
6	Khāndesh ...	{ Rayatwari ... 4,638,829 Other Government ... 818,868 Alienated ... 103,091 Total ... 5,061,288	{ 2,936,313 52,962 73,149 3,062,424	{ 29,034 12 377 26,423	{ 2,910,279 52,950 72,772 3,036,001	{ 162,198 496 12,129 174,763	{ 3,072,417 53,446 84,901 3,210,764	{ 3,067,210 3,004 84,851 3,155,065	{ 5,207 50,442 50 55,699	{ 360,311 4 6,086 366,401	{ 221,199 138,058 5,882 360,079	{ 406,845 126,249 750 533,844	{ 678,117 614 11,472 590,200	{ 1,566,412 259,923 24,180 1,850,524
7	Nāsik ...	{ Rayatwari ... 3,396,550 Other Government ... ----- Alienated ... 167,246 Total ... 3,563,796	{ 1,879,675 ----- 109,229 1,988,904	{ 28,323 ----- 1,584 29,907	{ 1,851,352 ----- 107,845 1,958,997	{ 358,639 ----- 22,267 380,906	{ 2,209,991 ----- 129,912 2,339,903	{ 2,209,404 ----- 129,868 2,339,272	{ 587 ----- 44 631	{ 50,044 ----- 5,208 55,252	{ 45,469 ----- 8,815 54,283	{ 783,924 ----- 1,462 784,786	{ 307,723 ----- 21,849 329,572	{ 1,186,559 ----- 37,334 1,223,893
8	Ahmadnagar ...	{ Rayatwari ... 3,072,342 Other Government ... ----- Alienated ... 440,373 Total ... 4,112,715	{ 2,412,082 ----- 308,681 2,720,763	{ 40,833 ----- 3,163 43,796	{ 2,371,449 ----- 305,518 2,676,967	{ 362,824 ----- 59,665 422,489	{ 2,734,273 ----- 365,183 3,099,456	{ 2,733,950 ----- 365,176 3,099,126	{ 323 ----- 7 330	{ 85,449 ----- 6,934 42,382	{ 6,678 ----- 8,585 10,263	{ 540,739 ----- 331 541,070	{ 355,204 ----- 64,340 419,544	{ 938,039 ----- 75,190 1,013,259
9	Poona ...	{ Rayatwari ... 2,872,145 Other Government ... ----- Alienated ... 471,290 Total ... 3,343,435	{ 1,768,372 ----- 311,255 2,079,627	{ 73,598 ----- 10,565 84,163	{ 1,694,774 ----- 300,690 1,995,464	{ 398,357 ----- 77,791 476,148	{ 2,093,181 ----- 378,481 2,471,612	{ 2,093,067 ----- 378,337 2,471,404	{ 64 ----- 144 208	{ 11,086 ----- ----- 11,086	{ 1,920 ----- ----- 1,920	{ 451,889 ----- 1,496 453,385	{ 314,119 ----- 91,313 405,432	{ 779,014 ----- 92,809 871,823

III.—Crops, 1893-94.

No.	District.	I.—CEREALS.														TOTAL.	
		Jowari (Great Millet), Sorghum vulgare, &c.	Bajri (Spiked Millet), Pennisetum Typhoidum.	Paddy (Bhat), Oryza sativa.	Wheat (Gahn), Triticum aestivum.	Barely (Jav, Sattu), Hordeum vulgare.	Maize (Mako), Zea mays.	Kodra (Hark), Paspalum scrobiculatum.	Ragi (Niglu), Eleusine coracana.	Rala, Kang (Gallon Millet), Panicum italicum.	Yara (Sava and Barag), Panicum mallicecum P. miliare.	Bandi, Bardi, Panicum flavidum.	Bhadli, Panicum pilosum.	Amaranth (Gajjara), Amaranthus frutescens.	Others.		Acres.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
A.—BOMBAY PRESIDENCY PROPER.																	
<i>I.—Gujarat.</i>																	
1	Ahmadabad	{ Rayatwari ... Other Government ... Alienated ...	134,173 180,388 16,363	74,767 98,580 8,587	74,455 18,767 3,817	111,006 77,430 7,252	14,031 4,236 186	2,525 1,003 910	10,229 6,227 161	3,477 1,494 37	103 138 ---	14,675 10,498 406	3,537 19,785 1,290	45 ---	4 ---	443,079 418,514 25,369	
	Total		330,921	178,884	97,029	195,688	18,453	3,838	16,670	5,008	241	25,579	24,592	45	4	896,952	
2	Kaira	{ Rayatwari ... Other Government ... Alienated ...	48,860 13,760 ---	144,129 42,689 ---	118,044 14,630 ---	18,028 995 ---	3,780 186 ---	277 19 ---	82,794 85,714 ---	55,814 12,611 ---	159 25 ---	435 158 ---	1,369 58 ---	243 33 ---	23 13 ---	476,849 120,889 ---	
	Total		62,640	188,812	133,574	19,023	3,946	296	118,508	68,425	184	593	1,425	276	36	597,738	
3	Panch Mahals	{ Rayatwari ... Other Government ... Alienated ...	2,557 2,390 568	31,894 10,154 3,944	51,689 12,267 4,931	20,189 2,443 1,941	2,318 509 184	73,049 17,920 11,473	10,558 4,567 3,330	10,023 3,426 1,671	6 ---	1,574 1,184 699	9,536 3,271 1,743	23 155 34	12 ---	273 309 50	213,703 58,594 80,789
	Total		5,515	45,994	68,887	24,572	3,011	102,445	18,455	15,121	223	3,457	14,550	212	12	632	303,086
4	Broach	{ Rayatwari ... Other Government ... Alienated ...	82,090 121 ---	13,330 ---	15,849 25 ---	76,100 45 ---	---	5 ---	6,999 ---	179 ---	2 ---	36 ---	1 ---	7 ---	---	205,468 191 ---	
	Total		93,081	13,330	15,874	76,145	5	6,999	179	2	36	1	7	---	---	205,659	
5	Surat	{ Rayatwari ... Other Government ... Alienated ...	107,454 1,778 2,707	6,503 2 2	106,478 1,017 198	26,518 43 ---	---	11 ---	31,700 850 107	10,575 76 52	1 ---	24 ---	605 ---	122 ---	2 ---	486 ---	290,479 3,266 3,068
	Total		111,939	6,507	107,693	26,561	11	32,157	10,703	1	24	605	122	2	486	296,811	
<i>II.—Deccan.</i>																	
6	Khairndesh	{ Rayatwari ... Other Government ... Alienated ...	467,799 2,213 13,156	588,830 4,277 13,114	18,034 11,855 1,635	254,209 7,889 4,381	5 ---	2,203 205 396	3,024 1,249 10	7,121 1,912 146	534 9 10	4,019 671 118	1,003 1,581 33	1,219 463 186	293 ---	573 133 ---	1,334,866 82,357 34,232
	Total		475,168	602,221	31,524	266,479	5	2,804	3,283	9,179	553	4,708	2,617	1,868	340	706	1,401,455
7	Nasik	{ Rayatwari ... Other Government ... Alienated ...	123,169 ---	620,047 ---	52,090 ---	299,197 ---	---	1,944 ---	---	126,167 ---	613 ---	39,834 ---	51 ---	3,461 ---	144 ---	12 ---	1,268,729 ---
	Total		128,251	650,220	54,651	329,187	---	2,009	---	131,802	630	41,605	57	3,725	147	12	1,342,296
8	Ahmadnagar	{ Rayatwari ... Other Government ... Alienated ...	927,974 ---	561,618 ---	11,825 ---	261,859 ---	250 ---	596 ---	107 ---	24,655 ---	3,827 ---	13,229 ---	26 ---	4,724 ---	599 ---	244 ---	1,811,533 ---
	Total		1,073,326	615,829	12,062	284,285	293	669	109	24,656	4,159	13,259	27	4,774	642	254	2,034,344
9	Poona	{ Rayatwari ... Other Government ... Alienated ...	665,837 ---	490,712 ---	61,213 ---	83,067 ---	580 ---	1,543 ---	99 ---	48,586 ---	1,273 ---	39,462 ---	49 ---	5,970 ---	103 ---	2,148 ---	1,400,642 ---
	Total		766,186	601,955	68,008	99,533	708	1646	99	53,411	1,740	41,238	51	6,838	111	2,485	1,644,009

