SIXTEENTH ANNUAL REPORT

OF THE

DEPARTMENT OF LAND RECORDS AND AGRICULTURE,

BOMBAY PRESIDENCY,

FOR THE YEAR 1898-99.

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From

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

To

THE HON'BLE J. W. P. MUIR-MACKENZIE, M.R.A.C., I. C. S.,

Secretary to Government,

Revenue Department, Bombay.

Poona, 19th February 1900.

Sir,

I have the honour to submit the annual report of the Department of Land Records and Agriculture for the year ending 31st October 1899.

CHAPTER I. PREFATORY.

- 2. Mr. A. B. Fforde was in charge of the office till 5th December 1808, when I received charge.
- 3. Under orders of Government, Mr. Fforde visited the Central Provinces in company with Mr. M. C. Gibb, I. C. S., to study the system adopted there for the preparation and maintenance of a correct record of rights and interests in land. I made tours in the Surat, Khándesh and Kolába districts in connection with the revision survey work of Párdi, Jalálpur, Bulsár, Pimpalner, Mahád and Mángaon tálukas. While at Surat and Dhulia I inspected the Survey Headquarter and District Survey Offices there.
- 4. Mr. Mollison, the Deputy Director of Agriculture, besides supervising the agricultural operations on the Poona Farm, paid several visits to Surat and inspected the farm there. He also inspected the Nadiád Farm and paid a visit to Ahmedabad to inspect the additional land required for the Municipal Sewage Farm. He visited Kánara to report on the question of assignment of beta lands for the cultivation of spice gardens. He proceeded to Madras to conduct the oral and practical examination in Agriculture. The services of Mr. Mollison have, since September last, been placed at the disposal of the Commissioner, N. D., in connection with famine grass operations in the Northern Division.

CHAPTER II.

LAND RECORDS ESTABLISHMENT.

- 5. The Land Records staff worked in the same districts as in the previous year. The Survey records of certain surveyed alienated villages in the Khandesh, Poons and Sholapur districts were transferred to the Collector's charge.
- 6. In the Southern Division, owing to provalence of the plague at Belgaum, the Survey class was, as last year, held at Bijapur and Karwar. No class was opened at Alibag, the Circle Inspectors being employed on famine duty, and in Ratnagiri there was no candidate. In the Central Division, on account of prevalence of the plague at Poona, Ahmednagar and Nasik, the annual Survey class has been postponed to March-April, but in view of the prevailing scarcity further postponement will be necessary.
- 7. The Circle Inspectors in two talukas of the Ratnagiri District performed their regular duties, while those of the other talukas were employed on miscellaneous work. In the fair season nine Inspectors were engaged wholly on measuring Pardi numbers in five talukas and one petha and one on disposal of miscellaneous measurement work in the Dapoli taluka. The services of one Inspector

were placed at the disposal of the Executive Engineer for the demarcation of road-side boundaries, and he fixed the boundaries for a length of fifty miles. The remaining Inspectors disposed of miscellaneous measurement cases in November and December, and from January to the end of May they carried on the special boundary-mark inspection work under No. 104 of the Rules under the Land Revenue Code. The three villages of the Devgad Taluka, which were left over at the end of the last season, were finished and the work made some progress in the Mandangad petha. The Circle Inspectors also measured some Pardi numbers. The Pardi measurement work was completed in 188 villages out of 568. The work embraced 1,886 numbers covering an area of 908 acres estimated to yield an assessment of Rs. 354. In the rains, with the exception of three Inspectors who worked in the Huzúr Record Office under the orders of the Huzúr Deputy Collector, the Circle Inspectors were employed at the District Survey Office in preparing Kamjasti patraks and duplicate copies of tipan books, correcting printed copies of village maps and sorting the survey records into A and B divisions. It has been decided to retain the full staff for two years more. In seven tálukas of this district the ordinary duties of Circle Inspectors are not at present carried out, but as there are now several villages which have lapsed to Government and are provided with the stipendiary village accountants, the practicability of working the rules in these villages is under the consideration of the Collector.

8. As in the last year one of the Circle Inspectors in the Ahmedabad district continued to do measurement work in the railway suburb at Ahmedabad.

9. Crop, Waste and Boundary-mark Inspection.—The average inspection work performed by Circle Inspectors is exhibited in the following table:—

•		Aver 1	GE BY E.	\	İ					
District.	Average of days of actual inspection.		Number of Villages inspected.		Number of Survey Numbers (occupied and waste) inspected per diem.		Average Area of occupied Numbers in Acres.		Average Area of inspected Numbers in Acres.	
•	1898-99.	1897-98.	1898-99.	1897-98.	1898-99.	1897-98	1898-99.	1897-98.	1898-99 .	1897-98
1	2	3	4	5	6	7	8	9	10	11
Dhárwár Bijápur Belgaum Kánara Ratnágiri Kolába Kbándesh Násik Ahmednagar Poons Sholápur Sátára Ahmadabad Kaita.	69	60 62 25 52 49 60 67 56 72 65 60 71 69	10 15 30 29 9 68 49 83 86 42 34 28 85 30	42 38 19 48 9 65 48 34 87 43 35 28 87 88	8 7 9 10 4 7 8 8 7 7 7 8 15 14	9 8 9 9 4 8 8 8 8 8 7 6 8 15 13	11 17 10 2 8 4 10 9 12 10 21 8 4 3 2 4	12 16 11 2 5 10 10 10 20 8 4 2	10·9 . 16 . 10 . 1·8 . 7 . 4 . 9 . 10 . 12 . 11 . 20 . 7 . 4 . 1·4	10 16 10 2 7 5 9 9 11 10 18 7

The standard of 80 working days was reached in none of the districts, though more than 70 days were devoted to the inspection in two districts. As observed last year, this standard necessarily varies with local conditions and circumstances.

The number of days fell off in five districts, especially in Dhárwár and Bijápur; in Násik and Ahmednagar the average days of actual inspection were the same as last year, and the other districts showed an improvement. Employment of Circle Inspectors on plague duty caused considerable hindrance to the inspection work in Dhárwár, Bijápur and Kánara. In four other districts also the work suffered to a small extent from the same cause. Urgent measurement work and absence of Circle Inspectors on leave contributed, as usual, to the reduction of inspection days. Absence through illness was common in the

Sátára District. In Ahmednagar eight Circle Inspectors were employed for about a fortnight in completing measurements of lands taken up for the famine relief works in 1896-97 which had been begun by a special staff in 1897-98. In Khándesh three Inspectors in addition to 6 táluka classers remeasured and reclassed the lands damaged by the floods of the Girna and Titur in 1896. In Kolába one Inspector was employed during most of the season on special work in connection with khoti litigation in the District Court at Thána. In the beginning of the season some time was devoted at head-quarters to the instruction of the inexperienced Circle Inspectors in crop inspection. Hindrance to Circle Inspectors' test-work owing to village officers' absence at the time of test was noticeable in some districts, markedly in Sátára, notwithstanding the rule of giving six days' previous notice to village officers and obtaining their acknowledgment. Except in four districts the number of villages inspected was nearly the same as last year. In Belgaum, where the number of inspected villages was small last year, there was improvement in the year under report.

The daily tale of work was generally satisfactory and compares favourably with the last year's in four districts. The figures in columns 8 to 11 show that numbers selected for inspection were of fairly average size in all the districts.

10. The general results of the inspection are embodied in the following table:—

	,	, ,	Cro Inspec		Was Inspec		Boundar Inspec		
	Villages is	aspected.	Occupied	Lands.	Unoccupio	ed Lands,	Percentage of Survey Numbers		
District.			Percen inspected o Numb	n Survey	Percei inspected : Num	on Survey]	of which marks examined on total number of Survey Numbers.		
	1898-99.	1897-98.	1898-99.	1897-99.	1898-99.	1897-99.	1898-99.	1897-93.	
1	2	3	4,	5	6	7	8	9	
Dhárwár Bijápur Belgaum Kánara Rátnágiri Kolába Khándesh Násik Ahmednagar Poona; Sholápur Sátára Ahmadabad Kaira	28 80 24 100 77 88 78 97 96 97 94	91 81 49 79 100 77 85 75 89 98 99 92 99	9 5.5 6 9 10 6 8 7 7 5 6 7 5 3	76689677856753	31 24 18 43 30 23 29 39 40 36 13	25 30 20 15 55 75 22 29 31 37 42 41 12 8	10·4 6·0 6·5 9·7 10·4 7·4 9·0 7·9 7·7 5·6 6·0 7·0 6·7	8·4 6·5 6·3 8·9 9·1 8·8 8·1 8·1 8·2 5·1 6·1 7·1 6·4 3·5	

In the two tálukas of Ratnágiri all the villages were visited and in five other districts more than 90 per cent. of the village came under inspection. In seven districts the percentage of inspected villages was lower than last year. The reasons are those given above. The extent of crop inspection was generally sufficient except in Kaira and compares favourably with last year.

11. The rule requires that one-third of the waste numbers in a village or one-third of the numbers selected for inspection should be inspected. The percentage actually inspected seems sufficient in all the districts except Ahmedabad and Kaira, where, however, some improvement over last year is noticeable. The unduly high percentage noticed last year in Ratnágíri and Kolába was reduced to the proper standard.

12. The number of encroachment cases detected during the year in-

Division.		1808-99.	1807-98.
Southern	•••	801	854
Central		1,057	870
Northern		476	725

creased 20 per cent. in the Central Division while there was a falling off to the extent of 6 and 34 per cent., respectively, in the Southern and Northern Divisions. More than three-fourths of the cases in latter divisions were contributed by the newly equipped districts of Kolába and Kaira. In Dhárwár, Bijápur and Kánara owing to pre-

valence of the plague village officers were unable to pay much attention to the subject. In the Central Division the encroachment cases were numerous in Khandesh and Nasik. Of the cases detected in the Ahmednagar district, three-fourths were contributed by one taluka (Akola). The marginal table indicates

District.	ments by villa	e of encroach- detected zs officer! ou al number.	District.		ments d	of encroach- letected officers on number.
	1998-99	1897-98.			1898-99.	1897-99.
Bijapur Belgaum Kanara Ratnagiri Kolaba	12 31 80	62 43 73	Násik Ahmednagar Poona Sholápur Sátára Ahmedabad Kaira	***	2 14 8 35 70	19 6 3 11 15 63 34

that as regards the districts where there are stipendiary village accountants, the progress made by them in detecting encroachm e n t s was fair in Ratnagiri and Ahmadabad. In Kolába the percentage of detected cases was 51

and in the remaining two districts (Kánara and Kaira) it was as low as 30 owing to prevalence of the plague. The District Inspector of Kánara states that owing to frequent transfers of village accountants (shanbhogs) the duty of detecting encroachments does not receive sufficient attention. Among the districts with hereditary village staff, Sátára alone showed considerable improvement. In Kánara the District Inspector and the General Duty Inspector personally detected 99 and 15 cases, respectively. No improvement was noticeable in the number of encroachment cases disposed of by Mámlatdárs.

In Sholápur and Ratnágiri all the cases detected related to unauthorized cultivation. In Poona, Kolába and Belgaum the percentage of cases of unauthorized cultivation was respectively 69, 47 and 27. In Nasik also these cases were numerous. In Dhárwar and Bijápur no cases were detected. No details are reported from other districts. In the Poona District only one case, a notorious encroachment of long standing, was discovered during the year and reported to the Collector. Hundreds of toddy trees in Government land were encroached upon at Mundhva in the Haveli Táluka.

13. The marginal table indicates that the quality of the village officers'

District,		und correct ntage).	District.		Entries found correct (percentage).		
	1838-99.	1897-98.	 	·	1898-99.	1897-98.	
Dhárwár Bijápur Betgaum Kánara Batnágiri Kolába Khándesh	53 20 57 75 57 88 75	59 37 66 76 63 91 72	Násik Ahmednagar Poona Sholápur Sátára Ahmedabad Kaira	940 940 940 940 940 940	80 52 78 93	75 63 78 54 78 91 79	

work as compared with the last year deteriorated in eight districts. Mr. Lushington considers that the high percentages in Kanara and Kolába are too good to be trusted, especially in the latter district. In

Násik the District Inspector noticed that in some villages the crop estimates of the village officers and Circle Inspectors exactly tallied. He thinks that Circle Inspectors try to secure such tally to avoid further enquiries, and suggests that District Inspectors should take a small independent test of the village officers' work. It is probable that the village officers delayed their inspection till the Circle Inspectors came. Such cases were marked in Násik as well as in Dhárwár, Ratnágiri, Sátára and Kaira.

14.	Boundary-mark	Inspection The	Circle Inspectors'	
-----	---------------	----------------	--------------------	--

		Ma	rks found (percer		pair,	,		Marks found in disrepair, (percentage).					
District.		Omi	tted.	Wrongly shown as in repair.		District.		Omli	tted.	Wrongly shown as in repair.			
-	_	1898-99.	1897-98.	1808-99.	1897-99.		_	1908-99.	1597-96.	1999 99.	1597-09		
Dhárwár Bijápur Belgaum Kænara Ratnágiri Kolába Khándesh		. 72	60 46 50 39 39 21	8 15 34 27 15	25 26 19 13 19	.fásik Ahmednagar Poona Shoiapur Sátára Ahmedabad Kaira		21 21 21 15	3 25 24 18 17 8	35 24 20 30 36 10	20 16 30 21		

inspection is confined to the marks in the survey numbers of which they make the crop or waste inspection. The quantity of numbers inspected was sufficient and compares favourably with that of the last year, ex-

cept in six districts (vide columns 8 and 9 of the statement in para. 10 above.) No improvement was noticed in the village officer's work except in Ahmednagar and Ahmadabad. Delay in commencing the inspection on the part of the village officers was marked in five districts. In Dhárwár and Bijápur the plague was probably responsible. Due notice has been taken of the delay in Kolába. Apathy on the part of village officers in getting boundary marks repaired is a general complaint.

15. The subjoined table indicates the result of the District Inspectors' test of Circle Inspectors' work:—

^	,		·	Percent-	Crop Inspection.		WASTE INSPECTION,		BOUNDARY-MARK INSPECTION.	
	District.	•	Number of Circles visited per cent.	Villages inspect- ed by Circle	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
Dhárwar Bijápur	* ***	•••	45 68	6 8	2·3 4·5	96·6 68	3·4 2·6	100 40	2.6	99 97
Belgaum	•••	•••	41	2 8	1.0	59	0.3	75	3·6 0·7	89
Kánara Ratnágiri	, •••	•••	83 100	26	2·3 6·4	61·6 76	1·7 2·4	92 - 50	2 6 5	97·7 95·6
Kolába Khándesh	* ***	• • •	100 96	4 3	2·9 2·0	74 87	1·5 1	84 100	1·8 2	82·6 95
Násik Ahmednagar	•••	•••	66 64	3 4	1·0 1·0	87 86	2	92 100	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	98 99
Poona	***	•	87 100	6 8	3 · 3	94 82	4.	100	3 3	94 93
Sholápur Sátára	•••	•••	84	7	3	77 ·	3 5	,100 92	3	90
Ahmadabad Kaira	•••	•••	92 69	14 10	5·4 6·8	97 81	· 2·3	90 80	3·8 6	80 ენ

All the circles were visited in three districts only. As compared with the last year there was an increase in the percentage of circles visited in five districts while it fell off in seven districts. The District Inspectors of Dhárwár for the greater part of the inspection period and of Kaira for a fortnight were employed on plague duty. The test work of the Belgaum District Inspector was interrupted by the supervision of the special measurement work in connection with the Gokák Storage Reservoir and the settlement of discrepancies regarding the Railway lands in the Railway Schedules and Survey Records. In Khándesh the District Inspector was party engaged in supervising the special work of remeasuring and reclassing the lands damaged by the Girna floods. In Ahmadabad one circle only was not visited, the District Inspector having to supervise the correction of mistakes in measurement books relating to land taken up for the Ahmadabad-Prántij Railway. The District Inspector classed a large area in one village in Viramgám táluka. Besides the test of the Circle Inspector's work, the District Inspectors of Násik and Bijápur took a small independent test of village officers' work. The Kolába District Inspector devoted a part of his time to giving instructions to the inexperienced Circle Inspectors. The

employment of 11 Circle Inspectors in Kánara on plague duty is responsible for the low percentage of circles visited by the District Inspector. The extent of test was generally sufficient and compares favourably with the last year in eight districts. The higher percentage of test work in some of the districts is attributed to the smaller number of villages visited by Circle Inspectors on account of their employment on plague duty or special measurement work. The District Inspector of Ratnágiri spent a month and a quarter in testing the Pardi measurement work and for about two months travelled with the Superintendent in the Dápoli and Khed tálukas in connection with settlement enquiries. This accounts for the large decrease in test work, which is however ample as compared with the other districts. The quality of Circle Inspectors' work is fair in eight districts. In others there is considerable room for improvement as regards crop or waste inspection. In Sátára the deterioration in quality is attributed to new appointments of untrained Circle Inspectors. As compared with the last year, improvement is noticeable in two districts only. In three districts a few Inspectors were punished for bad work by fine or reprimand.

The General Duty Inspector. - The General Duty Inspector was mostly employed on original measurement and classification work in six districts and in the others on either original or test work. In Ratnágiri and Ahmedabad he held charge of the District Inspector's post for a month in addition to his own duties, and in Poona he enjoyed one month's privilege leave. In Kaira along with other Inspectors the services of the General Duty Inspector were placed at the disposal of the plague authorities for about three months. In Khándesh, Bijápur, Ratnágiri and Ahmadabad the General Duty Inspector in the fair season accompanied the Assistant or District Inspectors who were new to their work and were not declared competent to take an independent test of Circle Inspectors' measurement work. In Khandesh the General Duty Inspector also helped the District Inspector in supervising the measurement and classification of lands damaged by the Girna floods, and in Násik in settling a boundary dispute and demarcating certain alluvial land. In Dhárwár he was occupied for three months with the measurement of lands irrigated by the Dharwar Canal. In Ahmednagar he devoted one month and a half to measurement work in connection with the Kapurwadi tank and roads and quarries in the Nagar taluka. In Ratnágiri he measured and prepared a map for some Kauli lands at Unahi village in taluka Dapoli in connection with a civil suit against Government. In the rains the General Duty Inspectors were, as usual, employed in scrutinizing corrections in survey records. In Poona the General Duty Inspector was placed in charge of the temporary establishment engaged to prepare the revision settlement papers of the Indápur táluka. In Belgaum from July to September he did the road measurement work which was lest incomplete by the Circle Inspectors in the fair season. In Ratnágiri he compared the maps received from the Survey of India Department with the Revenue Survey maps and corrected them where necessary.

17. Check of the Village Census.—The appended table shows the extent of the test.

District.			Circles visit	ed per cent.	Percentage of villages on allotted	total No.	Percentage of entries found correct on total checked.		
··	· .	-	1898-99.	1897-98.	1898-99.	1897-98.	1898-99.	1897-95.	
								•	
Dhárwá r]	100	100	87	93	88	87	
Bijápur	•••		87	9 2	90	93	85	83	
Belgaum			83	78	64	65	82	80	
Kánara	•••	•••	56	100	90	97	64	66	
Ratnágiri	•••		100	100	98	100	73	73	
Kolába	•••	•••		55	95	**	83	97	
Khándesh 🔠				98	. 98	96	87	. 88	
Násik	•••		60	83	75	*	78	80	
Ahmednagar 📑			100	100	*	91	80	80	
Poona	•••			100	*	96	79	76	
Sholápur	***			100	99	****	82	85	
Sátára	* ***			100	97	98-	83	90	
Ahmadabad	·•••			100	*	*	- 93	95	
Kaira	***	• • •	100	100	**	99	62	78	

The check census is confined to agricultural stock, and is taken in July, except in districts of heavy rainfall where the registers are examined concurrently with the crop and boundary-mark inspection in November to February. The test extended to all the circles in seven districts as against nine in the last year. Fourteen circles remained unvisited in Násik, 10 in Kánara and from 1 to 1 in Khándesh, Sátára, Bijápur, Belgaum and Koliba owing to special measuroment work, plague duty, sickness, detention at the tíluka office for the crop compilation work or deputation to the Survey Department. In three circles of Násik this test hitherto taken in July was ordered by the Collector to be done concurrently with the crop inspection. In the other circles the work was prevented by the detention of Circle Inspectors at the táluka office or their employment under instructions from the Survey Department on work in connection with the introduction of revision survey rates into Nándgaon táluka. The Circle Inspectors in Kánara were on plague duty in the inspection period.

The percentage of villages tested as far as given seems fair except in one or two districts. The test work was reduced by the causes mentioned in the last paragraph, and by the absence of village officers especially in Nasik and Belgaum. It is noticed that the detention of Circle Inspectors at the taluka office was due to delay on the part of the village officers in submitting the village crop returns. The Collectors have been requested to impress on the taluka officers the necessity of getting in the village returns punctually. The suggestion that in the 11 circles in the Satara District in which the crop inspection period has been curtailed to three months, the month of November may be utilised exclusively to check census, seems worthy of adoption.

The quality of village officers' work was generally fair except in Kánara and Kaira, whereas in six other districts as compared with the last year it deteriorated. In Kaira, the habit of filling in the census registers at the village chavdis noticed in the last report does not seem to have been checked during the year. In seven districts only the District Inspector's test was sufficient. The District Inspector of Poona was engaged on the preparation of the Indápur Revision Settlement papers, and in Ratnágiri, the District Inspector was occupied with the settlement enquiries in the Dapoli táluka. In Belgaum, owing to the detention of the Circle Inspectors at the táluka office for compilation work, the District Inspector could not commence the test till 20th July. In the remaining districts plague duty or other special work interfered with the test. The Circle Inspectors' work was generally satisfactory, but compared with the last year it showed deterioration in two or three districts.

18. Vital Statistics.—The marginal table indicates the result of the ex-

	•	• ,			Southern Division.	Centra. Division.	Northern Division
Births omitted Deaths omitted	•••	1898-99 { 1897-98 1898-99 { 1897-98		•••	111 172 38 87	471 407 212 836	67 94 30 41
Causes of d	•		•••		8 80 23 63	34 68 104 816	7 10 12 4

amination of Vil- lage Form XIV, 23 compared with the last year. It is satisfactory to notice a gradual improvement in the village officers' work. In Ahand mednagar Sholapur the number of births

omitted was more than double that of last year. As remarked by the Collector of Dhárwár, the general improvement seems to be due to the constant and useful supervision exercised by the Táluka and District Officers owing to prevalence of the plague. The Circle Inspectors and a few District Inspectors also tested the other Sanitary Department Forms. In Dhárwár in some villages the cattle-disease form (Village Form XIV E) was not kept, though rinderpest was actually prevalent there. All errors discovered were immediately reported to the Deputy Sanitary Commissioners.

19. Maintenance of Boundary-marks.—The complete boundary-mark inspection, which consists of the repair village by village of boundary marks for

the maintenance of which Government is wholly or partly responsible, was as usual carried on in the prescribed period (March-May). The following table exhibits the progress made:—

Dist	riot.	Gross number of Government villages.	Number of villages completed at the beginning of 1898-99.	Number of villages complet- ed in 1898-99.	Total.	Number of seasons including the current one (1898-99).	Average Number of villages inspected per annum.	Years required to complete the district.
Southern	Division.							
Dhárwár Bijápur Belgaum Kánara Ratnágiri Kolába		1,012 913 1,417	694 678 280 421 54 42	27 10 49	694 678 280 448 64 91	10 9 6 7 5 2	69 75 47 64 13 45	18 13 19 22 5 20
Central	Division.							,
Khándesh Násik Ahmednagar Poona Sholápur Sátára		. 1,490 . 1,227 . 1,004 . 665	1,726 515 502 329 259 690	343 39 86 72 64 122	2,069 554 588 401 323 812	6 6 6 6 6	345 92 98 67 54 135	8 16 12 15 12 7
Northern	Division.		,					
Ahmadabad Kaira	•••	598	99 64		125 64		25 32	

The figures entered against Kolába in the last report having been found to be of doubtful accuracy, the correct number of villages inspected in the last scason was subsequently ascertained, and has been entered in column 4. The decrease in Ahmednagar in the completed villages at the beginning of the current season is due to the omission of the incompleted villages, and in Násik some of the villages are still incomplete. The progress of the work was fair in Khándesh, Sátára and Kolába. At the present rate of work, the inspection of all the villages can be fairly completed in the prescribed period in the Central Division and in Kaira, Bijápur and Ratnágiri. In the remaining districts 18 to 22 years will be required. The inspection work was wholly suspended in Dhárwár, Bijápur and Kaira owing to the employment of Circle Inspectors on plague duty, and in Belgaum on measurement work which had accumulated owing to the plague and scarcity. The plague also interfered with the work considerably in Kánara and to a small extent in Khándesh and Násik. As usual, the disposal of measurement work took up much of the Inspectors' time in most of the districts. This work included in Khándesh the re-measurement and re-classification of lands damaged by the Girna and Titur rivers and the demarcation of land taken up by the G. I. P. Railway for enlarging the railway line. In Sátára the measurement of Kadim Inám lands brought under settlement was; included, and in Poona, Ahmednagar and Belgaum measurement of roads. In the last district the disforested area in one taluka was measured and the work of substituting stones in place of earthen mounds in survey numbers usually flooded by the Krishna was satisfactorily carried out in one village. The Superintendent, S. D., inspected the latter work. Some of the Circle Inspectors in Násik and Ahmednagar did pot-pahani work or prepared revision survey jamábandi papers, and the services of some Inspectors in the Sátára District were lent to the Survey Department to help in measuring and classification work. The number of days lost to inspection work in Satara owing to sickness was larger than in the last year.

The days actually devoted to inspection work ranged from 62 in Kolába to 22 in Ratnágiri against the standard of 75 days. The daily tale of work

attained at the first inspection varied from 97 marks in Sátára to 36 in Ratnágiri, and at the second inspection from 52 in Sholápur to 17 in Ratnágiri. As compared with the last year, the first inspection showed general deterioration, but there was improvement in the number of marks examined at the second inspection, except in Ahmadabad and Kolába. Of the marks examined more than half were found in disrepair in four districts, and in Ahmednagar and Sholapur the percentage of such marks was as high as 70. Of the marks found out of repair or missing all were re-examined in Ratnágiri, and in others from 70 to 94 per cent. Of these, except in Kánara and Kolába where the percentage stood respectively at 43 and 42, the marks repaired by the rayats were found to represent from 71 to 92 per cent. The number of marks remaining to be repaired at the end of the season was practically nil in Khandesh, Ahmednagar, Poona and Sátára, while in other districts it ranged from 3.6 in Násik to 15 in Kolába. The remaining marks, which represent from 3 per cent, in Ahmadabad to 46 per cent. in Kanara of the marks re-examined, were repaired by Circle Inspectors by hired labour. Re-inspection was much in arrears in Poona, Satara and Kolába; shortness of the daily work is attributed to tardiness in recouping the Circle Inspectors' permanent advance, which was a general complaint. The account difficulty in paying the Circle Inspector's bill immediately on its receipt at the taluka office was completely removed by the Accountant General's ruling. The orders were, however, received by the Circle Inspectors too late in the season. It is hoped that there will be no room for this complaint in future. In four districts difficulty was found in getting labourers to repair marks found out of repair. In such cases Circle Inspectors have no alternative but to induce the rayats to repair them, which is naturally a slow process. The District Inspector of Poona points out that under the rule restricting the halt of an Inspector in a village to a month, some villages must remain unfinished at the end of a season. It would, however, not be advisable to alter the rule.

The rule of deputing the Inspectors of circles in which the work is forward to assist in circles in which it is behindhand, was carried out in three districts. In three districts some of the circles were inspected a second time. In the Central Division the last year's arrears of the second inspection were partly cleared off in four districts. It is necessary that such arrears should be finished before a new village is commenced.

District.		Factorely	Number of Marks fixed by measure ment.	District.		Number of Encroach- ments.	Number of Marks fixed by measure- ment.
Dhárwár Bijápur Belgaum Kánara Ratnágiri Kolába Khándesh	44. 69. 69.	88 29 422	204 897 20	Násik Ahmednagar Poona Sholapur Sátára Ahmadabad Kaira	***	138 16 100 143 188 7	125 359 152 78 86

20. The usual table is appended:—

Encroachments detected
and marks fixed
by measurement
during the inspection are specified
in the margin.

The figures show a decrease below those of last year except in two districts.

MEASUREMENT AND CLASSING WORK PERFORMED BY CIRCLE INSPECTORS

	8	OPTEBBE	DIVISIO	7.	C	BYTBAL	Division	ı.	Norther Division.			
Clusses of Cases.	Arrears on Slat	New cases receiv-	Cases disposed of.	Ralance on Sist	Arrests on Blat	New cases receiv-	Cases disposed of	Ralance on Slet July 18:9.	Arrests on Slat	Now cases received.	Cases disposed of.	Belance on Sist.
Partition of land under Court's decree Sub-division on applications of occupants duly saic-	27	85	92	21	71	168	174	65	1	7	6	
tioned	97	82	112	67	53	126	119	61	23	43	50]]
surement of fields	54	33	52	35	48	70	76	42	113	225	225	1

	s	OUTHERN	Divisio	я.	(Central	Division	·.	N	ORTHPRN	Divisio	1.
Classes of Cases.	Arrears on Sist July 1898.	New cases received.	Cascs disposed of.	Balance on 31st July 1899.	Arrears on 31st July 1898.	New cases re-	Cases disposed of.	Balance on 31st July 1899.	Arrears on 31st July 1898.	New cases re-	Cases disposed of.	Balance on 31st July 1899.
4. Disputes requiring fixing of boundary-marks by field-books	441 230	277 \$36 89	319 320 117	399 246 103	734 374 54	656 728 101	862 762	528 3±0	104 123	124 240 66	182 277 63	46 86
poses— (a, Burial ground (b) Tanks (c) Roads (d) Dharmashalas and other public buildings. 8. Measurement of land for building sites	50 13 46 17	51 16 41 57	35 20 33 48	66 9 5± 26	2 2 32 21 78	12 2 65 26 204	11 2 6± 30 218	3 2 33 17	25 103	17 4 11 50 214	15 2 9 47 236	28 87
9. Reclassification of Survey numbers 10. Miscellaneous	603 1,799	7 586 1,791	7 718 1,998	2 471 1,592	13 411 1,893	15 1,529 3,702	12 1,558	16 382 1,593	. 4 155 676	10 800 1,811	741 741 1,864	3 214 623

The want of tally between the arrears shown in the present return and the closing balance of the last year is noticeable in five districts. In the Central and Northern Divisions there is a slight increase, while the arrears in the Southern Division have decreased 4 per cent. The new cases received during the year fell by 27 per cent. in the Southern Division while there was an increase of 37 and 5 per cent. respectively in the Central and Northern Divisions. Except in Belgaum and Kolába, the decrease was general in the Southern Division owing to prevalence of the plague, especially in Dhárwár and Kánara. The increase in the Central Division was shared by all districts except Ahmednagar and was confined to classes 2, 4 to 6, 8 and 10. The progress of disposal was generally satisfactory, especially in Belgaum, where most of the Circle Inspectors were employed on this work throughout the complete boundary-mark inspection period (March-May). In the Poona District, in accordance with Government Resolution No. 8393, dated 29th December 1898, the measurement of one road, 25 miles long, was completed, and the work of measuring the other roads was in progress. In Ratnágiri nine Circle Inspectors did Párdi measurement work. This work as well as the measurement work in connection with the land taken up for the Gokák Storage Reservoir and for four roads in Belgaum District have not been included in the above table. In the latter district 1,155 survey numbers were in all measured.

The extent of test by the District and General Duty Inspectors is indicated

Percentage of General Duty In-spector's test. Percentage of District Inspector's test. Distric t. Dhárwár Lijapur... ٠., Belgaum ... 3·6 ...17 Ratnágiri ``i∙2 Kolába Khándesh 12.4 6·0 30 21 Ahmednagar Poota .. Sholápur 9 7 2·9 tátára ... Ahmadabad 41

in the marginal table. The figures against the districts in the Central Division represent the percentages on the real measurement cases. Such cases are not separately reported from the Southern and Northern Divisions. In Bijapur no test was taken either, by the District Inspector or by the General Duty Inspector. In Belgaum measurement work was tested in 115 survey numbers, but as the number of test measurement cases has not been given, columns 2 and 3 cannot be filled in. The test of measurement work is one of the principal duties of the District Inspector and more attention to this work is required. The District Inspectors of Bijapur and Ratnagiri were new to the work, and in Dharwar the District Inspector was on plague duty. The

District Inspector of Sátára, having to test the special measurement work in one Inám village in Koregaon Táluka and to dispose of a number of petitions and complaints made by the Inámdár and rayats, was unable to take more tests of the

regular measurement work. In Násik the District Inspector settled an important dispute regarding the boundary between Peint and Dharampor State. In most of the districts the General Duty Inspector was employed on original measurement and classification work or otherwise engaged. The Circle Inspectors' work was generally fair.

The receipts of fees for work done for private individuals increased during

District,	District.		District.		Amount.
Dhárwár Bijápur Belgaum Kánara Ratnágiri Kolába Khándesh	•••	Rs. 186 291 806 839 392 11 64	Násik Ahmednagar Poona Sholápur Sátára Ahmadabad Kaira	100	Rs. 165 256 369 349 488 1

the year in the Central Division, while there was a falling off both in the Southern and Northern Divisions. The increase in the Central Division was the natural result of the increased work. The rule for charging fees for private work does not seem to have been strictly followed in Ahmadabad.

Divisions.	1898-99.	1897-98.
Southern Division Central Division Northern Division	74 65 501	20 22 266
Total	610	308

The cases of utilisation of Circle Inspectors for work not prescribed by the rules doubled during the year. The tendency towards such utilization was very marked in Kánara, Násik, Ahmadabad and Kaira, and demands careful attention at the hands of the Collectors. In the Kolába district the men were employed on enquiries standing over from last year as to whether the works for which tagili advances had been given were duly carried out.

The Collector rightly observes that the District Inspector ought to have returned these cases to the taluka offices when he noticed them in the monthly Nikalpatrak.

DISTRICT SURVEY OFFICES.

21. The usual table shows the work performed at the several district survey offices:-

		OF CASES IN ATING CONTROL PAR	BRECTION		OF ARA	BBANDS.	Number	from Field	Number of extracts from Sur-	Number of Maps supplied to Village
District.	Received during the year, including arrears of past years.	Disposed of during the years.	Arrears on 1st August.	Received during the year, including arream of past years.	Corrected during the year.	Remaining to be corrected on lat August.		Hooks sent	mpplied to Revenue Officers and Peti- tioners.	and other
1	2	3	4	5	6	7	8	9	10	11
Dhárwár Bijápur Belgaum Kánara Kolába Khándesh Ahmednagar Poona Sholápur Atára Ahmadabad Kaira	43 64 311 343 184 69 95 170 22 135	89 21 43 62 289 140 184 53 77 122 21 133 1,072	22 197 14 18 48 1 2 91	97 46 37 88 279 343 59 162 200 18 86 90 69	91 46 87 86 207 146 59 57 109 145 17 84	31 53 55 11 22	521 97 320 570 383 62 472 355 913 1,763 156 857 829 512	361 258 2,181 417 35 12 124 354 752 578 228 646 783	140 2 109 4 102 1 65 17 85 1,412 87 6	105 145 107 2,103 114 112 126 270 211 165 86 64)

Cases necessitating corrections in survey papers received during the year, including the arrears of the last year, were generally less, but the correction work actually performed showed an increase except in Dhárwár, Bijápur, Kánara and Kaira, where owing to the employment of Circle Inspectors on plague duty measurement cases had to be kept back. Fifty-one cases have remained in arrears in Ahmadabad pending settlement of the question referred to the Director. The progress of disposal was satisfactory, especially in Ratnagiri and Kolába. In Poona the head-quarter Assistant and the Record-keeper were for 31 months engaged on supervising the preparation of the Indapur settlement papers. Eight experienced Talátis were employed temporarily for 22 months in the district survey office at Alibág to clear off the cases transferred by the Survey Department together with the records. The arrears left now are such as can be disposed of by the permanent staff in the district survey office. The heavy decrease in column 9 in Dhárwár is due to non-performance of the complete boundary-mark inspection, and the employment of the whole staff on measurement work is responsible for the large increase in Belgaum.

Besides the work specified in the above table much miscellaneous work is received and disposed of at the district survey offices. Survey records of some villages received from the Survey Department in three of the district survey offices, and the maps and gats of some villages received from the Photozinco Office in two district survey offices were sorted and stored in two divisions. The work of sorting out the original measurement and classification books of villages in which the revision survey work was done on a partial system and placing them with the revision papers was in progress where not finished. The work of sorting papers from the survey records for destruction was nearly finished in Dharwar and Belgaum. The work for three talukas in the Kolaba District was done by the Survey Department and that for the remaining one taluka was completed during the year. In Poona 300 extracts were made from Prati-books for fixing assessment according to the classification value. The District survey office at Belgaum examined the measurement tipans of 457 survey numbers in connection with the Gokák Reservoir measurement work and made some progress in preparing the classification records for the same.

Fee Receipts.—The receipts were nearly the same as in the last year in the Southern and Northern Divisions, and increased 38 per cent. in the Central Division. The receipts increased in all the districts except four. The larger figures in column 3 against Belgaum, Poona and Sholápur are due to more measurement work done for private individuals. It is strange that there should be no receipts for making corrections in survey papers in the district survey offices at Bijápur and Ratnágiri.

•		ł	Fres on	ACCOUNT OF SU	PPLY OF	 	
Di	strict.	1	Extracts from Survey Papers to applicants direct.	Extracts from Survey Papers to applicants through Circle Inspectors.	Village Maps.	Fees for making cor- rections in Survey Papers.	Total
Souther	n Division.	_ -	; ;		•		
Dhárwár	•••		2	76	26	3	107
Bijápur	***	•••	2	18	18		38
Belgaum	***	•••	4	99	18	16	137
Kánara	•••	•••	1	48	16	25	. 90
Ratnágiri Kolába	***	•••	38	•••	84	···	122
Z OI a D a.	•••	_	3	•••	71	77	151
	Toțal	•••	50	241	233	121	645
Central	Division.					-	
Khándesh	***		1	3	23	. 10	37
Násik	•••		17	13	6	22	58
Ahmednagar 👚	•••		12	34	17	24	· 87
Poona	•••	•••	33	· 74	` 76,	42	225
Sholápur	***	•••	7	79	6	4	96
Sátára	•••	•••	27	46	18	24	1 15
	Total	•••	97	249	146	126	618
Norther	n Division.					-	
Ahmadabad		1	16	1	18		•
Kaira	•••		10	•••	18	1 1	35 20
		-			 -		
	Total	•••	17		36	2	55

SUPERINTENDENTS OF LAND RECORDS AND AGRICULTURE.

22. The extended term of three years for which these appointments were sanctioned in Government Resolution No. 5914, dated 10th August 1897, expired in September 1899, and proposals for their further retention have been put before Government. The scheme referred to in the last report on the subject of training village officers in survey, which is one of the objects for which the appointments of Superintendents were originally sanctioned, is still before Government. The real object, however, for which these officers are required is that they may undertake most of the duties hitherto performed by Superintendents of Survey, including settlement work of a routine nature.