10	Sholapur...	Rayatwari ... Other Government ... Alienated ...	3,257 446 8,702	1 1	359 2 361	945 5 950	3 3	206 29 235	7 7	23 23	5 5	241 7 248	10,047 488 10,535	4,944 229 5,173	4,944 229 5,173									
11	Sátara ...	Rayatwari ... Other Government ... Alienated ...	10,808 1,869 12,675	120 58 176	887 53 440	3,597 642 4,239	163 37 199	909 328 1,237	24 24	12 12	1 1	820 103 922	16,839 3,037 19,926	12,954 2,542 15,496	12,954 2,542 15,496									
III.—Karnatak.																								
12	Belgaum...	Rayatwari ... Other Government ... Alienated ...	14,897 3,814 18,711	 	103 116 219	165 82 247	105 25 130	1,100 857 1,957	143 156	84 9 103	1,501 273 1,773	18,113 5,190 23,303	8,709 2,540 11,248	8,709 2,540 11,248										
13	Bijápur ...	Rayatwari ... Other Government ... Alienated ...	3,192 578 3,570	 	51 1 52	14 1 15	4 4	20 6 26	1 1	5 5	4 4 211	3,479 410 3,889	1,433 148 1,581	1,433 148 1,581										
14	Dhárwár...	Rayatwari ... Other Government ... Alienated ...	52,661 3,031 54,692	4 4	1,359 56 1,415	446 54 500	29 29	2 2	3 3	506 2 508	17 17	93 3 140	1,372 2,149 3,723	58,831 419 3,723	3,309 419 3,723									
IV.—Konkan.																								
15	Thána ...	Rayatwari ... Other Government ... Alienated ...	288 288	247 247	212 212	10 10	40 40	663 663	 	1 1	4 4	1,465 1,465	1,274 1,274	1,274 1,274										
16	Kolába ...	Rayatwari ... Other Government ... Alienated ...	63 79 147	 	19 19	1 1	 	289 289	 	 	 	376 80 456	35 10 45	35 10 45										
17	Ratnágiri ...	Rayatwari ... Other Government ... Alienated ...	389 89 459	 	450 287 739	4 4	 	 	 	 	 	843 826 1,202	4 4 4	142 81 197	142 81 197									
18	Kánara ...	Rayatwari ... Other Government ... Alienated ...	1,133 307 1,133	3 3	1,906 253 1,906	11,562 57 11,562	 	6 6	 	6 6	4 4 4	251 15,488 15,488	3,386 3,386	3,386 3,386										
Total, A		Rayatwari ... Other Government ... Alienated ...	1,133 123,032 11,674	1,133 75 61	1,908 3,898 717	12,477 5,231 762	1,071 9 67	1,233 22,120 1,399	603 11 783	1,643 3 3	2,657 89 173	3,524 61 154	6,078 122 680	454 2,633 15,849	4 4 15,849	27 31 9,308	81 72,242 1,907	31 72,242 1,907	81 72,242 1,907					
Total			1,133	135,702	1,289	1,908	4,615	12,823	5,992	1,139	1,364	23,530	1,286	1,647	2,918	3,749	6,860	552	206,507	4	27	31	83,457	83,457
B.—SIND.																								
19	Karáchi ...		45				27	1	245	84	1	2,772	45	11	3,231	22	22	1,514	1,514					
20	Hyderabad...		287				8	15	73		3	810	102		1,298	14	14	1,333	1,333					
21	Shikárpur ...		176				7		2,033	36		6	104		2,361	16	16	603	603					
22	Upper Sind Frontier						1		204			5	5		210			25	25					
23	Thar and Párkar ...		87					6	57			5	5		160	3	3	27	27					
Total, B			594				43	22	2,612	120	1	3,593	261	11	7,260	55	55	3,502	3,502					
GRAND TOTAL			1,133	136,296	1,289	1,908	4,615	12,823	5,992	1,182	1,366	26,142	1,406	1,648	2,921	7,342	7,121	563	213,767	4	82	86	86,959	86,959

IV.—Irrigation, 1893-94.

No.	District.	Net area cropped.	Area irrigated from Canals.	Area irrigated from other sources.	Total area irrigated.	CROPPING OF IRRIGATED AREA.							Deduct area cropped with irrigation more than once.	Balance net irrigated Area.	
						Wheat.	Rice.	Other Cereals and Pulses.	Sugarcane.	Other Food Crops.	Non-food Crops.	Fodder Crops.			Total.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15
A.—BOMBAY PRESIDENCY PROPER.															
<i>I.—Gujarāt.</i>															
1	Ahmadabad ...	674,013 646,314 61,017	3,394 140 321	34,949 18,850 990	39,343 18,790 1,311	9,514 11,395 656	6,492 856 321	14,332 1,056 285	2,471 1,132 13	2,808 1,219 4	2,368 191 33	962 2,942	38,747 18,790 1,311	404	38,343 18,790 1,311
	Total ...	1,381,343	3,855	54,589	58,444	21,565	7,668	15,673	3,615	3,831	2,592	3,904	58,848	404	58,444
2	Kaira ...	547,216 156,533	190	16,710 12,965	16,900 12,965	3,446 763	159 13	5,56 891	669 584	2,310 1,257	5,814 9,669	407 249	17,981 13,426	1,061 461	16,900 12,965
	Total ...	703,749	190	29,675	29,865	4,209	172	6,047	1,253	3,567	15,483	656	31,387	1,522	29,865
3	Panch Mahāls. {	245,915 68,494 35,339	..... ..... .....	1,148 901 341	1,148 901 341	479 558 251	120	3	227 16 23	261 318 64	343 9 .....	..... 2	1,333 903 341	185 2	1,148 901 341
	Total ...	349,748	.....	2,390	2,390	1,288	120	3	269	643	252	2	2,577	187	2,390
4	Broach ...	577,976 843	..... .....	681	681 .....	..... .....	1	2	78	402	196	2	681 .....	..... .....	681
	Total ...	578,819	.....	681	681	.....	1	2	78	402	196	2	681	.....	681
5	Surat ...	477,812 5,251 3,788	..... ..... .....	10,914 164 81	10,914 164 81	24	2,995	76	5,530 131 12	1,277 14 5	1,156 19 14	..... ..... .....	11,058 164 81	144	10,914 164 81
	Total ...	486,851	.....	11,109	11,109	24	2,995	76	5,673	1,296	1,189	.....	11,253	144	11,109
<i>II.—Deccan.</i>															
6	Khāndesh ...	2,910,279 52,950 22,772	12,753 94 345	31,165 12 864	43,918 106 1,209	12,577 30 205	2,438 2	3,539 46 204	3,190 2 103	8,019 9 541	16,341 19 228	75 5	46,679 106 1,288	2,761 79	43,918 106 1,209
	Total ...	3,036,001	13,192	32,041	45,233	12,812	2,440	3,789	3,295	8,569	17,088	80	48,073	2,840	45,233
7	Nāsik ...	1,851,352 107,645	37,611 3,474	39,368 3,939	76,979 7,413	24,592 3,337	4,292 268	11,576 1,305	8,967 828	17,076 1,865	17,165 1,190	2,270 175	85,938 7,978	8,959 665	76,979 7,413
	Total ...	1,958,997	41,085	43,307	84,392	26,929	4,560	12,881	9,805	18,941	18,355	2,445	93,916	9,524	84,392
8	Ahmadnagar {	2,871,449 805,518	7,680 317	63,107 7,861	90,787 8,178	24,541 2,233	1,250 164	49,719 4,227	3,352 245	6,512 810	12,631 1,650	1,220 53	99,225 6,332	8,438 1,154	90,787 8,178
	Total ...	2,676,967	7,997	90,968	98,965	26,824	1,414	53,946	3,597	7,322	14,181	1,273	108,557	9,592	93,965
9	Poona ...	1,694,774 300,690	31,310 2,907	62,590 11,351	93,870 14,258	20,463 2,930	1,279 101	42,610 5,045	10,965 2,142	22,607 3,941	11,475 1,990	924 119	110,323 16,268	16,453 2,010	93,870 14,258
	Total ...	1,995,464	34,217	73,911	108,128	23,393	1,380	47,655	13,107	26,548	13,465	1,043	126,591	18,463	108,128