23. The extent of the tests taken by the Superintendents in the year as compared with the preceding year is indicated in detail in the following table:—

		,	1 0	MBMR P UKAS,	of Circles,	ned.	Incra	RES CTION.	Boom	PLETE DARY REG CTION,	Muast	?BING.	tus tested	ath Peris-	dal keturna
D i	etrict. 		Total.	Visited.	Total Number of Circles,	Daftars examined.	In how many Circles.	Survey Numbers tested.	In how many Circles.	Marks tested.	In how many Circles.	Surrey Num-	Annal Census t.	Birth and Death tern (Number of Entries).	Number of Villages in which Statistical Keturns were checkel.
Souther: Dhárwár Bijápur Belgaum Kánara Ratnágiri Kolába	Division		8 7 8	32 33 30 7	28 24 21 29 6 11 116	8 8 8 21	6 8 8	53 52 105	 	010 100 100 100 100 100 100 100	:: 6 :: 1 1 7	3 1 1 10	28 25 325	16 2 16	12 17 36
Contral Khándesh Násik Ahmednagar Poona Shoiápur Sátára	Division	10. 10. 10. 10. 10.	17 12 11 8 7 11 66	1 8 1 12 12 15	48 35 83 23 19 33	8 9 3 9 1 80 26	6 6 6 8 7 1 23 20	22 88 26 47 2 135		693		11 7	148 114 55 124 511	100 231 55 113 3 892 872	10 9 16 48

Neither of the permanent incumbents was in charge of the office continuously during the year. Mr. Lushington was on plague duty for nearly five months (December—April) and on privilege leave for three months (5th May to 4th August). In his absence the charge of the office was held by Ráo Bahádur Ichhárám Bhagvandás, Personal Assistant to the Director, and Mr. J. W. Whitcombe, Assistant Superintendent, Marátha States Survey. Mr. W. D. Wilkins, Assistant Superintendent, Konkan Survey, who was appointed to act as Superintendent Land Records and Agriculture, C. D., during the deputation of Mr. Young to the Deccan survey, took charge from Ráo Bahádur Ichhárám Bhagvandás on 5th November, and held it till 10th April, when he proceeded on leave on medical certificate, and since then Ráo Bahádur Ichhárám has been in charge. Mr. Ichhárám held joint charge of the offices of the Superintendents, Land Records and Agriculture, C. D. and S. D., for a fortnight in April. The complete boundary-mark inspection work was not tested in either division. In the Southern Division the Superintendent was in March engaged on general settlement enquiries in the Dápoli táluka, and on enquiries in connection with the classification record in the Khed táluka of the Rathágiri district. In April and May the Superintendent travelled in the Belgaum and Dhárwár districts, in which, as also in Bijápur, the complete boundary-mark inspection work was stopped owing to the employment of Circle Inspectors on plague duty or on special measurement work. The Superintendent took a test of this measurement work. In the Central Division the ill-health of Mr. Wilkins prevented him from taking test of this work. The Superintendent, C. D., having also charge of the Superintendent S. D.'s office, spent the month of April in Belgaum. The month of May was devoted to the examination of the district survey office at Sátára, and to the supervision of

the preparation of certain statements at the district survey office, Poona, in connection with the introduction of the second revision survey rates into the Indápur táluka of the Poona district. The test of crop inspection work compares favourably with that of last year in the Southern Division, and in the Central Division the deficiency in the quantity of test was made up by the examination of the work of a greater number of Circle Inspectors. The employment of the months of March to May in the manner specified above accounts for the decrease in the figures in the last three columns. Care was taken to visit the districts which were not visited last year, and in the Southern Division Kánara alone remained without inspection for two successive years. While in the Ratnágiri district the Superintendent, S. D., took test of the measurement of Pardi lands, on which nine Circle Inspectors had been employed since November 1898. The District Inspectors and district survey office were thoroughly examined in three districts in the Southern Division and in five in the Central Division. The field work of two District Inspectors of Belgaum and Bijápur was also tested. In the Central Division Mr. Wilkins examined the Assistant District Inspector of Khándesh in measurement work and found him competent to take test of Circle Inspectors' work without the help of the General Duty Inspector. In the inspection tour both the Superintendents paid attention to the test of entries in the circle books.

Along with the scrutiny of the work of the Land Record Establishments, the village and taluka statistical forms were examined. The results of this examination were, as usual, communicated to the Collectors concerned with the remarks of the Director for such action as the Collectors considered necessary.

- 24. The remarks of the Superintendent, C. D., regarding the inspection work may be summarized thus:—The Circle Inspectors' work was found satisfactory with the exception of crop inspection in two or three villages in two districts and boundary-mark inspection in two villages in one district. Judging from the small extent of test, the village officers' crop and boundary-mark inspection work was found fair in two districts. In the other three districts the percentage of villages in which the work was found unsatisfactory ranged between 36 and 70. The census test was generally fair except in Khándesh. The táluka officers appeared to exercise little or no supervision over the compilation of the taluka statistical forms, especially the price register, and tardiness in the disposal of encroachment cases reported by Circle Inspectors was also remarkable. Mr. Rede, District Inspector of Násik, has been doing his work with much zeal and interest. Mr. Padhye and Mr. Kirane, District Inspectors of Poona and Satára, showed great energy and ability in supervising the work of Circle Inspectors. In Sholapur and Khandesh Mr. Gadre and Mr. Athavle worked with diligence. Mr. Gadgil's work in Ahmednagar was not examined during the year. With regard to the price register, the recent revision of the form and the provision made for its punctual preparation will tend to effect considerable improvement in future.
- 25. The Deputy Superintendent, Gujarát Survey, supervised the working of the Central Record Office at Broach, but owing to pressure of regular survey work he could not take test of the Circle Inspectors' work in Ahmadabad and Kaira.

REVISION SETTLEMENTS.

26. In the touring season the Superintendent, S. D., made local inquiries in connection with the revision survey proposals for the Dápoli táluka of the Ratnágiri district. In the Central Division the revised rates sanctioned by Government for the Indápur táluka were introduced before the close of the revenue year. Temporary establishment at a cost of Rs. 400 was sanctioned for preparing the akarbands, and great assistance was rendered by Mr. Padhye, District Inspector of Poona.

Crop Experiments.—Mr. Wilkins conducted four experiments, two in Násik and one each in Khándesh and Sholápur. In the Southern Division there was no opportunity for conducting experiments.

SUPERIOR TEST BY SUB-DIVISIONAL OFFICERS AND MA'MLATDARS.

27. The following table shows the extent of the test taken on fields or registers already tested by Circle Inspectors. The return is incomplete with regard to census and vital statistics for Sholapur, Dharwar and Ahmadabad and partly for Khandesh, Ratnagiri and Kolaba:—

			-	Svi	3-Divisior	AL OFFIC	ers.			ÁRS AND LEABIS.	
·						1	Eubjoc t o	f Test.			
	District.			Crop- Record.	Bound- ary- Marks.	Village Census.	Vital Statis- tics.	Crop- Record.	Bound- ary- Marks.	Village Census.	Vital Statis- tics.
-					of Survey	Number ter E	of Regis-	Number o	of Survey	Number ter En	
Dhárwár Bijápur	•••	•••	•••	79	67	86	268	10 124	39 191	924	1,693
Belgaum Kanara	•••	•••	•••	27	82 27	315	266	270 256	269 281	766 19 5	440 173
Ratnágiri Kolába	***	***	•••	22	42 40	34	24 41	72 60	83	38	 52
Khándesh Násik	•••	•••	***	735 17	913	941	1,273	1,087	1,006	674	1,498 441
Ahmednag	ar	,		204	215	79	412	382	519	133	370
Poona Sholápur	•••	•••	***	1	120 28	•••	1,435	276 263	195 316	199	262 789
Sátára	•••	•••	•••	481	448 272	302	24	995 113	974	643	2,883
Ahmadaba Kaira					2/2	•••		113	1,163	•••	***

Except in two or three districts the extent of test is not sufficient, though it compares favourably with the last year in three or four districts.

In the Dhárwár district owing to plague duty the Sub-divisional officers could not spare time for this test. The Mámlatdárs' test was also short for the same reason. In Kaira the village officers' and Circle Inspectors' work was tested, but the return in the prescribed form has not been supplied. Plague duty interfered with the test in Bijápur and Kolába. The First Assistant Collectors in Sátára, Poona and Kánara, and some Mámlatdárs in the last two districts took no test of the Circle Inspectors' work. The Collector of Poona has warned the Mámlatdárs not to neglect this work. Remarks as to the quality of Circle Inspectors' work have been reported from four districts only.

The Collectors of Sátára and Poona took personal tests of the Circle Inspectors' work.

- 28. Extracts are given below from the remarks made by the Collectors on the working of the Inspecting Staff during the year in the administration reports or in memoranda forwarding the annual returns relating to Circle Inspectors' work:—
 - Dhârwâr.—"The mengreness of the departmental work done by the Agricultural Staff is more than compensated for by the material assistance they have rendered, along with officers of other Departments, in combating plague and checking its spread. Most of the Circle Inspectors undertook their extra duties zealously. " " " Messrs. Rayadurga and Kumble both did good work during the year. The latter has devoted himself energetically to mastering his departmental duties."
 - Belgaum.—"At the beginning of the fair season a number of them were engaged for nearly two months in measuring land required for the Gokák Storage Reservoir to allow of the acquisition being completed before the end of March. As the measurement work generally had for various reasons fallen much into arrears, a special

effort was made to bring it up to date at the expense of the year's work of complete boundary-mark inspection. Leaving one Circle Inspector in each taluka the others were employed in completing the measurement of lands required for the Kagwad-Athani, Kudchi-Terdal, Yargatti-Hatkol and Nipani-Mahalingpur roads, and in measuring the disforested areas in Parasgad taluka. The work of substituting stones in place of earthen mounds in survey numbers usually flooded by the Krishna was satisfactorily carried out in the village of Darur. The District Agricultural Inspector still considers the work of his staff unsatisfactory with one or two exceptions. The tendency to select small numbers for test is as noticeable as ever. The village officers are very unpunctual with their returns, and inspection of this reacts on the efficiency of the Circle Inspectors."

- Kanara.—"The Circle Inspectors' staff is not very efficient. The appointments are unpopular. There is not a sufficient proportion of trained survey men on the survey staff. I am arranging to obtain in a few months some men from the Deccan Survey who are thrown out of employment on the completion of the survey work. Some of the Circle Inspectors did useful plague work, and their appointment on that duty saved the impoverished Local Board of lot of money. The District Inspector, Mr. Shesho Shrinivas, was on plague work for some months, and his excellent service has been reported in my plague report. Throughout the year his work has been satisfactory."
- Koldba.—"The staff is only introduced as yet into part of the district. The District Inspector was employed on plague duty during the year 1897-98. The present was, therefore, the first year in which all the staff with an experienced District Inspector were engaged on their legitimate duties. The Collector thinks that this fact should be taken into consideration in reference to the work of the Circle Inspectors, which certainly was neither accurate nor energetically performed. After the instruction given by Mr. Torvi, however, an improvement next year may be expected."
- Khándesh.—" In every instance where these duties were not fully carried out, the cause was deputation to special work. The work done by the Circle Inspectors was good on the whole, and was satisfactorily supervised by the District Inspector and his Assistant. Circle books have been introduced wherever the revision settlement rates have come into force."
- Ahmednagar.—"There appears to be barely sufficient check over the work of Circle Inspectors, but they have little opportunity of evading altogether the performance of their duties, as their time is so strictly regulated by rules. During the current year most of the Circle Inspectors were employed on their legitimate duty as prescribed in the Circle Inspector's Rules except a few from the several talukas who were engaged for a period of a month and a half in measuring land occupied by roads, quarries and metal stacks, owing to the famine and in performing some field and office work in connection with bringing under settlement the three Vinchurkar villages lastly resumed in the Kopargaon taluka. During the year four Circle Inspectors were fined, three for negligence in crop inspection and one for not having rejoined his post at the expiry of his leave."
- Poona.—"The conduct of Circle Inspectors has on the whole been good. Four were warned for petty neglect of duty and one, who persistently refused to submit his diaries and whose work was generally bad, was punished by a fine of Rs. 10, and a stoppage of pay of Rs. 5 per mensem until such time as his work is reported to be again satisfactory. The general outturn of field work has been satisfactory and the reduction of arrears of measurement and miscellaneous work is very creditable to Mr. Padhye's supervision. The preparation of Indápur táluka settlement papers added very considerably to Mr. Padhye's duties and imposed for a time a heavy strain on the district survey office establishment. Mr. Padhye has continued to work throughout the year with his accustomed zeal and energy and has fully maintained his reputation as a thoroughly efficient District Inspector."
- Sholdpur.—"The District Inspector and most of his staff continued to do good work during the year."
- Satara.—"The district survey office was visited and examined by the Superintendent, Land Records and Agriculture, C. D., in the month of May last. The survey records have been all carefully arranged, and the correction work has been nearly up to date. As regards the work done by Circle Inspectors, I can only repeat what I said last year. Much of it seems to me waste of labour. They inspect the work of village officers and detect mistakes, but they do little or nothing towards effecting any rermanent improvement in the work of these officers. They compile multitudinous statistics, which are of course not without their uses, but the bulk of which seems to me to be out of proportion with its practical usefulness. As surveyors they are not as reliable as one could wish. For instance last year, when a piece of careful surveying had to be done in connection with the Yenna Lake at Mahábalcshvar, it was necessary to call in the

aid of Assistant Settlement Officer, Mr. MacIver, the Circle Inspector, having been found incapable of doing what was wanted."

Ahmadabad.—"The work of the Circle Inspectors so far as it relates to the inspection of boundary-marks appeared to me to have been satisfactorily done. I have, however, several times noticed inordinate delay on the part of these officers in disposing of the correspondences referred to them by the Mamlatdars. But they themselves were not to blame in most cases, as several correspondences were referred to them which ought to have been referred to the Talatis or General Duty Karkuns. Such correspondences were therefore withdrawn from them and referred to the officers whose duty it was to dispose of them. The whole work appears to be too irksome to some of the Inspectors and they are therefore most anxious to return to their original appointments. The circle books were filled in with tolerable care, and the few clerical mistakes that were noticed at the time of inspection were pointed out to the Inspectors and communicated to the Mamlatdars concerned."

Kaira.—"The ordinary work of the District Inspector and of the Circle Inspectors was satisfactory, and they gave valuable help in plague operations."

CHAPTER III.

UTILISATION OF LAND RECORDS.

PROGRESS IN THE COMPILATION OF THE CIRCLE BOOKS.

29. The usual table is appended, showing the progress made up to and including the season of 1898. It includes only the villages for which the compilation is complete:—

			Total num-	Number	DF VILLAGES Bind	IN WHICH	Circle B	OOKS COM	PILED	
District.		Total num- ber of Govern- ment villages.	villages for which books are to be opened.	Introduc	tion of Circle	o Books.		troduction of the errent settlement.		
			opened.	Rough books.	Village copies.	Táluka copics.	Rough books.	Village copies.	Taluka copies.	
Dhárwár Bijápur Belgaum Kánara Ratnágiri Kolába Khándesh Násik Ahmednagar Poona Sholápur Sátára Ahmadabad		1,289 1,011 913 1,416 1,270 914 3,224 1,536 1,226 1,002 665 962 832	1,269 1,011 913 1,408 69 914 1,978 1,043 1,151 1,002 665 962 446	622 284 204 1,192 9 683 1,630 1,033 781 80 96 915 323	622 148 204 512 9 1,630 947 784 80 96 897 326	622 148 204 419 9 1,630 919 784 96 907 326	1,060 908 910 700 69 386 1,243 233 1,151 776 236 221 372	1,004 447 910 600 69 1,243 233 1,151 559 235 221 444	971 193 910 600 69 1,243 233 1,151 346 236 221 444	

As regards the current entries, the progress is satisfactory in Khándesh, Ahmednagar, Sátára and Ahmadabad; fair in Dhárwár, Belgaum, Kánara, Ratnágiri and Násik; and unsatisfactory in Kolába, Poona, Sholápur and Kaira. The compilation for back years is nearly complete except in three districts. The Collector of Sholápur has issued instructions for completing the compilation before the expiry of the current settlements. Employment of Circle Inspectors on plague duty interfered with the compilation work in Dhárwár, Bijápur, Belgaum, Kaira and Sátára. During the year the standard of daily work as regards the circle book compilation was prescribed, and if steps are taken to ensure that this standard is acted up to, much improvement will be noticeable. The following irregularities found in some districts deserve special notice:—(1) Fair books were written up direct without entries having been made in the first instance in the rough books; (2) fair books were filled in before the entries in the rough books had been examined and initialed by the

Mámlatdárs; (3) filling up of fair copies of the circle books was not commenced at all, or was much in arrears; (4) in one táluka office the táluka copies of the circle book were mislaid, and the writing up of the books had to be postponed. Delay on the part of Mámlatdárs in checking the entries in the rough books was to a certain extent responsible for the irregularities Nos. 2 and 3. The non-examination prevented the village copies from being sent to the villages where they are intended for the inspecting officers to examine and make remarks. The attention of Mámlatdárs should be drawn to the necessity of prompt examination of the rough books. The compilation should also be so arranged that the entries as far as filled in the rough books may after examination by the Mámlatdárs be transferred to the fair books in the same year. As the circle books are intended to supply data for future settlements it is essential that special care should be taken for the preservation of the táluka copies.

The District Inspectors and Superintendents, Land Records and Agriculture, C. D. and S. D., took tests of the Circle Books compilation. Reports regarding the test by sub-divisional officers have been received for two districts only.

- 30. Detailed remarks on the progress of the circle book compilation in the several districts are made below:—
 - Dhârwar.—Compilation work up to date in five talukas; in the six other talukas current entries for one to three years in arrears owing to the employment of Circle Inspectors on plague duty. Back entries in arrear in two talukas only.
 - Bijápur.—Progress slow. As regards current entries, rough books have been brought up to date in two tálukas only. In others one to three years' entries are in arrears. Back entries have been written up to date in all the tálukas except one. Fair books are much in arrear, for which delay on the part of Mamlatdars in examining the rough books and initialing the entries seems to be principally responsible. In two tálukas employment of Circle Inspectors on plague duty interfered with the compilation work.
 - Belgaum.—Current work up to date in two talukas. In others one to two years' entries in arrears. The compilation was wholly suspended in the talukas of Belgaum and Gokak owing to the employment of Circle Inspectors, on plague duty, and on measuring the land taken up for the Gokak Storage Reservoir. Entries for one year for more than half the number of the villages in Chikodi remained in arrear for the same reason. The Collector rightly remarks that the Mainlatdars have failed to realise the necessity and advantage of keeping this work up to date. The compilation for back years has been completed.
 - Kanara.—Current entries are filled in to date in two talukas. In others rough books are nearly up to date except in Sirsi, and the compilation of fair books shows good progress in three talukas. Owing to the recent introduction of the revision survey no compilation is due for back years in two talukas. In others it is nearly up to date except in Sirsi. In Siddapur, Haliyal and Yellapur, employment of Circle Inspectors on plague duty accounts for the short work. In the last taluka rough entries remained to be initialed by the Mamlatdar. No explanation is given as to the short work in Karwar and Sirsi. Steps have, however, since been taken to bring the compilation to date in the latter taluka, for which revision survey proposals are under preparation.
 - Ratnágiri.—Progress satisfactory. The compilation is up to date in Vengurla, and in Málvan one year's entries are in arrears, owing to the táluka papers having been sent to the Huzu'r for audit purposes. The Collector thinks that with a little more effort Málvan could have brought the books up to date as Vengurla has done.
 - Kolába.—Progress unsatisfactory. The compilation of rough books only has been made. It is up to date in two tálukas only and in the other two, entries for three or four years are wanting. Fair books not commenced at all, for which the very slow progress made by the Mamlatdars in checking the entries in the rough books and in initialing them is perhaps responsible. The attention of the táluka officers should be drawn to the necessity of promptly checking the entries in rough circle books.
 - Khandesh.—Progress satisfactory. The current compilation work is up to date in all the talukas except two. In Chopda one year's entries only are in arrears and in Erandol the work done in September-October was short owing to the illness of the Mamlatdar and the absence of one of the Circle Inspectors. The compilation for back years, which, owing to the recent introduction of the survey settlements is small, is up to date.

Nasik.—The compilation is up to date in two talukas. In others the current entries have been nearly brought up to date, but the progress made as regards the back years is unsatisfactory, except in the taluka of Peint, where one year's entries only remained in arrear owing to the taluka papers having been sent to the Huzur office for audit purposes, and in 45 villages of Nandgaon, in which owing to the recent introduction of the revision settlement no compilation was due. Entries for 2 to 19 years are in arrears. In Sinnar one Inspector attended the Survey. Class at Nasik and another Inspector was untrained. Owing to the taluka papers having been sent to the Huzur office for audit the Circle Inspectors in Peint were engaged for 11 months in arranging the taluka records, and one Inspector assisted the Circle Inspectors of Nasik in the compilation work. In one taluka (Dindori) it was noticed that the work was not compiled uniformly for the same number of villages.

Ahmednagar.—The progress was satisfactory in seven talukas where the books are compiled to date. In the remaining talukas current entries only are in arrears for one to three years. Detailed statements have not been received for this district.

Poona.—The progress is very slow except in Indápur and Mával. No return has been sent by the Mámlatdár of Haveli in spite of repeated reminders from the District Inspector. Current entries remain to be made for one to four years and in some villages for ten. As regards back entries the compilation of rough books only shows fair progress. Fair books were not written up at all in two tálukas, and in some tálukas fair books were filled in before the entries in the rough books were checked and initialed by the Mámlatdárs, who are much behindhand in this respect. The compilation is reported to have been carelessly done in three tálukas, especially Junnar.

Sholapur.—Progress slow. In Madha, Pandharpur and Sangola entries for two or three years are in arrears, in Malsiras for six years and in the remaining two for nine to twelve years. Very little compilation work was done during the year (September—October 1898) except in Madha. The Circle Inspectors in Karmala were employed on supervising the distribution of dole, and two Inspectors from each of the Pandharpur, Sangola and Malsiras talukas were sent to Madha to help in completing the arrear compilation for that taluka, in which the current settlement expires in 1899-1900. The compilation was brought down to 1895-96, and the Collector reports that it will be completed during the current year. He further observes that special assistance will be given so as to complete the circle books in Sholapur, Barsi and Karmala before the expiry of the current settlements in those talukas. Two Inspectors from Sholapur were engaged in eliminating redundant boundary marks from the copies of the village maps in the taluka office. In the Sholapur taluka the village copies of the circle book do not seem to have been hitherto filled in, which is irregular.

• Sátára.—Progress satisfactory. The compilation is up to date, except that one year's entries remained in arrear in Koregaon and for a few villages in two other talukas. Two Circle Inspectors in Koregaon were employed on plague duty and one of the Circle Inspectors in Pátan was on leave. The táluka copies of the circle book for the villages in one of the circles could not be found in time, and consequently the compilation for one year had to be postponed. As the books are to be retained for 30 years, special care must be taken to preserve them. Entrics for two years in two circles also remained to be initialed by the Mamlatdar.

Ahmadabad.—Progress satisfactory. The compilation has been brought up to date in all the tálukas except two. In one, entries for one year are in arrears as regards both rough and fair books and in the other for fair books only. In some tálukas entries for one to two years were made in the fair books before examination by the Mámlatdár of the rough books, and in one táluka the figures seem to have been entered direct in the fair books and no rough books kept. This is irregular. The attention should be drawn to the necessity of prompt check of the entries in the rough books.

Kaira.—No compilation work was done during the year in the talukas of Mehmadabad and Matar, and the progress in Nadiad and Thasra was slow. No explanation is given for the non-compilation or short work. In the remaining talukas the work is up to date.

COLLECTION OF REVENUE AND RENTAL IN PRECARIOUS TRACTS.

31. The following table compares the measures adopted in 1898-99 with those in the preceding year:—

Number of notices served District.			in which	of cases penalty evied.	Number of cases of distraints of moveable property.		Number of cases of forfeiture of occupancies,		Remarks.
	1897-98.	1898-99.	1897-98.	1898-99.	1897-08.	1898-99.	1897-98.	1808-99.	
Khándesh Násik Ahmednagar Poona Sátára Sholápur Belgaum Bijápur Dhárwár Kolába Ratnágiri	9,425 27,908 35,374 19,146 13,993 894 8,917 2,312 10,288	13,711 9,647 23,053 29,681 21,341 9,111 1,153 12,969 2,982 9,901 2,558	38 9 3 4 2 2 2 3 21 61	99 73 21 3 9 2 4 14 4 19 58	146 43 160 10 5 19 2 99 4 35 223	30 34 584 74 1,483 214 3 304 17 62 204	134 145 4 3 1 11 4	306 175 262 11 13 1 860 23 8	•

The number of notices fell considerably except in the five districts of Násik, Dhárwár, Sátára, Belgaum and Bijápur. The last three districts also showed considerable increase last year. On the other hand, the number of cases in which penalty was levied more than doubled, the cases of distraints of moveable property more than quadrupled, and the number of cases of forfeiture of occupancies increased by about five times. For the large increase under cases of distraints of moveable property, Sátára is responsible. In the Karád táluka of the district there was marked disinclination on the part of rayats to pay their dues; and in 1,200 cases moveable property had to be distrained.

CHAPTER IV.

SCIENTIFIC AND NATIONAL ENQUIRY UNDER IMPERIAL CONTROL.

A.-METEOROLOGY.

- 32. The number of rain-gauge stations in the whole of the Presidency (including Native States) reporting rainfall information to this office were 325, the same as last year. Three stations were temporarily closed, as the medical officers in charge of the gauges were called away on plague duty. A separate report on rain-gauge inspection and rainfall registration is submitted under Government Resolution No. 4523, dated 1st December 1894, General Department.
- 33. The detailed analysis of the rainfall of the season of 1898 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 statement below:—

Rainfall at District Head-quarters.

					An	i NUAL RAINI	ALL BNDING	31st Decem	BBR.
No. District Head-quarters.				`Average of eleven years		18	97.	1898.	
_		<u> </u>			ending 1897.	Fall.	Rainy days.	Fall	Rainy days.
	,				Inches.	Inches.	No.	Inches.	No.
1	ł	Dhulia (Khándesh)	•••	26-22	30.84	34	21.03	36
2	z	Násik	•••	•••	30.06	28.46	44	27.59	51
3	CA	Ahmednagar	`•••		23.68	18.23	30	14.78	31
4 5	DECCAN.	Poona	•••	•••	35.10	37.18	50	22.92	52
G	1	Sholápur	•••	•••		20.42	37	34.85	40
U	ı	Sátára	•••	•••	44.63	46.61	72	35.97	78

						киД	UAL RAINS.	ALL ENDING	31st Drcky	DER.
No.	Γ,				Average of eleven years	18	1697.		180%	
						ending 1897.	Fall.	Rainy days.	Fall.	Rainy days.
	,					Inches.	Inches.	No.	Inches.	No.
7	. ¥	(Belgaum	•••	•••	•••	51.36	45.28	78	52.79	101
7 8 9	KAR- NA TAK.	{ Bijapur	•••	•••		25.63	28.47	43	26.08	47
9	A M	(Dhárwár	•••	•••	•••	33.74	41.24	64	41.95	81
10	بوا	(Kárwár (Kána	ra)	•		122.57	129.75	103	133.75	113
11	KONKAN.) Ratnágiri				101.97	136-16	90	118.97	93
12	l K	Alibág (Kolál	ba)		•••	94.49	101.02	94	101.43	86
13	×	(Thána	•••	•••	•••	105.93	121.17	91	108.30	96
14	٠.	(Surat	•••			46.02	39.02	53	32.52	42
15	1,1	Broach	•••	***		42.78	42.31	51	47.51	41
16	GUJARA'T.	≺ Kaira	•••			37.48	21.07	36	31.63	36
17	l p	Godhra (Panc	h Mal	háls)	•••		36.01	46	43.49	42
18	ا ت	(Ahmadabad	•••	•••	•••	32.29	31.18	44	36.23	29

The monsoon of 1808 broke timely on the Kánara coast, but the current being weak advanced slowly into Khándesh, Gujarát and beyond the Sahyádris and soon spent itself. In these parts therefore there was a break in the second half of June and sowings were checked. They were resumed and completed in July. There was sufficient and seasonable rainfall in Gujarát and on the litteral in July and August. But in the eastern parts of the Deccan and the Karnátak, the kharif crops were severely tried by deficiencies of rain and towards the end of the latter month they began to fade. But copious rain fell everywhere in September and gave timely relief. The October rain was up to the requirements of the different parts of the Presidency, heavy in the eastern rabi tracts of the Deccan and the Karnátak and light in the Konkan and on the Gháts. None fell in Khándesh and Gujarát, where the season closed rather early. The rabi crops felt some insufficiency of moisture. The East Deccan and the Karnátak had a fall of cyclonic rain in November, as well as in December, which benefited the rabi crops.

Deccan.—The monsoon of 1898 set in timely with Mrig in June, but a break following immediately, the sowing operations were checked except in the western hilly tracts. They were completed in July. In parts of Ahmediagar, Sholapur, the Deshi portion of Satara and Poona, the full kharif area was not sown. Sown crops also suffered from deficient rain in August. September rain was most opportune and heavy enough everywhere to sustain the withering kharif crops. It also produced sufficient moisture for rabi sowing, which was favourably effected in the subsequent break. The rainfall in October and November was rather insufficient. The late rains closed rather too early for the rabi crops, which somewhat reduced their outturn.

Karnátak.—The ante-monsoon showers were heavy enough for preparing land and early sowings. The monsoon of 1898 opened early in June, and in the western (Mállád) portion it gave good rain for all agricultural operations till the end of August. But in Bijápur and eastern tálukas of the other two districts the monsoon current grew weaker in the second fortnight of June and gave only occasional showers. This checked sowings. Some kharif area remained unsown until utilised for the rabi. The sown crops in these parts suffered from repeated deficiencies in July and August. At the end of the latter month they were fading; but heavy rain in September gave timely relief. Rabi sowings were started during the intervening breaks. There was another seasonable good fall in October and a subsequent break was useful for completing rabi sowings. The Vishákha showers in November were beneficial to the

sown rabi. No rain fell afterwards. Rats appeared in places in Dhárwár, but no serious or widespread injury was done.

Konkan.—The monsoon of 1898 commenced in the first week of June in Kanara and in the second week in the other districts. Kharif sowings were completed in June. Rain fell almost daily in July, sufficient and favourable for transplantation. The August rainfall was light in the second half of the month, but it was seasonable and sufficient for weeding operations. The Purva and Uttara falls in September were heavy; but the break towards the close of the month prevented damage. October rain was much below the average, but immediately following the heavy fall of September it was not insufficient. The break was utilised for harvesting kharif crops. The fall of November was slightly injurious in places to rice ready for reaping or already reaped. No rain fell subsequently except a few scattered showers in December in Kánara and Kolába.

Gujarat.—The rainy season of 1898 commenced in the middle of June and closed before the end of September. The kharif sowings were begun in June, but a break occurring at the end of that month they were completed in July. The rainfall in this month was too heavy for bájri and cotton in Broach, where resowing of cotton was necessary. August rain was sufficient to keep standing crops in fairly good condition. Most of the rabi rains fell in September and the sowings of the winter crops were completed in October. No rain fell afterwards. The late rains ceased very early.

Forecast of the season of 1899-1900.

34. The forecast of the season of 1899-1900 is that of widespread scarcity. The season opened with mild monsoonish weather, and the current being weak the rain in June was everywhere light and in the latter half of the month ceased altogether in the Deshi tracts of the Deccan and the Karnátak. During the remainder of the kharif season the rain was light and quite insufficient for the crops on the littoral, while in the whole of the North Deccan and Gujarát (especially North Gujarát) and in the eastern tracts of the Deccan and the Karnátak the rain was scanty or wholly absent up to September. In the eastern parts of the Deccan and the Karnátak heavy rain in September revived the withering crops and induced rabi sowing. But in the North Deccan and Gujarát the kharif crops failed altogether unless irrigated, and all agricultural operations were at a standstill. The cattle there began to suffer. October rain fell in light showers and was confined to Kánara and Ratnágiri, the South Deccan and the Karnátak. The North Deccan and Gujarát again received no rain, and rabi sowings were altogether stopped; elsewhere in the Presidency the rabi crops sown with the September rain have suffered for want of further rain and are expected to yield a poor outturn.

B.—MINERAL STATISTICS.

35. The annual return of mines and minerals was, as usual, forwarded to the Reporter on Economic Products, Calcutta, and the return of mineral concessions was submitted to Government for transmission to the Government of India. In addition to these, the two half-yearly returns showing particulars of mines being worked were supplied to the Director of the Geological Survey. This information has also been supplied for the first time to the Compiler of the General Administration Report, Bombay.

Additional information regarding certain mineral industries for which trustworthy statistics are not supported by actual returns was supplied to the Reporter as last year.

Under instructions conveyed in Government Resolution No. 6602, dated 21st September 1899, Revenue Department, the annual statements (Nos. I and II) of the production of minerals and gems will in future be forwarded to the Director General of Statistics instead of to the Reporter on Economic Products. Mr. E. D. Payer of Secunderabad (Civil Engineer, Hyderabad State Railway), has been granted a license, in addition to the one reported last year, to explore for minerals in the Gadag taluka of the Dharwar District (Government Resolution No. 6877, dated 30th September 1899, Revenue Department).

The lease to mine for gold in the villages of Alnawar and Kadalgiri, Dhárwár District, granted to the Syndicate to whom Háji Ismail valad Háji Mahomed was allowed to assign his rights and privileges, has, under Government Resolution No. 5840, dated 22nd August 1899, Revenue Department, been extended for a period of two years on the condition that the Association makes substantial progress before March next.

C.—COLLECTIONS FOR THE IMPERIAL INSTITUTE AND THE INDIAN MUSEUM.

- 36. The following articles were forwarded to the Reporter on Economic Products to the Government of India:—
 - (1) Abies Webbiana, Ver. Talispatra (leaves).
 - (2) Agaricus igniarius, Ver. Gharikun (sap).
 - (3) Alhagi maurorum, Ver. Taranjbin (manna).
 - (4) Alpinia officinarum, Ver. Pankijir (root stocks).
 - (5) Astragalus verus, Fer. Katiragond (gum).
 - (6) Carum nigrum, Ver. Shahajire (fruits).
 - (7) Centipeda orbicularis, Ver. Shinkni (leaves).
 - (8) Cocos nucifera, cocoanut (gum).

The Reporter paid a visit to Karáchi, Ahmadabad, Surat, Bombay and Poona in September-October last in connection with the collection of commercial products for the Indian Museum.

D,-ENTOMOLOGY.

37. Locusts appeared in several tálukas of Karáchi, Hyderabad and Thar and Párkar during the months of May and June last, but no damage was done by them.

At pages 138 and 139 of Volume IV, No. 3, of the Indian Museum Notes, a mixture of arsenic and soda has been recommended for the destruction of locusts. Great caution is necessary in its preparation and use on account of its poisonous character.

The Imperial Bacteriologist has obtained from South Africa a culture of the fungus which is said to have been found very effective in destroying swarms of locusts in that country. Small tubes containing the fungus are prepared at his laboratory and supplied on receipt of a telegram reporting the presence of locusts in any district. Instructions for using and cultivating the fungus have been published. The Imperial Bacteriologist is of opinion that the fungus is worth trying in the case of grasshoppers also.

$\mathbf{E}_{,}$ VETERINARY.

Organization of a Subordinate Civil Veterinary Staff.

38. A salutri class has been started at the Bombay Veterinary College from 4th January 1900 to train men eligible for holding the appointments of Subdivisional Veterinary Assistants contemplated by the scheme for the organization of a Subordinate Civil Veterinary Staff in this Presidency. The instruction is given in colloquial Hindustáni and Maráthi, and consists principally in practical demonstrations. The course of instruction extends over two years, and the class is open to both Civil and Military pupils. No fees are charged for the instruction. Detailed rules and regulations in connection with the class have been published for general information.

As regards the other matters dealt with in the scheme, the final orders of the Government of India are yet awaited.

Transfer of Sind.

39. The Superintendent, Civil Veterinary Department, Baluchistán and Sind, has been subordinated to the Local Government as regards his duties in connection with cattle-breeding, cattle-disease, veterinary dispensaries and horse

and mule-breeding operations by the agency of Local Board and Muncipal stallions in Sind. He submits an annual report which is reviewed by this office.

Horse and Mule-breeding.

40. The Superintendent, Civil Veterinary Department, Bombay, travelled in twelve districts, visited Palanpur, Rájkot, Bhávnagar, Junágad, Vankáner and Morvi, and paid seven visits to Bombay. He inspected all the grant-in-aid veterinary dispensaries and attended the horse-shows held at Ahmednagar and Rájkot. The Superintendent, Civil Veterinary Department, Baluchistán and Sind, visited all the dispensaries in his charge.

The number of stallions on the register at the commencement of the year in the Presidency Proper was 42, of which 4 were destroyed and 1 died. Eight stallions were added. Thus the number at the close of the year was 45, of which 9 were Thorough-bred English, 3 Hackney and Norfolk Trotter, 31 Arab, 1 country-bred and 1 Australian. Nine of the stallions were located in Gujarát and the rest in the Deccan. The actual number of stallions at stud-work during the year was 41.39 against 44.79 during the preceding year.

The total number of mares covered was 1,466 against 1,105 during the preceding year, the rise being chiefly noticeable in the Deccan, which suffered from the effects of famine during the preceding year. The average number of mares covered per stallion rose from 24.67 to 35.42.

The average number of produce per stallion declined from 10.89 to 8.62, but the percentage of produce to the number of mares covered per stallion showed a slight improvement, being 34.93 against 34.29. The percentage of "not held" showed an increase (52.94 against 51.54) and that of unknown results a decrease (12.13 against 14.17). It is hoped that the introduction of the forms for the registration of mares and their produce will effect greater accuracy in the statistics in future.

As regards the relative merits of the different classes of stallions as foal-getters, judging from the average percentage of known produce to mares covered per stallion for the six years ending the year under report, the country-bred horse ranks first, the Arab pony second and Arab horse third, closely followed by the Thorough-bred English, while the Norfolk Trotter and the country-bred pony occupy the lowest rank. It has been decided in consultation with the Inspector-General, Civil Veterinary Department, that the Norfolk Trotter class of stallions should no longer be allotted to this Presidency as being unsuited to the class of mares obtainable here.

As regards supplying British Cavalry remounts, the average percentage of allotments of the remounts inspected at the Ahmednagar remount Rearing Depôt for the six years ending the year under report showed that the Norfolk Trotter holds the first rank, followed by the Thorough-bred English and the Arab.

Of the 152 country-bred remounts purchased, 45 per cent. were the known produce of Government stallions, 21 per cent. were the produce of country sires and the breed of the rest was not known.

The number of colts castrated was 53 against 87 during the preceding year, inclusive of Sind.

613 mares were branded for horse and pony breeding in the provinces of Deccan and Gujarát as against 276 during the preceding year, showing a satisfactory increase.

Of the 35 officers empowered to grant certificates to mares for service by Government stallions, only 6 exercised their powers and issued 90 certificates. As the number of branded mares in every breeding district has reached, and in some cases exceeded, the limit fixed under the rules of an average of 50 mares per stallion, the system has been discontinued.

The average cost of maintenance (exclusive of transit charges) per horse and pony stallion was Rs. 385 against Rs. 559 during the preceding year. The total cost of the Department amounted to Rs. 47,261 against Rs. 51,419.

The Arab stallion Maxim, maintained by the Hyderabad District Local Board, covered 42 mares. Of the 63 mares covered by him during the preceding year

24 foaled. The donkey stallion kept by the same Board being small, and an indifferent coverer, has been recommended to be used for covering donkey mares only. In Káthiáwár horse-breeding is making satisfactory progress and mulebreeding has taken a firm footing.