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10	Sholapur	{ Rayatwari Other Government Alienated	1,939,730 148,650 Total ...	9,862 357 10,019	79,883 5,697 85,580	89,545 6,054 95,599	27,605 1,974 29,579	5,419 249 5,668	41,981 3,849 45,830	4,945 228 5,173	8,356 346 8,702	25,098 1,303 26,399	1,309 15 1,224	114,611 7,964 122,575	25,088 1,910 26,976	89,545 6,054 95,599	
11	Sátara	{ Rayatwari Other Government Alienated	1,410,674 232,205 Total ...	15,099 1,533 16,631	83,069 18,856 102,925	98,768 20,388 119,156	19,920 4,005 23,925	5,413 2,212 7,625	24,573 4,238 28,811	12,870 2,457 15,327	13,028 2,609 15,637	40,189 7,452 47,641	362 81 443	118,355 23,054 139,409	17,537 2,666 20,253	98,768 20,388 119,156	
<i>III.—Karnatak.</i>																	
12	Belgaum	{ Rayatwari Other Government Alienated	1,418,397 312,096 Total ...	2,057 1,554 3,611	34,080 9,310 43,390	36,137 10,864 47,001	2,458 1,029 3,487	8,502 341 8,843	7,761 2,987 10,748	8,708 2,540 11,248	6,798 2,552 9,350	5,658 2,392 8,050	134 69 203	40,019 11,910 51,929	3,882 1,046 4,928	36,137 10,864 47,001	
13	Bijapur	{ Rayatwari Other Government Alienated	2,472,096 289,463 Total ...	864 51 915	9,927 1,275 11,202	10,791 1,328 12,117	1,974 279 2,253	1,547 140 1,687	1,026 139 1,165	1,433 144 1,581	3,479 522 4,001	2,217 247 2,464	223 24 247	11,899 1,499 13,398	1,108 173 1,281	10,791 1,326 12,117	
14	Dhárwár	{ Rayatwari Other Government Alienated	1,975,233 109,965 Total ...	7,488 797 8,285	69,109 7,932 77,041	76,597 8,729 85,326	45 7,865 45	67,800 7,865 75,245	277 392 277	3,167 392 3,559	3,786 229 4,015	2,873 235 3,108	1 1 1	77,509 8,741 86,250	912 12 924	76,597 8,729 85,326	
<i>IV.—Konkan.</i>																	
15	Thána	{ Rayatwari Other Government Alienated	455,969 1,063 7,701 Total ...	6,793 137 291	6,793 137 291 7,221	6,793 137 291 7,221	..... ..... .....	..... ..... .....	..... ..... .....	1,274 1,274	5,275 137 291 5,703	..... ..... .....	244 244	6,793 137 291 7,221	..... ..... .....	6,793 137 291 7,221
16	Kolába	{ Rayatwari Other Government Alienated	236,227 155,848 1,901 Total ...	..... ..... .....	2,272 5 2,277	2,272 5 2,277	..... ..... .....	..... ..... .....	..... ..... .....	29 29	1,544 5 1,549	700 700	1 1	2,274 5 2,279	2 2	2,272 5 2,277
17	Ratnágiri	{ Rayatwari Other Government Alienated	91,197 24,953 5,158 Total ...	..... ..... .....	5,022 914 209 6,205	5,022 914 209 6,205	..... ..... .....	2,387 425 194 3,006	890 155 27 1,112	102 11 16 129	943 317 21 1,286	655 6 11 672	..... ..... .....	5,022 914 209 6,205	..... ..... .....	5,022 914 209 6,205
18	Kánara	{ Rayatwari Other Government Alienated	238,099 Total ...	237	24,615 24,615	24,852 24,852	..... ..... .....	14,265 14,265	499 499	2,966 2,966	4,774 4,774	2,352 2,352	1 1	24,857 24,857	5 5	24,852 24,852
Total, A.		{ Rayatwari Other Government Alienated	21,539,307 1,117,249 1,991,908 Total ...	128,345 284 11,656 140,234	595,972 33,748 69,007 698,727	724,317 33,983 80,862 838,961	147,638 12,746 15,949 176,333	123,919 1,293 11,877 137,089	204,060 2,148 22,306 228,514	70,943 1,878 9,159 81,978	109,060 3,278 13,900 126,136	147,629 9,913 16,645 174,187	8,035 3,193 541 11,769	811,244 34,445 90,277 936,006	80,967 493 9,615 97,045	724,317 33,983 80,862 838,961	
<i>B.—SIND.</i>																	
19	Karáchi	.....	427,798	312,374	115,424	427,798	59,263	160,032	160,488	1,514	6,076	63,081	1,762	452,216	24,418	427,798
20	Hyderabad	.....	886,656	821,731	60,642	882,373	58,674	169,038	429,815	1,333	11,101	205,274	19,538	894,773	12,400	882,373
21	Shikárpur	.....	874,810	715,985	158,825	874,810	319,787	252,957	346,794	602	15,344	108,087	1,402	1,044,973	170,163	874,810
22	Upper Sind Frontier	.....	267,158	254,120	13,038	267,158	26,407	14,205	136,075	25	1,198	107,534	5	285,449	18,291	267,158
23	Thar and Párkar	.....	612,872	196,224	27	196,251	7,638	101,204	40,418	27	1,617	48,491	2,431	202,226	6,975	196,251
Total, B.		.....	3,069,294	2,300,434	347,956	2,648,390	471,769	697,436	1,113,590	3,501	35,336	532,867	25,138	2,879,637	231,247	2,648,390
GRAND TOTAL		.....	27,766,758	2,440,668	1,046,683	3,487,351	648,102	834,525	1,342,104	85,479	161,472	707,054	36,907	3,815,643	328,292	3,487,351

Accompaniment A to Agricultural Return No. II.

Details of "Current Fallow," 1893-94.