Cattle-breeding.

41. A stud bull has been kept by the District Local Board, Hyderabad, but no information about his work was received during the year under report.

Horse Shows.

42. Two shows were held in the Presidency proper—one at Ahmednagar and the other at Rajkot.

The Ahmednagar Show.—Held on 31st October 1898. The total number of exhibits amounted to 488, much below the usual number owing to a rumour that the show would not be held. The animals admitted were, however, of a far superior class. Twelve animals were purchased for the nursery and were considered by the Remount Agent to be the best ever obtained. With very few exceptions all foaling and covering certificates were produced. Rs. 2,200 were distributed in prizes.

The Rajkot Show—Held on 29th November 1898. The total number of exhibits amounted to 449. A good number of brood marcs and promising fillies were exhibited. There was an increase in the exhibits of private owners; mules were exhibited for the first time, and the institution of a class for baggage ponies was successful. The Remount Agent was unable to attend the show, though the Government grant was specially offered in prizes for young stock to be purchased for the Remount Rearing Depôt. Rs. 2,500 were awarded in prizes. There is a consensus of opinion in favour of reverting to the former practice of holding a central show at Rajkot irrespective of any local shows that may be periodically held elsewhere in Kathiawar, and the matter has been left to the discretion of the several Chiefs at whose expense the show is held.

Cattle-disease.

43. The following statement shows the outbreaks of cattle-disease in the Presidency Proper and in Sind as compared with the previous year:—

	RINDS	BPEST.	Anti	IBAX.	Mo	r-and- Uth Iabb.	PN.	EURO- EUMO- IA.	SYA	edon ipto- ique,		1 HER ASES.	Tor	'AL
Year,	Attacks.	Percentage of deaths.	Attacks.	Percentage of deaths.	Attacks.	Percentage of deaths.	Attacks.	Percentage of douths.	Attacka	Percentage of deaths.	Attacks.	Percentage of dostha.	Auacka.	Percentage of death.
residency Proper	0.04	69:85 45:73	140 19	86·87 100•00	2,679 115	4*29 1*74	***	:::		52·04	127 8,651	93-70 8-09	4,294 4,013	29 91
otal, 1998-99 ".	1,648	61 OG	179	88-27	2,794	4'11		***	99	52-04	3,676	9.03	8,207	19
otal, 1897-98	7,295	67:23	39	11.28	8,936	3.31	•	\$0.00	55	100.00	1,209	63 27	13,548	60

It is satisfactory to note a decrease in the total number of attacks as well as in the percentage of deaths. It is suspected that the statistics are still incomplete, as no reports about cattle-disease have been received from certain districts.

Under Government Resolution No. 4699, dated 6th July 1899, Revenue Department, Collectors are also to report cases of rabies.

At the instance of the Inspector-General, Civil Veterinary Department, enquiries were made regarding warbles, but the officers consulted reported that it was unknown in this Presidency.

Veterinary Dispensaries.

44. Including the Veterinary Officers employed by the Ratnágiri and Kolába District Local Boards at their own expense, there were 19 Veterinary B 2190—7

Assistants working in the Presidency Proper and Sind. The following statement shows satisfactory results:—

Numb			PERCENTAGE ON TOTAL CASES THEATED.								
Year.	of Vete-		Cured.	Relieved.	Died.	Incurable.	Results unknown.	Under treat- ment at close of the year.			
Presidency Pro-	15	19,151	79·49	5 ·99	2.83	1.08	9·12	1.49			
per. Sind	4	4,782	89-98	3.08	3.83	•37	1.11	1 63			
Total 1898-99	19	23,933	81.61	5.41	3.02	•93	7.51	1.52			
Total 1897-98	17	19,976	80.18	5.41	2.18	•79	9.68	1.76			

The work done by the several Veterinary Assistants was generally good, especially that done by Messrs. Bhatt, Maniar, Patel, Haji and Asudamal. The Hyderabad Dispensary building is approaching completion. It is hoped that steps will be taken at an early date to provide suitable accommodation for the Surat, Jalgaon and Belgaum Dispensaries and to find a more convenient locality for the Shikarpur Dispensary. The services of the Veterinary Assistant at Hyderabad are being utilized in giving veterinary instruction to the students of the Agricultural Class.

F.-ARCHÆOLOGY.

45. The Collector of Broach reports that a cultivator in petha Hánsot found, among other articles, two iron plates imbedded in the earth, which on being forwarded to the Royal Asiatic Society, Bombay Branch, were found to contain a grant of land to the Bráhmans of Broach dated about 540 A.D.

G.-TRADE AND TRADE STATISTICS.

46. The Rail-borne trade registered in 1898-99 is, as shown in the following table, extracted from the annual report separately submitted:—

′	I	PESIDENC	T PROPER	Sind.				
Year.	External	Trade.	Local	Total	External Trade.		Local	Total
	Imports.	Exports.	Trade.	Trade.	Imports.	Exports.	Trade.	Trade.
· •	_	Mauno	ls (1 M	d. = 82	lbs.);	000 om	itted.	
1898-99 Average 1897-98 Increase (+) or decrease (—) over average. Increase (+) or decrease (—) over last year.	420 286 276 +134 +144	146 127 135 +19 +11	336 329 304 +7 +32	902 742 715 +160	167 94 73 +73 +94	30 38 36 —8 —6	90 76 70 +14 +20	287 208 179 +79 +108

The total trade in the Presidency Proper improved 26.1 per cent. over the last year and 21.5 per cent. over the average. In Sind the improvement was still larger, being 60.4 per cent. over the previous year and 38 per cent. over the average.

The road-borne trade was, as usual, registered at six selected nákas in the Presidency Proper and at seven nákas in Sind.

CHAPTER V.

SCIENTIFIC AND LOCAL ENQUIRY UNDER PROVINCIAL CONTROL.

A.-EXPERIMENTAL FARMS.

47. The following is a brief notice of the principal points connected with the cultural operations and the dairy farming and breeding of stock conducted on the Poona, Manjri and Surat Farms during the year under report.

Poons Farm.

48. The season on the whole for kharif crops was favourable, although the rainfall was considerably under average. Sufficient rain fell in June and July The rainfall in August was light, that in September heavy The light rainfall early in October brought kharif sown crops to maturity. Fair weather prevailed subsequently and harvest operations were conducted under favourable conditions. A good crop of grass was produced in the Poona District and cut for hay earlier in the season and in better condition than usual. Rabi crops were poor except where helped by irrigation. Fodder, however, was abundant in the district.

Fodder Experiments.

- 49. Sorghums. In past years it has been abundantly proved that a certain number of the indigenous varieties of jowár have special value as fodder crops. Under favourable conditions they are capable of producing enormous weights of fodder per acre. Three exotice varieties compare favourably with indigenous varieties. Reference is invited to former Farm Reports for details. The definite conclusions which have been attained are:—
 - (a) That some varieties have characteristically thin stalks and much leaf growth and the fodder is, therefore, of finer quality than of varieties with thicker, coarser stalks.
 - (b) Varieties with specially thick stalks have usually large heads of grain, and for the production of grain are superior to varieties with thinner stalks. Good fodder varieties have generally heads of grain which take the form of a graceful drooping panicle which affords no foothold to birds. This is of course an advantage.
 - (c) When the production of fodder is the chief object aimed at, thick seeding within certain limits increases the outturn and improves the quality, because the plants being crowded grow tall and thin. The practice of sowing thickly is advantageous in a favourable season in fertile soil which is clean and otherwise in good condition. Heavy downpours of rain damage a very thick crop to a greater extent than a thin crop. A very thick crop is specially liable to rust in wet or close weather, and is unable to resist drought for any length of time.
 - (d) Some varieties grow to maturity far more quickly than others. Those that grow most quickly can under favourable conditions be reaped as fodder crops in full flower 7 or 8 weeks after sowing, and may then stand 8 feet or more high. The advantage of growing such varieties in a time of scarcity is obvious. Some of the early maturing varieties when cut as fodder before maturity produce from the stubble second and even third vigorous growths if the rainfall is favourable and the soil in good condition.
 - (e) Like other cultivable plants in India, the varieties of jowar do not all lend themselves favourably to any decided change of soil or climate. It may generally be said that if the change is considerable the variety in the first season deteriorates, but by acclimatization may recover. The Sundhio variety of Gujarát, which is probably the best fodder variety in cultivation, appears to thrive with a moderate rainfall under almost any description of fairly good soil and (excepting extent of rainfall) in almost any climate. This variety owing to its successful cultivation at Government farms is now extensively cultivated in many parts of India.
 - (f) Of all the varieties experimentally grown at the farm, only a very few have been found specially suited for cultivation as irrigated crops

in the fair season, and these have been obtained mostly from the Ahmednagar and Sholapur districts, where irrigated jowari crops under wells produce with liberal management crops which ripen in February-March usually.

In the year under report over 120 different varieties have been grown. These have been grouped under two main classes—"Grain varieties" grown on the Surat Farm, "Fodder varieties" grown at the Poona Farm. Although the conclusions recorded above are definite in a general sense, yet, when the characteristics and qualities of each of the numerous varieties were separately examined, surprising differences become apparent. Mr. Mollison has taken detailed description of each variety so far as characteristics were apparent. Typical heads of grain of each variety were photographed and a record kept, from which in future years it will be seen whether there is any departure from the original type in the general appearance of the plant, the size, shape and weight of the heads of grain, the size, shape and colour of the grain, or any other characteristic which was apparent. The efforts at the farm will be to effect improvements, and this, it is hoped, will be induced (a) by acclimatization associated with careful cultivation in good soil and proper rotation; (b) by careful selection of seed, the best heads of grain from the most vigorous plants being selected specially for seed for the following year.

Sorghum Halepense.—The conclusions reported last year regarding the utility of this handsome perennial grass are confirmed by further observation. It does not maintain the vigour of growth and vitality which it exhibited when first planted. Indigenous grasses have to some extent taken possession of the plot, and the exotic is unable to resist this inroad, though protected by numerous underground stems which ramify in all directions. The conclusions therefore are that the Sorghum Halepense in permanent pasture will rapidly disappear in the Deccan, and it is not advisable to sow it temporarily, because owing to its numerous underground stems it is difficult to clean the land properly for another crop.

Mauritius Water Grass.—This is an excellent grass for damp, even wet, situations. It thrives where no ordinary cultivated crop will grow successfully. It grows best during the monsoon, but maintains a fair degree of vigorous growth the whole year. The crop is most successfully propagated from cuttings, and applications for such have been received and met during the year. Applicants have been advised that the grass is only recommended for special situations.

Guinea Grass.—The successful cultivation of this grass on the farms and in many parts of the Deccan, in Gujarát, Káthiáwár and Sind is fully established. It is an excellent fodder for all kinds of farm animals, especially for milch cattle and horses. The best results are got in good free working soil with plenty of manure and sufficient irrigation. The grass grows most luxuriantly in the monsoon when it flowers freely. At other seasons the leaf growth is fair with no great tendency to produce flowering stalks. It thrives under shade. Plantations should be replanted every third year, the old root-stocks being grubbed up and replaced by sets obtained by sub-division. We strongly recommend all stock owners to maintain a permanent plot of Guinea grass, the outturn in a year being large and certain, the crop being exceedingly hardy and not subject to any kind of disease.

In the current season with scarcity or famine imminent, a good many applications for Guinea grass sets and lucerne seed have been obtained specially from Káthiáwár, but it has been explained to the applicants that to meet the requirements of impending scarcity these perennial crops are less suitable than the quicker ripening varieties of jowár which under irrigation and other favourable circumstances give a very heavy yield of fodder and also of grain in quick time. Perennial crops require more time to become fairly established.

Lucerne.—There is little to add to former conclusions regarding this crop. It is liable to many mishaps, as damage by insects, blights, disease and rats. But when the crop thrives it yields heavily and pays well. It has been proved on the farm that a mixed crop of Guinea grass and lucerne is less risky and yields more than lucerne alone. The mixed produce is excellent fodder and

there are no practical difficulties in growing the crops mixed and reaping the produce of such crop separately. The farm practice is to grow lucerne in ridges and this is recommended, because the crop can be conveniently kept clean and remains healthy longer than if sown on the flat. The bed system probably for a time produces, however, a heavier outturn.

Experiments with Fibre crops.

50. Egyptian Cotton.—The experiments in former years proved that exotic varieties of cotton are unsuited to the conditions of Indian agriculture. Egyptian seed as supplied by Mr. J. N. Tata and by the Reporter on Economic Products to the Government of India gave very poor crops as compared with indigenous sorts such as the Deshi and Goghari varieties of Broach. Sufficient seed of the exotic varieties as grown on the farm was saved for trial on a small scale and Mr. Tata kindly again supplied seed from fresh imports. The acclimatized seed and the newly imported seed was sown in comparison with Desh-Broach and Goghari. The heavy rainfall of July completely destroyed the exotic seedlings. The indigenous seedlings were not injuriously affected. The plots were small (1 acre for all) and as the object of the experiment was nullified by the destruction of the exotic seedlings, all the plots were grubbed up and more useful fodder crops were sown instead.

As indicating the comparative values of the exotic and indigenous varieties in a favourable season, the outturn figures of the previous year may be again reported as under:

				Lint and seed per acre. Lbs.
Deshi, Broach	•••	•••	•••	806
Goghari		***	•••	846
Egyptian		***	***	104

Rhea.—This fibre plant was grown only in a comparatively small plot during the year under report. The soil is of moderate quality and depth and is capable of successfully growing with liberal treatment any of the ordinary crops of the district either as dry-crops or under irrigation. The Rhea was irrigated when necessary and excepting in the hot weather grow with fair vigour, the best stalks being about 4½ feet high. The crop remained quite healthy and at the beginning of the current season provided by the sub-division of the roots sets for a considerable extension of area. In the current season the plot occupies about an acre. No difficulty was experienced in extending the area. Almost every set grew, transplantation being done during light rainfall. Fibre was extracted by steeping the ribbons and cleaning in the ordinary country way and appears to be fine in quality and fairly clean. We cannot yet venture to report outturn results per acre. The cost of cultivation and of extracting the fibre is heavy and it is not likely that Rhea cultivation can be profitably introduced in the Deccan. The experiment will be persevered with until definite conclusions can be published.

The proportionate outturns are as under:-

			Tot Conte.
Percentage of dry ribbons to green stalks		***	4.3
Do. of fibre (fairly clean) do.	•••	***	0.47

In comparison with the foregoing figures I give the following for ambari (Hibiscus cannabinus) and san (Crotalaria juncea), two common fibre plants in the Deccan:—

		Ripe stalk per acre,	Fibre per acre.	Percentage Fibre to stalk.
Ambári (Hibiscus cannabinus)	•••	Lbs. 5,733	Lbs. 973	17.0
San (Crotalaria juncea)	•••	6,280	520	8·2

Experiments with other crops.

- 51. Bájri.—Only five varietics of this important cereal have been identified throughout the Presidency and it is probable that no other varieties are known. The cultivation of the known varieties is carried on at the farm with certain definite objects in view:—
 - (i) To determine the adaptiveness of each variety for inferior, medium and fairly good soil.
 - (ii) To determine the comparative influence of different seasons (favourable and more or less unfavourable) on the outturn of the different varieties.
 - (iii) To improve the seed of each variety by selection continued from year to year, the best heads of grain being selected at harvest time from the most vigorous growing plants.
 - (iv) To distribute to suitable cultivators select pedigree seed likely to suit the soils and other agricultural conditions of their holdings.

The experiments have proved that some of the varieties (i.e. those originally got from the fertile province of Gujarát) are superior as regards weight and quality of grain and straw to the indigenous Deccan varieties, if the conditions of soil and season are favourable. On the other hand with inferior soil and deficient rainfall or other adverse circumstances the evidence at hand indicates that the indigenous Deccan variety is in the Deccan most productive. We hope that by acclimatization and selection of seed the superior varieties may be improved and their power to resist adverse conditions of cultivation strengthened.

Wheat.—Numerous varieties of this important cereal are cultivated throughout the Presidency. Small parcels of seed of all the well-known varieties were obtained. These varieties were grown side by side on the farm under irrigation, and in suitable soil considerable confusion exists regarding the identification of varieties, because different vernacular names are given to the same variety in different districts. At harvest time it was found that almost all plots contained several varieties. The seed when sown, although apparently true to variety, was in all cases mixed and in some instances very much mixed. It was easy to select from the ripe crops heads of grain which could easily be identified as belonging to a distinct variety. This selection of pure seed was carefully done in all plots. We therefore have for cultivation in the current season small parcels of selected seed of over twenty varieties. There can be no question regarding the purity of the seed in each sample and there also can be no doubt regarding the general character of the plants from which each kind of seed was obtained. Mr. Mollison took careful descriptions of the plants of different varieties in respect of observable characteristics. The intention is to continue the cultivation of varieties from year to year and try to improve them by careful selection of seed continued from year to year. The behaviour of each variety will be closely watched and any improvement or deterioration from the original type noted. The susceptibility of the various varieties to disease, particularly to rust, will be studied. This may be found specially important, because in parts of the Presidency in particular years the wheat crop is well nigh destroyed by There is no doubt that some varieties resist rust attack in greater degree than others. There was clear evidence of this in the Farm plots. In Australia by a process of selection varieties have been obtained which to all intents and purposes are rust-proof. A trial of rust-proof varieties will not be neglected. But there is more hope of successful results from efforts to improve indigenous varieties up to the required standard. Cross fertilization may be found a useful means towards the desired end. No actual remedy has, in any country, yet been found for rust, but as regards remedies for other fungoid diseases affecting wheat and other cereals, attention is directed to paragraph 59.

The soil of the Poona Farm is not suitable for the cultivation of dry-crop wheat. Trials will, however, be started on the Surat Farm which has deep black soil, very retentive of moisture, and therefore with favourable late rain suitable for dry-crop wheat. The proposed wheat experiments will no doubt

disclose particular characteristics in varieties which at present have escaped notice or are not commonly known.

Gram (Cicer arietinum).—This is an excellent rotation crop and requires light irrigation only. It has been grown chiefly on this account. Fodder crops are a speciality on the farm. The best are sorghums. These cannot be successfully grown continuously. Hence the necessity of growing gram—a leguminous crop and therefore a good rotation crop with sorghums. The rotation answered admirably for about five years. In 1897-93 there was evidence that the gram was not quite so healthy as usual. It withered prematurely in patches. The plants in the patches when examined appeared to have diseased roots. In the year under report the disease in the gram was much more extensive than in the year before. The conclusion come to is that frequent cultivation of the same crop on the same land and continuous irrigation predisposed the gram to become diseased and it has been found desirable to change the plan of cropping. We continue the cultivation of the various sorghums annually as rain fodder crops, three thickly sown rows of fodder jowar or sorghum alternating with one row of tur. The fodder jowar is out early. The tur subsequently branches out and shades the ground. Practically two crops are got each season. The mixed crop exercises the beneficial influence of good rotation and tur having long tap roots resists drought and therefore needs no irrigation. Land which has become sick of irrigation is thus rested.

Tur (Cajanus Indious).—Two varieties have been grown on the farm for some years. The white seeded superior variety generally cultivated in Gujarát and the red seeded variety commonly grown in the Decean. As regards outturn there is little to choose between varieties as grown on the Poona Farm. But on the Surat Farm the Gujarát white variety gave in the year under report far better results than the red Decean variety. In each case the tur was a subordinate crop with jowár.

Object-lesson crops.

52. All the known cereal, pulse, oil-seed and fibre-plant crops of the Presidency were grown in small plots in proper season. The Agricultural students and Veterinary students of Parel College had thus opportunities of noting the cultivation and characteristic appearances of such crops.

Every effort was made to accommodate the various crops to such description of soil as is usually found at least fairly suitable. But notwithstanding this it is noteworthy that a few crops, which are not commonly grown in the Deccan, failed to show any vigour of growth. Thus lang (Lathyrus sativus), a common pulse in Broach, and guvar (Cyamopsis psoraliodes), a common pulse throughout Gujarát, produced insufficient crops. Safflower, the dye variety of Gujarát, got blighted and damaged by swarms of aphides, whilst safflower, the oil-seed plant of the Deccan, in the adjoining plot produced a healthy vigorous crop. Masur (Ervum lens) did not thrive, and rape and mustard although repeatedly sown were eaten up by insects almost as soon as the young seedlings appeared above ground.

Sugarcane Experiments at Manjri.

- 53. Varieties.—Some years ago the various varieties of the Presidency were collected for experimental cultivation. In the first year some varieties grew well, others did not thrive particularly well and in some cases failed. It was clearly demonstrated that experimental trials should precede general cultivation on a larger scale. By continued cultivation it has been demonstrated:—
 - (1) that a variety which has been deteriorated in the first year may, in subsequent years, through the influence of careful cultivation and acclimatization, improve greatly as regards weight of cane per acre and outturn of gul per acre;
 - (2) that the outturn of gul from Pundia (the local variety) is at least equal

(3) that two varieties introduced from Mauritius and two from the Southern Marátha Country have great tillering power and produce larger ration crop than Pundia. They are also less subject to damage by jackals, pigs and sugar-borers;

(4) that some varieties which are in general cultivation in parts of the Presidency could advantageously be replaced by other varieties which

are unquestionably superior.

Sugarcane comparative manure experiment.—In the year under report the services of the Agricultural Chemist to the Government of India were not available and the manures applied to the comparative plots were not analysed. The quantities applied were not, therefore, based upon the proportions of manurial ingredients which they contained, but upon the market values of the manures. It was decided to apply to each plot manure costing Rs. 160 per acre. This represents perhaps a lighter dressing than the best cultivators give, but in respect of some of the manures it was considered sufficient to secure good crops, particularly as the land was believed to be in good condition, the cane grown in previous years having been heavily manured. The land was rested in the previous year from irrigation. An unmanured crop of fodder jowár was, however, grown in the monsoon. Reference is invited to Farm Reports for the results of previous years. The general results of the year are tabulated below:—

Dressing of manure in each case cost Rs. 160 per acre.	Value of gul per acre.	Remarks.
	Rs.	
Niger seed cake	732	This is an oil cake which is edible and ordinarily used as cattle food, but is richer in manurial elements and cheaper weight for weight than the manure cakes commonly used.
Safflower cake	708	The above remarks also apply equally to this cake.
Poudrette as a first application, safflower cake as a top-dressing.	702	Ordinary cultivators use poudrette before plantation and top-dress later with castor cake. They do not usually employ safflower cake.
Fish manure	684	This manure as obtained from the Thana coast is used to some extent in the district by ordinary cultivators, but generally as a top-
	. •	dressing to supplement other manures like poudrette or farm-yard manure previously applied.
Farm-yard manure and castor cake as a top-dressing.	682	These manures are commonly used as in the experiments by ordinary cultivators.
Poudrette	620	Commonly used by cultivators.
Cattle dung	609	Do. do.
Farm-yard manure (cattle dung and urine preserved with litter.)	608	Do. , do.
Castor cake	602	Not commonly used alone by cultivators, but as a top-dressing to supplement a short supply of poudrette or cattle manure.
Cotton seed	528	Dear in the Poona District, but in large applications an effective manure. Probably would be an economical manure in cotton-growing districts where obtainable at cheaper rates.
Crushed bones and top-dressing of nitre.	484	Manure costly, therefore application costing Rs. 160 per acre was small.
Bones dissolved with sulphuric acid (Bone superphosphate).	469	Manure costly, therefore application costing Rs. 160 per acre was small.
Dissolved bones with top-dressing of nitre	427	Do. do.
Crushed bones	3 98	Do. do. cost of cultivation exceeded value of crop.

The above figures show that the cultivators of sugarcane have at hand manures which are not ordinarily employed, which could be used with economy, and great advantage. In the neighbourhood of the Mánjri experiments, the

lessons of our experimental trials are being practically applied. In the current season and for the first time about 600 acres of cane in the neighbourhood have been top-dressed with safflower cake.

Sugarcane water experiments.

The experiments this year as in previous years clearly show that moderate irrigation at short intervals produces a heavier crop of cane than heavier irrigation at either long or short intervals.' The best results were obtained with light irrigation at intervals of 8 days in the fair season, and 33 waterings were given during the period of growth, which extended to almost exactly 12 months. The soil is black and fairly deep. The water given to the comparative plots was gauged.

Mauritius system of planting cane.

The system consists of planting the sets in rather deep pits. The pits are dug at definite distances apart. Several sets are planted in each pit, and as the shoots grow they are earthed up. The cane grows in clumps, which are firmly rooted in the ground, and are therefore not liable to lodge by wind or rain. The experiments have proved the system is advantageous for such varieties of cane as freely tiller; but for other varieties that do not freely tiller, probably the ordinary system of planting, i.e., shallow planted sets at close intervals, is probably best.

The sugarcane experiments were conducted at a profit of Rs. 394. The price of gul was higher than usual.

Ganesh Khind Gardens.

54. The plantation of mangoes was extended during the year, but the crop of fruit was exceedingly poor as elsewhere in the Deccan. The chief revenue was from grass. Expenditure exceeded income by Rs. 287. It is expected that the mango trees will be valuable in time. The plantation contains nearly 3,000 trees.

The Dairy and the Dairy Herd.

55. The profit for the year was Rs. 2,470. There were 194 animals in the herd at the end of the year as compared with 187 at the beginning. Fifty animals, chiefly young he-buffaloes and old cows, were sold. The herd was healthy throughout the year, and the present strength is about the full limit that can be conveniently maintained.

In the cattle-breeding and dairy operations cortain definite aims are kept in view:—

- (i) To breed up to a higher standard certain of the breeds of India as regards their milking capacity, and to maintain or, if possible, improve the usefulness of the same breeds for draft purposes.
- (ii) To supply pure milk and other dairy products to the sick in hospital and, as far as possible, to the public in Poona at rates which are kept so high that our operations do not interfere with private enterprize.
- (iii) To show by precept and example the advantages of cleanliness and improved methods and appliances in dairy management, and the necessity of careful management and feeding for dairy cattle.
- (iv) To teach dairy methods—the manipulation of dairy machinery and cattle management—to those who attend at the farm for the purpose of being taught. Mere on-lookers are not admitted to these privileges. Men who come to learn must also work.

It may be definitely said that progress in all the directions indicated above has been made from year to year and there has been no backsliding in the year under report. Young cows bred on the farm are proving themselves excellent milkers. The sales of milk and butter could be greatly increased with a larger herd, but with present facilities any increase is impossible. A number of soldiers were sent for instruction in order to be able to manage dairies and milk cattle

in other cantonments. The Department can take credit for initiating in India an enterprize which has had a material influence on agricultural prosperity, on the improvement of Indian butter, and its export trade.

The services of farm bulls are given gratis for all healthy cows.

A reserve supply of fodder equal to the requirements of a full year is always kept in stock. The whole of the departmental operations at Poona, inclusive of sugarcane experiments at Mánjri, agricultural operations at Kirkee, the Ganesh Khind Gardens and the dairy and dairy herd were worked at a profit of Rs. 172. The season and other circumstances were unusually favourable and the financial, results abnormally good.

Surat Farm.

56. The season was favourable. In February abnormal rain fell in sufficient quantity to thoroughly soak the soil. Ploughs were every where at work in the district throughout the hot weather. The farm lands were deeply ploughed during this time, and tillage operations were well advanced when the monsoon broke on the 10th June. The season between June and October may be characterized by periods of sufficient rainfall alternating with breaks of moderate extent, the only exception being heavy rain on the fourth week of July which caused considerable damage by flooding. There was full opportunity throughout the kharif season for thoroughness in weeding and other tillage operations. The rainfall of October, November and December was slight.

Dry-crop land.

57. On this area experiments along definite lines of investigation have been started. These, as far as possible, are associated with ordinary work-a-day practices. The various experiments are referred to under approximate headings below.

Manure rotation experiments with staple crops of the district.

- 58. The soil is deep black and the staple crops on such soil in the district are cotton and jowari. The objects aimed at are to show—
 - (a) that it is not a good practice to take cotton and jowar in alternate years without any variation;
 - (b) the value of more extended rotation;
 - (c) the value of green manure;
 - (d) the value of growing a leguminous crop subordinate to jowar or at regular intervals;
 - (e) whether a dressing of concentrated manure costing Rs. 10 per acre applied every second year pays better than no manure at all; and finally that by means of a moderate application of farm-yard manure, with the assistance of green manuring and proper rotation, the fertility of black soil can be maintained at a tolerably high level.

The experiments have now been in progress two years. Any comparison of the results cannot be made with exactness until the rotations are complete. The actual outturn figures will be found in Mr. Mollison's Annual Report. The results so far show in the clearest possible manner that an excellent object lesson is being placed before the cultivators of the district. The plots during growth and at harvest presented an extremely interesting study. They showed great variableness, but this variableness was entirely under control, because induced by intentional differences in treatment. The results this year and last show—

- (a) that cotton and jowar taken alternately only produce moderate crops, although the cotton is manured with a fair dressing of farm-yard manure
- (b) Better crops are got from cotton and jowár similarly rotated and manured, but with tur grown subordinate to the jowár.

- (c) The effect of extending the rotation to three years by growing a pulse crop, or by giving a green manure crop of san, or by fallowing the soil for a year, increases the outturn from cotton and from jowar to a very considerable extent.
- (a) An application of castor cake costing Rs. 10 per acre does not increase the outturn of either jowar or of cotton to such an extent as to warrant the assumption that it pays better than no manure at all. This conclusion probably may, however, be modified as the experiments proceed.
- (e) An application of poudrette, equal in cost to the application of farmyard manure, gave exceedingly poor results. Neither the jowar nor the cotton were appreciably benefited.
- (f) The no-manure plot have given very poor outturns, but before the experiments were started the soil was in exceedingly poor condition. The difference between the no-manure plots and those that have received manure, and which have been unintentionally otherwise differently treated, are very marked.

The prevention of Fungoid disease in Cereals by steeping the seed before sowing.

59. Certain fungoid diseases owe their origin to disease germs which contaminate the seed. The germs can be destroyed by steeping the seed before sowing in sulphate of copper (½ per cent. solution) or in water at a temperature of 135 to 150 F. The hot water treatment is the simplest, but not so effective as the sulphate of copper. Boiling water and well water at any ordinary temperature, if mixed together in equal proportions, will give water sufficiently hot, but not too hot for the purpose. The temperature will ordinarily range from 135° F to 145° F, depending upon the temperature of the well water. The results reported below, as obtained on the farm this year (a bad year for smut in jowari), are very striking.

Crops.	per acre	smutted heads , unsteeped ots.	Number of s per acre at copper s		Number of smutted heads per acre steeped in hot water.		
•	Plot I	Plot II	Plot I	Plot II	Plot I	l'lat II	
Smutted ears	200	329	23	18	61	59	

The improvement of seed by selection of the staple crops of the district.

60. Special importance is attached to this work, because it is believed that it is a means, which is neglected in India, of improving the indigenous varieties of cultivated plants. These crops are so numerous in India that only a small number of the varieties can be taken up on the Government farms at one time for improvement. As pointed out above, progress is being made with varieties of jowár, bájri, wheat at Poona, and like progress is being made with varieties of jowár and of cotton at Surat. As regards the latter crop we are confining attention entirely to the local varieties. Surat and Broach cotton has a high reputation in the European markets. Experiments have proved that the introduction of exotics or of cottons from other parts of India are not likely to cause permanent advantage or temporary good. We aim at improvement by careful cultivation, systematic rotation and by selection of seed, the biggest bolls of cotton being selected from the healthiest and most vigorous growing plants at harvest time to provide seed for the following year.

The influence of this method of selection on the length of staple and quality of fibre will be watched, and we hope to get rid of boll-worm entirely or to a considerable extent by choosing, for seed, bolls which are not affected by hand ginning and by steeping the seed before sowing in copper sulphate solution.

This pest does extensive damage in the Surat and Broach districts, and the increase of the pest can unquestionably be attributed at least in part to careless selection of seed and the contaminating influence of the ginning factories. The selected cotton this year yielded very high percentages of lint, viz., Deshi 38 per cent. and Goghari 45 per cent.

Experiments with Fodder Crops.

61. Experiments were started to test whether the sorghum fodders which usually give such excellent results in the Deccan, and which mature quickly could be successfully grown in the black soil of Gujarát as kharif crops and second crops of gram, &c., taken in seasons when late rains were favourable. The results were disappointing and experiments will not further be continued. The black soil of Gujarát, owing to its retentive power, and because it gets very sodden when heavy rain falls, is in most years unsuitable for such varieties as grow quickly early in the season. The most successful varieties make poor progress during the monsoon, and do not reach maturity until December.

Irrigated Crops.

62. The results with Guinea grass on the irrigated area are very satisfactory and the plantation has been extended. Applications from local cultivators have been received for sets in the current season and complied with.

About 11 acres of the farm are commanded by three wells. The soil is deep black and very retentive and is not the class of soil which would be chosen as specially suited for irrigated crops. It can, however, be improved to the extent that it will in time become more suitable. The conversion of black soil, into garden land, even at considerable expense, is a useful object lesson. Ditches have been dug to drain surface water quickly to a lower level, which, by digging out, has been converted into two good rice beds. The consistence of the soil of the irrigated area has been considerably altered by growing green manure crops and by the addition of heavy dressings of farm-yard manure, and now the land has proved itself capable of growing excellent crops of the hardier varieties of garden crops, such as surans (elephant foot), turmeric and yams, onicns, sweet potatoes, chillies, gourds, &c. In time there is little doubt that the land will become valuable garden soil.

Surat Dairy and Dairy Herd.

- 63. A herd of Gir cows and Surat buffaloes has been kept since the farm was started. A small herd of Kankreji cattle (the best type of Gujarát cattle) has been added in the year under report. Efforts are being made to improve the Gir and the buffalo breeds for milk purposes in the same way as Sind and Aden cattle at Poona. The Kankreji cattle are essentially a work breed, and although the cows milk fairly well, still, in improving the breed, the characteristics chiefly aimed at will be size, activity and adaptiveness, in other respects for draft or work.
- 64. The net cost of the Surat Farm was Rs. 5,048 in the year under report. A considerable part of this is debitable to permanent improvements and capital expenditure necessary for getting the farm into trim order.

The Nadiad Farm.

65. The results of the year's operations were not satisfactory, which is partly ascribed to absence of timely rainfall and damage of crops by insects. The sales of the seeds from the seed store, which amounted to Rs. 894 during the preceding year, fell to Rs. 208, the lowest amount realized for a number of years. The seed store was started to supply sound seed to local cultivators not in a position to obtain such seed for themselves, but this object has not been fulfilled, as there is no local demand. Mr. Mollison finds the present superintendent of the farm (a graduate of the Madras Agricultural 'College, paid at Rs. 25 per mensem) inefficient, and recommends that a capable and experienced agriculturist, paid at about Rs. 60 per mensem, should be engaged. The accounts show a closing balance of Rs. 7,332, or Rs. 239 more than the preceding year.

The Hyderabad Farm.

66. A portion of the farm, measuring 17 acres 25 gunthas, is in the occupation of a private individual, to whom it has been leased for a period of 10

years, commencing from 1st April 1897. He is reported to have made some progress in rearing poultry, pigs, &c., and cultivating bájri, jowári and vegetables. About 42 acres have also been leased for wheat cultivation, and 3\frac{1}{2} acres more are under lucerne, Guinea grass, carrots and peas. The remaining area is still lying waste, the Municipality not having been able as yet to erect the necessary engine for the water-lift at Gidu Bandar.

The Empress Gardens.

67. The receipts, expenditure and deficit resulting from the management of the Empress Gardens by the Agri-Horticultural Society during the year under report, as compared with the results of the preceding year, were as noted below:—

			Receipts.	Expenditure.	Deficit.
			Rs.	Rs.	Rs.
1897-98		•••	8,183	11,165	2,982
1898-99	•••	•••	9,071	10,364	1,893

The satisfactory increase in the income of the gardens was mainly attributable to the energetic part taken by Mr. Mollison in the management. The deficit, Rs. 1,893, was less than two-thirds of that of the preceding year. A nearly equivalent sum was spent on special improvements, which showed that the gardens were nearly self-supporting.

The income of the gardens from the sales of seeds, plants, out flowers, fruits, vegetables and other garden produce, showed a satisfactory improvement. Seeds were carefully selected and special arrangements made for their storage. Plants of well-known sorts did not command a great sale, and this was possibly on account of the competition of the many private nurseries existing in Poona. Some steps were taken to introduce new plants, which is an important function of the Society.

The culture of the various kinds of fruits and vegetables was successful, particularly that of vines. Mangoes failed as in other localities.

The attractiveness of the ornamental part of the gardens was greatly increased and the gardens gained much in popularity.

The systematic labelling of the trees and plants was commenced by the Agricultural Office during the year, and is now being continued by the Super-intendent with the assistance of certain members of the Society. This important work will facilitate the preparation of a complete catalogue of the large stock of plants and will greatly increase the usefulness as well as the attractiveness of the gardens.

The Bund Gardens.

68. The management of the Bund Gardens was taken over by the Agri-Horticultural Society on the 1st February 1899. The offer of the Society to manage the gardens has been accepted for a period of three years, and Government have agreed to make good any deficit in the accounts of both the Empress and the Bund Gardens to the extent of Rs. 3,000 per annum. During the short period of the year under report, the gardens under the successful management of the Society showed great improvement, and their popularity as ornamental gardens increased. The financial results of the management relating to the period in question will be shown next year, but no deficit was incurred.

B.-MISCELLANEOUS EXPERIMENTS.

- 69. Arrowroot.—The Dapoli plantation of arrowroot again yielded a poor crop, though good tubers were used as seed. Mr. Gogte concludes that arrowroot should not be grown on the same land for more than three years. About 5½ acres have been put under the crop during the current year.
- 70. Strawberries.—The Superintendent of Mahábaleshvar reports that strawberry growers have a sufficient number of plants propagated from the stock obtained from Bangalore in 1896-97, and that no new plants were brought for cultivation during the year under report.
- 71. Coffee.—As regards the cultivation of coffee on the lands leased to Ráo Bahádur Morey in the Supa Petha, the report received from the Collector B 2190—10

of Kánara shows that in 1897 a nursery of 3,000 seedlings was formed, last year one of 4,000 seedlings, and during the current year one of 2,000. The seedlings of 1897 have been transplanted this year with an interspace of 6 or 7 feet on land measuring about an acre. The seedlings are 2 to 3 feet in height and in a thriving condition.

Mr. Gogte, of Dápoli, has sown seed sufficient to raise 4,000 to 5,000 plants.

72. European Carrots.—Experiments were again made in some places with the following results:—

In Kathiawar, the trial was continued in Junagad, Rajkot, Vankaner and Limdi, but the germination was very unsatisfactory and the plants were blighted and gave a very poor outturn. In the Kanara District the trial in Sirsi was a failure, but a good crop was obtained in Supa. In Kolhapur the seed sown failed to germinate. In Karachi, trials were conducted in the Sehwan and Kotri Divisions. In the former, owing to inferiority of the soil, the outturn was fair, while in the latter the germination was partial and the yield low.

The Commissary General, Bombay Command, had the seed tried at Quetta, Deesa, Mhow and Nasirabad. At Quetta, one pound of seed of three different varieties sown in June gave an outturn of 556 lbs; one pound was also sown in August, but owing to the very severe cold weather which set in during November the yield was only 350 lbs. At Deesa, 5 lbs. of seed of the red variety sown in November gave an yield of 614 lbs., and the poor result is attributed to the extreme heat of Deesa. At Mhow, 54 lbs. of seed was sown in July on 4 acres of ground, but much of the seed was washed away by rain, and the outturn was 53,574 lbs. At Nasirabad, 5 lbs. of seed of white variety and ½ lb. of the red were sown. The crop was well irrigated and produced 8,002 lbs.

- 73. Sabai Grass.—The Deccan Paper Mills Company report that they have leased a large area of land in the vicinity of their Mills with the object of gradually utilising it for Sabai cultivation. At present they have 22 acres under Sabai. Their experiments to see what influence watering has in promoting the growth of flowering stalks, are continued. On land under the influence of the canal, the grass that was grown with ordinary watering showed a larger percentage of flower stalks than that which was cultivated with but slight irrigation. Their efforts to grow Sabai as a dry-crop failed during the year under report owing to want of rain.
- 74. Utilization of Bones as manure:—The following figures exhibit the export of bones from Bombay during the nine years ending 1898-99:—

Year.			(Quantity in tons.
1890-91	•••		. ***	10 000
1891-92	· ,e • •	•••		16,281
1892-93	***	•••	•••	17,569
1893-94	•••	•••	,	
1894-95	••• `		***	,
1895-96	•••	•••	•••	-,
1896-97	***	***	•••	
1897-98	***	***	•••	
1898-99	***	***	***	27,901

The quantity exported during the year under report shows an increase of 6,454 tons. Of the exports, 54 per cent. were taken up by the United Kingdom, 32 per cent. by Germany, and the rest by Belgium, France and Japan.

Messrs. Coen and Co. of Hubli exported 350 tons of plain bone-meal, 1,000 tons of bone-meal mixed with oil-cake manures and 150 tons of uncrushed bones.

C.—IMPROVED AGRICULTURAL IMPLEMENTS.

75. The reports received from Collectors show that no new agricultural implements or machines were tested during the year under report and that there is nothing to add to the information already recorded about those in use. Mr. Mollison reports:—Ransome's Turnwrest plough continues to do excellent work on the Poona Farm and especially in the irrigated area when in suitable condition for ploughing. Its superiority over any indigenous plough in this kind of

soil cannot be doubted. It is only recommended for land which on account of irrigation is in a sufficient state of moistness to be easily ploughed at any season. Market gardeners whose gardens are eight miles from the farm come repeatedly to borrow the farm ploughs and use them extensively.

D.—MEASURES OF PROTECTION. (1) Arboriculture.

76. No reports have been received as to the extension of fuel and fodder 'reserves.

(2) Extension of Communication.

77. During the year under report the following additions were made to open mileage of railway lines:—Rájpardi to Nándod (18½ miles) on the Rájpipla State Railway, and Kankrakhadi to Chinchpada (72½ miles) on the Tápti-Valley Railway.

(3) Irrigation.

78. In the Presidency Proper the total area irrigated from Government canals and tanks under the management of the Public Works Department—35 in number—was 102,091 acres, showing a fall of over 18 per cent. below that of the preceding year. There was an increase of 1,930 acres under eleven irrigation works, chiefly under the Khári Cut, Mukti and Ekruk tanks and Yerla River Irrigation Works, but it was too small to counterbalance the large decrease of 24,690 acres under the other works. The decrease was most marked under the Nira (—13,214), Mutha (—4,646) and Hathmati (—1,110) canals, and was principally due to seasonable rainfall.

In pursuance of the policy of Government regarding efficient and systematic treatment of old irrigation tanks in Gujarát and the Southern Marátha Country. an outlay of Rs. 57,500 was incurred in repairing and improving 75 such tanks—5 in Ahmadabad, 19 in Surat and Broach, 12 in Belgaum and 39 in Dhárwár,

As will be seen from the following section, encouragement continued to be given for the construction and repair of wells and tanks by tagái advances. In the Presidency Proper, Rs. 1,81,800 were advanced for this purpose.

(4) Tagai Advances.

79. The following statement compares tagái advances made during the year ending 31st July last with those of the preceding year:—

			1897-98.		1809-99.			
Povince.	Under the Land Improvement Loans Act No. XIX of 1883.	Under the Agriculturists' Loans Act No. XII of 1884.	Total.	Under the Land Improvement Loans Act No. XIX of 1853,	Under the Agriculturists' Loans Act No. XII of 1584.	Total.		
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Gujarát Deccan Karnátak Konkan Sind	•••	4,670 1,81,005 19,797 14,030 29,674	30,209 3,98,214 2,67,839 9,144 34,367	34,879 5,79,219 2,87,636 23,174 64,041	13,594 1,73,407 1,27,359 20,945 1,88,946	62,682 1,05,286 25,793 6,615 92,024	76,276 2,78,693 1,53,152 27,560 2,80,970	
Total	•••	2,49,176	7,39,773	9,88,949	5,24,251	2,92,400	8,18,651	

N.B.—The figures for 1307-98 are those published in the Jamabandi Reports.

It will be seen that the total advances were 19 per cent. below those of the preceding year. It is probable that but for the prevalence of the plague and the curtailment of the funds placed at the disposal of Government, the advances would have been greater. The advances made in the Deccan and the Karnátak show a decrease, while those in Gujarát, Konkan and Sind show an increase, due to the fact that during the financial year 1897-98 the funds allotted to the

latter divisions were, as explained last year, withdrawn and assigned to the former divisions, where owing to the preceding famine all the assistance that was possible was required for the replacement of cattle and the purchase of seed. It will also be seen that the total advances under the Agriculturists' Loans Act, which during the preceding year were for the first time far in excess of those under the Land Improvement Loans Act, resumed their normal relation during the

year under report.

Of the money advanced in Gujarát, Rs. 48,000 were taken by Broach, nearly Rs. 20,000 by Surat and nearly Rs. 6,900 by Ahmadabad. The Collector of Broach states that the system is capable of further extension, and suggests that a much larger sum should be placed at the disposal of the Commissioner. In the Panch Maháls the system was taken advantage of only in Dohad and Jhálod, which took Rs. 1,327, and no money was advanced in the Western Maháls owing to plague. Kaira took an insignificant sum (Rs. 100) and the Collector remarks that very little seems to have been done to popularize these advances in this district. To this reason may also be added the prevailing low rate of interest. In 1894-95, Mr. Atkins reported that "for the Patidár class tagái is rarely required, for the rate of interest charged by money-lenders is extraordinarily low." The sums advanced in Panch Maháls and Broach were all under the Agriculturists' Loans Act, and the Collector of Broach states that the Land Improvement Loans Act is seldom taken advantage of, as wells are seldom dug in that district for irrigational purposes.

In the Deccan and the Karnátak every district took a large sum—between Rs. 40,000 and Rs. 80,000—excepting Khándesh and Násik, which took respectively only Rs. 28,000 and Rs. 4,740. The Collector of Dhárwár states that the advances in his district amounted to much less than in preceding years owing to the widespread plague epidemic, and observes:—"This is, I think, a matter for congratulation rather than regret, as the prevalence of an epidemic not only prevents the borrower from spending the advance properly and renders supervision difficult, but is likely to give rise to complications regarding security, transfer of liability for advances and recovery."

In the Konkan the sums received were:—Thána Rs. 3,370, Kolába Rs. 9,140, Ratnágiri Rs. 6,842, and Kánara Rs. 8,208.

In Sind the system is getting more and more popular, the sums advanced in Karáchi (Rs. 92,000), Shikárpur (Rs. 83,000) and Upper Sind Frontier (Rs. 45,000) being the largest taken by them since 1890-91,—the former two amounts being the largest taken by any district in the Presidency during the year under report. The Collector of Karáchi reports that it is still difficult and in many places impossible to obtain loans from ordinary money-lenders on anything less than mortgage with possession; and the Deputy Commissioner, Upper Sind Frontier, states that money-lenders "would not advance under any conditions less than actual alienation of a portion at least of the estate from fear of the Zamindárs going under management."

Of the advances under the Land Improvement Loans Act, 42 per cent. were granted for constructing and repairing wells and tanks—mostly in the Deccan, Karnátak and Sind, and 10 per cent. on constructing and repairing canals in Sind. The rest of the money was advanced for raising embankments, uprooting weed-grasses and similar land improvements.

It is believed that advances were generally applied to the purposes for which they were granted. In some cases, however, money advanced was found to have been misapplied and was consequently ordered to be recovered at once with interest accruing up to date. The Collector of Kánara reports that in a few instances, where the works were partially incomplete owing to circumstances beyond control, a reasonable extension of the period was allowed for the completion of the works.

The reports show that loans were repaid on due dates except in a few instances where previous bad seasons and prevalence of plague necessitated suspensions. The Collector of Sátára, however, reports that during the last two years some persons able to pay have made default on the general excuse of plague and famine, and steps have had to be taken, as in the case of land revenue,

for the recovery of the instalments by compulsory processes. In their Resolution No. 5759 of 30th November 1899, Famine Department, Government have warned all officers concerned not to grant loans to persons who are already defaulters in respect of land revenue, or are in effect men of no substance, without sufficient enquiry into the securities offered. The danger of granting loans indiscriminately is shown by the remarks made by the Collector of Bijapur in his Administration Report for 1898-99 on the subject of the arrears of advances made during the preceding two years.

CHAPTER VI.

AGRICULTURAL EDUCATION.

80. As a step towards reviving the Agricultural classes which were languishing for want of students, the scholarships attached to the classes have been reduced in number and raised in value.

The University have recently agreed to the conversion of the Diploma in Agriculture into a degree, and Government have also been pleased to direct that the Licentiates of Agriculture should have a preferential claim to District Inspectorships of Agriculture before other officials of the Revenue Department or those of the Survey Department who do not know English, and that they should also be placed on the same footing as Licentiates of Civil Engineering for admission to the Forest Department, provided they undergo the special course of training in forest subjects and pass the same tests in those subjects as Licentiates of Civil Engineering are required to do to qualify for such appointments.

With the advantages noted above, native gentlemen—both land-owners and others—who wish to see their sons graduated and to enter them in Government service would find the degree in Agriculture as an alternative preferable in many respects to the usual course in Arts, and Government have also intimated that they are inclined to form a favourable opinion of any officer who while not inferior in general education and mental calibre to the graduate in literary subjects is a man of active out-door habits and trained in the observation of agricultural facts, in the handling of domestic animals, and the organization of field labour.

CHAPTER VII,

PUBLICATION OF AGRICULTURAL INFORMATION.

A.-AGRICULTURAL STATISTICS.

81. As last year, the Imperial Tables A, C, D and G of Agricultural Statistics were submitted to Government for transmission to the Director-General of Statistics.

No.	District.				Date of submission of Agricultural Returns.
1 2 3 4 5 6 7 8 9 10	Poona Ratnágiri Kaira Ahmadabad Broach Bolgaum Hydorabad Panch Maháls Surat Thána Shikárpur			•••	26th do. 3rd October. 10th do. 12th do. 13th do. 16th do. Do. do.

The marginally noted eleven districts were late in submitting their agricultural returns. It is hoped that they will show greater punctuality in future.

Return No. I.—Details of Area.

82. This return shows the gross area of the Presidency inclusive of villages held on privileged tenures, but exclusive of feudatory and tributary States. In the Presidency Proper the area is still approximate, as areas in unsurveyed tracts are only estimates. In Sind the unsurveyed area is now limited to one village in Upper Sind Frontier.

In the Presidency Proper the gross area returned was curtailed by 4144

Distri	Square Miles.		
Khándesh Ahmednagar Násik Thána		•••	$ \begin{array}{r} -4123 \\ -2\frac{1}{4} \\ -2 \\ +1\frac{1}{8} \end{array} $

square miles. The marginal table, in which noticeable variations are set out, will show that Khándesh is in a large measure responsible for the decrease, a large area in which registration was imperfect having been omitted. Elsewhere the changes are due to survey operations.

In Sind the total number of villages increased by 8 on account of the formation of new villages, but the area decreased by about 6,000 acres or over 9 square miles. This was the result of numerous changes noticed below in detail.

Area for which statistics are available. - In the Presidency Proper, the

District.	INCREASE (+) OR DECREASE (-) OF			
		Villages. Acre		
Khándesh Panch Maháls Poona Thána Ahmednagar Kaira Belgaum Násik		142½ +93 4 10 +9 +3 1 +1	-288,350 +131,110 -13,890 +4,186 +6,143 +4,189 -2,373 +162	

number of villages decreased by 57½ villages and the area by 167,730 acres. Important changes are shown in the margin. In Khándeslr 142½ "other Government" villages were transferred to the category of those for which statistics are not available, and the estimated area of this large unsurveyed tract was reduced by 261,000 acres. One surveyed Inám village was similarly transferred, the statistics being not trustworthy. Besides these, 13 other Government villages and one Inám village in the same district were surveyed and thus rendered capable of

furnishing crop statistics. These statistics were also introduced in 58 "other Government" and 35 Talukdari or alienated villages of the Panch Mahals. The village officers of 4 villages (two Government and two alienated) in the Poona District failed to collect crop and other statistics. In Thana 10 Government villages were transferred to the head of statistics non-available. Five such villages were placed in the class of "other Government villages" and 15 in that of surveyed alienated villages. These changes were effected to make the classification of villages more correct. In Ahmednagar one Inam village was resumed by Government and three Government villages were surveyed and put in a position to furnish statistics. In Kaira 89 villages of the Narva tenure were transferred to the class of villages of Rayatwari tenure and three Inam villages were made to supply statistics. One village in Bolgaum could not furnish any information, as the village papers were destroyed by fire. One village of Nasik being surveyed supplied statistics. Correct registration of Government land in Inam villages and Inam land in Government villages explain the changes in Sholapur and Satara. One Inam village in Dharwar and one village of other than Rayatwari tenure in Ratnagiri lapsed to Government.

In Sind the villages of available statistics increased by 8, but the area decreased

District.		INCREASE (+) OB DECREASE (-) OF			
		Villages.	Acres.		
Karáchi Shikárpar Hyderabad Thar aud Parkar Upper Sind Frontier	***	+1 +5 +2 	+161 -5,108 -4888 +2344 +1,576		

by about 6,000 acres. The district changes are tabulated in the margin. In Karachi 9 Government villages were ranked with other Government villages, their settlement being suspended in consequence of the obliteration of the boundary marks by floods. One village of the latter class was surveyed and another split up into two alienated villages. The net result was an increase of one village. In Shikarpur five villages were newly formed out of the existing ones. The

district area was curtailed by over 5,000 acres. Some area was newly formed by the river, but a very much larger area was eroded. The decrease in Hyderabad was the net result of correct registration, exclusion of temporary cultivation on river sides, territorial changes and re-measurement under survey operations

Thar and Parkar gained some area by transference from Hyderabad, and two villages of this district were split up into four. Alluvial accretions chiefly account for the increase in the Upper Sind Frontier.

Non-reporting villages.—1,709½ Government villages with an area of 5,936½ square miles and 807½ alienated villages with 2,019⅓ square miles did not furnish statistics of cultivation in the Presidency Proper. The number of non-reporting villages (Government and Alienated) increased by 57¼. The causes have been explained in reporting on the area of available statistics. In Sind the non-reporting area has remained the same.

Return No. II.—Cultivated, i.e., Occupied area and Uncultivated, i.e., Unoccupied area.

The subjoined table exhibits variations as compared with last year in areas under sub-heads of cultivated and uncultivated land

		in Acres (000 omitted).	
•		PRESIDENCE PROPER.	SIND,
	1		<u> </u>

	Pags	idenet Pa	open.	SIND.			
· Detail.		1897-98.	1898-99.	Increase (+) or decrease (-) per cent.	1897-98.	1898-09.	Increase (+) or decrease (-) per cent.
A.—Cultivated Area— Gross cropped area Cropped more than once Net cropped area Current fallows	 	24,313 755 23.558 6,300	24,690 728 23,962 5,967	+1·1 -3·6 +1·7 -5·3	4,065 262 8,803 4,164	3,286 229 3,057 4,770	-11.8 -12.6 -19.6 +14.6
Assessed Unassessed		29,754 104	29,873 56	+0.4	7,257 710	7,283 514	+04 -234
Total A.	•••	29,853	29,929	+0.2	7,967	7,827	-1.8
B.—Unoultivated Area— Available for cultivation { Assessed Unassessed Forest Others Total B.	1	944 697 7,263 4,978	931 474 7,111 5,022	-1·4 -20·6 -2·1 +0·9	760 5,204 763 15,252 21,979	829 5,293 761 15,230 22,113	+9·1 +1·7 -0·3 -0·1 +0·6
, Graud Total		43,635	43,467	-0.4	20,946	23,910	-0.3

In the Presidency the "gross" and the "net cropped" areas both in-

	Area in	Acres (000	omitted).
District	Net croppe 1 area,	Current fallow.	Cultivated, f.e. occupied area.
1	2	8	4
Presidency Proper.			
Ahmadabad Kaira	+67 +3 +12 +33 +13 +14 +64	-20 -13 +/1 +/3 -2 -16 -29 -39 -7 -64 +0 -176 -3 -16 -3 -176 -3 -1	+8 +3 +110 +17 -57 +3 +4 -11 -3 +1 +5
Karáchi Hyderabad Hyderabad	-197 -135 -296 -46 -81	+172 +88 +343 +25 +79	-18 -47 -1.9 -23 -2

creased over 1 per cent., and marked a further recovery from the shrinkage of 1896-97. But they are still below the average of the 10 years preceding that famine year. The area cropped more than once decreased by 3.6 per cent. In Sind the areas declined noticeably. The district variations are shown in the table in the margin. It will be seen that the net cropped area expanded in all districts except Broach, Sátára, Khándesh and Poona. In the first named district some area remained fallow after the removal of the cotton damaged by the excessive July rain. In Sátára the kharif sowing rain was deficient in the eastern parts. In the other two districts the decrease is nominal, being due to the diminution of the gross area already explained under Return No. I. The fluctuations in the current fallow mostly correspond with those in the cropped area. Changes other than those due to season are indicated by column 4. They are either

due to newly occupied land, or reversion of land to the unoccupied area, or to the increase or decrease in the gross area itself. New lands were brought under cultivation in Ahmedabad, Surat, Násik, Bijápur, Dhárwár and Kolába. Reversion to the unoccupied area took place in Sátára and Belgaum. The changes in the gross area already noticed explain the modifications in Kaira, Panch Maháls, Khándesh, Poona and Ahmednagar.

In Sind the cultivated area decreased in all districts on account of insufficient rain and low inundation, and the area left fallow increased. Reduction in excess of the increase under fallow is attributed to the reduction in the gross area of the districts or exclusion or relinquishments of temporary cultivation.

The area cropped more than once in the Presidency Proper decreased by 27,000 acres of 3.6 per cent. This is mainly attributable to the deficiency of kharif rain in the eastern parts of the Deccan and the Karnátak districts, where some area was left unsown till the rabi season. In Sind the low inundation and want of sufficient moisture curtailed the twice cropped area by 33,000 acres or 12.6 per cent.

84. The following table summarises the distribution of fallow of the Presidency Proper under the six specified heads:—

Details of "current fallow" (percentages).

	1		DISTRIBUTION OF TOTAL PALLOW.						
Province.	Total fallow on occupied area,	Fallow in rotation.	Grass land.	Grass-bound land.	Rab land,	Land unsown on account of season.	Other fallow.		
Gujárat { 1898-99.	24.03	17·44 17·91	28·82 27·7 5	1·87 2·04	0.01	8-64 13-81	43·22 38·49		
Deccan { 1898-99 1897-98	18·17 19·03	30·28 27·56	24·86 22·01	5·31 4·15	1·02 1·26	4·34 8·68	34·19 36·34		
Karnátak { 1898-99 1897-98	\ 13·49 \ 16·08		29·32 24·87	18·92 15·53	•••	4·85 12·64	35·69 37·14		
Konkan { 1898-99 1897-98	48· 19 46·5 7		18·57 19·62	4·91 5·12	31·52 28·96	0·46 0·62	10·96 11·77		
Total { 1898-99 1897-98	19·93 21·10		25·22 23·11	6·99 6·19	5·99 5·42	4·50 8·94	31·98 3 2·75		

In Compared with last year the total fallow decreased everywhere, noticeably in the Karnátak, as the favourable season led to expansion of cultivation. From Bijápur it is reported that the people extended cultivation without due regard to customary rotation in order to raise funds to meet tagái advances. As a natural result of the good season land left fallow on account of season showed perceptible decreases in all parts in favour of grass land or fallow in rotation. In Gujárat the increase is credited to miscellaneous fallow and in the Konkan to ráb land.

85. Uncultivated, i.e. unoccupied area.—The reductions in the gross area of Khandesh, Poona and Thana, especially of the first named district, together with the fresh occupations noticed above, curtailed the unoccupied area, but the decrease was partly compensated by the increased gross area of Kaira, the Panch Mahals and Ahmednagar, and the reversion in Satara and Belgaum. The net decrease was 239,000 acres or 373 square miles. The unoccupied area of Sind increased by 134,000 acres or 209½ square miles.

Of the land available for cultivation, assessed land showed a decrease of 13,000, and unassessed of 123,000 acres; together they curtailed the margin for

fresh occupation by 136,000 acres. In Sind, on the other hand, such area increased by 157,000 acres.

86. Forest.—The area under forest on the whole decreased by 152,000

District	District.		(Acres 000 omitted).
		[Variation.
Khándesh	•••		+125
Thána	•••		-40
Panch Mahals	***	•••	+10
Dhárwar	•••		+2
Satára	***	•••	+1
Poons	•••	•••	— 1

acres. Noticeable variations occurred in the marginally noted districts. In Khándesh and the Panch Maháls and Poona they are accounted for by the change in the gross area of the districts. In Thána a large area was disforested. Forest received additional area in Sátára and Dhárwár. In Sind the forest area did not show any remarkable fluctuation on the whole.

87. The table given below (which is inserted in every annual report) endeavours to show, by combination of the information contained in Tables I and II, the distribution of cultivation and the margin of land left for the expansion of cultivation in the different districts. In the Presidency Proper the area for which statistics are not available has remained the same. In Gujarát this area decreased from 8.2 to 6.1 per cent., a large area in the Panch Maháls district being transferred from the category of "unavailable" to "available" statistics. The net area cropped increased in the Karnátak by '2.1 per cent. This being due to the extended cultivation of the usually occupied area, there was a corresponding decrease under fallow. In Sind, deficiency of water caused by low inundation and absence of rain curtailed the net cropped area by 2.5 per cent. This appeared in the form of fallow and to a slight extent in the margin of land available for cultivation. Other changes are not remarkable.

			PERCENTA		AREA FOR VILLABLE OF A	VHICH STATIS REAS,—	TICS ARE
No. District.	Percentage on gress area of areas for which statistics	. Cultivated, i.e., occupied.		Uncultivated, i.e., unoccupied,			
	are not available.	Net cropped.	Current fallow.	Available for cultivation.	Not available for cultivation.	Forest.	
	A.—Presidency Proper		•				
	I.—Gujarát.					•,	
1 2	Ahmadabad	امما	54·3 69·8	18·5 8·6	5·5 9·1	21·1 12·5	0·8
3	Panch Mahals	. <i></i>	41.2	19.7	10.0	8.4	20.7
4 5	Broach Surat	6.4	61· 4 47·0	9·7 2 6·0	2·5 4·8	26·4 17·8	4.6
	(1898-99	6.1	54:3	17:2	6.2	17:8	4.5
•	Average { 1898-99 1897-98	8.2	53.7	17:2	6 ·5	18-2	4.4
	II.—Deccan.			•			
6	Khándesh	25.7	62-1	5.1	8.2	12.0	12.6
7	Násik ,.	4.2	52.2	12.4	4·1 1·2	9·3 10·1	22·0 13·1
8 9	Ahmednagar Poona	0.2	63·8 55·5	11·8 18·5	0.3	12.1	13.6
10	Sholapur		69.2	15.6	0.5	8.8	6.1
11	Sátára	1 6.0 1	53.0	21.1	0.8	9.5	15.6
	ſ1898-99 	9.2	59.5	13.2	3.0	10.4	13.9
•1	Average { 1898-99 { 1897-98	9-0	58· 3	13.7	3.4	10-3	14.3

B. 2190-12

			Percenta	GE ON NET	AREA FOR V	VHICH STATE	STICS ARE
No.	District.	Percentage on gross area of areas for which	Cultiva occuj			ated, i.e., upied.	•.
		statistics are not available.	Net cropped.	Current fallow.	Available for cultivation.	Not avail- able for cultivation.	Forest.
	A.—PRESIDENCY PROPER —continued.		•		,		
	III.—Karnátak.			,			
12 13 14	Belgaum Bijápur Dhárwár	5·6 0·3 2·6	61·6 77·1 72·6	14·0 10·4 9·1	2·4 1·8 2·4	6·6 5·6 7·7	15·4 5·1 8·2
	Average { 1898-99	2.6	71·0 68·9	11.1	2·2 2·2	6·5 6·5	9.2
	IV:-Konkan.			102			
15 16 17	Thána Kolába Kánara	3·5 82·7	20:7 30:0 28:0 9:4	21·0 24·6 34·9 3·9	4·4 2·2 1·8 2·1	22·8 21·6 33·6 5·7	31·1 21·6 1·7 78·9
	Average { 1898-99 { 1897-98	25.6	18.7	16·0 16·1	2.9	16·7 15·9	45·7 46·4
1			55.1	13.7	3.2	11.6	16.4
	Average A. { 1898-99 1897-98	. 10.6	54.0	14.4	3.5	11.4	16.7
	B.—SIND.				-		
19 20 21 22 23	Shikarpur Upper Sind Frontier	0.7	4·4 15·2 15·1 22·1 7·9	8·0 24·7 21·4 27·8 13·4	13·0 37·0 27·1 22·9 13·7	73·1 20·6 30·6 24·5 63·3	1·5 2·5 5·8 2·7 1·7
	Average B (1898-99		10.2	15.9	20.4	50.9	2.6
	Average B. { 1897-98	0.08	12.7	13.9	19.9	51.0	2.5
	Average for {1898-99	6.5	36.8	14.6	10.3	27.6	10.7
	dency (1897-98	6-6	37.2	14.2	10.2	27.5	10-9

Return No. III.—Crops. ·

88. The main features of the season and harvest of the year are described elsewhere in this report. The following table shows the effect of the season on the area sown. In the Presidency Proper, jowari and bajri, and tur, which is often cultivated as a row crop with the millets, showed decreases. All other crops, cereals and pulses, as well as non-food crops, increased, the extension under wheat, gram and cotton being very remarkable. The reduction under the millets and tur was to a considerable extent a shrinkage from their extensive cultivation in the previous year necessitated by the famine of 1896-97. The cultivators having repleted their stocks from the good harvests of 1897-98 appear to have given preference to the cotton and oil-seed crops. Wheat and gram were encouraged by favourable rains at the time of sowing. Though the area placed under wheat in the Presidency as a whole was larger, in the Deccan it has not fully recovered from the diminution induced by the late famine. The percentage

increases under tobacco and sugarcane are also large. But the total cultivation under these crops is comparatively small.

In Sind there is a general decrease under all heads. The area under cereals has contracted 16.4 per cent.; that under pulses 10.9 per cent.; under food-crops 15.8 per cent.; and non-food crops 35.1 per cent. This contraction is due to low inundation and scanty rain.

Table to show effect of season on area sown.
(Area in Acres, 000 omitted.)

,		Pres	EDENCY PRO	OPKR.	Sind.		
Crops.		1897-95.	1898-99.	Increase (+) or decrease(-) per cent.	1857-98.	1898 09.	Increase (+) or decrease(- per cent,
Jowári Bájri Paddy Wheat Others		7,906 4,777 1,653 1,403 1,615	7,542 4,189 1,726 1,850 1,628	-4·6 -12·3 +4·4 +31·3 +0·8	741 806 890 573 33	515 770 898 351 19	-30·5 -4·5 -0·1 -38·7 -12·4
Total, Cereals	•••	17,360	16,935	-2.4	3,052	2,553	-16.1
Tur Gram Others		627 591 1,472	616 759 1,503	-1·7 +28·4 +2·1	 66 200	 53 181	-17·7 -8·0
Total, Pulses	•••	2,690	2,878	+6.9	266	237	10.9
Tobacco Sugarcane Oil-seeds Cotton	•••	72 54 1,450 2,222	94 58 1,590 2,645	+30.6 +7.4 +9.7 +19.0	9 3 498 107	9 3 203 92	-41·2 -14·0
Food Crops, Total	••.	20,282	20,039	-1.2	3,366	2,832	—15·8
Non-food Crops, Total		4,031	4,650	+ 15.3	628	453	<u>_35·1</u>
Total, Crops		24,313	24,689	+1.6	4,061	3,285	-19:2

Jowari and Bajri. The marginal table shows the variations in the areas under

		Acres (000	OMITTED)	•
Distast.		ári.	7041-4	Net
ŀ	Kharif.	Babi.	BRJFI	variation.
			·	
	-58		-1	59 7
•••	+3	·** . ,		+9
94.				+2
***	···ĸ	49	<u> </u>	_ _ 5
				-415
				109
				-193
				69
1			-18	447
	-8	76	+44	30
1	-79	+72	-6	-13
**	+2	63	+15	
***	-49	+ 29		-21
٠	-388	-24	-507	-951
		-69	-5	-61
	l	-27		-27
904			7	-120
-	ŀ		-1	-15
***		-7	-24	-31
		-2/6	-37	-268
		690	G=4	-1,214
	844 644 644 644 644 644 644 644 644 644	Jow Kharif. -58 +3 -197 -2 -12 -10 +2 -38 -383	Jowari, Kharif. Babi.	Kharif. Babl. 581 +3 +1 +8 +3 +1 +3 +1 +3 +15229197 -3 -2292 +16 -1902 +43 -23310 -56 +14 +2 +68 -188 -76 +4479 +72 -6 +2 -63 +1549 +28383 -24 -56759110 -7110 -7110 -7110 -7110 -77226 -37

tion and want of sufficient rain.

jowári (kharif and rabi) and bájri. In the preceding year these millets were grown to a large extent in all districts to replenish the exhausted During the year under stocks. review some of these districts substituted the more paying crops of cotton and oil-seeds when they found the sowing more favourable for them. In other districts, especially in the castern portions of the Deccan and the Karnátak, the kharif cultivation was curtailed by the deficiency of rain in July and August. Thus the net variations of the two crops shows a general decrease, except in the Panch Maháls, Sholápur and Broach, noticeably the first two in which the cotton area is comparatively too limited to replace the millets. In Sind, jowári and bájri both declined owing to low inunda-

1	District.							
Preside	ncy P	горет.						
Ahmadaba Kaira	iáis	944 944 944 944 944 944 944 944 944 944		+18 +15 +21 -3 +4 -7 +3 +1 +3 +1 +1 +1 +3				
j		Total		+73				
'	Sind.		ĺ					
Karáchi Hyderabad Shikárpur Upper Sind Thar and 1		Tetal		-11 -6 +23 +2 -8 -8				

Dis	triet.		`	Acres (000 omit ted).
Presiden	cy P	roper.	_	
Ahmadabad		•••	41.	-20
Kaira	•••	4	•••	+3
Panch Mahál Broach	8	***	•••	+7
Surat	***	***	•••	+26 -2
Khaudesh	•••	•••	•	+46
Nereik	***	•••		+81
Ahmednagar			***	+ 110
Poons		***		+18
Sholapur		***	•••	+11
Bátara	***	***	***	+7
Belganm Bijápur	***	***	***	+20
Dharwar	***	***	•••	+60
D1111,11,111	***	***	•••	+75
		Total	•••	+441
8	ind.	•		
Karáchi				<u> </u>
Hyderabad	***	***	***	-31 -28
Bhikárpur	•••	\		-167
Upper Sind	Front	ior		-15
Thar and Pa	rkar	***	***	+9
		Total	•••	-222
G	rand	Total	٠.,	+218

paddy.—In the Presidency Proper the cultivation of paddy recovered by 73,000 acres. The marginal table shows a general increase due to favourable rain in all the rice-growing parts of the Presidency. The only districts which show decreases are Broach and Khándesh, but in both of these the rice area is comparatively small and other crops more suited to the rains were allowed to occupy a larger area. In Sind, Shikarpur and Upper Sind Frontier are said to have extended their rice cultivation in the expectation of good inundation or rain. In the other districts the rice area decreased with other crops.

Wheat.-Total expansion of 441,000 acres. The partial recovery of wheat during the previous year was completed in the year under review. The aggregate area was in excess of that in the normal year of 1895-96. Heavy rain in September and October induced larger cultivation of the crop, especially in the eastern tracts of the Deccan and the Karnátak. these parts much of the kharif area which could not be sown with the kharif cereals was devoted to wheat. In Ahmadabad and Surat, the only districts which show decreases, the area which would otherwise have been placed under wheat was occupied by cotton. In Sind a better supply of water in the canals during the rabi season led to an increase in Thar and Párkar. Elsewhere the wheat area shared the general decline.

Other Cereals.—Among these, vari, barley, banti (barti) and bhadli show decreases. The rest increased. Vari is said to

Crop.			Acres (000 c	mitted).
010p.			Presidency Proper.	Sind.
Kodra (Harik) Rogi (Náchni) Rála (Káng) Vari (Sáva) Barley Maize Banti (Barti) Bhadii Amaranth Others "	*** *** *** *** *** ***	*** *** *** *** *** ***	+7 +9 +10 -9 -8 +10 -5 -2	

decreases. The rest increased. Vari is said to have given way before other more important crops. Barley, which is principally cultivated in Northern Gujarát, declined mainly in Ahmedabad, where it appears to have shared the fate of wheat, which it resembles in cultivation. Maize increased largely in the Panch Maháls and Sátára. Elsewhere it declined, but the decreases were small in proportion to the cultivation. Favourable rain encouraged kodra, rági and rála. Barley in Sind partook of the general shrinkage.

District.		Acres (000 omit ted):	District.	Aeres (000 omit- ted).
Tob. Presidency Pro Ahmadabad Kaira Panch Mahals Broach Khandeeh Naik	P-0 11 T-00 11 A-10 10 T-01 21	+2 -1 +2	Gram. Presidency Proper. Ahmedabad	-4 +4 +1 +15 +19
Abmednagar Poons Sholápur Sátára Belkaum Dhárwár	Total	+9 +5 -14 +1 -10 -4	Ahmednagar Poona Sho-Apur Stafara Belgaum Bijarpur Dharwar Total	+48 +10 +19 +14 +12 +19 +7 +168
			Sind. Karichi	-2 -3 -1 -6 -12 +156

Pulses.-Pulses taken together showed an expansion of 188,000 acres, chiefly credited to gram (+168,000 acres) miscellaneous (+31,000 acres). Tur followed the course of the millets with which it is cultivated as a principal row crop showed a net decrease of 11,000 acres; it is not grown in Sind. The general increase indicated by the figures under gram is due to sufficiency of rabi rains. In Sind this pulse on the other hand decreased like other crops.

וסנ	District.						
Preside	noy P	roper.					
Ahmadabad Kaira Khandesh Nasik Ahmednaga Poona Sholapur Sitara Belgaum Bijapur	***	14, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10	***	+1 +2 +3 +5 +1 +2 +4 +1			
.	lind.	Total		+29			
Hyderahad Shikarpur	***	•••	:::	+1 -1			
	Gran	Total i Total		+ 32			

Tobacco.—General increase. Good harvest of food
crops in the proceding year affording greater scope for
non-food crops in this year, favourable rain, the neces-
sity of meeting tagái debts by paying crops, and
better prices, all these causes are said to have combined
to increase the extent of cultivation by 22,000 acres
or over 30.6 per cent. In Sind this area remained
stationary.

Die	Areas.			
Abmadabad Khándesh Násik Ahmednagar Poora Sholápur Sátára Belgaum Bijapur Dhárwár Thána		011 011 011 011 010 010	29. 41. 20. 20. 20. 41. 41. 41. 41.	+531 -497 +659 +396 +1,242 +250 +1,796 +319 +221 -989 +416

sugarcane.—Aggregate increase of 4,000 acres or 7.1 per cent. The increase is general and is due to higher prices of gul obtained in the previous years and to good supply of water in wells and canals. The area, though in excess of the preceding year, is still much below the figures of the previous nine years.

Oil-seeds.—The figures given in the margin show a general increase except

				Acres (000	omitted
C	гор.			Presidency Proper.	Sind.
Seвате				+32 +50	-4
Linesed Castor Saillower	***	***	***	+6 +39	***
Raperecd	***		•••	+1 +25	_8
Niger Ground-nut Others	***	***	450	-11 -2	<u></u> 13:

under groundnut and 'others' in the Presidency Proper. Favourable season, more room left by the extended sowings of food crops in the preceding year, and an inducement to grow more paying crops to meet tagai advances taken during the famine helped to encourage the cultivation of oil-seeds. But though the total area rose from 1,450 to 1,590 thousand acres, it is only a partial revival from the fall of 1896-97. The area is still 22.4 per cent. below that recorded in

1895-96. Some of these crops are important articles of trade and deserve special notice.

Sesame. The area under this crop increased 32,000 acres or 11 per cent. above the preceding year. The scantiness of the sowing rain curtailed the area in Poona, Sholápur and Dhárwár; but the deficiency was more than made up by the extended cultivation induced by favourable rain in Ahmedabad, Panch Maháls, Broach and in the North Deccan.

Linseed Cultivation chiefly confined to the districts of the Deccan and the Karnátak, in almost all of which the extent of cultivation increased owing to good sowing rain in September and October. The small decrease in Bijápur is attributed to the restricted area of the rabi jowári with which linseed is mixed.

Groundnut.—The area continues to recede. During the year under review it showed a further fall of 10,700 acres or 11 per cent. The decrease is general except in Poona and Sholápur, where the cultivation remained stationary. The decrease is attributed partly to want of seasonable sowing rain and partly to discouragement caused by partial failure of crops of the previous two seasons and diminished demand.

The important oil-seed crops in Sind are sesame and rapeseed. Like other crops both decreased perceptibly.

Distr	ict.			Acres (000 omit- ted).
Presidency	Pro	per.		
Khándesh Næsik Abmednagar . Belgnum Bijapur	••	100 100 100 100 100 100 100 100	60. 60. 60. 60. 60. 60. 60.	+77 -46 +8 +257 +47 +39 -13 +126
Dharpar -	•••	 Total	••	-72 +423
Sin	d.			
Hyderabad Shikarpur Thar and Parl	 Lar	***	**	-11 -2 -2
i 		Total	٠.	-15
· G	rand	Total	••	+408

Cotton.—The cotton area rose by 423,000 acres or 19 per cent. The increase is almost general and is due to the previous year's area being abnormally low owing to the extended cultivation of food and fodder crops consequent on the scarcity of the preceding year. Broach, Belgaum and Dhárwár alone show some decrease in area owing to absence or excess of rain at sowing time. In Sind the decrease was attributed to deficiency of water-supply.

Potato.—The area covered by the crop was 9,400 against 8,000 acres of the previous year. Poona continues to claim more than 75 per cent. of the total area of the Presidency Proper. Of the aggregate expansion of 1,400 acres, this district alone showed an increase of over 800 acres. The remaining increase was shared by Ahmednagar (+200), Sátára (+180) and Dhárwár (+190).