No.	District.	True fallow, i.e., customary fallow in rotation.	Grass lands, i.e., numbers or parts of numbers set apart for grass and never sown.	Grass bound or prickly- pear bound lands.	Shindád or Ráb land.	Land unsown owing to unseasonable or deficient rainfall.	Land left unsown for miscellaneous reasons.	Total fallow (Column 6 of Agricultural Return No. II).
	1	2	3	4	5	6	7	8
								Acres.
<i>I.—Gujarát.</i>								
1	Ahmadabad ...	Rayatwári... 2,976 Other Government 4,607 Alienated ... 47 Total ... 7,720	24,376 132,190 11,733 168,299	11 8 19	47 47	51,450 49,509 16,601 117,760	33,029 157,823 9,238 199,590	111,889 843,727 37,819 493,435
2	Kaira ...	Rayatwári... 1,873 Other Government 6 Alienated Total ... 1,879	11,526 5,238 16,814	..... ..... ..... 2	..... ..... ..... 53	9,152 68 9,205	22,103 740 22,843	41,707 6,089 50,796
3	Panch Maháls ...	Rayatwári... 918 Other Government Alienated Total ... 918	363 2,243 900 4,506	688 13,830 1,030 15,448	..... ..... ..... ...	1,717 6,484 1,706 11,907	31,156 56,835 25,384 113,375	34,742 82,392 29,030 146,154
4	Broach ...	Rayatwári... 46,113 Other Government 154 Alienated Total ... 46,267	25,519 146 25,665	77 77	1 1	372 372	2,227 2,227	74,309 800 74,609
5	Surat ...	Rayatwári... 148,088 Other Government 8,328 Alienated ... 168 Total ... 151,584	89,398 1,032 1,017 91,447	50 50	..... ..... ..... ...	777 777	11,898 85 7 11,990	250,211 4,446 1,192 255,848
<i>II.—Deccan.</i>								
6	Khándesh ...	Rayatwári... 4,121 Other Government Alienated Total ... 4,121	7,928 85 7,963	154 2,933 3,086	49 49	37,860 819 1,477 39,656	112,026 177 7,685 119,888	162,189 496 12,129 174,763
7	Násik ...	Rayatwári... 114,231 Other Government Alienated Total ... 122,934	52,965 2,160 55,145	5,041 88 5,126	11,539 85 11,674	79,274 2,066 80,340	96,469 9,218 105,687	358,639 22,297 380,906
8	Ahmadnagar ...	Rayatwári... 78,125 Other Government Alienated Total ... 97,367	38,014 8,189 46,203	8,541 1,139 9,680	845 2 847	32,225 2,327 34,552	205,074 28,766 233,840	362,824 59,665 422,489
9	Poona ...	Rayatwári... 157,095 Other Government Alienated Total ... 180,707	87,869 22,237 110,096	15,490 5,216 20,736	16,449 1,169 17,618	30,635 5,259 35,894	90,829 20,268 111,097	398,857 77,791 476,148
10	Sholápur ...	Rayatwári... 73,216 Other Government Alienated Total ... 79,700	93,706 4,585 98,291	50,228 2,087 52,315	721 721	22,798 808 23,104	105,610 18,053 118,663	346,279 26,516 372,794
11	Sátára ...	Rayatwári... 154,590 Other Government Alienated Total ... 209,065	130,405 36,184 176,589	3,955 1,439 5,394	2,008 412 2,421	3,045 676 3,721	64,828 10,829 75,657	268,831 104,616 473,447
<i>III.—Karnátak.</i>								
12	Belgaum ...	Rayatwári... 78,056 Other Government Alienated Total ... 93,609	67,403 40,042 107,445	33,610 16,456 50,065	161 161	8,400 973 9,373	91,471 48,495 129,966	269,101 121,518 390,619
13	Bijápur ...	Rayatwári... 6,240 Other Government Alienated Total ... 8,059	58,163 1,877 60,040	135,940 22,721 158,661	..... ..... ..... ...	15,949 2,131 18,080	105,815 17,097 122,822	322,107 45,655 367,662
14	Dhárwár ...	Rayatwári... 1,234 Other Government Alienated Total ... 1,344	102,434 16,511 117,045	20,393 3,878 24,271	..... ..... ..... ...	9,371 921 10,292	66,723 8,410 75,133	200,156 28,830 228,985
<i>IV.—Konkan.</i>								
15	Thána ...	Rayatwári... 91,700 Other Government Alienated Total ... 92,742	81,139 7,829 9,050 97,818	29,390 681 30,071	166,255 923 197,178	5,203 740 5,943	29,492 7,948 37,440	433,179 7,629 20,384 461,192
16	Kolába ...	Rayatwári... 74,702 Other Government Alienated Total ... 193,475	44,162 673 876 45,711	2,750 332 3,112	45,351 17,434 441 63,226	734 80 814	11,411 747 12,158	179,140 136,816 2,540 318,496
17	Ratnágiri ...	Rayatwári... 42,677 Other Government 23,407 Alienated ... 884 Total ... 66,968	7,859 4,869 12,528	855 1,665 2,520	16,548 10,289 26,828	999 509 1,508	20,801 6,916 611 27,628	89,099 47,648 1,495 138,150
18	Kánara ...	Rayatwári... 3,523 Other Government Alienated Total ... 3,523	33,382 33,382	4,358 4,358	132 132	2,248 2,248	45,762 45,762	89,405 89,405
Total ...		Rayatwári... 1,079,528 Other Government 149,142 Alienated ... 133,912 Grand Total ... 1,362,582	966,421 155,070 154,398 1,275,887	311,401 15,837 57,693 384,991	290,209 27,714 3,033 320,956	311,209 58,954 85,383 406,546	1,136,224 222,823 206,919 1,565,966	4,066,052 629,540 591,336 5,315,928

ACCOMPANIMENT A TO RETURN No. III.

ACCOMPANIMENT A TO RETURN NO. III.

Details of Kharif and Rabi under Cereals and Pulses, 1893-94.