Green Fodder.—The important crops are lucerne and hot weather jowári. The area under the former decreased from 2,392 to 1,979 acres and that under the latter from 22,831 to 14,105 acres. Lucerne is chiefly grown in Ahmednagar (1,118 acres), Poona (418 acres), and Thána (211 acres). Hot weather jowári diminished mostly in the districts of the Deccan and the Karnátak, thereby indicating that the decrease is a continuation of the shrinkage from the large area of the last famine. In Gujarát, Ahmedabad considerably reduced its area, but Kaira and Broach extended it.

Kharif and Rabi Crops.—The details given in the subjoined table show variations under kharif and rabi cereals and pulses of the Presidency exclusive of Sind, and give the main features of the season:—

			ARBA IN ACRES (COO OMITTED).								
	Year,		Khar	if.	Rab	i, ·					
,	, <u>.</u>		Cereals.	Pulses.	Cereals.	Pulses.					
1897-98	•••	•••	11,044	1,907	6,316	783					
1898-99	. •••		10,160	1,922	6,775	957					
	Variation	•••	-884	+15	+459	+ 174					

89. Below are the usual tables showing the distribution of crops. Statement A shows the distribution of the principal crops in each district. Statement B shows the proportion of the area of each crop in each district to the gross area of that crop in the Presidency Proper. Sind is included in Statement A. A separate statement similar to B is prepared for Sind with percentages shown on the gross area of Sind:—

A .- Distribution of Crops-Percentages on District Areas.

					Foot	Caor	٠.				Non-p	ооъ С	g074.	Total	
No.	District.			C	ereals.									• In	d Croye.
		Jonaii.	Bájri	Paddy.	Wheat.	Grains.	Others.	Total	Pulses.	Othera	Cotton.	Oilstell	Cthern	Ford Crute.	Non-tool Crape.
1	1	3	4	6	8	7	8	9	10	11	13	13	16	13	16
	A,-Persidence Proper.				1		 								
	I.—Gujardt.	\	12	в	15		,	57	11	1	20		,	69	31
1	7.	17	25	17	8	25		79	13	1	1	2		23	7
3	n		10	16		14	26	72	18			0	1	90)	10
4	Broach		2	8	15	2		49	13	1	38	3	1	03	97
5	Surat		ī	21	5	9		62	16	1	15	. 5	1	70	21
٠	(1893-09	-	11	13	9	10	5	63	13	<u> </u>	17	•	2	77	23
1	Average { 1897-98	1	13	10	0	10		64	13	<u> '</u>	16	-		78	
,	II.—Decoan.						{				}	1	}	·	
6	Khándesh	. 15	20	1	6			42	13	٠٠٠	37		1	55 85	45 18
7	Násik	7	37	8	18	8		70	14	l	Ţ	١.	1	1	11
8	Ahmedusgar	. 87	28		10	2		77	12	1	. 2		1	}	'' s
9	Poons	86	81	4	8	4	""	80	10	1	*	1	1 -)	11
10	Sholápur	63	12		1	"	1	80					3	٠,	
11	Sálára	29	27	.	-	7	1	- 68	19	-1	2	-		-	14
	Average { 1898-99	ł	25	ſ	1	1	1	1	1	•	- I	1	, 1	l	15
	Average , { 1897-98	32	30	.	- 5	3	.	-\ 	- 	-{	-		-	-	
	III.—Korndlak.	-	}		1	}	1	Ì			. 1 .		. 3	95	15
12	Belgaum,	40	8	7	l l	Į.] 1	ł	14	1	1 1	1		ł	13
13	Bijápur	. 55	11	"	7	1	1	74	12	1	19	1	1	1	27
14	Dhárwár	}		8	13	7	.[68	11	<u> </u>	-		~} ~~ ~	79	21
	Average { 1898-99 1897-98	. 43	7 7	4	7	5		69	11	<u></u>	12		2	50	20
	IV.—Konkon.		\ 											ļ	Ì.
18	Thána			67		20		67	7		1	1	1	99	
10				61		St		92,	1		- 1	1		ı	,
17				\$ 9		38	1	77	ł			į.	١ .		
18	Kanara		<u></u>	78	·	8	·{	82	8			-\ <u></u>	.	.[
	1698-90	.,		65	1	22		86 87	١ .	;	1		1	1	4
•	Average { 1897-95 .		<u> </u>	. 65	-	22	1	68	13	ا	-)	-1	. I 	91	19
	Average A { 1898-99 .		1	I .	1	!	;	71	11	1			1 2	83	17
	Average 2 (1997-98 .	- 89	19		- <u>-</u> -	┟─ਁ	 	-	 	1	1		1	1	1
	B,Si#D, ,		[\		}	1	63		١,		1.	. 6	91	ļ
Ì9	Karachi	16	1	I	i	***	;	77	1	1	7	6	ء (د	80	20
20	Hyderabad	. 11	l .	J	ĺ			75	16	1		1	ı		•
21	Smitwibes	. 23	1		1 .]	1	63	11	} ;	ı	2	1	ł .	23
22	Chher pure requeses) 89] 1	1	1	ł			69	8		_	-	-\	.}	
23	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1		-}	-}	-		78	7			1	1	1 .	14
	Average B \ \ \begin{pmatrix} 1898-99 & \\ 1897-98 & \end{pmatrix}	18	1	1) .	<i></i> -	1	.	.}	-l <i>-</i>	-)- 	-} 	17
		29	 -	9	8	6	1			1	1 6		2	1	1
	Average for the Presidency. [1893-99 .]	T	ł .	9	7	5	1	72	10	1	' '	' '	7 1	'\ °`	"
		}	<u> </u>	1	1.	1	<u> </u>	<u>. </u>	<u>`</u>	-	<u>'</u>	- -	<u> </u>		

B .- Distribution of Crops -- Percentages shown on the Area of the Presidency Proper.

					Fo	ов Св	ors.				Non-	FOOD C	BOPS.	Top	FAL.
					Cereals			,							
No.	District.	Jowari	Bájri	Paddy.	Wheat.	Coarse Graine.	Others.	Total.	Pulses.	Others.	Cotton,	Oil-seeds.	Ot hers.	Food Crops.	Non-food Crops.
1	2	3	4	б	6	7	8	9	10	11	12	13	14	15	16
_	I.—Gujardh							,							
1 3 4 5	Ahmadabad	2.8 0.8 2.1 1.8	3.6 4.1 1.2 0.3 0.2	4·2 6·7 4·7 1·1 6·4	9.8 1.3 1.0 4.1 1.6	3 9 12 3 5 · 1 0 7 3 6	10·1 2·6 54·9 0·1	4·1 3·3 2·1 1·6 2·0	4.4 3.0 3.2 2.6 2.9	4.8 2.9 0.7 2.7 3.4	13·0 0·2 7·1 3·0	2.7 0.9 2.8 1.1 1.7	3.0 7.3 1.7 1.0 1.0	4°1 9°3 2°3 1°8 2°1	8.0 1.1 1.1 4.5 2.3
	Total { 1898-99	7·5 7·9	9·4 6·4	23·1 20·7	17°8 22°5	25.6 25.6	67·7 61·2	13·1 12·6	16·1 16·1	14·5 12·5	22·3 24·7	9·2 9·1	14·0 14·7	13°5 13°0	17·0 18·2
	II.—Deccan.		-			``									
6 7 8 9 10	Khandesh	5.8 1.7 13.3 9.5 17.1 6.4	14.2 16.8 17.7 11.4 5.9 10.8	1·1 3·4 0·8 4·1 1·3 2·9	10.7 15.6 14.1 4.9 2.8	1.2 11.3 3.3 5.2 0.5 8.6	2·3 2·3 2·4 4·3 7·7 8·1	7·5 7·9 12·2 9·2 9·7 7·0	13°1 9°0 11°0 6°7 6°2 10°8	5.0 9.4 6.1 13.1 4.8 12.0	41.7 2.1 1.6 	12.0 13.5 13.4 9.3 11.9 5.5	12.2 3.6 6.7 4.4 8.0 10.2	8·2 8·1 12·0 8·9 9·1 7·6	28 9 6 1 6 1 3 6 4 8 2 9
1	Total {1998-99	53·8 54·1	79.8 82.3	13·5 13·5	51·8 47·9	30.1	27·1 3·r3	53°5 55°4	56'8 54'9	50°4 52'4	45·6 38·9	65·5 64·3	45·1 44·9	ჩ3∙9 65•3	52·4 48·6
İ	. IIIKonkan.														
12 13 14	Belgaum	9·5 20·2 9·0	3.5 7.2 0.1	6·8 0·8 9·2	5·8 10·0 5·8	10.6 2.2 11.4	4·5 0·5	7.4 12.1 7.5	8·4 7·1 9·0	8·9 3·2 5·4	5·1 11·5 15·6	4.4 12.9 6.4	15.0 8.6 15.0	7·8 11·3 7·8	' 5′8 11°3 12•4
	Total {1898-99	38.2 38.2	10·8 9·3	16·8 17·1	30.0 30.8	24·2 23·6	5·3 5·3	27*0 25:8	24·5 26·3	17.6 18.1	32·1 36·4	23·7 21·8	34·5 32·9	26°6 25°8	29·5 31·9
	IVKonkan.										·				
15 16 17 18	Thána	***	*** ***	11.3 3.0 14.3 18.0	•••	6'8 9'2 3'6 0'5	0.2	2·4 2·2 0·6 1·2	1.1 0.8 0.5 0.2	3.7 1.2 2.0 9.9	446 446 448 448	0.8 0.3 0.4 0.1	1.7 0.1 0.8 3.8	2·2 2·0 0·6 1·2	0°8 0°1 0°3 0°3
•	Total {1899-99	***		46'6 48'3		20·1 19·9	0.2	6·4 6·2	2·6 2·7	17·6 17·0		1.8	6·4 7·5	6·0 5·9	1·1 1·3
<u>, , , , , , , , , , , , , , , , , , , </u>		100	100	100	100	100	100	100	100	100	100	100	100	100	100

B .- Distribution of Crops -- Percentages shown on the Area of Sind.

		<u>L</u> _			Fo	ор Сво	P2.				Nox-	FOOD C	ROPS.	Tot	PAB.
ļ					Cereal	B.								•	
No.	District.	Jowath.	Bájri.	Paddy.	Wheat.	Coares Grains.	Others.	Total.	Pulses.	Officers.	Cotton.	Oil-seeds.	Others.	Food Crops.	Non-food Crops
1	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 2 3 4	Hyderabad Shikarpur Upper Sind Frontier That and Parkar	13·7 17·3 39·2 28·8 1·0	2·8 36·3 1·5 4·7 64·7	24·2 23·9 31·8 2·9 17·2	10·3 11·2 58·7 10·5 9·3	31.6 14.7 39.5 5.9 8.8	31·1 25·1 20·5 18·1 5·2	13·8 24·5 27·8 9·8 24·1	10·9 6·5 57·4 18·8 6·9	24·9 28·7 34·9 6·0 5·5	0°9 64'1 2 6 0'9 31'5	5·8 24·5 26·8 32·5 10·4	32·8 47·0 12·0 1·6 8·8	13·7 28·1 30·4 10·5 22·3	8: 86: 19: 21:

Outturn of Crops.

90. The following table gives the reported anna valuation of the outturn of the principal crops in each district. The valuation (by Mámlatdárs) purports to conform to the standard prescribed in Government Resolution No. 725, dated 1st February 1898, Revenue Department, by which a normal crop is designated as a 12-anna crop. The table must, however, be taken as representing a merely approximate estimate. approximate estimate.

Approximate Anna Valuation of Principal Crops in each District, 1838-93.

No.		Dist	rict.					•	Average	ANKA T	VALVATIO	J.			
						Jowari.	Bøjd,	Paddy.	Wheat,	Kodra,	Rági.	Vari.	Tar.	Gram.	Cotton
	,	.—Gu	iaedt												
1	Ahmadabad	•••	***			10							I	1	
2	Kaira	•••	***	***	•••	} _ [11	13	10	13	12	10	13	10	10
3	Panch Mahái		***	•••	•••	· ·	11 7	11	10	12	12	9	12	9	8
4	Broach		***			1 10	, •	11	7	9	8	6	6	9	5
5	Surat	•••	***	***		10	10	9	9	9	•••	•••	9	9	9
	'	 I.—De		***	***	10	7	10	10	10	11	10	9	8	7
\ 6	Khándesh														
7	Násik	***	***	***	•••	13	11	10	8	8	12	12	10	9	11
8			***	•••	***		11	12	11	•••	12	12	10	8	12
9	Ahmednagar		***	***	•••	. 8	7	8	7	5	8	8	7	6	9
10	Poons	, ••• ,	***	•••	•••	10	9	12	8	5	9	8	5	8	4
	Sholapur	•••	***	***	•••	10	6	7	8	4	5	1	7	7	
11	Sátára	***	***	•••	•••	11	10	12	10	8	10	9	9	9	19
		Ka	rnátak,		,									}	!
12	Belgaum	•••	***	***	•~	9	8	9	9	7	่ง	9	10	10	. 9
13	Bijápur	***	***	•••		9	7	8	8	3	4	3	8	9	6
14	Dhárwár	***	, 100	, ===	•••	8	6	10	12	7	8	8	9	11	6
	ı, <i>IV</i>	.—Ko	nkan.			.	1		'					1	1
15 .	Thána	•••	•••	***	•••		***	11		8	10	10	9	10	
16	Kolába	***	***	***	•••	•••	•••	11		10	11	11	11	7	
·17	Ratnágiri	,•••	•••	•••	•••	•••	•••	11		10	10	8	10	5	
18	Kánara	•••	***				***	11		•••	D		***		
		Sinc	?.			}						Į,			ĺ
19	Karáchi	· 		•••		9 .	11	11	9		9			8	8
20	Hyderabad	•••	•••	•••		10	8	10	9			🖠	***	9	6
21	Shikárpur	•••	•••	• * *		8	8	9	8		· [7	8
22	Upper Sind Fi	rontie	,	•••		8	8	7	7			J		8	9
23	Thar and Párk	io r	***	•••		7	6	10	11						8

Maize.
 Note.— In the above table valuations are calculated on the standard of 13 annas to the normal crop.

In Gujarát and the Konkan, the kharif and rabi crops yielded fairly well. Rice would have yielded still better if the late rains had not held off rather too early. Khándesh gave a good outturn of kharif crops. But in the other districts of the Deccan and the Karnátak, these crops, especially those in the eastern tálukas, suffered from deficiency of rain in July and August, which reduced their outturn below the normal. The rabi crops in the whole of the North Deccan and Gujarát felt the effects of the early cessation of rabi rains and yielded a moderate outturn. In Sind the low inundation and scanty rainfall reduced the outturn of all crops.

91. Fruit Trees.—In the Presidency Proper the numbers of mango, jack and palms returned, decreased perceptibly, while tamarind and cocoanut trees increased to a small extent. Mango and date-palm are the only trees of importance in Sind, and both of them increased. The enumeration of trees is to be taken as a rough estimate only, and it is only valuable as serving to show the distribution of trees. Trees in forest or in village sites are not included in this enumeration.

54
Number of Fruit Trees.

(000 omitted).

No.	Province.	Mango.	Tamarind,	Jack.	Cocoanut.	Toddy-palm.	Date-palm.
1 2 3 4	Gujarát Deccan Karnátak Konkan Total for the { 1898-99 . Presidency. { 1897-98 .	564 931 393 561 2,449 2,463 —14	125 74 113 45 357 355 +2	217 267 —50	7 13 73 1,835 1,928 1,926 +2	205 1 96 302 342 40	1,627 1,693 —66
!	(1897-98)	+8	•••		+1		+10
.	Grand Total $ \{ \begin{array}{c} 1898-99 \\ 1897-98 \end{array} $	2,671 2,677	357 355	217 267	1,930 1,927	302 342	
,		6	+2	-50	+3	-40	-56

The enumeration includes an estimate of trees of special local value in particular districts as given in the subjoined table:— >

Trees of special local importance for 1898-99.

· · · · · · · · · · · · · · · · · · ·	·				<u> </u>				
Trees an	d Distri	ets.	•	Number.	Trees	and Distr	icts.		Number.
1Mowra (Bassia	latifoli	ia).		5.—Fig	(Ficui c	arica).		
Kaira				144,714	J	(=		(•
Panch Maháls	•••	•••		115,946		-		'	1 .
Surat	***	•••		1,792	Poona				82,054
Khándesh	•••	•••		43,293	Násik	•••	***		3,516
Násik	***			14,484	Ahmednagar	•••	•••		4,062
Broach	***	•••		2,414	Shikarpur	•••	•••		1,467
	•••			-,	Hyderabad	•••	•••		779
2.—Betelnut	(Areca	catech	z).	-	Belgaum	•••	•••		225
	(,	-,- }		Des Guardini	•••	•••	•••	-20
Kánara	•••	•••		9,014,121	•			}	
Dhárwár	•••	•••		151,616	6Vine	(Vitis 2	inifera		
Ratnágiri	499	•••		199,067	l °' '***	(, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.000	'	
Kolába	•••	•••		23,187		,		- 1	
Thána	•••	•••		4,008	Násik		•••		65,305
				-,00-	Poona		•••		63,900
3.—Ráye	an (Mi	mu80n s	,		Ahmednagar		•••	••	8,804
	andra)		- 1	ı	Shikarpur	•••	***		32,209
	,				Khandesh	•••	•••		1,103
Kaira	•••		•••	79,729	Hyderabad		•••	•••	501
Panch Maháls	•••	•••	• • •	3 559	Upper Sind				345
Broach	•••			2,974	Karachi		•••		570
,				_,,,,,		•••	•••	***	,
4.—Kashew	nut (A	nacard	ium		ł			1	
	dentale				Į.			1	
		•			7Kokum	(Garcin	ia Indi	ca).	
Kánara		•••	•••	105,487		, , =	7		
Ratnágiri	•••	***	•••	26,023]				
Thána		•••		5,261	Ratnágiri		***		2,622
				-,	I		••-	•••	-,

Return No. IV-Irrigation.

The net irrigated area in the year under report amounted to 3.9 per cent. of the net cropped area in the Presidency Proper and 81.3 per cent. in Sind, as against 4 and 76 per cent., respectively, last year.

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

Irrigated Area.

		PRES	IDENCY P	ROPER.		Sind.	
No.	Detail.	Ares omitt		Increase (+) or decrease	Area (000 omitted).		Increase (+) or decrease
		1897-98.	1898-99.	per cent.	1897-99.	1808-00.	(-) per cent.
	A Area Irrigated.	•					
1 2 3 4 5	Irrigated from Government canals Do. private canals Do. wells Do. tanks Do. other sources	14 574 109 132	117 12 561 113 131	-12·7 -14·3 -2·3 +3·7 -0·8	2, 5 57 177 19 165	2,232 130 30 93	-12·7 -26·6 +57·9 -43·6
6	Total A, Area Irrigated B.—Crops Irrigated.	963	934	-3.01	2,918	2,485	-14.8
7 8 9 10	Rice	206	163 231 57 608	+ 79 + 12·1 + 7·5 - 9·8	899 377 3 1,881	896 277 3 1,535	-0·3 -26·5 -18·4
11	Total B, Crops Irrigated	1,084	1,059	-2.3	3,160	2,711	-14:2

Note .- The difference between totals A and B is due to the inclusion in the latter of the area cropped more than

		Acr	es (000 omiste).			
District	a,	Canals.	Tanke, wells, &c.	Not variation.			
Ahmadabad Kaira Panch Maháls Broach Surat Khándesh Násik Admednagar Poona Sholspur Sátara Belgaum Bijápur Dhárwár Thána Kolába Ratnágiri		 -5 -1 -15 +1 -11 -11 	+112 +6 +2 -5 +1 -32	- +1 +2 -12 +1 +1 -20 +2 -4 -1 -3 			
Kanara		 	+1	+ 1			

The total area irrigated decreased by 29,000 acres, or 3 per cent., in the Presidency Proper. The decrease occurred mostly under canals and wells. The chief variations in the areas irrigated from different sources are shown in the marginal table. The canal irrigation shows considerable decrease in Poona and Nasik. In the former the season was favourable and canal water was not resorted to; in the latter the decrease is reported to be the result of correction in the classification of area. Last year, area which should have been included under the head "Irrigated from other sources" was included under "Canals." A large area under wheat appears to have led to increased demand for water

from tanks and wells in Kaira, and insufficiency of early rain had a similar result in Dhárwár and Sholápur. The reduction in the area irrigated from wells is partly attributed to good rainfall, but it may also be a shrinkage in contrast with the previous year, when well irrigation was resorted to on a large scale on account of partial failure of rain. The increase in Nasik is explained by the correction of registration noticed above.

In the Presidency Proper the area of irrigated crops decreased from 1,084,000 to 1,059,000 acres, i.e., by 25,000 acres or 2.3 per cent. The decrease occurs especially under "other cereals and pulses," wheat, rice and sugarcane show increase which is explainable by the deficiency of late rains. In Sind the irrigated area as well as the irrigated crops decreased 14 per cent. on account of low inundation.

Return No. V.—Agricultural Stock.

93. The following table shows the result of the enumeration of the principal heads of agricultural resources in the Presidency. These statistics are not yet supplied by Sind:—

Agricultural Stock.

		PRESIDENCY PROPES.							
Details.	,	Number (000	omitted).	Increase (+)	Decrease				
,		1897-98. 1898-99.		per cent.	per cent.				
Plough Cattle Breeding Bulls Cattle for other purposes Milch Cattle Young Stock		2,965 16 116 2,444 1,835	2,947 16 116 2,531 2,067	+ 3·5 + 12·6	0·6				
Total, C	attle	7,376	7,677	+ 4.0	*****				
Horses and Ponies Sheep Goats Ploughs Carts		122 1,507 1,675 1,014 514	124 1,561 1,832 1,037 514	+ 1·6 + 3·6 + 9·4	 -00				

The district variations are noted below:

No.	Distric	t. .		Plough Cattle.	Cows.	She- buffaloes.	Young Stock.	Total Cattle,	Sheep.	Goats.
1	Ahmadabad	•••		-216	+3,355 487	+2,333	+6,405 +12,397	+12,107	+ 559	+2,874
2 3	Kaira Panch Maháls	***	•••	-903 +15,241	+13,307	+1,537 +5,009	+15,469	+12,534 +49,248	+ 3,578 - 552	-1,513 $+6,942$
4	Broach	***	``'	-1,606	+ 466	+ 41	+1,762	+625	+1.224	+1,485
5	Surat	***		166	+2,701	+1,508	+2,336	+ 6.491	-857	+5,650
6	Khándesh	•••		-15,624	-1,517	+3,560	+26,664	+13,922	+3,332	+18,408
7	Násik	•••		+4,162	+8,383	+881	+23,790	+37,874	+10,475	+16,356
8	Ahmednagar			-7,346	+2,302	+ 36	+29 503	+23,376	+13,593	+ 31,477
9	Poona		•••]	-3,466	+1,904	+1,199	+18,254	+17,749	-+21,717	+ 1,073
10 '	Sholápur	•••		13,050	726 [61	+16,426	+2,137	—16,9 9 2	+28,684
11	Sátóra	***	•••	2,001	+2,249	+770	+17,553	- 17,536 '	+1,897	+ 7,805
12	Belgaum .A	•••		3,372	+ 2,459	+2,618	+15,266	+16,859	+ 5,675	+3,502
13	Bijápur	***		+12,000	+14,531	+ 5,285	+24.904	+57,030	+9,481	+ 35,738
14	Dhárwar	***	•••	+1,400	+ 6,685	+3,652	+11,326	+ 22,666	+388	-6,474
15	Thana	***		-1,879	+236	+629	+2,659	+1,988	+89	-108
16	Kolába	***	••••	225	+ 326	+194	+4,340	+3,599	+61	+ 2,385
17	Ratnágiri	***	•••	291	+ 291	+47	+683	+791	233	+1,550
18	Kanara	•••		+ 72	÷ 133	.+425	+2,951	+4,330	-1 63	+ 522
	\ .	Total		<u>-17,270</u>	+56,603	+ 29,663	+232,748	+300,862	+ 54,026	+156,356

Cattle.—The aggregate number of all kinds of cattle increased by 301,000 or 4 per cent., the total reaching 7,677,000. This number, large as it is, is still much below the figures of 1894-95 and 1895-96, when the number was about 8½ millions. The deficiency exists mainly in the Deccan and the Karnátak. It is satisfactory to note that during the year under report the increase occurred under milch cattle and young stock, and the increase appears to be very general. It is most marked in the Pauch Maháls, Khándesh, Násik, Ahmednagar, Poona, Belgaum, Bijápur and Dhárwár. It is attributed to the abundance of fodder and the new purchases by the cultivators helped by tagái advances. Disease was also markedly absent. Plough cattle decreased a fraction below last year.

Sheep and Goats.—Sheep show an increase of about 54,000 or 3.6 per cent. Goats have also increased from 1,675,000 to 1,832,000 or 9.4 per cent. The increase under both the heads is general and is partly due to breeding and fresh purchases and partly to immigration. The exceptional decrease in Sholápur is not explained. Under goats there is a perceptible decrease in Kaira and Dhárwár. In the former it is explained by migration. In the latter the decrease is remarkable, but the reporting officer has no explanation to offer. The enumeration of these animals, which are usually roving herds, must be taken as approximate.

Horses and Ponies.—Increase 2,000 or 1.6 per cent. noticeably in Ahmednagar and Bijápur (+1,000 each).

Return No. VII.-Water-supply.

94. The return is a quinquennial one and will re-appear in 1901-1902.

B.-PRICES.

95. Price Inspectors.—Restrictions imposed on account of plague prevented the inspection of 3 out of the 59 stations, viz., Sirúr, Sásvad and Kolhápur.

The cost incurred and the number of days actually devoted to inspection are given in the following statement and are contrasted with the figures for the previous year:—

	Year.			Salary.	Travelling allowance.	Total.	Days of Inspection.
		·		Rs.	Rs.	Rs.	No.
1897-98 1898-99	***	•••	***	3,340 2, 980	948 1, 092	4,2 88 4, 072	135 182

- 96. Retail Prices Current.—The inspection brought to light the following irregularities. In Bijápur and Ahmednagar the registration work was performed rather carelessly; numerous corrections were made in the register and left unattested by the supervising officer. The Inspectors noticed that in some stations prices were omitted for articles which were regularly sold in the markets, and in some they were registered when the articles were not procurable. Bombay the price of superior instead of the average quality of rice was quoted. This mistake was found in the case of many articles in Ahmadabad and Itájkot. Godhra returned the same price continuously for ten months and took no notice of the fluctuations of the market. Karáchi reported the price of the hides of bullocks and the skins of goat instead of the average price of hides and skins of different kinds. Officers in charge of the price registration at Kaira, Rájkot, Godhra and Jacobabad did not take the prescribed 5 per cent. test. In Poona the City Magistrate took this test by summoning the dealers instead of personally inquiring in the market. Numerous errors were detected in calculating the prices in Bijapur, Ahmednagar, Malegaon, Satara and Dhulia. All these stations except Dhulia failed to record causes of marked variations in prices. In Ahmadabad, Kaira, Godhra and Deesa in Gujarát and at Jacobabad and Karáchi in Sind the explanations were noted by guess work on the day of preparing the price returns. For instance, the variations in prices in Ahmedabad were attributed to the fluctuations of the market while they were found to be due to incorrect quotations.
- 97. Táluka Form No. 38.—These forms were inspected in all the district head-quarter stations visited by the Price Inspectors. The inaccuracies noticed show that due attention was not paid to the rules contained in the Manual of Revenue Accounts. In Dhulia the form was not kept as prescribed by the rules. The Mámledárs of Ahmadabad, Godhra, Surat and Thána did not take any test of the jantri. In the first-named station the price of the new produce was not distinguished from that of the old; the prices were not ascertained on the prescribed dates, the Circle Inspector reported the prices in Indian maunds

instead of in local maunds, the price of 100 bundles of fodder (karbi) was quoted for an Indian maund, and in the case of tobacco cut leaves were quoted in lieu of cured leaves tied in bundles. In Surat the prices of rice and salt for Ránder given in the report submitted by the Bhág Kárkun did not agree with those recorded in the form.

A new Taluka Form has been sanctioned under Government Resolution No. 7110, dated 7th October 1899, Revenue Department, for introduction from January 1900.

98. Fortnightly Return of Retail Prices.—In this return some errors were detected in Satara, Malegaon and Ahmednagar in the conversion of local into standard seers.

A return (pages xliv—xlv) is appended giving for all the districts of the Presidency and the several cantonments visited by the Inspectors the annual average retail prices of the principal staple food-grains and articles of ordinary consumption for the year under report.

99. Return of Wholesale Prices.—These returns were examined concurrently with the returns of retail prices and were found to be compiled in a satisfactory manner in all the 10 fixed stations.

C.—CROP EXPERIMENTS.

100. The number of experiments conducted during 1898-99 amounted, as shown in the margin, to 98 as against 127 in the previous year. Of these, 37 years 5; gram 10; sugarcane 5; sesamum 5; linseed 7; groundnut 3; other crops 4. Central Division and 16 in the South-

ern Division. No experiments have been reported from Belgaum, Dhárwár and Kolaba districts owing to the officers being placed on plague duty. In several other districts also the work suffered more or less from the same cause.

D.-TRADE IN WHEAT, COTTON AND OIL SEEDS AND FORECASTS OF THOSE CROPS.

101. The following statement compares exports by sea of wheat, cotton and oil-seeds from the Port of Bombay to countries abroad during the seven years ending with the year under report:—

1895-96. 1896-97. 1897-98. 1892-93. 1893-94. 1894-95. 1898-99. Crop. 2,799 4,699 1,043 377 6,485 8,176 1,158 Wheat ... 2,569 Cotton ... 3,862 3,711 2,323 3,831 3,843 3,972 .. 4,542 3,072 2,468 1,350 3,719 4,767 2,705 1,733 1,412 2,802 Linseed ... ••• 2,353 2,254 2,156 Rapeseed 2,165 4,353 ••• ... 1,467 1,238 1,259 1,000 667 1,419 Sesame ... 1,160 795 1,098 1,598 23) Groundnut

Figures in thousands of cwt.

It will be seen that the exports of wheat were the largest since 1893-94-Large exports by sea were called for by a rise of prices in London, occasioned by a belief that the American supply would be deficient and that the supplies from Russia and India would not be large. The exports were chiefly made to France, the United Kingdom and Italy.

The supplies chiefly came from within the Presidency and from the North-West Provinces and Oudh, the Central Provinces and the Punjab, in all of which the crop was excellent.

The exports of cotton were only smaller than those of 1891-92. The imports chiefly came from the Bombay Presidency and the Berárs, where the cultivation was extended and the harvest good. The export of cotton to the United Kingdom shows symptoms of gradual decline, due partly to the fact that the Indian mills now manufacture much of the coarse yarn and cloth for

which the Indian short-stapled cotton was required, and partly to the abundance of cheap American cotton which European millowners find more economical. For the present, however, the Indian cotton trade has gained in the east what it has lost in the west. Japan has become the largest consumer of Indian cotton.

The season for linseed, rapeseed and sesamum was favourable, and large stocks came in from almost all provinces. The exports were larger than during some preceding years and were chiefly made to France, Bolgium and Italy. The trade in groundnut was insignificant.

The official forecasts were published as usual. The forecast areas of cotton and wheat approximated to the actual area. But the divergence shown by the oil-seeds was rather wide and, as explained in previous reports, is attributed to the usual difficulty of ascertaining the actual area under these seeds, which are mostly grown as row crops.

E-AGRICULTURAL LEDGERS.

102. An agricultural bulletin by Mr. Mollison on the cultivation of betelpalm, cardamoms and pepper in Kanara and the manures used in the gardens is under publication.

CHAPTER VIII.

FINAL.

103. In the preparation of this report much assistance has been given by Messrs. Nagarii, Gokhle and Bhardi under the general supervision of Mr. Yashwantrao, Acting Assistant.

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

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

STATISTICS.

RAINFALL

(CHAPTER IV).

EXPLANATORY REMARKS.

Rain Periods and their Dates.

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

The average given in the tables is that for eleven years ending 1837, 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 12 annas representing an average crop.

Synopsis of Rainfall Summary, 1898-99.

District.	KHAR	IF.	RA	BI _e	General Romarks
District.	Rain.	Harvest.	Rain.	Harvest.	as to rain.
West Khandesh .	Late for sowing. Suffi- cient afterwards.	Good	Timely for sowing, but ceased rather carly.	Fair	Generally below average except in Navapur.
East Khandesh	Do. do,	Do	Do. do,	Do	Generally below.
Násik	Insufficient in June. Sufficient later on except in August in the Eastern and Cen- tral talukas.	ļ	Timely for sowing	Do,	Exceeded the average i two tilukas; elewher below.
Ahmednagar	Sowing rain light. Some area left un- sown. September rain saved the with- ering crops.	poor elsewhere.	Sufficient for sowing; deficient afterwards.	Fair in two tálukas; poor elsewhere.	Much below average.
Poons	Sufficient and season- able in the Maval; In the desh deficient in July and August, but September made up the deficiency.	poor in the deshi tálukas.	Sufficient for sowing, but scant afterwards.	Middling	Below average except tw talukas in the west.
Sholapur	fowing rain late and insufficient.	Poor	Do, da	Fair. Wheat and gram damaged by rate in places.	Up to average, except as choldpur.
Sátára	Sufficient and timely in the west, late and deficient in the east.	ern tálukas;		Generally fair	Below average in general.
Belgaam	Do, do	Good in three talukas. Fair elsewhere.	Good for sowing and development.	Good in Gokak. Fair elsewhere. Cotton yielded 8	Above average.
Bijipur	Deficienț till August .	Poor	Gord and sufficient for sowing; deficient after November.	Fair. Cotton poor.	Above average at Bijapo and three southern tale las.
Dhárwár	Sufficient and season- able in the west. Frant in August in the east.	Fair to good	Euflicient and timely throughout.	Good. Cotton blighted in places.	Above average except i Ron.
Kánara	C. Malant and seeson	D o	Good and sufficient	Fair to good	Above average in four talu kas; elsewhere up to o under.
Ratnágiri	Good and sufficient	Fairly good	Do. do	Do	Above average.
Kolába	Heavy in the begin- ning and in July, but seasonable later on.	Good	Do. do	Fair	Generally above average,
Thána	Sufficient and season-	Fair	Do. do	Do	Above average in four telu kas ; elsewhere below.
Surat	Good and sufficient	Good	Sufficient for sowing but stopped too early.	Middling	Below average except a Valod.
Broach	Sufficient, but July rain injuriously heavy.	Fairly good	Do. do	Do	Above average except is Anklesvar and Hénsut.
Kaira ···	Good and sufficient	Do,	Sufficient for sowing but scant in October.	Middling. In places	Below average in three talukas; elsewhere above.
Panch Maháls	Good and sufficient, but August rain inju- rious to maize.	Do	Do, do,		Above average throughout.
Ahmadabad	Late for sowing, suffi- cient afterwards.	Good except in Viramgám.	D0. do	Fair to good. Cot- ton injured by un- timely rain and cold in December.	Above average.

West Kha'ndesh, 1898.

	Dhul	la.	Pimpal	ner.	Nandu	bár.	Naváp	nr.	Talod	a .	Shahad	A. :	Shirpu	r.	Sindkhe	da,	Amaln	er.	Parol	la.
Rsin Periods.	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.	<u></u>	In.	-	In,		Īn.		In.		In.		In.		In.		In.	
Early Baios	0.25	1	0.32	1	0'52	1	1.83	2	0.91	1	0.52	1	0.93	١,	1.64	1	0.27	1	0.20	1
Ante-Monsoon .				. <u>.</u> .			•••		***		0.68	3							•••	,
Morseon-Kharif	11.21	20	14.50	23	16.07	80	38.92	43	18-43	29	8-94	23	13-23	21	10.26	20	11.07	19	11.31	22
Monsoon-Rabi	9-17	14	7:43	11	8.36	14	18·2 3	26	8.68	19	7:32	18	7.73	14	6.77	15	12-15	17	8-25	16
Late Rains	0.30	1	0-17	1	Q+85	1	0.14	1	497		•••		4**				0.09		0.25	1
Total	21*03	86	22.45	36	25.80	46	59·11	72	23.03	48	17:11	43	31*43	36	18:97	36	23. 28	87	20:31	40
≜ verage	36.22	34	20-90	81	28.99	50	42.94	66	32-08	44	27:40	44	25.25	42	20.82	42	25.67	40	30-23	46

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

Remarks.—The total rainfall of the year exceeded the normal in Navapur and Pimpalner; elsewhere it was slightly below the average. The sowings generally commenced with Mrig rain, but a break following they were not completed until good rain came early in July. August rain, though not up to requirements, was seasonable and sufficient to sustain the crops. The slight deficiency was well made up by the good Uttara fall in September. For the kharif crops, therefore, the rain was well-distributed. The rabi sowings were completed with the usual Hasta showers which practically closed the rainy season, for no rain fell afterwards. The kharif crops were generally up to the normal, and gave an outturn estimated at 11 annas. The rabi suffered from the early cessation of rains and yielded 8 and 9 annas of outturn.

East Kha'ndesh, 1898.

		ilis- on,	Pách	ora,	Bh	ad-	Eran	dol.	Cho	pda.	Jalg	êO⊒.	Jámn	er.	Bhusá	val.	Edalal	bad.	Yáva	1,	Ráve	ıΓ.
Rain Periods.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Bainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Raimy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
•	În,		In.		In.		In.	_	In.		In.		In.		In,		In,	_	In.	_	In.	
Early Rains	0.02	***	0.01		0.17	1	0.07	-110	0.39	1			824		4=4	•••	***		440		0.14	
Ante-Monscon		,	0'13	1	0.58	1	0.21	1	0.52	1	0.58	1	4*4	•••	0.03	127			0.43	1.	0.38	3
Monseon-Kharif	14.20	24.	13.38	24	19:41	21	13:47	23	10.79	25	16.69	28	12.88	26	17.55	28	14.61	26	15'98	28	14-80	22
Monsoon-Rabi	13.05	17	10.70	15	7:67	18	11.62	19	11.88	19	17:43	19	17:47	17	12.33	16	10-91	15	14.38	20	9.86	15
Late Raine	1.68	1			0 .03		0.03						0.22	1	***	197	0.02					
Total	28-98	42	24.53	40	27.66	41	26.02	42	23-67	46	84.28	48	30.83	44	29:90	44	25.57	41	30.78	49	25.18	40
Average	34-54	37	3 3*48	43	31.85	49	32·1 5	49	28 82	45	\$2.86	44	32-62	42	29-12	45	26-81	39	26:38	99	27:30	86

General characteristics.—In the north, high hills of the Sátpudas. 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 Khándesh, but less certain.

Remarks.—Rain generally below average except in two talukas where the increase was not very noticeable. As in West Khandesh the sowings were started in the first half of June; but being checked by the light fall of A'rdra, were completed in July. The August rain falling with partial breaks was very beneficial to standing kharif crops. They flourished without a check in September. The Hasta showers at the close of that month were somewhat too heavy for the kharif

Na'sik. 1898.

										_		· -												
l	Nás:	K.	Iga Pur		Birn	AR.	Nipe	ıάd.	YEO	CA.	NÁ: GAO		Má		SATA	'NA.	KALY	AN.	Спл		Dind	oki	Íω	N 1.
Rain Periode.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Bainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days	Fall.	Ba'ny daye.	Fall.	Painy days.	Fall.	1
-	Ia,		In.	_	ln,	_	In.		In.		In.		lo.		Ia.		In.		In.		In.		In.	-
Carly Rains	03.0	1	0.20	1	0.80	1	0.50	1	0.22	1	0'17	1	0.10	1	0.59	1	0 30	1	0.88	1	0 57	,	0-98	į
ute-Monsoon			0.28	1			0.08		0 96	2	1.25	1	***		0.30	2		•••	0 77	1	477		0.01	
donsoon-Kharif	17.18	80	91.91	61	10-47	29	12:67	24	B·12	21	13-16	15	11.06	16	13:11	18	18 69	28	13 85	31	25'05	43	65:18	8
Ionecon-Rabi	8 98	18	45-99	40	5 -99	15	5.43	10	11.01	11	6.51	14	3:85	8	8:21	11	0 44	18	8 24	10	7 75	21	19*83	;
Late Rains	0.23	2	1.00	2	8.33	4	2.81	8	0.71	2	0.29	2	0 80	2	0.56	3	1.28	3	3.30	3	1.10	2	1.58	
Total	27:59	51	140 08	105	19.28	49	21 16	49	21.37	40	21 39	33	15-61	27	22'83	89	28-49	w	20 10	51	35913	09	96 96	,
Average	30.08	44	143 83	100	28.58	43	25-91	34	24 59	33	28 74	35	22:27	31	21.40	26	27,69	40	27 84	61	51-30	83	04:32	-

General characteristics. - The district is divisible into the Dosh (or open country) and the Dings (near the Sahyadris with heavy rainfall and primitive cultivation). The west portions of Nasik, Dindori and Igatpuri and the whole of Peint belong to the Dangs,

Remarks.—Number of rainy days larger. The aggregate rainfall, however, exceeded the average in one or two talukas only. Elsewhere it was in defect. The monsoon opened timely in June, but the total fall of the munth was insufficient for full sowing. The July rain, however, was sufficient and seasonable for the completion of the retarded sowings. In the western talukas the kharif crops had favourable rains in August and September. But in central and eastern talukas they suffered from a deficient fall at the close of August and would have yielded poorly it they had not been saved by the timely and heavy fall of Uttara and Hasta in September. These rains gave good maisture for rabi sowings, which were effected in time in the break of October. rains gave good moisture for rabi sowings, which were effected in time in the break of October. This break was, however, a prolonged one and was followed by light showers in November and December at very long intervals. The rabi rains therefore were on the whole not up to the mark. This reduced the outturn of rabi crops in many places to 8 to 10 annas. The kharif crops gave a better outturn of 12 annas and upwards.

Ahmednagar, 1898.

	1 Nag.	AB.	2 Pa'ss	BB.	Sa	RI-	4 Kar	AT.	JA	b 'M- Ed.	·Sa	в ву. on.	7 Nev	(sa.	8 Rág	URI	Koi ga	PAR- ON.		O GAM-	II Aro	
Rain Periods.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Bainy days.	Fall.	Rainy days.	Fall.	Bainy days'	Fall.	Rainy days.	Fall	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.	_	In		In,		In.		ln.		In		In.		In.		in.		Ĭg.		Îo.	
Early Rains Auto-Monsoon Monsoon-Kharli Monsoon-Rabi Late Bains	0.39 5.61 6.59	1 11 18 1	0.02 1.21 7.00 12.29 9.95	3 22 14 4	0°22 4°65 7°52 0°76	1 9 13 2	1.63 5.68 10.74 0.46	3 11 14 2	0:06 8:29 9:09 10:29 0:81	6 19 16	1:07 11:17 6:85 0:66	 17 15 8	0°80 8°48 12°10 0°83	21 13 13	0°64 9 14 9 3d 0 3d 0°96	8 9 16	0 03 6:30 2:21 0 60	14 12 3	0 23 2:14 8:55 0:00	 9 17 8	0°29 8°67 8°69 1°78	1 26 10 8
Total	14.78	31	21.47	43	13-15	24	18:49	80	23-03	4)	19.73	37	22.01	30	19 10	20	18'05	33	12 36	26	18:61	40
Average	23.63	30	25.68	32	20.43	27	22.06	28	29:53	41	28:00	85	24.40	36	22 64	34	3.•75	30	21 82	29	23.76	39

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

Remarks.—The total fall was much below the average, though the number of rainy days was larger, indicating a light fall over a greater part of the season. The land prepared under ante-monsoon showers was ready to receive kharif sowing in June. But the monsoon opened with a light fall in that month. Only partial sowings were effected. July rain permitted additional sowings, but being short of the requirements some area was left unsown. On these supervened another deficiency in August, which gave only light and occasional showers. Kharif crops began to wither and rabi sowing was delayed. A change set in in September, when rain full in excess of the average, saving the kharif crops and providing moisture for rabi sowing. But this proved to to wither and rabi sowing was delayed. A change set in in September, when rain fell in excess of the average, saving the kharif crops and providing moisture for rabi sowing. But this proved to be a short spell of good rain. For October again gave light and partial showers only for the first few days. The standing kharif crops again suffered. The Chitra and Swati showers in October did not fall. The rabi crops, therefore, suffered from deficiency of moisture. They had some showers in November and December, but they were either too light or untimely to give material showers in November and December, but they were either too light or untimely to give material help. The kharif outturn estimated at 10 annas only in one taluka, 6 to 8 annas in six, 3 to 4 annas in two and only one anna in Karjat; rabi yield 10 annas in two talukas and 5 to 8 annas in the rest. Cotton estimates about 6 to 8 annas.

Poons. 1898.

	Poo	na.	PA	UD.	VADG	.≜on.	Lona'v	L å ,	Кн	SD.	Спо	DA.	JUNE	rar.	Sint	7 % .	SA'EV	▲D.	Ba'n Mat		DHoi	iD.	Indi	
Rain Periods.	Fall.	Rainy days	Fall.	R iny days.	Fall.	Rainy days.	Fall.	Bainy doys.	Fall.	Rainy days.	Fall.	Rafry days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rairy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.	İ	In.	i –	In.				In		In,		In.		In.		In.		In.		In.		In.	
Early Rains	0.18	1	0.63	2	0-26	2			0.26	1	0.12	1	0-11		0.03	[,, ,	0.39	1	0.30	1	0.03	•••	0.10	
Ante-Monsoon	0.61	3	1.23	2	0.72	8	•••		0.62	3	2:03	3	0.61	3	0.43	2	0.59	2	2.19	6	0.8%	8	1.78	7
Monsoon-Kharif.		2.1	42.64	52	34.21	18	145 14	62	14 57	23	19 88	36	19 00	36	4.83	11	8.20	24	3-47	10	4.53	13	4.11	13
Monsoon-Rabi	9·4s	18	13 78	31	11.75	19	48-42	43	11.78	16	7:25	14	7:20	20	13.18	14	9.10	11	13'85	15	8.80	15	14.88	14
	0.80	1	0.83	8	0.3	1			0.63	1	0.50	2	0 15	***	1.97	3	1 61	4	1.13	2	0.80	ړا	8-13	8
				_	_			_	l	_						Í —		<u> </u>				_		(<u></u>
Total	22.92	52	59.11	93	47.6	.3	193 [.] 56	105	37-48	43	29-28	58	27:07	59	20-49	30	20.19	45	\$0.83	34	15 [.] 10	83	23.88	87
<u> </u>			<u></u>			\ -{		_				 		—]	-		_	 -					-
Average	35·10	50	04.87	77	41.29	62	184-80	100	25 90	49	30-44	53	34.21	49	23 54	30	24.57	39	25.28	23	23*86	31	22-75	83

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 tálukas are uncertain and irregular like the adjoining tálukas of Sholápur.

Remarks.—The rain generally under average except in two Maval (western) talukas. Antemonsoon showers favourable for preparations of land. The monsoon commenced in the second week of June. In the western portion of the district the fall of the month was sufficient and reasonable for kharif sowing. In the subsequent months the kharif crops had beneficial rains and developed under favourable circumstances till they were reaped. But in the eastern (Deshi) talukas the rain was deficient from the commencement. Both July and August months closed with a great want of rain. In places the klarif crops were reported to have failed. In September, however, a most opportune and useful downpour of ain changed the situation. All surviving kharif crops did well at the end of that month. October rain too, though limited to the Hasta period, was heavy in the Deshi portion of the district. The break of Chitra that followed was useful for harvesting kharif crops and the sowing of rabi. The Vishakha showers useful to the rabi crops were not sufficiently heavy. In December the showers were still lighter and more scattered. The moisture of the rabi crops was deficient, which reduced the outturn (6 to 8 annas). The estimates for the kharif crops were 10 to 12 annas in the Maval, 4 to 8 annas in the Deshi talukas. In some of them the crops failed.

Shola'pur, 1898.

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SHOLA'PUR,		PUR.	Balı	18L	MA'D	HA.	KYBNA	'EA.	PANDH	ARPUR.	SA'#G	OLA.	MA'LE	ibas.
	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.	
•••	0.33	1	0.81	2	0.2	a	0.13		0.55	2	0.81	. 3	0.26	1
•••	0.61	1	0.10	1	0.41	2	1.20	8	0.89	5	1-14	•	1.89	
	14 99	19	9.62	17	9 12	16	8-26	12	11.13	12	6-19	10	3.68	11
	18*51	19	11.41	18	13.19	17	12.72	15	11.77	18	8 79	20	13:27	15
••	0.43	1	2·10	8	0"75	1	0.38	2	1.70	8	8-06	8	0.70	2
1	31.88	40	23.84	41	23.99	88	22.99	82	26.04	40	19:99	39	19:60	93
o	28.58	87	98 72	41	29.94	44	26.10	84	27:94	42	22 93	83	23'93	83
		In. 0.32 0.61 14.99 18.51 0.42	In 0.32 1 0.61 1 14.99 18 18.51 19 0.42 1	In. In. In. In. In. In. In. In. In. In.	In. In. In. In. O'81 2 O'61 1 0'10 1 14'99 18 9'62 17 18'51 19 11'41 18 O'42 1 2'10 8	In. In. In. In. 0.39 1 0.61 2 0.52 0.61 1 0.10 1 0.41 14.99 18 9.62 17 9.12 18.51 19 11.41 18 13.19 0.42 1 2.10 8 0.75	In. In. In. In. In. In. In. In. In. In.	In. In. In. In. In. In. In. In. In. In.	In. In. In. In. In. In. In. In. In. In.	In. In. In. In. In. In. In. In. In. O·55 O·61 1 O·10 1 O·41 2 1·50 3 O·89 14·99 19 9·62 17 9·12 16 8·26 12 11·13 18·51 19 11·41 18 13·19 17 12·72 16 11·77 0·42 1 2·10 8 0·75 1 0·38 2 1·70 34·85 40 23·84 41 23·99 35 22·99 32 26·04	In. In. In. In. In. In. In. In. In. In.	In. In. In. In. In. In. In. In. In. In.	In. In. In. In. In. In. In. In. In. In.	In. In. In. In. In. In. In. In. In. In.

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

Remarks.—Rainfall above average at the head quarters; elsewhere approximating to the normal fall. Preparatory ante-monsoon showers light. Monsoon commenced timely in June, but rain not sufficient for general sowing till the middle of July. In places the kharif area remained unsown. In August the rain was partial and very light and kharif crops began to wither. Relief, though late, came with the Parva and Uttara downpours in September. These with the Hasta showers benefited the kharif crops and enabled the rabi to be sown to a large extent. But October gave a long break and it was followed by only very light showers of Vishakha in November. The total rabi rain was therefore deficient. The season on the whole was poor for kharif crops, which mostly yielded from 4 to 6 annas; in places only 3 annas. The rabi jowari yielded from 8 to 12 annas. In places wheat and gram were damaged by rats, yielding 2 to 4 annas.

Sa'ta'ra, 1898.

	SATA	RA.	Kor gao		WA	ı.	Kha dáu		MED	на.	MA COLI	4 -	Påt	AN.	KA	iΔD.	VAI (lst. PUI	(м-	SHIR	ĹLΔ,	D v E		VADI	? J].	Vit	1.	TA
Rain Periods.	Fall.	Rainy days.	Fall.	Rainy dava.	Fall.	Rainy daye.	Fall	Rad y days.	Fall,	Rainy days.	Fall.	Rainy days.	Fail.	Reiny days.	Fall.	Rainy days.	Fall.	Rain: days	Fall.	Kainy dara.	Fall.	Kainy days.	Fall,	Rainy days.	Fall,	Rainy days	Fall
arly Rains nto-Monsoon onsoon-Kharif ate Rains	8.95 20.80 10.41	2 9 44 21 2	In. 0.64 1.78 14.82 9.56 0.03	2 6 41 13	In. 0.28 2.04 19:60 9:61 4:12	1 6 30 19	In. 0:08 359 8:56 8:55 1:69	0 19 14 2	In. 1:30 3:73 6:13 16:07 2:82	1 8 65 27	In. 0.59 2.06 21 \$.77 77:60 0:70	66 47	In. 1-08 2-65 41-99 10-24 0-54	1 6 56 33 8	In. 1.23 2.27 1.11 7.47 0.78	2 5 34 17 3	In. 1:64 4:14 12:79 5:74 0:10	4 8 31 10	In., 8 on 7 & 1 29 61 9 34 0 28	4 11 44 15 8	In. 0:18 2:94 4:23 0:10 0:77	1 6 9 16 1	4 17	3 7 12 14	Tn. 0-40 3 (1) 0-93 8-61 0-99	2 4 16 19 8	In. 2 16 5 31 9 68 11 31 1 75
Total	35-97	78	26.83	62	35.50	60	23-01	6)	83.22	93	296-62	123	62.50	93	26.86	61	24-47	89	49.93	79	17:71	33	17.21	3.4	19-03	44	30:13
Average	44-63	72	80*79	68	419	52	22.73	51	82.20	86	290.87	128	74 19	86	83 77	67	28-11	01	41.49	75	23:38	41	23 14	39	20:05	40	25 UA

General characteristics.—Western Belt—Parts of Javli, Pátan, Wái, Sáiáia, and Válva hilly. Regular and heavy rainful. Central Belt—East portions of above and all Koregaon 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.—Rainfall above average at Shirala petha and Tasgaon; elsewhere generally below the average. The ante-monsoon showers were heavy enough for preparation of land. In the western portion of the district the monsoon opened timely in June with sufficient rain for kharif sowing. Here the subsequent rain till the end of the kharif period was masonable and sufficient. The crops developed without any distress. But in the eastern talnkus the sowing rain was meant. The fall of July again consisted of drizzling and scattered showers—quite insufficient for complete sowing. August rain was equally meagre. The kharif crops at the end of the month begun to wither. The needed relief came in time from the fall of Uttara and Hasta in September, which were heavy in all parts. October rain being moderate was beneficial to the ripe kharif crops and useful for the completion of rabi sowing. The rain which fell in November and December was too light to give sufficient moisture for the rabi crops. They therefore, on an average, gave an outturn of 10 annas. The kharif outturn varied from 10 to 12 annas. Groundant is said to have yielded only 6 annas.

Belgaum, 1898.

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Rain Periods.	Fall.	Bain d	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days-	Fail,	Bainy day	Fall.	Rainy days.	Pall.	Rai 7 days.	Fall.	Falsy days.	Fall.	Rainy daye.	Fall.	Rainy days
Early Rains Ante Monecou Monscon-Kharif Monscon-Rabi Late Rains	8·45 26·48 13·17	9 17 51 25 6	In. 1:50 5:74 78:87 16:13 1:23	13 6# 85	In. 0.82 8.48 43.52 13.81 5.81	8 11 66 28	In. 0-80 7*87 15*43 9+4 2-,0	8 15 29 22 6	In. 0:73 5:98 7:23 11:14 8:59	2 18 16 21 7	In. 0.65 6-78 9:39 12:46 8:23	3 11 23 30 6	In. 0:29 6:19 6:20 1(:50 2:66	1 11 14 12 5	In. 0 41 9 92 1 : 29 1-19 8 20	9 19 81 23 6	To. 0:14 10:43 1:0:19 14:57 1:07	1 19 30 18	9761 3729 11 93 1 4 3	1111111
Total	52.79	101	103 51	118	78:14	106	35.04	75 —	29.01	58	82-35	6 1	26'68	43	62°13	78	40:23	66	26.53	41
Average	51.36	78	108-60	93	70.05	81	29.89	b 4	24 82	44	26-23	80	26:30	39	31.63	67	27:4	51	23 40	4

General characteristics.—Near the Sabyádris the rain of the south-west monsion 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.—Number of rainy days everywhere larger. In all talukus except Chandgad peths, the total rain was in excess of the average. The ante-monsoon showers were heavy and favourable for preparation of land and sowing of early rice. The monsoon opened cally in June and gave good rain till the end of August in the western talukas for sowing and development of the kharif crops. But in the eastern talukas the progress of the monsoon was checked in the second fortnight of June. The kharif crops in these parts suffered from repeated deficiencies in July and August. They began to fade at the end of the latter month. But the advent of a timely rain in September changed this condition and started rabi sowings. The Hasta fall prolonged in October proved somewhat injurious to the rabi jowari, but provided good moisture for other crops. They had another good fall of Vishákha in November. No rain afterwards. The kharif crops vielded well—12 a nas in Chikodi, Parasgad and Khánápur; elsewhere 8 to 10 annas. In parts of Sampgaon and Clokák the yield was as low as 4 annas. Gram and wheat 16 annas in Gokák, elsewhere 8 to 10 or 12 annus. Cotton 6 to 10 annas. Rabi jowari not above 8 annas.

Bija'pur, 1898.

	Bijår	υR.	Inc)I.	SIND	GI.	Ba'e		MUI		Вле		Bil	GI.	Bádá	MI.	GUN	
Rain Periods.	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.
Late Rains	2° 3 5°01 12°9 5°2 3 26°08	47	In. 0-24 2-50 8-50 1-20 1-95 24-45	48	In. (*32 2*60 6*28 10 10 5*22 27*08		In. 0-29 4·45 4-06 8·37 3·58 21·75	_	In. 0 03 2 3 6 1 4 17*1 3*33	8 10 20 6 44	In. *44 *65 *9 *1 *24 *24 *24 *16	<u> </u>	In. 0.03 3.36 5.22 9.21 3.30 21.12 25.30		In. 113 126 126 1265 2893 2749	-	In. 0.09 3.61 8.18 9.89 4.66 26.43	7 14 19 5 45

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 tálukas of Bijápur, Indi and Sindgi have capricious and light rainfall.

Remarks.—Rain above the average in Bijápur and the four southern tálukas. Elsewhere slightly under the average. Ante-monsoon showers sufficient for preparation of land. The monsoon commenced early in the first week of June, but the fall was ill distributed. Sowings were checked by the break in the second fortnight. Both July and August rains were deficient. The kharif crops began to fade. In places they were completely lost. But timely relief came in September, which gave more than average rain. October rain was again sufficiently heavy and useful. The rabi crops were sown in time. The Vishákha showers in November were heavier than usual and very beneficial to young rabi crops. The rabi would have given a very good yield if the rains had not ceased altogether after November. They gave an outturn of 8 or 9 annas. Cotton yielded still low—6 annas. The kharif crops were between 6 and 8 annas.

Dha'rwa'r, 1898.

• •		Dhár- wár.		Hubli.		KAL- GHATGI.		ĸÁ- 3.	HANGAL.		Кор.		Ráne- Bennur.		Karaj- gi.		GADAG.		Mun- dargi.		NAVAL- GUND.		NAR- GUND.		Ron.	
Rain Periods.	Fall.	Roiny dayn.	Fall.	Rainy daye.	Fali.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fali.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	
Mo soon-Rabi	In. 1.93 8.22 13.67 15.51 2.63	3 13 35 25 5	In. 0.42 9 40 9.45 19.00 2.27	28	In. 1°04 11'07 16'80 16'28 3'49	3 13 45 33 6	In. 0'08 8-99 10'70 13:13 2:39	13 29 23 4	In. 0·20 5·30 1 *12 13·93 2*50		In. 6 02 12 64 1 75 3 07	11 34 30 7	In. 4-95 8-77 17-68 2-73		In. 5.66 1:17 1:44 3:09	1 11 29 24 5	In. 0-29 1-74 4-12 1-1-17 3-94	2 8 19 27 6	In. 4°63 6'00 0'38 6'75	9 7 14 7	In. 5'48 4'11 17'91 2'25	10 11 23 5	In. 0:30 4:74 6:17 17:3 2:48	1 7 15 20 5	In. 0.11 3.72 5.06 9.92 2.35	
•	41.95		41 04	<u> </u>	18·66 		35·15 26·37		40·05 38·85		36.45	82	23.74	-	34·84 29-03	—	31·76 24·11		26.78		29.15		31.62	<u> </u>	21.16	

General characteristics.—The district is composed of hilly tracts—the Mallad 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 Dhárwár and Bankápur tálukas are partly Mallad. The soil of the Mallad 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.—Number of rainy days larger. The annual fall exceeded the average in all talukas but Ron, where it was a little below. The ante-monsoon showers being heavy, kharif sowings commenced before the regular monsoon set in, in June. In the western portion they were completed in this month, but checked in the eastern talukas by the prolonged break of the second fortnight. Conditions favourable to the kharif crops in July and August. But in the eastern talukas the July rain was deficient and there was practically very little rain in August. The crops began to wither. September fall was, however, generally above the average and improved kharif prospects. Rabi sowings were commenced well in time. October rain was also in excess of the usual fall. The Vishakha showers in November, though injurious to rice ready for harvest, was beneficial to rabi prospects. Rats appeared in places in December, but no serious or widespread damage was done. Cotton suffered from blight in places; it yielded 6 to 9 annas. Jowari—kharif 10 and rabi 11 annas. Rice 11 annas; wheat 14 annas; gram 12 annas. Linseed 8 annas.

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	Ka'dwa	A'BWA'B. ANKOLA.		RUMTA.		HONY, AYB"		BRATEAL.		HALITA'L.		SUPA.		YBLLA'PUB.		Миновор.		Siber,		SIDDAT	ru B.	
Rain Perioda.	Fall.	Rainy days.	Fall,	Kainy days.	Fall.	Rainy days.	Fall.	Bainy days.	Fail,	Rainy days.	Fail.	Lainy days.	Fall.	Painy days.	Fall.	Esiny days.	Fall,	Pair J days.	Fall.	Laky days.	Fall	Ling days.
	In.		In.		In,		In,		In.		Ìn.		In.		In.		In.		In.		In.	
Early Rains	0.37	1	1:35	1	1.12	1	0.30	1	0.58	1	1.49	8	0.67	3	1.43	2	0:63	1	0.58	1	1:35	
Ante-Monscon	1.63	4	3 ·10	7	1.39	7	4.36	7	8.57	6	5 15	14	5.67	9	3.23	9	10.0	13	5.03	9	.25	
Monsoon-Kharif	92 47	64	110· 4 0	68	95.59	66	93.20	67	103:41	62	28.59	65	64:87	64	66-26	62	24·33	443	70:77	61	78 95	61
Monsoon-Rabi	31.31	87	37.05	ಟ	40-16	47	40 24	43	40:34	43	14-99	84	17:40	31	19:07	35	15:73	30	19*06	39	27:02	
Late Bains	8.08	7	8.16	6	4:09	8	3:85	9	9-22	11	3-68		3-31	8	2.14	ė	4:53	6	3:74	8	0.31	•
Total	133.75	113	158.06	125	143-27	129	141-95	126	156.80	128	64:09	115	01.08	114	92-69	113	65.23	98	97 87	115	114-78	124
Average	122.67	103	131.76	103	145 17	108	148'35	110	157.88	114	48'04	81	93-92	98	109.95	102	\$4· 20	84	101.76	104	112:10	ım

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

Remarks.—Rainfall below average in Yellapur, Sirsi, Honavar and Kumta. Elsewhere up to or above the average. The monsoon set in in the beginning of June. Rain seasonable and sufficient in July. August rain, though not as heavy as usual, was also seasonable. Septembor rain was heavy, but not injurious. October fall was again heavy, but moderated by intervening breaks in the latter half of the month, which were useful for harvesting early rice. The Vishakha showers in November proved somewhat injurious to the rice ready for cutting and to garden crops in parts. The second crops were put in with good moisture. Rice yielded generally 12 annas; 9 or 10 annas where they were injured. Betelnuts 7 annas in Siddapur. Elsewhere 10 to 12 annas. Pepper and cardamom fared as well as betelnut.

Ratn'agiri, 1898.

		 ,																				
	Batha'g	m.	Varque	EA.	Mārva	ø.	DEVGA	D.	Ba'sa's	T2.	Bang. Meany		Cnipe	"≡.	Gumy,o	AB.	Kuz	D.	Da'20	LÍ.	Mapdan	0 L D.
Rain Periods.	Fall,	Rainy days.	Falla	Bainy days.	Fall.	Balny days.	Fall	Bainy days.	Fall.	Rainy days.	Fall.	Bainy days.	Fall.	Rainy days.	Pall.	Bainy days.	Fall.	Rainy daya.	Fall.	Rainy days.	Fall,	Rainy days.
	In.	_	In.		lu.		Io.		Iu.	Γ	In.		In.	_	In.		In.	-	lo.		Ĭo.	
Barly Rains	0-49	1	0-74	2	1.33	2	0.20	1	0.63	3	1.38	ı	0.45	1	0.07		0 /30	1	0.03		0.30	1
Ante-Monsoon	0"64	3	4.86	5	2:38	5	0 89	1	0-51	5	1'94	.8	1.96		0:33	1	0.61	3	0.97	2	0.84	
Mensoon-Kharif	95-23	55	84-29	61	67:85	52	62.81	67	141.08	66	140-23	64	135 -10	59	76:09	56	127:95	62	123 51	62	140-10	63
Monsoon-Rabi	22-41	35	27-15	34	80.80	35	25.23	33	29-11	88	87-80	45	27 · 18	47	22 29	35	40.03	41	32 76	85	39.71	62
Late Rains	0-20		6-19	7	4 52	8	3 63	8	4-42	8	1.30	6	1/47	1	0 10	1	113	•	0:31	1	1.64	3
Total	118 97	93	123-23	109	106-88	102	92.65	98	175*74	116	183-54	119	178-16	116	94:87	93	101 63	113	157 49	100	182'84	113
Average	101-97	90	111-74	98	97:78	93	67'31	77	139.44	196	153 -94	113	148-73	110	103:23	101	152 80	100	142:44	107	167-34	108

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

Remarks.—Number of rainy days generally larger. The aggregate rain in excess of the average. Regular monsoon commenced a few days late in the second week of June. The rain that fell in this month was not well distributed, being excessive in some talukasia the beginning and insufficient at the end in others. Sowings were, however, completed in time. Transplantation effected under favourable circumstances in July. August rain much under the average, but the light fall towards the end of the month useful for weeding. The Purva and Uttars rains in September rather heavy, but no serious injury was caused. October rain in moderate showers in the first week, light and partial afterwards, when kharif crops were harvested. November rain good for garden crops. On the whole, the season was good and crops fared well. Rice, nagli and harik yield estimated at 10 annas; vari 8 annas.

Kola'ba, 1898.

	ALIBA	'a.	PANVE	L,	URAN		Kabja	T,	Ма'тпв	ва'й,	Кна'ра'	PUB.	Pan		Ron	A.	Na'nga	L'ON,	Мана	Ď,
Rain Periods.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall,	Rainy days.	Fall.	Rainy days.	Fall.	Bainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
	In.		In.		In.		In.		In.		In,		In.	,	In.		In.		Ia.	!
Early Rains	0.38	1	0.61	1	3.54	1	0.24	1	0.40	2	0.28	9	0.50	1	0.72	1	0.50	1	0.62	1
Ante-Monscon	0.10	1	0.39	1			0.38	1	0.02	•••	0.08	•••	0.62	1	0.12	1	0.24	1	0.22	3
Monsoon-Kharif	70:30	55	85.64	58	55'46	55	116.24	60	154.42	67	117-18	67	80.80	28	98.04	59	116-47	63	115.23	60
Monsoon-Rabl	30.2	28	26.42	36	34 98	31	36.21	38	49:29	41	41.69	89	94-47	38	37:09	40	48.75	49	43.88	12
Late Raine	0.50	3	1.86	1	0.77	1	0.40	2	0.52	2	0.18	1	0.18	. 1	0.84	1	2.49	2	2'17	2
Total	101:48	86	115-12	97	04:44	88	154-33	102	204 50	112	159.65	99	126-37	100	137-74	102	163-14	109	102.46	108
Averago	94:49	94	121.33	97	97:45	94	138-10	98	228.03	113	132-54	104	124-00	108	130.08	106	138-47	106	139.48	107

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.—Rain above the average in all talukas except Panvel, where not far short of it. Monsoon broke in the second week of June. In this month the rain was rather heavy, necessitating resowing in places. Partial break in the third week, useful for completing sowings. July rain more than sufficient; in places injurious to young crops, but not bad for transplantation. The light fall of August made amends for the previous heavy rain. September rain being in excess of the usual fall would have been again injurious, but for the break at the end of the third week. Very little rain in October except the Hasta showers. Vishákha showers in November light, but rather untimely for rice cut or ready for reaping. Very little rain in December; none afterwards. Outturn of rice estimated at 12 annas. Warkas and rabi crops 10 annas.

Tha'na, 1898.

	TBA'N	A	Kalya	'11.	M vrba	'o.	Shv, sv, 1	DR.	Mogha	DA.	Вніжи	Di.	Валян	n.	V ∆'D∆		Ma'ri	Mr.	Da'ha'i	NV.	Umb GAG	
Rain Periods.	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 dage.	Fall.	Rainy days.
l l	In,		In.		In.		In.		In.		In.		In.		In.		In.		In.		In.	
Sarly Rains	0.40	1	3 ·78	1	0-90	1	1.02	1	0.61	1	0.65	2	0.32	1	0.21	1	0.47	2	1.00	8	2-07	1
Ante-Monscon	•••		· •••		0-44	1	***	•••	***	.,.	•••				***	,-,						
Monsoon-Kharif	79.61	61	77.59	63	80:35	56	72-19	56	62 40	57	74.40	54	54-77	54	80.34	69	51.28	50	36.09	48	32.04	45
Monsoon-Rabi	26.39	83	34·0 6	35	36-81	34	28-20	39	23.60	86	22.59	91	33 -69	17	25.95	88	16.01	24	21-59	19	23.88	20
Lete Rains	1.60	1	0.10	1	1.50	3	1.28	3	0.55	1	0.35	***			0.63	2	8.18	1	0.40	1	***	
Total	109-30	96	105.42	90	119-70	84	103.02	98	87.56	95	98.08	87	87 68	72	107-41	100	71.84	77	69-98	70	67.99	67
Average	105.93	01	109-01	83	109.43	88	114.65	83	106-26	88	110.64	91	91.64	80	98-80	89	64-94	76	71.50	71	67-36	74

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.—The total rain in excess of the average at Thána, Murbád, Váda and Máhim; elsewhere below the average. Kharif rain commenced in the second week of June. Sowing begun and completed in time. Transplantation completed in July without any difficulty. August rain less than usual, but sufficient to keep crops thriving. The Purva and Uttara rain in September heavy, but the partial break at the end allowed no injury to take place. October rain limited to the light and partial Hasta showers in the first week. They were too scanty for the late crops in parts. Outturn of rice and nazli 9 to 10 annas. Rabi crops 8 to 9 annas. Garden crops 10 annas.

Surat. 1893.

•	SURA	AT.	OLP	۵.	Ránd	Ea.	Mánı	DVI.	Bárd	OLI	Vál	0 D.	JAL		Спік	BLI	Bors	ĹB.	Pin	DL.
Rain Periode,	Fall,	Rainy days.	Fall.	Ratuy days.	Fall.	Rainy days.	Fall.	Rainy duys.	Fail.	Rainy days.	Fall.	Bainy days.	Fajl.	Rainy days.	Fall,	Rainy days.	Fall.	Bainy days.	Fall,	Rainy days.
,	In.		In.		In.		In.	_	In.		In.		In.	_	In.		ln.	-	ln.	
Early Raine	1.68	2	1.82	1	3.82	1	2.14	3	3.61	9	8:67	2	1'87	2	2.4	9	1-95	3	2.52	2
Ante-Monanon			0.04			••		۱.,	·										••	
Monsoon-Kharif	24.80	27	27-42	29	25.77	29	29.09	34	33-43	33	49*14	38	27:22	23	44:71	39	30-97	43	35.67	4.9
Monsoon-Rabi	5 °78	12	8-40	15	8 14	13	15.76	20	10.99	17	16·36	23	6-43	13	11.27	23	20 *08	21	23-16	23
Late Rains	0.16	1	0.08		0 26	1	0.80	2	0.10	1	0.37	1					0°17	1	0.12	1
Total .	32-52	42	37:24	45	36.49	44	47*69	58	47-19	53	61 34	64	34 63	37	68.66	64	83.07	66	60:49	71
Average	46*02	53	38-72	53	42 '71	48	53:49	68	56 25	59	5 8*82	65	54:25	59	67.63	G)	64*68	61	76-67	71

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.—Rain below average except at Válod, where 2 inches in excess. Monsoon broke in the second week of June. At the end of June sowing of rice nearly over; that of cotton and jowár in progress. In July the rain fell almost daily with partial breaks intervening. Rice transplantation in full swing. August rain rather light, but not insufficient except for rice. Good for weeding. Most of the September rain fell in the Uttara period; it was favourable and sufficient for all kharíf crops. No rain fell in October, November and December. Thus the season closed too early. The rice suffered for this and yielded a mid-lling outturn. Other kharif crops were good. Rabi crops felt the want of moisture. Wheat outturn poor in places.

Broach, 1898.

	Bros	OH.	Ankle	SVAR.	HÁN	SOT.	V 40	BÅ.	ЖЖ	о р.	Ј амв	USAR.
Rain Periods.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Bainy days.	Fall.	Rainy days.	Fail.	Rainy daye.
	In,		In.		Ia.		In.		Ia.		In.	
Early Rains	1.18	, 1	7:45	1	1.41		0.93	ı	1.03	1 1	1.07	1
Ante-Monscon	••		0.02		0.30	1	••			•	0.11	1
Monsoon-Kharif	37.73	25	28-97	24	23:40	21	37:59	20	35.61	26	89 67	23
Monsoon Rabi	8:46	15	8'49	16	7:68	8	11-16	14	12 83	14	9.70	15
Late Rains	0 15		0.10	•	0-01		0.32	2	0.18	1	0.05 ,	
Total	47 51	41	80.68	39	32.88	33	50 ·0 1	43	40.58	41	60 80	40
Average	42.78	51	40:44	56	85.20	42	33-67	45	. 33/83	39	83'72	34

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

Remarks.—The aggregate rainfall was above the average except at Anklesvar and Hansot, where not much in defect. Monsoon commenced with Mrig in June. The month's rain more than the usual fall. Sowing of cotton and other kharf crops in full swing. July rain was excessive, too heavy for bajri and cotton. The latter was damaged and had to be resown. This was followed by light rain in August. More rain was desirable for the standing kharif crops and for sowing of the winter crops. But the rabi fields were sufficiently meistered by the heavy fall of Uttara in September. Rabi sowing effected in this month. No rain in October and November. Only a few scattered showers in December. Kharif crops harvested in October. Scane on the whole fairly good. Kharif crops yielded between 9 and 10 annual and rabi 9 annual.

Kaira, 1898.

				KA	IBÅ.		MAD.	MA	TAR,	NAI	or £ d.		PAD-	THI	SRĄ.	Æx.	AND.	Bor	SAD.
Rain I	'erio	đe.		Fail.	Rainy da) s.	Fall-	Rainy days.	Fall.	lainy	Fall.	Rainy days.	Fall.	Rany days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.
				In.		In.		In.		In.	•	Ia.		In.		In.		În.	
Early Rains	•••	***	***	0.49	1	0-63	1	0.40	1	1.03	1	0.82	1	073	1	0.84	1	0.75	3
Ante-Monsoon			***	0.04		0-20	1			0.05		9.30	1	0.10	1	0.04		0.73	1
Monsoon-Khari	ť,	•••	•••	23.06	24	21-96	18	20'94	20	27:96	21	21.38	21	27.01	21	26*88	25	31-85	22
Monsoon-Rabi	•••	***	***	11.93	10	14·15	11	13.00	10	14.20	13	7:11	11	14.07	12	13.63	14	15.31	15
Late Rains	***	***	•••	0-15	1	0.18	· 1	0.08		0.18	1	0.38	1	0.41	1	0.32	1	0.54	1
		Total	•••	34-63	36	37·12	39	32'42	31	13.69	35	80.00	\$ 5	43 32	36	42.03	41	48.26	40
		verage.		37-49	36	36:44	38	36.39	35	10.12	41	36.73	44	36:41	43	38:17	41	37°81	46

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.—Rainfall below the average at Kaira, Mátar and Kapadvanj; elsewhere exceeding the average. Monsoon set in on the 10th. Kharif sowings started in time,, but were checked by the break at the end of the month. July rain was heavy enough for completing sowings and transplantation. The fall of August was half of the usual fall in the majority of talukas. But the crops were healthy. September rain was in marked excess of the average in almost all talukas. The latter half of this month was rainless, and the break was useful for rabi sowings. No rain in October. Kharif crops harvested. Rabi suffered from absence of rain in October and November. Kharif crops yielded from 9 to 10 annas. Rabi 6 to 8 annas.

Panch Maha'ls, 1898.

	GODE	RA.	Kálo	r.	Hir	ox.	Dona	D.	JHÁI	LOD.	Jambug	HODA.
Bain Periods,	Fall.	Rainy days.	Fall.	Reiny days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall	Rainy days.	Fall.	Rainy days.
	In.		. In.		In.		In.		īn.		In.	
Sarly Rains	0.88	1	1.46	. 1	2.60] 1	1.62	1	1-15	. 3	1.56	1
Late-Youboon	0.07	}	0.12	_ 1	0-16	i	***	•••	0.18	, 1		***
Monsoon-Kharif	29-68	25	33-17	23	40.67	24	16.88	19	25 89	22	41.01	25
Monsoon-Rabl	12:36	15	14:66	15	20.15	17	16.87	19	13.26	16	18.72	18
Late Bains	0-40	1	0.13	1	0.30	1	0.26	1	0.60	2	0.17	,
Total	43.49	42	49-67	41	63.88	44	35.21	40	41.18	43	61.46	4
Average	40'88	46	39.26	43	41.86	52	30-12	43	31.83	43	47.08	5

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

Remarks.—With a smaller number of rainy days the total fall of rain was everywhere in excess of the average. As in other Gujarát Districts the sowing rain came in the second week; but the break at the end of the month did not allow sowings to be completed. July rain was sufficiently heavy and favourable for the completion of sowings as well as transplantation. Angust rain proved excessive for maize in Jhilod. Other crops flourished without any check. The Purva rain in September was light, but it was followed by the heavy fall of the Uttara. Maize reaped and rabi sowings effected during the break at the end of the month. No rain in October—November. Only drizzling showers in December. The estimated outturn of maize 8 annas. Rice 11 annas. Kodra, bajri and other crops 8 to 9 annas. Wheat and gram 9 to 10 annas.

xiii Ahmadabad, 1898.