No.	District,	I.—CEREALS.														Total Cereals.
		Jowári, Sorghum Vulgare.	Bájrí, Pennisetum Typhoideum.	Rice.	Wheat.	Barley.	Maize.	Kodra, Paspalum Scrobicu- latum.	Ráji, Eleusine Caracana.	Ráji, Panicum Italicum,	Vari, P. Miliare.	Bandi, P. Davidum.	Bhádi, P. Filosum.	Rájjira, Amaranth.	Others.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>I.—Gujarát.</i>																
1	Ahmadabad ...	{ Kharif ... Rabi ...	330,921 178,884	97,029 195,688	195,688 18,453	18,453 3,838	3,838 16,670	16,670 5,008	5,008 241	241 25,579	25,579 24,592	24,592 45	45 4	4 4	4 4	Acres. 682,621 214,431
	Total ...	330,921	178,884	97,029	195,688	18,453	3,838	16,670	5,008	241	25,579	24,592	45	4	4	896,952
2	Kaira... ..	{ Kharif ... Rabi ...	62,640 188,812	133,574 19,023	19,023 3,946	3,946 296	296 118,508	118,508 68,425	68,425 184	184 593	593 1,425	1,425 276	276 36	36 36	36 36	585,260 32,478
	Total ...	62,640	188,812	133,574	19,023	3,946	296	118,508	68,425	184	593	1,425	276	36	36	597,738
3	Panch Maháls ...	{ Kharif ... Rabi ...	5,515 45,994	68,887 24,572	24,572 3,011	3,011 102,445	102,445 18,455	18,455 15,121	15,121 223	223 3,457	3,457 14,550	14,550 212	212 12	12 632	632 632	273,636 29,460
	Total ...	5,515	45,994	68,887	24,572	3,011	102,445	18,455	15,121	223	3,457	14,550	212	12	632	303,086
4	Broach	{ Kharif ... Rabi ...	93,081 13,330	15,874 76,145	76,145 5	5 6,999	6,999 179	179 2	2 36	36 1	1 605	605 122	122 2	2 486	486 486	58,121 147,638
	Total ...	93,081	13,330	15,874	76,145	5	6,999	179	2	36	1	605	122	2	486	205,659
5	Surat... ..	{ Kharif ... Rabi ...	111,939 6,507	107,693 26,561	26,561 11	11 32,157	32,157 10,703	10,703 1	1 24	24 605	605 122	122 2	2 486	486 486	289,250 27,561	
	Total ...	111,939	6,507	107,693	26,561	11	32,157	10,703	1	24	605	122	2	486	296,811	
<i>II.—Deccan.</i>																
6	Khándeah ...	{ Kharif ... Rabi ...	475,168 602,221	31,524 266,479	266,479 5	5 2,804	2,804 3,283	3,283 9,179	9,179 553	553 4,708	4,708 2,617	2,617 1,868	1,868 340	340 706	706 706	1,134,976 266,479
	Total ...	475,168	602,221	31,524	266,479	5	2,804	3,283	9,179	553	4,708	2,617	1,868	340	706	1,401,455
7	Násik... ..	{ Kharif ... Rabi ...	128,251 650,220	54,651 329,187	329,187 2,009	2,009 131,802	131,802 630	630 41,605	41,605 57	57 3,725	3,725 147	147 12	12 12	12 12	12 12	831,557 410,739
	Total ...	128,251	650,220	54,651	329,187	2,009	131,802	630	41,605	57	3,725	147	12	12	12	1,342,296
8	Ahmadnagar ...	{ Kharif ... Rabi ...	1,073,326 615,829	12,062 284,285	284,285 293	293 669	669 109	109 24,656	24,656 4,159	4,159 13,259	13,259 27	27 4,774	4,774 642	642 185	185 69	681,195 1,353,149
	Total ...	1,073,326	615,829	12,062	284,285	293	669	109	24,656	4,159	13,259	27	4,774	642	254	2,034,344

9	Poona ...	{ Kharif ... Rabi ...	38,849 727,337	601,955	68,008	99,533	708	1,638 110	99	53,411	1,740	41,238	51	6,838	111	360 2,125	814,229 829,780
		Total ...	766,186	601,955	68,008	99,533	708	1,646	99	53,411	1,740	41,238	51	6,838	111	2,485	1,644,009
10	Sholapur...	{ Kharif ... Rabi ...	209,626 1,290,879	209,626	25,055	51,260	1,909	14,125	43	30	1,519	1,777	6	715	82	6,550	259,528 1,344,048
		Total ...	1,290,879	209,626	25,055	51,260	1,909	14,125	43	30	1,519	1,777	6	715	82	6,550	1,603,576
11	Sátára ...	{ Kharif ... Rabi ...	284,490 193,946	498,047	40,055	60,083	5,050	8,082 914	20	59,693	32,250	52,804	6	...	639	1,743	977,769 259,983
		Total ...	478,426	498,047	40,055	60,083	5,050	8,946	20	59,693	32,250	52,804	6	...	639	1,743	1,237,762
<i>III.—Karnátak.</i>																	
12	Belgaum ...	{ Kharif ... Rabi ...	420,911 186,434	169,776 2,726	111,356	108,394	219	5,391 2,538	41	55,663 24	81,311 4,648	33,759	3	...	2	170 9	878,362 304,986
		Total ...	607,245	172,502	111,356	108,467	219	7,929	41	55,687	85,959	33,759	3	...	2	179	1,183,348
13	Bijápur ...	{ Kharif ... Rabi ...	351,357 1,032,022	266,415	13,278	177,521	3	830	30	203	3,2181	10,153	5	...	1	8	674,453 1,209,565
		Total ...	1,383,379	266,415	13,278	177,522	3	830	30	203	3,2181	10,153	5	...	1	8	1,884,008
14	Dhárwár ...	{ Kharif ... Rabi ...	445,987 156,131	4,259 5	158,636	266,930	31	31	85	50,748	77,918 3,651	35,976 184	...	...	...	...	773,651 426,691
		Total ...	602,088	4,264	158,636	266,930	31	31	85	50,748	81,569	36,160	...	...	...	...	1,200,542
<i>IV.—Konkan.</i>																	
15	Thána ...	{ Kharif ... Rabi ...	50	...	301,410	164	...	83	13,522	60,775	...	25,745	...	...	...	...	401,749
		Total ...	50	...	301,410	164	...	83	13,522	60,775	...	25,745	...	...	...	...	401,749
16	Kolába ...	{ Kharif ... Rabi ...	...	...	239,477	...	...	...	17,432	60,596	...	51,717	22	...	...	...	369,244
		Total ...	...	...	239,477	...	...	...	17,432	60,596	...	51,717	22	...	...	...	369,244
17	Ratnágiri	{ Kharif ... Rabi ...	...	...	46,642 828	...	...	...	18,657	25,469 83	28	11,223	...	...	...	...	102,019 861
		Total ...	...	...	47,470	...	...	...	18,657	25,502	28	11,223	...	...	...	...	102,880
18	Kánara ...	{ Kharif ... Rabi ...	1,525	...	181,163 14,301	...	...	19	...	6,856	197	697	...	...	...	...	190,456 14,301
		Total ...	1,525	...	195,463	...	...	19	...	6,856	197	697	...	...	...	...	204,757
	Total ...	{ Kharif ... Rabi ...	3,591,121 4,819,498	4,051,871 2,735	1,706,373 15,129	237 1,965,662	75 33,553	142,124 3,562	246,110	638,517 57	232,712 8,724	353,757 777	43,967	18,254	1,985 821	10,673 2,222	10,037,976 6,872,240
	Grand Total ...		7,410,619	4,054,606	1,721,502	1,985,899	33,628	145,686	246,110	638,574	241,436	354,534	43,967	18,254	2,306	13,095	16,910,216