	AH N		Para	NTI J.	Мор	.AEÀ	SAN	AND.	VIRA	жоум	ряс	LKA.		TAN- UEA,	God	0π Δ.
Rain Periods.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall,	Rainy days.	Fall.	Rainy days.	Fall.	Rainy days.	Fall,	Bainy days.
-	, In.		In.		In.		In,		ta.		In.		In.		ln.	
Early Rains	0.76	1.	***		0.02	1	0.53	1	0.16	1	0.88	ı	0.80	1	0:02	1
Ante-Monsoon	***	145	***		0.53	1	0.50	1	•		0.08		9:75	1	0'87	1
Monsoon-Kharif	23.67	17	34.42	26	28.92	10	21.03	20	13.23	17	2 3-33	10	12 79	14	26-75	19
Monsoon-Rabi	11.61	10	7.51	13	14-67	9	10.28	8	9:35	12	7:04	•	10'70	12	6-87	19
Late Rains	0.49	1	0.40	2	0.43	1	080	1	0:44	1	0-12	1	0.10	1	0.04	
														-		—
Total	86.53	29	42:33	39	45-19	81	32.34	81	23 47	31	32-10	30	:0·7 6	20	32. 13	93
Average	32.29	44	31.95	- 48	30.38	41	30:31	43	81 91	83	34:30	43	27:31	81	20-90	81

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 total rain below average in Dholka and Viramgám; elsewhere up, to or above the average. The sowing rain came before the middle of June, but cessed in the Ardra period. Kharif sowings were, however, well completed in July. August rain was light for rice. Other kharif crops were good. September rain was more than double at some stations. This closed the rainy season. Rabi sowings completed in October. These crops felt the early cessation of late rains. The outturn of kharif crops estimated at 4 to 6 annas in Viramgám; elsewhere 10 to 12 annas. Wheat varied from 8 to 14 annas. The untimely showers early in December and excessive cold late in December and in January combined reduced the outturn of cotton to 8 annas in places.

STATISTICS.

AGRICULTURAL. (CHAPTER VII.) I.—Area of Available Statistics.

II.—Area, Cultivated and Uncultivated.

III--Crops.

IV.—Irrigation.

V.—Agricultural Stock.

II. A.—Details of "Fallow."

III. A.—Principal Fruit-bearing Trees-

III. B.—Details under Kharif and Rabi Crops.

_		* *	A THUMB	- 1,12	inn of Fille	*.7				zulacie S	POR WHICH ST	ATISTICS A	en available.	3	1		Azeryesia sos	WHICH	Statistics and	I MOT AVA	ilajen.
No.	District.	-	erament.		llenated.	*	Tolal.	La. Go	hrveyed vernment yatwari.	G	Other -	Surrey	d Alleneted.		Total.	d :	venment.	- ,	Llienated.		Total
		No.	Aorea,	No.	Acres,	No.	Acres	No	Acres.	No	· Acres	No.	Acres	No	Åeres:	No.	Acres.	No.	Acres.	No.	Acres.
	¢ 1	\$ 8.7	8			1/4					M	, ,		1	8		9		10 -	•	11
	A.—Bonbay Parsidency Proper.		•			•													•	:	
	Abrochhad	6214 946 9119 963 823	2,330,001 903,845 901,640 918,369 1,481,440	63 20 714 15 214	126,517 27,449 136,453 14,728 24,490	865 841 811 433 853	2,443,608 1,021,217 1,028,112 937,113 1,667,629	649 649 647 620 647	1,765,33 s 280,867 636,314 917,310	341 207) 1 10	1,179 12,243	9 3 79	4,180 226,458 4,254	530 690	2,173,120 953,747 1,028,064 1,919,369 1,068,039	1	140,071 50,203 68	# #5 15 27	221,417 23,377 18,723 26,108	93 61 1 15 28	270,449 42,570 66 19,723 26,600
10	II.—Decean. Shindesh Nauk Abtrednager Propa S Shdapager Satéré	2,124 1,536 1,327 1,041 098	6.314 698 8 453 389 8 679 518 8.873,346 8.717,195 8,446,430	1111 150 1469 1904 48 88	210,310 287,636 835,926 551,166 198,391 Cp1,632	3,395) 1,406 1,374 1,5 4 717 1,368	8,424 905 8,723 9:4 6,214 442 9,423 554 3,9 6 345 8,087,652	3,7177 1,803 1,2274 1,0103 606 109	4,004 139 3,346,955 8,176 517 3,658,637 2,717,995 2,464,430	* mells * mell * mell * mells * mells * mells * mells	upping menus faransa uppina uppina uppina uppina uppina uppina	62) 81 110 1674 40 216	108.267 169.668 641,650	2,760 1,5-8 1 337 1,168 717 1,177	4,772,386 3,546,646 4,120,189 8,344,472 3,916,386 2,874,338		1,550,517 56,408 13,860	26 78 36 36 83	102,053 97,941 94,374 65,322	6551 112 361 36	1,659,670 156,346 94,274 70,061 219,439
10	Biggum	718 1,018 1,2:0	\$ 746 E19 \$ 212 400 \$ COMP.MAG	9*1 261 143	415 866 245,464	1.194 1.1:3 1.475	2 975 476 3 624 755 2,945 265	912 2,012 1,248	2.345,144 3.512,660 3.440,223	÷		180 166 166	465,216 4:3,956 179,731	1 0773 1 167 1 424	2, 608, 380 8, 616, 794 3, 885, 644	1	3,275 742	61 40*	166,741 11,971 75,700	61 60	169,114 11.971 78,441
10	Thins' Evilton	1,606 1,54) 1,54) 1,4)7	2 744 "94 1,314 446 2,341 784 2,444,358)(0)(1)(1)(1	198 976 46 440 177,440	1,632 1,632 1,547	2,202 996 1, 65,606 2,564,257 2,534,383	2 858 5 (40 195) 1,617	2,159,377 753,174 431,865 2,534,23	# # # T	29,610 \$26,979 18,730	46 13 3	58,999 7,446 7,463	1 629 1,561 2071 1,417	2,216,947 1,314,448 441,974 2,435,323	19 1,000	6,789 10,396 1,947,367	, 70 67	27,402 170,016	4 66 81 1,139	78,140 47,397 2,117,393
}		30,8:4	44 196,409	2,097]		£99 <u>3</u>	48.559,269	18,103 ₁ 1	38,119,481	1,082	1.977,413	1,289]	3.070,476	20,475	43,467,370	1,709]	1,799,515	807	1,242,384	2,517	5,091,899
	Regards	970 1 300 1 100 370 738	9 872,482 6 97,6 577 6 713 754 1 139 623 1 880 256	16 121 120 130 14	86 947 870 746 613 446 4 .6 2 16 628	105 (100) (100) (100)	9.149 gap 4.396,237 5.397,139 1.690,446 8,660,667	1,348 1,348 1,144 301 514	6 779 (81 6.935 6.2 6.935 (19 1.67) 719 2.460,646	. 39 3 160	4,383,961 64,195 572,164 - 6,641,549	10 221 23	56 997 369 745 513 405 37.277 18,403	974 1,897 1,297 346 782	9 149 989 6,556 597 8 527,169 1,657,160 6,4 0.867	71161	dense dense dense dense dense dense		13,54	= 1	13,396
, <u> </u>	Total B		28,961,36° 73,170,775	309 2,4061			29,953,547 78,512,836	4,263 22,366;	17,812,787	200	11,141,629 13,119,043	308	985,816 4,056,398	4,-71 25,346	29,240,132 73,407,552	ļ	3,799,515	1 3081	13.385 1,305,769	2,518	13,385 5,105,234
		**.		*•			• 5	Schoolte o	Foreign Terri	tory, Yes	odntesy so d Tri	butory Stat	<u> </u>	<u>!</u> , ,) <u> </u>	<u> </u>		

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_						C	ULTIVAIED A	RBA.		-		Usc	ULTIVATED A	REA.	
S o	Distric	et.	Total Area as in Columns 5, 6, 7 and 8 of		Deduct Area				Details of C	Column 7.	Available for	cultivation.	Not available fo		
			Keturu No. 1.	Gross Area cropped.	cropped more than one.	Remainder net cropped area.	Add current fallows.	Total Columns 5 and 6.	Assessed Land.	Unassessed Land.	Assessed Land.	Unassessed Land.	Forest.	Others.	Total, Columba
-	1	•	2	3	4	5	6	7	8	9	10	11	13	13	14
	A.—Bombay Presi	DENCY PROPEE.	Acres.					Acres.		· .					Acres.
	1.—Guj				•			1	:						
1	Ahmadabad	{Rayatwári Other Government. Alienated	1,055,334 1,115,686 2,100	661,070 534,085 1,604	20,680 1,092 127	640,390 636,993 1,477	105,782 297,998 4:2	746,172 831,991 . 1,899	740,930 834,991 1,899	5,242	1.8513	9,036 411	13,116	179,499 280,254 121	309,162 280,695 201
		Total	2,173,120	1,200,759	21,899	1,178,860	404,202	1,583,062	1,577,820	5,242	108,593	- 9,415	13,116	458,904	~ 590, 058
2	Kaira	Rayatwari Other Government. Alienated	930,867 3,644 4,186	684,660 2,181 3,832	34,753 112 296	649,907 2,069 3,536	79,632 1,101 120	729,539 3,170 3,656	729,191 3,153 3,656	319 17	84,133 41	1,1 ⁴ 8 21	******	116,007 492 530	201 323 624 530
•	-	Total	938,747	690,673	35,101	655,512	80,853	736,365	736,000	365	81,171	1,209		116,999	202,332
3	Panch Mahals	Rayatwari Other Government.	626,314 275,237 126,453	820,275 117,399 70,389	62,458 12,430 9,461	257,817 104,919 60,928	40,745 1)0,890 51,389	298,562 215,799 112,317	297,090 214,513 112,317	1,472 1,285	61,191 2,636	46,377	1°6.314 27,069	41,970 82,400 11,500	327,752 59 499 14,136
	,	Total	1,023,054	£08,06 2	84,399	423,663	- 203,014	626,677	623, 920	2,757	56,827	46,277	212,403	85,870	401,37 7
4	Broach	Rayatwari Other Government.	917,210 1,179	563,540 - 941	. 851	582,689 941	69,2°5 201	051,974 1,143	642,742 1,142	9,232	21,368	1,454	******	242,364 37	265,236 37
	•	Total	918,189	564,481	. 851	563,630	89,186	653,116	643,884	9,232	21,368	1,481	•••	242,421	265,273
5	Surat	Pavatwari Other Government. Alienated	1,014,532 - 12,243 5,254	522,085 5,813 3,723	46,651 2×1 18	475,431 6,532 3,705	262,408 4,637 1,331	737,839 10,169 5,086	727,709 10,169 5,080	10,130	27,537 159 26	20,765 77 4	47,999	150,392 1,142 143	276 693 2,074 168
	•	Total	1,032,029	531,618	46,950	481,668	268,426	753,094	742,958	10,136	27,720	21,539	47,999	- 131,677	278,935
	II.—Dec	can.	•					_					20-5		
6		(Rayatwári	4,6°4,13 9	2,931,991	89,059	2,892,035	229,771	3 ,121,806	3,115,547	6,259	273,184	105,326	602,308	561,615	1,512,333
O	Khándesh	Alienated	109,257	71,678	504	.71,174	13,448	84,622	84,559	63	6,067	5,475	750	11,343	23,63
	*.	Total	4,772,396	3,003,672	40,463	2, 963, 2 09	213,219	3,206,423	3,200,106	6,322	279,251	110,801	603,058	572,858	1,565,968
7	Násik	Payatwari Other Government.	3,396,965	1,797,226 107,418	40,030	1,757,190	410,813	2,167,539	2,167,216 2,, 136,211	823 53	53,326	83,830 8,561	******	309,810 22,007	1,229,410 33,42
		(Alienated	169,693 3,566,648	1,901,644	2,813 42,643	1,862,001	31,459 441,802	2,303,503	2,303,427	376	1,268 £4,594	92,391	784,013	331,817	1,262,845
-		Y Rayatwari	3,678,518	2,378,497	49,686	2,328,811	417,178	2,745,990	2,745,949	41	29,418	8,789	1 4	353,550	932,52
8	Ahmednagar	Alienated	441,650	803,704	3,710	299,994	63,468	363,462	368,461	1	5,432	6,221	191701	- 61,264	73,18
		Total	4,120,168	2,682,201	53,396	2,628,805	~ 485,617	3,114,452	-3,114,410	42	03,880	15,012	542,010	414,814	1,005,716
											, ,	l .	1		1

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	(Rayatwart,	2,858,527	7,638,583	74,541 [1,564,013	822,128	2,086,170	2,085,906	174		2,295	450,682	311,892	772,367
Poons	Other Government	485,946	808,838	17,057	291,781	97,851	889,635	389,635	******	6	*16+48	2,863	93,412	96,311
	-Total	3,341,472	1,947,431	, 91,598	1,855,923	-619,982	2,475,805	2,475,631	174	7,495	2,291	453,545	405,334	868,668
	(Rayatwarl	2,707,935	1,916,849	89,097.	1,877,752	418,584	2,298,336	2,296,197	139	11,939	198	177,574	221,938	411,659
Sholepur	Alienated	1.8,391	- 136,311	3,162	154,119	33,124	167,273	107,228	45	republic	3,330	******	27,788	81,119
• •	Total	2,906,386	2,033,160	41,259	2,011,901	451,708	2,463,6 09	2,4 63,425	184	11,919	3,52 3	177,574	249,726	442,777
aut.	. Rayatwári	2,466,430	1,410,617	111,478	1,237,139	482,802	1,781,941	1,780,762	1,17,	15,651	3,712	434,173	230,653	634, 139
Sátára	Alienated	407,899	219,210	25,436	223,804	126,078	349,882	J45,867	. 15	476	2,703	14,132	41,674	69,017
-	Total	2,874,329	1,659,857	136,914	1,523,943	607,880.	2,130,823	2,129,621	1,191	16,127	6,417	449,635	2 7 2, 32 7	713,500
III.—Karı	h				· · · · ·					· .			·	٠.
111.—Au	,					200 000	1 500 553	1,689,465	2,036	26,665	40,511	429,317	157,037	652,503
Eolgaum	Rayatwari	2,343,144 463,216	1,455,503 318,873	41,188 5,318	3,414,314 313,560	270,237 116,379	1,690,551	429,918	21	5	1,459	2,906	28,897	83,277
<u>-</u>	(Alicanted	2,806,360	1,774,380	46,506	1,727,874	392,616	2,120,490	2,118,383	2,107	26,670	42,013	431,253	185,934	685,870
•	Total	3,313,899	2,503,753	5,626	2,497,127	819,171	, 2,815,228	2,815,163	65	33,997	17,813	175,670	164,891	397,671
Eijîpur	Other Government	403,895	290,633	434	2:0,098	66,763	316,866	346,673	193	8,418	1,0%	9,704	37,823	₩ M7,019
•	Total	3,616,781	2,793,285	6,000	2,787,225	374, 860	3,162,004	3,161,836	258	47,415	18,521	185,734	102,720	• 454,600
	(Rayatwirl	2,639,223	3,015,317	41.719	1 073 508	227,021	1,20-),619	2,199,842	777	47,843	3E	237,6.5	202,801	453,674
Dhirwir	Other thoy gramment.	179,721	110,336	1,575	103,761	83,995	112,756	142,575	181	9,619	11,539	******	15,817	30,965
•	Total	2,868,941	2,125,653	43,294	2,082,359	261,016	2,343,375	2,342,417	958	. 57,455	11,858	237,605	218,613	525,569
				•	:				٠. ا					
IV Ko	ntan.				, '					5 0 . 63	88 ,59 t	890,\$40	6±5,170	1,2-1,245
Thina	Rayatwiri	2,129,301 25,619	641,099 8,548	3,744 8	437,345 5,810	431,712 6,*91	869 057 12,731	869,213 12,731		\$3,1-63 541 54	9.0 1.695	7,959 1,610	6,179 13,130	16,853 16,531
-	{ Alienated	\$8,926 0.01 # 0.17	14,678 4C1 935	3,857	14,773	27,623	41,875 l	42,39 5 915,338	8,815	30,961	58,127	690,097	504,479	1,202,634
* *	Total	2,216,847	461,815 244,314	7,10g	457,958	466,225	924,183 417,166	41,2:7	5,949	3,056	19,416	193,351	140,641	9-4,999
Kolába	tituer Government,	8.20,978 7,416	156,580 2,4-3	3 ,194	239,253 157,656 2,34)	177,678 144,1.1 2,621	2.0.577 5,101	. 296,026 5, 101	bád	253	609	91,256	134,961	230,108 2,255
	Total	1,316,109	405,676	10,362	£95,314	323,800	719,201	712,443	6,761	3,355	25,250	231,637	234,023	597,295
•	(Revalwiri	423,635	123,229	9,272	216.956	144,614	263.614	263.510	91	1,26 i 23	5,451 173	7,466	143.2 6 4 31 1	157 661 4,514
Ratuigiri	Abenated w.	11723	3,635 3,646	153 216	3,142 3,243	5,724 1,665	9,204 4,590	9,2 M 4, Wd	*****	man-ma Pr J	872	***	1,9,3	2,557
	Tetal	411,874	133,307	9,641	123,666	154,012	277,703	277,614	04	1,993	6,195	7,466	143,509	164,166
, B	Rarate iri	2,825,323	243,929	13,153	236,746	97,96)	331,7%	331,12 5	578	67.9-3 	1,3 /2	1,992,67	111,53	2,190,617
Kinara	A. intated		 -			70.00			•••		****		•	**************************************
	Total	2,525,323	243,929	12,183	236,743	97,960	334,703	334,123	<u> </u>	51,9:5		1,992,467		2,199,617
Total A	Rayatwiri	34,419 441 1,977,413	\$1,411,69 6 5.0,791	431,623 37,039	21,220,533 613,4/1	4,734,216 670,625	25,954,779 1,354,095	25,94,693 1,141,972	22.70 t 2.154	8.65 \$1.9 \$	423 G01 7.144	6,851,253 129, 34	4 (4 + 3) 4 + 5 + 3 5 + 3 + 7	12.4 d. + - 3 f + - 1.7 4 + 1,2-7
,	(Lincons + 1 =	\$,000,476		69,0.4	1,9.0,113	661,596	1,354,0% 2,594,109	2,5-9,511	E7 131	930,513 930,513	474,023		5,021,803	
	Total	43,407,370	21,080,503	727,436	23,062,157	5,960,807	29,928,994	20,573, 000	\$ 5,505	و کا شرال به ایا	金を乗りが ター	C+171713 	0,021,000	* of or . had a
	-	·	·		'	·		<u>' </u>						

					Ст	LTIVATED ABI	EA.				Unc	ULTIVATED A	REA.	
No.	District.	Total area as in Columns 5, 6, 7 and 8 of Return No. 1	Gross area	Deduct area	Remainder net	Add current	Total, Columns	Details of	Column 7.	Available for	cultivation,	Not available i	or cultivation.	Fotal, Columns
	•	of Return No. 1	cropped.	gropped more than once.	cropped area.	fallows.	5 and 6.	Aggessed land.	Unassessed, land.	· Assessed land.	Unsusessed land.	Forest.	Others.	10 to 13.
	1	· , 3	3	4	5	8	. 7	8	9	10	11	12	13	14
	- BSIND.	Acres.					Acres.							Acres.
19	Karáchi (Rayatwári Other Government Alienated	4,769,031 4,323,951 56,987	376,375 43,668 8,255	22,625 1,625 116	353,850 42,043 8,110	520,251 160,335 49,847	874,101 212,378 56,937	835,453 27,023 55,053	38,648 175,350 1,034	127,848 983	927,608 130,209	136,557 1,422	2,703,421 3,988,959	8,891,930 4,121,573
	Total	9,149,969	428,298	24,265	404,033	729,433	1,133,466	917,534	215,932	128,329	1,057,815	137,979	6,692,380	8,016,503
20	Hyderabad (Rayatwari Other Government (Alienated	{4,925,523 809,745	713,420 ************************************	9,694 693	703,726 103,526	1,040,119 266,219	1,743,845 369,745	1,700,971 544,612	42,874 25,133	400,870	1,557,401	134,239	1,089,197	3,181,677
}	• Total	5,295,267	817,539	10,287	807,252	1,3 06,338	2,113,5 90	2,045,583	C8,007	4 00,870	1,557,401	134,209	1,089,197	3,181,677
21	Shikarpur Rayatwari Other Government Alienated	4,669,719 44,035 813,405	889,659 12,320 48,103	150,544 83 2,720	732,114 11,233 45,377	614,950 5,145 468,028	1,379,064 17,277 513,4-5	1,333,103 511,955	-45,961 17,377 1,450	162,352	1,234,532 16,811	303,342	1,590,429 9,847	3,270,655 26,659
.	Total	5,227,159	949,081	159,358	789,723	1,120,123	1,909,846	1,845,058	64,788	162,352	1,251,343	303,342	1,600,276	3,317,313
22	Upper Sind Frontier {Rayatwfrl Other Government Aliensted	1,407,769 232,054 27,277	361,371 23,839 6,257	29,024 1,237 299	338,347 22,602 7,959	444,591 19,318	782,938 22,6 \2 27,277	742,682 	40,256 22 ,602 24 ,860	50, 563 *****	235,183 96,350	44,626	294.451 113,103	******
	Total	1,667,100	3 93, 4 67	24,559	368,908	463,909	832,817	745,099	87,718	50,563	33 1,533	44,626	407,561	834,28 3
23	Thar and Parkar (Rayatwari Other Government Alienated	2,040,696 6,541,589 18,402	209,902 392,561 4,762	10,167 124 114	289,735 892,437 4,668	709.268 427,356 13,734	999,003 819,793 18,402	967,884 744,034 17,790	31,119 75,769 612	78,205 10,870	5/2,871 531,753	.140,927	241,690 5,179,173	1,041,693 5,721,798
	Total	8,600,687	697,245	10,105	686,840	1,150,358	1,837,198	· 1, 729,708	107,490	87,075	1,094,624	140,927	5,410,863	6,763,439
	Total, B Rayatwari Other Government Airensted	17,812,737 11,141,629 985,816	2,639,726 472,388 173,516	221,954 3,074 3,846	2,117,772 469,314 169,670	3,361,`79 592,836 816,146	5,778,951 1,062,150 985,616	5,58-1,093 771,1-62 931,827	109,859 291,088 53,989	817,336 11,653	4,517,593 775,123	759,661 1,423	5,939,196 9,291,081	
	Total	29,940,182	3,285, 630	223,874	3,056,756	4,770,161	7,826,917	7,282,982	: 43,935	829,189	5,292,716	761,033	15,230,277	22,113,265
	GRAND TOTAL { Bayatwari Other Government Alienated	56,232,218 13,119,42 4,055,292	24,501,331 1,303,169 2,170,723	862,976 20,994 72,940	23,638,355 1,2×2,775 2,097,783	8,095,895 1,163,461 1,478,142	81,733,750 2,416,236 8,676,525	\$1,482,029 2,152,994 3,621,358	251,721 293,212 51,567	1,712,711 13,220 84,076	4,941,294 782,166 43,189	7,711,014 127,756 33,955	10,183,459 9,749,584 369,147	1J,672 SU6
	Total	73,407,552	27,975,223	956,310	27,018,913	10,736,998	37,755,911	37,156,381	599,530	1,760,007	5,766,739	7,872,725	20,252,170	35,651,641

			. \	<u>.</u>	-				•		.—CBBBALS.								-
o.		District.		Jowarf (Great Millet), Sorghum Vulgare, &c.	Bijri (Spiked Millet). Pennisetum typhoi- deum.	Paddy (Bhát), Oryza Bativa.	Wheet (Gahu), Triti- cum Æstivum.	Barley (Jav. Sátu), Hordeum Volgare.	Maire (Maka), Zea mays.	Kodra (Harib), Paspa- lum Serobiculatum.	Ragi (Nágil), Eleusine Coracana.	Rrie Kang (Italian Milet), Panicum Italicum,	Varl (Sárn and Bamg). Panieum Maliaceum P. miliare.	Banti, Barti, Panicam flavidum.	Bhadil, Punicum Pilo.	Amaranth (Ráfgira), Amaranthus frumen-	Others.	Total, I.	-
	·	1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
		T PRESIDENCY PRO	PER.															Acres.	
1	Ahmadabad.	Rayatwári Other Governmen Alienated	4 <u></u>	123,666 86,540 408	85,109 63,972 170	69,701 12,499 618	101,802 76,478 80	15,622 4,507 58	8,318 1,009	15,803 6,090 21	4,924 1,769 30	72 429	3,715 2,844 6	5,799 12,965	# ************************************	37	******	419,565 271,100 1,393	
ļ	•	To (Rayatwiri	tal	209,620	149,250	72,808	180,860	20,187	4,327	21,414	6,723	501	6,565	18,766		37	•••	691,058	
2	Kaira	Other Governmen		327 497	171,766 450 1,365	115,594 142 245	21,180 268 106	4,554 20	1,169	113,322 199 808	52,723 - 228 225	144	837 81	1,842	*****	178	268	542,601 1,646	
1			tal	56,743	173,603	115,981	24 554	4,576	1,178	114,327	53,176	148	888	1,845	10· 400	. 177	366	3,320 547,567	
3	Panch Mahála	Alienated		3,411 3,646 677	29,528 15,054 6,315	51,072 30,448 10,285	13,837 2,79 a 2,128	1,498 839 867	78,124 29,998 20,508	14,918 7,169 6,243	10,247 6,247 2,637	2 161	1,256 955 667	12,079 6,818 2,678	84 258	11 1	1,472 678 4.4	217,411 92,817 82,503	
4	Broach	Ravatwari Other Governmen Alienated) (a.)	7,654 156,774 218	13,303	81,765 18,346	18,758 76,147 47	2,127	128,630	27,318	18,371	166	2,908	21,274	292	12 11	2,584 	362,731 274,644 293	
١			tal	156,992	13,303	18,388	78,194	*****	6	9,675	231	87	49	,			900 A	****	
5	Surat	Rayats tri Other thoreramer Alienated f	 	131,520 1,996 2,547	7,698	108,229 1,042 301	28,472 34	67) 10 10 10 10 10 10 10 10 10 10 10 10 10	4	34, 5×9 399 108	13,879 94 40	28	84	696	40	7	164	274,937 825 146 2 544	
		II.—Deccan.	otal	135.863	7,708	109,592	28,506	•••	4	35,005	14,042	28	34	687	48	7	164	3,018 301,743	
6	K h indosh	Payatuari Other Governmen	<u>.</u> .	421,194 16,933	\$81,563 11,445	17,048 1,406	193,756 3,141	. 100	8,383 1,84	2,440 6	-7,253 	940	8,702 	2,114	1,354	311 	168 	1,235,466 83,791	
1		Te Faratuici	o tal	408,126	593,027	18,454	196,697	100	3,567	2,446	7,498	1,030	3,807	2,266	1,455	3 55	168	1,269,196	
7	Násik	Alienated	otal	122 219 	649,911 31,888	8,437	261,365 27,273		2,128 70	1	117,572	646 6	29,551 ———————————————————————————————————	59 2	2,621 2:3	, 12	L1	1,261,661 75,082	
8	Ahmolnagar	Ravatwiri (Ravatwiri (Other theremore Allenated		129 250 68 148 Tal. 188	702,466 •••,317	53,843 13,677 ———————————————————————————————————	283,638	331	2,198	338	124,253 23,150	653	31,250 12,661	€1 79	2,903 2,777	256	151 737	1,839,933	
-		-	otal	1,002,010	741,676	13,976	19,477 261,488	34 365	113 1,530	339	23,186	8,£54	107 12,969	5 84	2,793	306	754	2,070,492	

_								1	.—CERNALS.		·					·
No.	District.	Jowari (Great Millet). Borghum Vulgare, &c.	Batri (Spiked Millet), Femilsceum typhol- deum.	Paddy (Bhás), Orysa Sativa.	Wheat (Gahu), Triti- cum Betivum.	Barley (Jav. Satu) Hordeum Vulgare.	Maize (Maka), Zes. mays,	Kodra (Harik), Paspa- lum Scrobieniatum,	Ragi (Nagli), Elousine Corsoans.	Raio Kang (Italian Milict., Panicum Italicum.	Vorl (Savs and Barng) Panicum Maliaccum P. miliare.	Banti, Barti, Panioum fiavidum.	Bhadh, Panícum Pilo sum.	Amaranth ' Ráfgira), Amaranthas frumen- taceus.	Others.	Total, I.
	1	2	3	4	5	6	7	8.	9	10	11	12	13	14	15	16
	A.—Bombay Presidency Proper—contd. •	-	-		·											Acres.
9	Poona (Rayatwari Alienated	622,271 90,659	485,95 2 118,845	62,572 8,224	73,999 16,349	1,004	1,321	87 2	\$8,699 5,134	283	23,502 2,074	61 20	8,1 27 784	82 11	3,479 316	1,317,628 242,981
10	Total Rayatwari Other Government Alienated	712,930 1,202,939 69,488	604,797 228,341 18,672	70,796 20,592 	90,348 48,097 8,049	1,175 2,781 236	1,430 18,806 908	89 143	43,833 69	1,753 2,874 132	25,576 4,061 95	81 21 21	3,911 977 15	93	3,795 6	1,560,607 1,524,741 113,364
11	Total Satára {Rayatwári Other Government	1,292,327 407,463 77,213 484,676	247,013 598,217 55,118 453,335	21,292 86,884 12,628 49,507	51,140 50,249 9,192 59,441	3,017 3,918 629 4,547	14,714 - 7,627 - 1,718 9,345	143 21 7	94 82,816 9,802 42,618	3,006 20,906 5,671 26,576	4,156 89,793 10,177 49,970	23 95 1 96	992	122 472 218 690	6 4,961 224 5,185	1,638,045 1,003,421 182,593 1,186,014
12	III.—Karnátak. Belgaum (Rayatwári	580,841 134,568	104, 0 88 42,610	111,133 7,150	91,541 18,346	132	9,203 3,240	44	87,948 5,197	59,061 12,268	28,154 3,897	**************************************	per pag 22,400 4.000	2	223	1,021,366 224,448
13	Total Rayatwarl Other Government Alienated	715,524 1,361,434 164,330	146,696 276,923 26,106	118,283 -12,494 774	107,887 169,945 15,416	189 (13)	10,443 1,146 	44 18	43,143 188	71,329 	32,051 8,525 1,043	0023340 301490 24490	0 6 0 0 0 0 2 7 0 4 0 1 9 2 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	223 6	1,245,814 1,849,306 207,894
14	Total Dhárwár (Eayatwári Other Government Allenated Total	1,525,764 636,631 36,746 673,377	300,029 6,311 208 5,519	13,268 140,401 18,043 158,444	185,361 270,359 9,345 279,704	14 5 	1,310 48 1 49	18	. 192 41,930 4,153 46,083	21,660 69,301 4,184 73,485	9,568 35,991 2,325 38,316	7 	\$80494 \$80494 \$80494	dhaqqy ATD-qag 4	6	2,057,190 1,200,018 75,005 1,275,023
15	IV.—Konkan. Thana {Rayatwari	42	0,519 	292,966 3,957	113		45 2	12,206	57,055 861	70,450	22,250 391	******	940 yes 411 ags	******* *******		\$84,574 5,209
	Total	42	743	12,124 308,987	113		2	15 12,221	1,044 58,960	***	485 23,126	•••	****	***	4	13,66 s 40 3 ,451

				*		•*	- • ,	٠.		•					• .				
16	Koluba	Bayatwari Other Govern Alienated	nat	entrod i	dágad <u>i</u> Byjsag appang	198,218 80,676 1,989	i	1912-00 1912-00 1912-03 1912-03	ramella realth	3,666 13,060	22,524 38,578 384	nite op nite op	17,726 81,017 130		*******	eggves eggves	110-110	#29,135 145,325 2,308	
ı			Total	***		247,880	1	***		16,725	61,281	484	48,873	400	•••	***	1	37-1,761	
17	Ratnágiri	Rayatwari		androp parati produpa	M11-1-1 M11-1-1 M11-1-1	49,694 1,037 1,509	ijaran Eberi isaran	411144 414144 414144	**************************************	16,404 783 269	20,892 730 734	19	10,297 200 100	eng-ton eng-ton	ndgopp sgsss	**************************************	******	97,613 2,758 2,696	
			Total	-48	5	62,534		***	. 9	17,426	22,3 36	19,	10,732	700	•••	•••	***	103,054	
18	Kenara	Raysiwari Other Govern		1,970	0000mg 179-10 100110	195,194	tagend theres elyens	624446 674146 777446	35 0	41944p .4414pa .4444pa	\$,96\$ ******	-tu	266	145144 14513 	441-44 441-44 441-44	edgrag dageng engrag	100110 100110 12212	203,819	
ļ		•	Total	1,970		195,194	444	***	850		5,963	56	286				10.704	203,819	
	Total, A.	Revetweri Other Covers Aliensted		6,696,452 91,655 768,729	8,797,048 79,446 882,846	1,546,673 99,793 79,531	1,646,372 62,620 120,895	29,890 4,859 1,\$53	129,114 31,016 26,015	223,171 27,644 6,499	469,161 47,632 36,396	182,433 429 26,489	242,590 35,508 23,430	22,942 19,295 3,463	16,948 258 1,178	1,760 1 300	11,734 678 991	633,730 1,472,418	
Í	'		Total	7,5-11,883	.4,189,299	1,725,997	1,819,888	36,302	179,145	257,313	571,988	209,351	301,123	45,191	13,399	2,068	13,403	16,935,330	
1	•	B.—Sirp.									,					-		•	•
19	Karschi	Rayatwari Other Govern		61,227 5,711 3,830	21,450 108 109	104,929 15,436 2,758	34,051 1,017 1,139	8,976 68 19	970 13	makeya	721 3	3 6	108 ******** \$	*******	0-4100 1-4100 	end (ed (ed.egs end (dg		329,401 33,747 6,904	
- 1		•	Total	70,767	21,725	217,101	36,186	4,055	982		784	6	106			•••	****	351,659	
20	Hyderabad	Raysiwari { Raysiwari { Other Govern	 120601	83,370	348,830 36,718	181,707 30,857	36,404 3,043	2,664 1,616	353 ****** 36		0 menus 2	**************************************	363 7	030y-00 176-116 176-00	6-4-140 1-3-143 1-4-146	**************************************	*** ***	548,796 78,348	XX III
I	•		Total	88,941	279,637	214664	89,447	3,872	189		10	9	870		•••	-99	••	627,139	E
21	Ehikárpur	Raystwari - Other Govern Alienated .		101,653 900 20,407	11,662 50 253	376,650 0,711	187,965 4,693 13,210	1,174 85 99	19 	engrap Headig Historia	50 3	230 2 106	. 48		000 100 000 100 001 100	001409 480100 201000	1,949	663,196 6,787 90,906	
			Total	201,839	11,465	285,541	205,858	1,287	19	• •••	53	946	48	•••		•••	2,015	709,061 \$11,560	
22	Upper Sind F tier.	ron- (Rayatwiri Other Govern Alterated -		172,519 18,460 2,465	34,476 ' 3,786	. 24,653 000 346	76,658 121 5	250 18	98 	eliyoby waariii royida	Pos-eq Sau-ren upp-erk	161 #	143 red 144 -ap 146a			******	2,635	14,318 4,518	
	•		Total	148,244	36,413	2 5,885	3 6,785	268	28	•••	***	156		•••	•••	***	2,625	250,403	•
23	Thar and Park	Ravatwiri Other Govern	 Language	4,002 696 84	39,797 379,938	163,416 73 1,546	22,304 146	965 196	16	*****	709 140 1 007 14			1-2-40 		000 -00 000 -00		301,259 2,679	
~		Alternated .	Total	5,033	430,717	155,077	32, 509	· 831	16	***	***	1	219	•••		•••	···	614,403	
	Total, B.	Raymindel Other Govern		469,516 21,907 24,240	\$50,434 \$40,484 \$8,438	\$37,787 16,156 44,378	297.612 5,977 37,396	-8,920 #37	1,106 13		790 6	304 65 301	729	**************************************	\$24.000 \$200.000 \$200.000	4-0-704 	4,514 123 8	1,984,800 621,677 1-2368	
	•	(Alimanted	Total		769,936	898,268	250,785	10,313	1,234	***	787	1,118	743	•••		***	4,840	2,502,607	
	Grand Total	Rayatwiri Other Govern	 	7,146,546 112,546 194,166	4,677,677 450,840 481,638	2,295,630 115,352 123,963	1,973,794 9s,147 15s,282	\$6,610 5,198 2,840	123,300 31,026 36,61	231.171 27,646 6,486	489,941 47,536 39,394	199,7% 691 26,608	245,319 26,5/3 28,044	29,445 19,5-4 8,468	20,959 3 5 1,178	1,750 1 306	16,319 8:11 104	36.999,479 944.817 1,004,798	¢.
			Total	. 8,056,696	4,969,965	2,624,366	2,900,673	46,615	180,379	257,313	672,77 5	210,459	301,866	45,191	12,399	2,068	18,013	19,458,007	8

							I	I.—Pv	LSB9.				`			III.	—Овси Р	ARD AN		DEN]	IV.—Da	WG S	AND	N _A H	COTIC	s.	
No.	District.	Tur (Pigeon Pea), Cajanus Indicus.	Gram (Chana), Cicerarietinum.	Mng (Green Gram), Phaseolus mungo,	Udid (Black Gram), Phaseolus radiatus.	Math (Kidney Bean), Phaecolus aconiti- folius.	Val (large-fruited Doli- chos), Dolichos lablab.	Chavli (small-fruited Dolichos), Dolichos catiang.	Kulith (Horse Gram), Dolichos uniflorus.	Field (Pea (Vatane), Pisum sativum.	Lentil (Masur), Errum lens.	Chickling Vetch (Lakh Láng), Lathyrus sativus.	Field Vetch (Guvar), Cyamopsis Psorali- odes.	Others,	Total, II.	A.—Vegatables (Roots and Tubers).	B.—Green Vegetables.	CGreen Fooder.	D.—Fruit Trees.	Total, III.	Tobacco (Tambákbu), Nicotiana tabacum.	Bháng, Gánja (Indian Benp, Cannabis sativa.	9 9	rabien.	1.≌	Others,	Total, IV.	
1	3	17	18	19	20	21	23	23	21	25	26	27	28	29	80	91	32	83	84	35	86	1	_	39 4		- -	43	
	A.—BOMPAY PRESIDENCY PROPER.													-	Acres.	ı				Acres.							Acres.	
	I.—Gujarét. A Rayatwári	6, 7 20	10,670	12,623	5,258	31,475	76 123	785 653	351		•••	#6*	7,259		75,115	762	1,739 569	1,793 3,030	1,106 73	5,400 3,626	2,909 961						2,909	
1	Ahmadabad . Other Government	1,675 7	8,290 14	10,249	4,043	20,039 67	***	174	4,932	***	***	***	2,567	:::	52,870 119	154 	29	4,823	1,180	9,056	3.893	•••	=			.	984	
	Total (Rayatwári	8,402 24,086	18,874	4,002	9,308 1,826	21,571	198 2,251	1,438 4,296	5,283		***		10,128 8,913		128,104 85,370	916 607	´ _ l	3,707	385	5,417	19,448					.	3,893 1	
2	Kaira Other Government	52 140	217	9	.** 2	13 99	ر 1	1	***		***	***	32 37		817 279	6	2	1		9	100	***	:::				61 100	М
		24,278	15,643	4,011	1,828	24,682	2,252 95	4,3 00	82	425	•••	•••	8,972 570		85,966 63,949	614	721 122	3,708 296	387	5,430	19,609					··] ···]	19,609 355	xxiv
3	Panch Mahals. {Ravatwari Other Government	5,350 2,034 1,443	48,137 8,202 7,843	2,210 - 998 - 530	4,623 1,708 953	1,471 653	5 9	316 144	***	631 49	***	1	322 172		15,726 11,799	443 63		* 12× 20	2	625 84	375 123	,			\		97.5 123	•
	Total	8,827	64,182	3,753	7,284	4,427	165	631	32	1,105	•••	1	1,064	•••	91,474	699	185	411	25	1	853	•••		.		\\	853	
4	Broach Rayatwari Other Government Alienated	12,414 3	2,578	. 648 	7 	2,808	935 	309	***	1,292 1	 	52,839 180 	\$82 2	7-4 7-8	74,212 186	254 	1,589 	***	***	5,897 	2,838	 4.1 4.0					2,838	
1	Total	12,417	2,578	648	7	2,808	935	309	· •••	1,293	•••	53,019	384	'	74,398 81,969	1	· 1	1	741 652	5,897 2,870	2,838 595	17				• •••	2,838 612	
5	Surat Rayatwari Other Government	25,856 154 74	1,251 5 2	3,720 25 11	4,079 1 11	290 	88,140 274 33	1,014 6 3	***	3,133 7 8	:::	2,945 17 16	1,525 7 6		495 159	424 	1,788 4 7		12 4	16 11	2 4	***		[↓		3	
}	•	26,084	1,258	3,756	4,091	290	38,417	1,023	•••	3,143	16	2,978	1,538	•••	82,624	421	1,797	8	668	2,897	601	17			.		618	
}	II.—Deocan.	*·				-			_	()				!		-	·	. ,	į		ļ	ļ						
A	Khandesh (Raystwari Other Government Alienated	67,689	50,658	25,475	105,992	19,457 282	292	3,8 31	95,288 779	2,4 52	38E	78 		145 156	370,600 7,649	1,754 179	4, 837 	312 *** 2	1,969 221	8,872 514	7,352				J .		7,393 268	
Ĭ	(Alienated Total	2,572 70,261	997 51,655	365 25,840	2,469 108,460	19,739	292		96,067	2,505	411	78	`	•••	378,248		4,949	314		9,386	7,620	31					7,651	
,	Nasik (Rayatwari Other Government	25,380	71,705	7,723	22,591	10,671	170	143	88,875	3, 904	8,66	5,101	:::	***	243,923 14,575	4,369		***	440	. ***					-		1,851	
	(Alienated	2,974 27,754	5,911 77,616	7,787	1,548 24,139	10,739	172	•••	8,104 91,979	3,146	9, 4 71	451 5,552		•••	258,498	782 5,151	1	i	·	14,200	1,944	1]	1			1,956	
8	Ahmednagar . (Rayatwari Other Government	50,990	103,312	21,092	3,286	35,488	576	617 18	65,270	718 2	391	88			281,781 33,115	5,053 532	1,141	3,578 202	1,441	11,213	6,876	452 43	=	***		: :::	7,329 683	
	- (*Hemstag	57,388	1	22,335	1	1	580	ľ	72,342	720	i	38		•••	314,896	5,585	1,280	3,780	1,613	12,258	7,516	495		.		-11	8,011	•