ACCOMPANIMENT A TO RETURN No. III—continued.

Details of Kharif and Rabi under Cereals and Pulses, 1893-94.

No.	District.	II.—PULSES.													Total Pulses.
		Tur, <i>Cajanus Indicus.</i>	Gram, <i>Cicer arretinum.</i>	Mug. <i>Phaseolus Mungo.</i>	Udd, <i>P. radiatus.</i>	Math, <i>P. acontifolius.</i>	Vál, <i>Dolichos lablab.</i>	Chavil, <i>D. catiangu.</i>	Knith, <i>D. uniflorus.</i>	Vatáno, <i>Pisum sativum.</i>	Lentil (Masur).	Lákh (Láng), Chickling Vetch.	Field Vetch (Guvár).	Others.	
1	2	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	<i>I.—Gujarát.</i>														Acres.
1	Ahmadabad	{ Kharif ... 4,173	.....	23,587	6,617	60,283	152	1,098	8,486	.....	.....	.....	6,293	.....	110,689
		{ Rabi... ..	36,335	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36,335
		Total ...	4,173	36,335	23,587	6,617	60,283	152	1,098	8,486	.....	.....	6,293	.....	147,024
2	Kaira	{ Kharif ... 19,914	150	4,355	1,291	26,782	1,378	3,721	.....	.....	.....	.....	8,763	.....	66,354
		{ Rabi... ..	1,146	30,881	.....	.....	48	.....	.....	.....	.....	.....	.....	.....	81,675
		Total ...	21,060	30,531	4,355	1,291	26,782	1,426	3,721	.....	.....	.....	8,763	.....	97,929
3	Panch Mahals	{ Kharif ... 5,078	.....	3,561	8,426	3,767	221	812	.....	.....	.....	.....	928	.....	22,793
		{ Rabi... ..	.....	64,967	.....	.....	.....	.....	99	1,630	.....	.....	.....	.....	66,696
		Total ...	5,078	64,967	3,561	8,426	3,767	221	812	99	1,630	.....	928	.....	89,489
4	Broach	{ Kharif ... 3,401	.....	452	10	2,764	139	259	.....	.....	.....	.....	263	.....	7,288
		{ Rabi... ..	6,321	1,717	.....	.....	619	25	.....	2,216	.....	47,323	.....	.....	53,221
		Total ...	9,722	1,717	452	10	2,764	758	284	.....	2,216	.....	47,323	263	65,509
5	Surat	{ Kharif ... 19,959	.....	2,982	3,711	279	745	822	.....	.....	.....	.....	1,591	.....	30,039
		{ Rabi... ..	1,185	1,732	.....	.....	86,200	.....	.....	4,351	.....	3,877	.....	.....	47,528
		Total ...	21,144	1,732	3,104	3,711	279	36,945	822	.....	4,351	9	3,877	1,593	77,567
	<i>II.—Deccan.</i>														
6	Khándesh	{ Kharif ... 79,140	.....	13,443	55,335	15,807	447	1,913	72,005	.....	642	131	.....	.....	238,963
		{ Rabi... ..	.....	55,623	.....	.....	.....	.....	.....	3,082	.....	.....	.....	.....	58,706
		Total ...	79,140	55,623	13,443	55,335	15,807	447	1,913	72,005	3,082	642	131	.....	297,568
7	Násik	{ Kharif ... 21,250	.....	9,762	31,886	11,798	144	75	76,196	.....	3,648	10,170	.....	.....	151,114
		{ Rabi... ..	.....	81,615	.....	.....	.....	.....	.....	3,648	10,170	4,585	.....	.....	100,018
		Total ...	21,250	81,615	9,762	31,886	11,798	144	75	76,196	3,648	10,170	4,585	3	251,132
8	Ahmadnagar	{ Kharif ... 60,003	.....	28,491	8,240	45,800	1,281	336	55,091	.....	1,074	605	.....	.....	199,242
		{ Rabi... ..	.....	125,489	.....	.....	.....	.....	.....	1,074	605	141	.....	.....	127,309
		Total ...	60,003	125,489	28,491	8,240	45,800	1,281	336	55,091	1,074	605	141	.....	326,551

9	Poona ...	Kharif	84,576	80,089	9,179	7,653	31,163	964	211	38,125	14	1	...	...	...	121,886
			Rabi	3,147	2,568	2,112	87,916
		Total	84,576	80,089	9,179	7,653	31,163	4,111	211	38,125	2,582	2,113	...	...	...	209,802
10	Sholapur ...	Kharif	82,287	76,898	9,081	1,203	32,094	66	36	12,360	46	112	453	...	21	117,759	
			Rabi	15	108	43	43	77,107
		Total	62,287	76,898	9,081	1,218	32,094	174	36	12,360	89	155	453	...	21	194,866	
11	Sátára ...	Kharif	65,070	86,322	15,159	43,939	70,370	4,142	230	48,067	...	...	...	...	251	247,238
			Rabi	2,237	764	89,323
		Total	65,070	86,322	15,159	43,939	70,370	4,142	230	48,067	2,237	764	...	251	336,551		
<i>III.—Karnatak.</i>																	
12	Belgaum ...	Kharif	61,150	52,138	9,721	7,025	6,516	1,636	1,123	51,494	...	...	...	...	...	139,667
			Rabi	437	52,138	62	...	4	5,911	...	8	6,390	6,339	71,286
		Total	61,587	52,148	9,783	7,025	6,520	7,537	1,122	51,502	6,390	6,339	...	...	...	209,953
13	Bijapur...	Kharif	64,575	68,008	21,745	...	6,565	4,735	3,790	24,779	22	...	...	...	...	128,211
			Rabi	...	68,008	109	32	68,149
		Total	64,575	68,008	21,745	...	6,565	4,844	3,790	24,779	54	...	...	...	...	194,360
14	Dhárwar.	Kharif	50,401	52,370	30,252	3,743	7,809	8,468	774	43,457	...	...	...	...	...	139,986
			Rabi	...	52,370	4,217	883	1	2,792	46	7,341	674	69	68,393
		Total	50,401	52,462	34,469	4,626	7,810	6,260	820	50,798	674	69	...	...	...	208,389
<i>IV.—Konkan.</i>																	
15	Thána ...	Kharif	6,112	1,354	394	19,128	...	1,650	3,887	1,137	340	...	...	217	...	34,119
			Rabi	87	1,421	58	58	...	1,020	1	2,645
		Total	6,199	2,775	452	19,186	...	2,670	3,887	1,137	241	...	217	...	...	36,764
16	Kolába ...	Kharif	462	3,058	2,529	3,248	...	...	...	46	...	...	...	...	...	3,756
			Rabi	2,084	5,599	...	8,900	60	15	1	22,246
		Total	2,546	3,058	2,529	8,847	...	8,900	60	61	1	...	...	...	...	26,002
17	Ratnágiri ...	Kharif	219	4	254	2,327	...	977	98	8,279	...	...	...	...	431	12,617
			Rabi	48	65	65	260	...	420	3	24	41	926
		Total	297	69	319	2,587	...	1,397	99	8,303	...	...	...	...	472	13,543
18	Kánara ...	Kharif	195	343	24	231	...	86	4	1,144	...	...	...	...	...	2,045
			Rabi	...	66	1,318	1,542	...	19	1,029	569	371	4,925
		Total	195	428	1,342	1,773	...	105	1,043	1,713	371	2	...	...	...	6,973
		Total	557,995	1,973	182,392	204,013	321,797	22,221	19,146	440,946	322	758	802	17,841	703	1,770,609	
		Rabi	11,308	618,293	8,421	8,357	5	59,293	1,173	8,056	28,318	20,110	55,926	2	41	1,019,303	
		Grand Total	569,303	820,266	190,813	212,370	321,802	81,514	20,359	448,722	28,640	20,668	56,728	17,843	744	2,789,972	

ACCOMPANIMENT B TO RETURN No. III.

Number of Principal Fruit-bearing Trees, 1893-94.

No.	District.	Mango.	Tamarind.	Jack.	Cocoanut.	Toddy-palm.	Date-palm.
1	2	3	4	5	6	7	8
A.—BOMBAY PRESIDENCY PROPER.							
I.—Gujardt.							
1	Ahmadabad	68,443	17,024	10	75	52	1,510
2	Kaira	213,266	25,452	...	.....	15	...
3	Panch Maháls	41,489	5,939	...	.....	129,198	...
4	Broach	25,123	5,713	1	82	33,558	1,252
5	Surat	177,260	66,261	3,567	6,988	78,378	520,435
	Total ...	525,581	120,389	3,578	7,145	241,201	523,197
II.—Deccan.							
6	Khándesh	217,096	14,285	8	125	367	3,006
7	Násik	177,962	8,730	162	226	12	...
8	Ahmadnagar	77,081	10,625	8	317	...	4,474
9	Poona	159,101	11,418	971	1,654	157	16,392
10	Sholápur	39,868	9,004	1	262	1	99,930
11	Sátára	172,150	11,521	8,922	5,663	1	378
	Total ...	843,258	65,583	10,072	8,247	538	124,180
III.—Karndtak.							
12	Belgaum	126,805	25,653	12,894	2,568	52	102,979
13	Bijápur	75,215	25,534	48	2,430	107	476,169
14	Dhárwár	177,434	59,257	8,443	66,942	4	503,003
	Total ...	379,454	110,444	21,385	71,940	163	1,082,151
IV.—Konkan.							
15	Thána	192,206	16,787	3,081	33,033	79,508	13,101
16	Kolába	91,700	4,796	5,112	90,225	18,959	30
17	Ratnágiri	88,351	4,199	46,695	537,106	...	...
18	Kánara	149,367	14,113	107,191	993,188	...	...
	Total ...	521,624	39,895	162,079	1,653,552	98,467	13,131
	Total A ...	2,269,917	336,311	197,114	1,740,884	340,369	1,742,659
B.—SIND.							
19	Karáchi	43,016	89	...	887	...	545
20	Hyderabad	87,424	31	...	.....	...	1,386
21	Sbikárpur	51,826	4	...	.....	...	148,605
22	Upper Sind Frontier	3,137	...	...	.....	...	1,208
23	Thar and Párkar	4,758	...	...	.....	...	5
	Total B ...	190,161	124	...	887	...	151,749
	GRAND TOTAL...	2,460,078	336,435	197,114	1,741,771	340,369	1,894,408