																						•						
9	Poona	Rayatwari Other Government Alienated	25,210 5,121	58,590 15,515 73,905	7,386 1,283 8,669	4,871 1,623 6,494	21,501 8,587 28,088	2,078 363 2,441	573 157	31,358 7,796 39,154	1,452 "396 1,848	988 81 1,069	1 1	***	1 ::: 1	157,009 35,722 192,731	10,512 2,983 13,495	1,780 471 2,251	1,320 252 1,572	959 4,164	16,817 4,665 21,482	1,488 203 1,691	27 8 35		ï		1,517 213 1,729	
.0	Shol á pur	Total Rayatwari Other Government Aliquated	30,331 '67,263 2,299	60,422 3,872 64,294	5,009 5,633 3.3 5,986	1,234 "111 1,345	24,095 1,512 25,607	226 4: 271	8s 86	11.3s7 1,632 12,419	113 t	72 16 88	238 14 352	***		170,870 9,263 180,133	5,044 395 5,439	1,601 148 1,749	821 50 877	1,133 67 1,190	8,599 ****656 9,255	4,095 195 4,290	59 ::: 58				4,153 195 4,348	
.1	Eátára	Total (Rayatwari Other Government Aitenated	69,561 60,464 6,149	64,454 10,300	13,015 2,322	84,570 7,827	61,566 4,409 55,975	3,120 41b 3,538	49	40,572 7,371	1,451 650	611 142	412 961 945	***	9;	269,362 42,551 311,913	8,566 1,445	1,038 "174 1,210	964 158 1,122	1,055	11,621 1,975 13,596	9,744 "910 10,654	583 "21 609		5		10,347 932 11,279	
		Total	59,613	74,754	15,337	42,397	00,510	0,000	494	90,313	2,006	753	***	••	103	911,819	10,011	1,210	1,122	1,200	10,050	10,001	003	" "	' .	"	11,270	
l	II.	I.—Karnútak.		/				_					'	-				ł					_ i]	1		
12	Delgaum	*** { Rayatwari Other Government Alienated	13,116	47,476 10,606	8,036 2,999	13,724	6,621 1,751	7,750	1,514 832	***	5,366 835	5,792 416	***	***		199,704	8,779 1,495	2,255 	230 12s	1,970	8,231 2,452	23,173 5,228	6 	10		***	23,189 5,228	
		Total	69,941	58,052	11,935	15,231	8,172	8,700	2,346	55,314	5,705	6,208		***		241,640	5,274	2,657	3 58	2,397	10,686	28,401	6	10	ύ 		28,417	
13	Bijápur	Ravatwari	69,597	63,964	10,676	***	4,377	4,821	8,26 0	***	72		***	***	:::	163,150	2,037	1,688	297	1,732	5,744	2,738	7	:: ::			2,74 5 181	
		(All coasted	9,280 77,877	69,080	22,018	·	2 so 4,617	478 4,799	3,660		76	•••	***	***		20,433	2,232	1,895	337	231 1,963	733 6,477	181 2,919	7				2,926	
i	*	(Rivalwiri	61,182	63,427	45,060	5,955	11,661;	4,901	1,031	\$5,162	133	. 2	•••	•••		247,903	2,276	8,333	17	3,451	9,077	1,263		15			1,279	
14	Dharwat	to lithe Gavernment	8,910	1,904	2,901	201	629	380	4.	3,292	5 3	" 1	***	***	***	13,223	75	307	3	479	562	24	•••	***		"	26	
	}	Total	65,092	65,331	47,951	6,1 56	12,150	1,659	1,081	58,454	189	3	•••	•••	•••	261,126	2,351	3,610	18	3,930	9,939	1,297	***	15			1,3,2	
		IV.—Konkan.									ĺ		[-		.					1	- [•
5	Thána	ess Rayatwiri (wher Government Alignated	4,871 73 60	1,958 1 26	297	15,123 214 214	***	2,433 6	3,6 51 27 40	759 7 13	89	 	 C9	***	 	20,150 8+6 402	1,069	761 60	211 	4,192 136 3 00	6,253 344 \$57	1					1 	
		Total	5,013	1,885	207	15,574		2,435	3,724	779	83		69	•••		23,863	1,11	829	211	4,625	6,784	1	•••	•••	· ·	•	1	
ß	Kolába	Ravatwari Oring Government Altenated	924 1,591	1.723 8-7	619 1,000	3,89A 6,540 14	•••	6,3:4 2,600	26 6v	1	•••	***	44. 844	***	<u></u>	12,052 10,833 85	51	335 6:-	- 1	2,211	2,629 77 15						***	
	į	Total	2.515	1,553	1,820	7,540		9,110	 გა	16			•••	***		22,969	61	421	1,	2,256	2,72 3		•••		1		***	
	D 1 (-: -: -:	(Raratwiri	2-7	36	23	2,4/5 41		1,965 84	153	8,065 241	=	-	•••	***	=	13,664 850	, 5.2 ,	11 t		8,745 35	5,911 4 ·	•••		2		•	***	
7	Latnagu	Ahenstel	9 002	1	682	2.543	'	1,934	12:	313	=		***	•••		370 13,804		 116		5,913	170 6, 121	***		2	1 i		 2	
	Į	Tetal «Bəvəlnári »	153	1	1.53	1,713		2.5	133 836	1 1	252	1	***			6,739	2.4	64	43	15,121	19,112	5		12	2	1	17	
S	Kanara	Allensted	=	:::	***	=		=	=	=	=	=	=			E10140				=		\ <u>`</u>		= =				
	ł	Total	183	246	 _			257	530	<u> </u>	2-2	1			<u> </u>	6,733	47,118	€4: \$3,17.	4.67	18,121	19,112	61 719	11	${}\frac{12}{5}$	<u></u>		$-\frac{17}{65.973}$	
	Tetal, A.	Rayalward Other toverments Alienated	(ne 1 %	1	12.23	311,5 64	261973 31,513 16,279	1 73 252 1 3 1/2 2 754		47] 645 5,171 43,739	19,645	16,926	61,479 1-7 4-2	3,22 3,22	إسسا	HL:~3	6	2,465 2,465	3,1 '- 9.4:	271 3 357	4 5 rd 15 rGS	1,4,2	1,1 <i>e</i> 3 , 		***		3,423 6,405	
		=	616,133	759,391	236,503	257,410	287,675	81,224	24,099	520,755				22,080	104	2,678,774	55,911	31,120	24,764	54,8221	100,532	91,122	1,270	57	7 1	••••	95,450	
			ı	<u> </u>	1	!	!	<u> </u>		1	1			<u> </u>	1		<u> </u>		- '			<u>'</u>	'			<u> </u>		

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	· ·	·					. 1	II.—Cı	rops, 1	898-99)—conti	nued.					·:	•.							`
	•			•					VCom	A PTERMIC	nd Spices.	,	-		- -				VI.	-Starc	Epe.	Vr.	I,—8va	ARS.	
No.	District.	Cardamom (Veldode), Elettaria cardamo- mum,	Chilles (Mirchys). Capaloum frutescalls.	Ginger (Ale), Eingi- ber officinals.	Black Paper (Miri). Piper algrum.	Betal-leavre (Pfine), Fiper-betal.	Betel-nut (Enpfri), Arese-exteebu.	Turmeric · (Halad), Curenma longa.	Fennel (Badi-shep). Pimpinella anisum.	Dill-seed (Balkun-shep), Anethum	Coriender (Diame): Coriendrum setivum	Camin (Jirl), Cami- num qrainum.	Ajwan-seed (Ovs), Ptychotus sjowen,	Fenugreek (Meth!) Trigonella fanum gravum.	Oommon Mustard (Mohri), Sinspis In- dies.	Gerllo (Lasna), Allum satirum.	Others,	Total, V.	Arrawroot, Maranta arandinaces, Curcu- ma angustifolia, &c.	Otheri.	Total, VI.	Buge roans (II., Sherdi), Sasebarum officinarum,	Others.	Total, VII.	
1	2	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	
	A.—Bonbay Presidency Proper. I.—Gujordi.															-) 	- Acres,			Acres.			Acres.	
1	Ahmedabad Ravatwari	=	2,495 325 1 2,811	209	111	, 	=	3 41	180		,19 16 	14	1 [1	916 39	= 14	30 60 1	11.	8,969 436 2	-	<u></u>		1,140 404 4		1,140 694 . 4	
2	Kaira Rayatwari		2,078 2,078 3	209	=	=	=	25 29 1	180 946	5 - 1 	28	1,679 68	 5 1	946 902 1	75 	91	5 378	4,306 4,992 89	25 	 58 	63	1,838 974 37	1-61:	1,838 974 87 16	
8	Panch Maháls Raystwiri Other Government	=======================================	1,085 483 236 99	806 =	-	=	=	23	950 	1 1	· ***	1,942	6	203 97 36	75 =	126 29 79 1	373 	5,090 630 457 100	2 5	58 	83 	1,027 194 37 16		1,027 184 27 16	77.4 7
4	Total Broach (Rayatwiri Other Government Aliensted	=	927 579	30 		-	=	- 11		1	14 *	33 =	1, 111	104	1 -	103 	4	1,187 - #61		1 : 1		237 74		237 74	-
	Surat (Rayatwari	=	273 1M 13	10 180	=	= .		22 115	-	1 = 1	6	# #11		1 188 	1 191 =	33 _ 67 _	4 # 	351 1,436 • 73 26	=	1111	*** *** ***	7.4 4,007 86		7 5	
-	Total	-	825	180	•			115		2	2		6	182	121	- 67	35	1,535		***	•••	4,759	•••	4.759	
6	Khandeah Ravatwirt Chor Government	-	6,967 " 366	<u></u> .	=	_# m	=	- 61 - 8	302	3,596 136	21,876	111	344 	ea 5	= 0	\$1 	=	24,397 370	Ξ	1 ==	_ 1	1,861 	=	1,862	
7	Total Nink {Rayatwir! Uther Government Alterneted	-	10,128	=	=	232 166	- - -	- 66 - 15	314	3,420 m	11,876 - 30	1	363	87 1,660 	81 297	206		20,776 7,140		1	1	1,922 6,842		1,922 6 344 	
·	Total Ahmednagar (Ravatwist		4,860 6.00	3	-	141	1	15	3	17	42 10	1	24	1,834	390	701 117	1	8,031 6,461		49	47	7,008	-	7,008	
8	Ahmednagar Other Government Allowated Total] =	5,510	=	=	244	-, 1	=	=	- 5	16	=	- 3	=	59	142	=	5,983	-	=	=		=	- 20 1,555	

-	1		···						V _ (· · · · · · · · · · · · · · · · · · ·	AND SPICE							<u>_</u>			1			
				. .	<u>.</u>	- 3		- 							· 1 1					-Starc	E E 9.		-SUGAI	es. ·
N	Districts.	Cardsmom (Veldode), Elettaria cardsmo- mum.	Chilles (Mirchys), Capsicum frutescens,	Oluger (Ale), Zingi- ber, officinale.	Black Pepper (Miri) Fiper nigrum.	Botel-leaves (Pánc). Piper-botçle	Betel-nut (Supári), Areca-catechu.	Turmeric (Halad), Curcuma longa,	Fennel (Badi-shep) Pimpinella suisum.	Dill-seed (Balan-shep), Anethum	Coriander (Dhane) Coriandrum sativum	Camin (Jiri), Cumi num cyminum.	Ajwan-seed (Ovn), Ptychotus ajowan-	Fenngreck (Methi), Trigonells fænum græcum,	Common Mustard (Mo hri), Sinapis Indica,	Garlic (Lasun), Alium sativum.	Others,	Total, V.	Arrawroot, Marants arundinacea, Curcu- ma augustifolia, &c.	Others.	Total, VI.	Sucarcana (Us, Sherdi), Saccharum officinarum.	Others.	Total, VII.
1	2	44	. 45	46	47	48	-49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	63
	A.—Bombay Presidency Proper —continued.								1		-							Acres.	· `		Acres.			Acres.
	II.—Deccan—continued.	[1		.]			•			i										•	1	
9	Poona (Rayatwari Other Government Alienated Total		6,710 "1,729 8,439	1		264 '''313 577	 3	35 35	 6	 	313 21 333	***	9 ::: 3	57 18 75	27 27	565 ***159 724	3 : : 3	7,990 2,240 10,230	***			6,228 3,765 7,993		6,228 1,765 7,993
10	Sholapur {Rayatwari	···	7,936 491	***	***	260 2	::: 1	481 2	***	044 270 470	27	*** ** pay	10 	6	* ***	5		8,921 603	***	***		1,363 71		1,363 71
11	Total Satara {Rayatwari		8,427 9,837 1,803	64 46	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	262 \$29 23	1 6	483 8,507	128 "24	2	34 1,429 290	# 0 0 # 0 0 # 0 0 # 0 1	10 13 5	6 20	1	206 708 84	010 010 010	9,429 15,791 2,920	•••		 	1,434 11,150 2,243	 	1,434 11,150 2,243
	Total		11,390	110		357	6	4,147	152	2	1,719	•••	18	20	1	7 9 2	•••	18,714			•••	13,393	•••	13,393
12	III.—Karnátak. Belgnum { Rayatwári	 	16,734 4,230 20,964	*** *** ***		79 ₁₂₇ 206	1 9	158 58 214	30 25 55		626 394 1,020	*** *** ***	***	101 23 124	254 ''' 1 255	1,980 453 2,433	***	19,968 5,312 25,280	017 200 200	### ##################################	***	7,044 2,273 9,317		7,044 2,273 9,317
13	Bijápur {Rajatwári	***	8,437 - 361	***	34 495 444	54	1	7	2	2	11 5	**************************************	*** *** ***	12	419 514	227 81	***	8,753 399	***	***	•••	675 35	*** ***	675 35
14	Dhárwár • {Rayatwári Other Government		1	19	1	54 1,328 125	1 458 87	9 24 	2	2 	16 436		17 	12 132 2	 8á 2	258 1,533 		4,152 · 56,664 2,171	•••		••• . ••• •••	710 1,904 ₂₆₇	*** *** ***	710 1,904 ₂₆₇
	Total IV.—Konkan.	•••	54,628	20	1	1,453	495	24	1	3	439	***	17	134	86	1,534	•••	58,835	•••		•••	2,171		2,171
15	Thana (Rayatwari Other Government Alienated Total		847 " 81 378	195 195	•••	221 224	6	47 ::: 47		***	276 17 293	***	500 001 001	***	2 2	3 3		1,100 48 1,148				1,578 1,578		1,578 ::: 1,578

										a				. •									•	
16	Koláha Ravatwári		51 37	***		15	4	673 610 600	*** ****	124 123 118	193	, 	*** *** ***	=== ==1 =>1	676 676	**** **** ***	***	239 41	***	*** *** ***		24 3 1	***	24 8 1
*	Total	•••	68			15	4		4.	•••	193	•••		•••		•••	•••	280	***	200	***	28	·	28
e 17	Ratnágiri {Rayatwari Other Government	145 145	568 20 24	***	1	^ ²	779 187 2	7	*	4+E	**** ****	***	***	*16 **1 **1	411 510 101	889 889 889		1,357 207 26	==	:::		169 2 16		159 2 15
	Total	•••	612	•••	1	. 2	968	7	•••		•••		•••		100		∤	1,590	6		6	175		175
18	Kanara Sayatwari	963	868	1	1,807	189	11,836	51 	***	846 ° 424 484	3	*** *** ***	644 987 898	**** *** ***	1 	7	33	15,240	*** *** ***	1 2 2	-0a -0a	8,192 		8,192
, 	Total	963	358	2 1	1,807	180	11,836	51		***	8			***	1	7	3 3	15,240			***	3 ,19 2		3.192
	Total, A Rayatwari	963	122,810 799 11,883		1,809	8,267	18,098 / 191 42	4,553 708	1,599	3,322 6 136	15,264 80 740	1,915 12 63	423	8,358 47 \$23	1,017	6,471 139 517	45:	181 309 1,223 15,025	81	168	139	50,034 859 7,518	- : : : : : : : : : : : : : : : : : : :	50,034 859 7,5,8
	Total	962	1		1,809	3,947	1 <i>3</i> ,331	5,260		3,463	16,034	1,990	450	3,728	1,113			98,157	31	108		58,411		58,411
	TOTAL	902	100,461	1,043	1,609	3,847	10,001	0,200	1,664	9,400	10,034	1,890	450	0,720	1,110	1,721		20,101		100	100	00,411		00,711
-	BSind.				•	-					_		,										'	
10	Karachi Rayatwari Other Government	***	87		- ma				33	3	100 11	188	244	***	2,757 1,801	43	2	8,211 1,816	***	88	5 8	1,308		1,806
	(Alienated	440	*******		*11*	-		***	4+1 4+1	•••		==	nes.	***	27		-	2,010	***	***		23		28
	Total	•••	91			644	***	***	- 33	2	111	188	***	***	4,585	42	2	5,054	·	38	38	1,838		1,338
20	Hyderabad (Ravatwari		213	\			***	_	1	- 19	24	- •••	101		411	84		746	-	2 0	20	597	7.	897
	(Alienated on	. ***	145	140	***	444 886	ton.	10a 441	5 PG 5 PG	***	*** 5	- 111	***	sirs Ciry	10	•	***	166		**	***	120		139
İ	Total	***	358	***	***	***	***		1	13	29	149	***	•••	421	88	••• [910	***	20	20	726	•••	726
21	Shikarpur Rayatwiri	144	131	}		164	-12	154		. 2	2,230	24	***	A34	8	. 63	7	3,479 10		44	4	/89		839
	(Altenated	-	•		>44 	***	**	7 to 1	70	-	10 0	***	-	***	774	•	-	40				•		•
	Ţotal		135			•=• •	***	***	19	2	2,260	14	. •••	•••	8	89	16	2,538	***	44	44	548	}	519
29	Upper Sind Pron- Rayatwart	145 148	1		=	-	eng Pela	***	•••	***	594		900 PRO -	ero 4m3	3 67	6	_8	798				23	***	23 ´
ļ	Altenated	***		774		194	***	444	***	f=0	-		-			l l	-	***	***	•••	***	·	-	-
•	Total	***	1 ;	***	•••	•••		•••	•••	•=•	- 524	•••	•••		257	6	8	796	***]		•••	22	•••	23
23	Thar and Parker . Raystward		156	***		64m 1988	 1-13	*** ***			150	1	-	=		16	-	340	_	18	18	43		
	(Alispated	***	13		[***		•••		-			***	***	-		-	12	***					***
• •	Total	***	169	***	***	494		***	•••	8	159	1	***	***		16	•••	853	•••	18	18	42	***	42
																231	17	7 570		<u></u>	120	2400		2,500
	Total, B Raystwirt		570		-	=	-	-	- 49 10		3,057 12	209	***	=	2,429 1,841 27	- 20	é	7,679 1,8.6 253		130		2,506 7 161	=	7
	(Detail	-	16s	-	-	-	-				94	+m	-	~	5,266		2 6	9,651		120	120	2,678	_	2,676
·	. 10th		754	•••	***	***	***	***	53	2 5	3,083	203	•••	***	0,200			-,001	****	124		2,010	•••	
		000	102.050	~~~	1 000	A 0.07	19.000				10.033	9110	402	8,358	4,445	6,702	72 1	188,881	31	228	259	52,542		52,542
	GRAND TOTAL Revetwari	962	123,358 803	977	1,809	3,387	13,098 191	4,552	1,642	3,347 5	18,301 42	2, 119	423	47	1,501	139	9	3,019	•••			866		₩ 6
	Ailensted	***	12,044	66		6:0	42	708	75	136	774	63	27	323	138	8±7	•••	15,878	***	·••	•••	7,679	•••	7,679
	Total	963	136,275	1,013	1,809	3,947	13,331	5,260	1,717	3,458	19,117	2,193	450	3,728	6,379	7,668	81 2	07,808	31	228	259	61,087		61,087
		1			i ł	•	ļ ļ	į	i 1					i		· [1			

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Poons	and Raystwari Other Govi Alienated an	1,451	1,689 " 54 50	298 *** 14	91,112 9,953	6	29,787	12,14e 3,128	112 149 141 401 149 802	126,38) 19,849	12 k 12 k 12 k	****	****			253 57	777	688 641 669 641 644 641	1110011	100	868,638	17,067	7,584,042 - 291,781	,
	Total	2,284	9,112	252	91,065	5	3 5,238	15,274		146,230	***	***			43	1		***	1 1	*	1,947,421	91,598	1,855,823	
O Sholapu	Rayatwári Other Govt	5,048 **** 37 7	24,871	4,661	117,821	*44	14,102	704	*** ***	178,020	39	***	58		930	720	18,922 ···· 515	480 100 480 100	20,046 *******	88	1,916,849 136 1	89,097 2,16?	1,877,758 /34,149	
	(Alieuated	5, 325	1,509 25,970	4,925	"8,512 125,833	•••	14,675	528 13,045	*** ***	189,77	 38	-	58		6 - 975		19,437		20.60	36	2,058,16	41,259	2,011,901	
1	(Barateri)	230	8,968	380	25,973	***	16,914	27,255		78,000		•••		.	4,800		7,409		15.00	817	1,410,617	117,478	1,299,139	
	Other Govt.	27	464	. *** 47	3,540	114	3,851	7,119	195 148	14,544	***	* 196	**** · ***		126	1 1	935	***	1,4	4 .		26,436	223,804	
	Total	257	3,422	407	28,819	***	20,265	34,374		87,544	***		***	•	4,926	8,79 6	8,344		17,066	3 38	1,659,857	136,914	1,522,943	
111	–Kornátok.			.	ļ	ļ					•										•			
2 Pal-	Rayatoriri .	10,487	1,993	6,576	81,474		4,378	1,068	111 698	\$5,920	21	***		,	114,929		5,292			10 12	1,456,502	41,188	1,414,814	
DarRegn	D.s. Cther Govi., Allenated	2,260	666	1,760	8,842	740	358	5 71	***	14.47:	***	***	-ns. -m	• •••	19,963 1 134,286		1,194 6,486	***		12 28	318,87 1,774,3 80	46,506	\$18,860 1,727,974	
	Total	12,697 7,786	2,66 l 75,087	8,356 8,346	40,316 80,837	***	4,736 18,876	1,639	100 Est	70,405	: ²¹				263,967	,	7,331		271,360	18	3,502,753	8,626	3,497,197	
Bijápur	Rayatwiri Other Govt Adenated	7,1 43e	7,917		9,006	ands area stad	1,777	4	7 100	18,017	444	**	*** 200	, 244	41,354	4	532		1 '	***	290.682	674	290,098	
Ì	Total	5,914	82,364	3,775	89,861	40.	20,653	51		204,918	~i	***		.	305,:21	1 1			1 1	13	2, 793,281	6, 060	2,787,225	
4 Dhárwá	Rayabwiri	36,344	16,387	11,000	40, 6 84		3,467 258	350	***	97,8)2	110	945 FV6		***	6 895, 68	176	5,28		15,27	20 *** 7	2,015,817 110,336	41,7 +	1.973,898	н
	(Atlenated	942 25, 886	17,067	12,426	1,468	da	3,720	39		3,475 101,287	173			١,		i - I	5,595		1	27	2,125,653	43,294	2,082,359	××.
	Total	20,000	17,007	20,400	32,110	***	0,10	~	[···	10/,20/	. = 0										. `	1		
17.	Konkan.			Ì			•	•	1							2,880	3, 871		5,75°	11	441 089	8,744	45 7,5 H	
5 Thána	Raystwiri Other GovL.	2,326 29		1,636	- 1		8,494 117 178		100 CES	13,671 147 213	***	4-i	424 E44	-	002 000 01 000	16	27		8:	=	5.84° 14,878	106	5,846 14,7,4	
	Total	2,394	***	1,828	15	10	8,784			13,0::1		70-2		1 -	1/	2,956	2,987	•••	5,94	11	461,815	3,857	457,958	
8	▼ * **********************************	1,14* 2,194	_	3	_ ,		907 976		•	2,009 2,575						141 87			194		248 3* 4 15 : 864	7,308 3,1-4 62	239,286 183,686 3,340	
1	Addispated	9	-]	-]	***	4	-	~ -	10			-	·	*****	183	53		230	2	8.4.2 405.676	10,362	895,314	
+ 1	Total	8,845	···	5	*	40.	1,317		9	4,677	***	EN4.		- !] ",	1,678	3		1,64		12-,209	9,7-*	116,954 3,448	
Ratusgi	Rayatwiri Other Govi	347	***	=	=	! !	250 178	=	= = 4	2.0 173	1 1			.		20	= =	= =	1 1	=	3 535 3,444	3.4	3,226	
	Total	357			***	***	6,350	•••	43	6,749	***	•••		.	1	1,671		•••	1,67-	132	133,307	9,641 12,18	123,666	
Kánara	Rayatudri	104	_ 1	_ 19.	= }	•	46	=	= = ==		=	=	= -		==	- 51	_ 141 _	===	22:		\$48,929	32,15 	2,00 / 100 feeding fee 140	
- August	betanoilă)	10:	9	130			- 16		250	63	-	.,.			2	81	141	- 1	92:	54	249,02	12,153	236,746	
	Total ••• Rayaswari	39:3°,24°,	244 079	01,241	620,639	2,401	217,~6	16,27	1 7 201	1,442,500	1,106	1,00	73	3,1	2,335 975	1 100	50	= 1	2,641,8 (2,612	\$1,861 60\$ 8 G.751	66].: \$2 17,710	21,770 543 813 411	
Total,	A. Other troys.	12 417	34,1 44	200 3 Eva 8	60. 183	3 8 164	17,822	38,647	2,117	120,404	··· 27		- -		111.046	1,950	5,7 €	- -	lin,fie	2 222	1,997,297 24,689,593	727.436	1,8-4,145 23,962,157	بدع
ı	Total	919.516	262,596	9 702	581,000	3.268	236,235	87,726	1 9,126	1,590,179	2,013	1,118	73	2 3,20	6 ≥,644,55 .	25,527	89,900		3 - · I	0,202	24,009,080	121 January	20,8 32,2 3	

		1	-			VIIIO	L SEBDS.						IX.	-Dye	8.				XF	IBRES	,			· (mone	pped.
No.	District.	Seame (Til), Sesa- vum Indicum.	Linsced (Alsi, Javas). Linum usitatissimum	Castor oil seed (Emudiya), Ricinus communis.	Bafflower seed (Knr-dai), Carthainus tinctorius.	Rapesced (Shiras), Brassica napus.	Nigerseed (Khursanl) Guizotia Abyssynica.	Ground-nut (Bhuimug), Arachis bypogea.	Cocus navifera.	Others.	Total, VIII.	Indigo (Nil, Guli), Indigofera tinctoria.	Saflower (Knsumba), Carthamus Persicus,	Morinda (Al Surangi), Morin la citrifolia	Others.	Total, IX.	Cotton (Kapus). Gossyplam herba- ceum.	Bombay Hemp (San Tág), Crotolaria juncea,	Hemp (Ambadi, Sheria), Hibiscus comabinus.	Jute (Corchorus).	Rhes.	Total, A.	XIMISCELLAMBOUS.	Gross Area cropped.	Peduct Area cropped than onco.	Remainder Not Area oro
1	2	67	63	69	70	71	72	73	74	75	76	77	78	79	80	81	62	63	84	85	86 8	7 89	89	90	16	92
	PSIND.	[-			-					Acres.					Acres.						Acres.	Acres.	Acres.	Acres.	Acres.
19	Karáchi (Ravatwári Other Govt . Alienated	. 4,2 57 4 87 7 4	*** *** ***	75 1	***	3,164 109 316	194 . 166	- 0.0 041 0-0	***	7,903 190 398	15,899 787 788	4	1	::	1		784 25	68 8	***			852 28	2,224 14,574 94	876,375 43,669 8,255	22,525 1,625 115	\$53,950 \$2,043 8,140
	Total	4,518		76		3,589	•••	•••	•••	8,491	16,974	.4	1		1	6	809	71	149	•••	•	880	16,892	42 8,298	24,265	401,033
3 .	Hyderabad (Ravatwari Other Govt	23,475 1,781	411 791 111	6×2 1++	100 000 001	4,692 488	***	*** *** ***	 	34,767 6,507	62,934 8,776	6,041 ***91	*** *** ***	 	13 	6, 054 91	51,001 7,645	187 *** 7	<i>-</i>		.	51,189 7,652	4,410	713,420 104,119	9,09 4 693	703,726 103,526
	Total	25,256		100		5,180	•	•••	•••	41,274	71,710	6,132	•••		13	6,145	58,€46	194	***		••• •	58,840	1 8,84 9	817,539	10,287	807 ,2 52
21	Shikárpur {Rayatwári Other Govt . Alienated	11,109 6 1,718	 	400 414 019	000 Bag 449	25,787 1,769 2,201	*** *** ***	*** ***		81,725 255 909	71,629 2,030 4, 828	712 769	*** *** ***	***	410 	1,122 769	1,964 278 153	49 2 1	114 691 106		.	2,012 280 154	•••	888,658 12,320 4 8,103	156,544 88 2,726	732,114 12,233 45,377
	Total	15,833	8	•••		29,757	***	***	•••	32,889	78,487	1,481	•••		410	1,891	2,3 95	51	•••		··· ·	2,446	1,927	949,081	159,358	789,723
2 2	Upper Sind Ravatwari Other Govt Frontier. Alienated	53,725 1,469	104 114 414	154 10 ₉ 104	515 210 986	-13,267 - 9,508 	6+0 +>1 ++1	400 500 516		17,436 684	83.428 9,508 2,153	44	· •••	-a- -a-	***	44 :::	810 	15	114 000 100		·	825	208	361.371 23.8 9 8,257	23,024 1,237 278	339,847 22,602 7,959
	Total	55,194	***	***	•••	21,775		***	 '	18,120	95,089	44		•••	•••	· 44	810	15	•••		 .	825	208	393,467	24,559	3 68 ,9 0 8
23	Thar and Ravatwari Other Gort. Alienated	5,331 3,113 56	 	117	***	1,667 571	ta 	***		18,533 175 1,031	25,530 3.975 1,057	67	105 106 H04		***	67	28,215 7 658	\$6 1	2			28,253		299,902 392,541 4, 782	10,167 124 114	289,785 392,437 4,668
	Total	8,499	•••	117	•••	2,238		***	,,,	19,738	30,592	67	•••	***	•••	67	28,88 0	37	2	 .		. 28,919	3,5 80	697,245	10,405	686,840
	Total, B. Rayatwari Other Govt Alienated	100,897 8,645 5,698	6	75 119		45,910 13,053 3,576	:::	***	1 : : :	110,363 620 9,529	258,920 16,300 17,652	6,868 860	1	:::	424	7,293 860	82,774 310 8,456	354 5 9	3		.	83,130 316 8,465	22,148 14,574 4,734	2,639,726 472,388 173,516	221,954 3,074 3,846	2,417,772 469,314 169,670
	Total	109,600	8	193	•••	62,539		•••		120,512	292,852	7,728	1		421	8,153	91,540	. 3 68	2		.	91,910	\$1,45 6	3,285,630	228,874	3,056,756
	GRAND Rayatwarl TOTAL Rayatwarl Alienated	19,666	244,874 774 16,956	61,319 5,963 3,593	520,819 · 60,183	49,601 13,361 3,845	217,668 745 17,822	75,278 1 12,447	1	117.755 1,737 10,146	1,701.420 97,524 144,087	8,654 887	1,098 21		426	887	2,418,752 197,838 119,505	1,604 1,968	83,594 560 5,708	:::	::: :	200,002 127,181	24,761 14,574 5,353	24,501,331 1,303,169 2,170,723	862,976 20,394 72,940	23,638,355 •1,282,175 2,097,783
_	Total	429,116	262,604	90,895	581,009	65,807	236 ,2 35	87,726	1	129,638	1,883,031	9,741	1,119	73	426	11,359	2 ,7 36 ,09 5	25,895	89,962		•••	1 2,851,953	14,6 88	27,975,223	956,310	27,018,913

		Not area	ARBA IBRIO CARA	ATED FROM	A 4 4 . 3 '	Area irri-	Area irri-			•.	° Cs	OPPIE OF I	ARIGATED AS	EA.	, , , , , , , , , , , , , , , , , , ,	-	Deduct area		•
· _ _	District.	erop ped.	From Government Canais.	From Private Canals.	Area firigated from wells.	gated from tanks.	gated from other sources.	Total area irrigated.	Wheat,	Rice.	Other cereals and pulses.	Sugarcane.	Other food erops.	Non-food crops.	Podder erops.	Total.	with derigation more than once.	Balance net irrigated area.	
	1	,		4	5 .	6	7	8	9	10	11	12	18	14	15*	16	17	19	
	A.—Bombat Presidenct Profes: 1.—Gujorát.	Acres.						Acres.								Acres.	Acres.	Acres.	
	A hms labed Ravstwari Other Government	840,390 \$36,9#3 1,477	5,309 164 534	EVLCCC Gap GET GET FEE	85.999 13.183 130	6,499 8,220	3,081 1,560	50,578 18,147	14,059 6,180 23	13,597 2,509 549	16,633 4,834 58	7,140 694	8,274 · 866	8,715 . 67	2\$0 3,049	52,658 18,1 W	1,780 2	50,879 18,147	
	Total	1.178,860	6,027		49,302	9,719	4,611	69,689	19,262	17,655	21,525	1,838	26 4,158	3,784	3,249	71,471	1,782	69,689	
1	Kaira (Payatwari	649,907 3,069 3,636	3,709	AMARAMA AMARAMA	88,772 no 204	505 	2,212 92 	39,198 93 294	11,515 29 106	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	6,660 20 54	975 37 16	1,976 4 3	18,275 8 80	971	40,421 92 303	1,223	39,199 93 204	
	Total	655,512	2,709	*****	34,126	605	2,244	39,584	11,644	149	6,634	1,023	1,983	18,363	1,015	₹0,816	1,232	39,584	
	Panch Mahala. Rayatwari Other Government Altenated	257,817 104,919 80,338	1011 pales , 1011 pales 1010 01110		1,174 1,055 297	149		1,381 1,065 297	528 285 207	**************************************	13 1	194 87 16	319 5.8 67	257 214 17	1	1,882 1,055 297	1	1,871 1 065 297	<u>}</u>
1	Total	423,663	*****	14	2,526	143	*****	2,683	1,020	*****	14	237	924	488	1	2,684	1	2,683	THEFT
1	Broach Raystwirl Other Government Alternated	962,620 941			B82	244	24	1,140	10	244	86	66	483	\$12	1	1,162	12	1,160	
	-Total	563, 630		*****	882	244	14	1,140	10	244	34		483	312	1	1,152	12	1,140	
1	Surat Raratward	475,431 8,533 3,706	6-17 pp.; 6-16 rug 660 p.s.	201E2	6,631 1:1 23	3,521	476	10,627 101 29		3,379	101	4,666 85	1,598 11	994 Å	a	10,699 1 1 23		10,627	
	Total	484,668	•••••	*****	6,755	3,121	475	10,751	4	3,3 91	101	4,758	1,612	939	8	10,813	62	يُّةُ 10,751	
	II.—Decean		<u> </u>							,			•						
	Khandesh Revatweri O her toresament.	1,962,036 T1,174	14.108 	963	30,919	==	120	64,961 1,220	25,058 	2,411	4,672 116	1,6 62 60	4,996	16,291	212	67,490 1,294	2,528	\$4,961 1,250	
	Total and Ravatways	1,757,196	14,162	943	40,728	46	332 23,518	56,211 64,541	25,475 36,768	2,426 4,713	4,788 16,049	1,923	7,331 11,134	16,529 17,7 63	314	£8,785 96,995	2,574	£6,211 66,841	
	(Aispeand m Total	1,962,001	18,623		3,941 50,939		1,165	7,160	7,291	100	1,126	608	1,376	1,645	130	7,741	168	7,199	
	Ahmednagar (Ravatwiri	2,336,811	5,400	*****	50,2.38 91,868	127	21,673 4,600	93,721	39,057 23,366	5,273	17,184	6,993 1,400	12,509	19,438	4,177 3,578	104,606	10,915	93,7 21 101,977	
	Transfer of Court Confessions	399.994	- 372	==	9,951		234	0,577	1,925		6,132	90		800		11,079	1,508	9,577	

{	1	· .	ARMA IRRIG			A A	Area ird-				Crop	PING OF 1221	AREA GETAD	•			Deduct area cropped	Balaure
o.	District.	Fet area eropped.	From Government Canals,	From Private Canals.	Area irrigated from wella.	Area irri- gated from tanks.	gated from other sources.	Total area irrigated.	Wheat.	Rico.	Other cereals and pulses,	Sugarcane.	Other food crops.	Non-food Grope.	Fodder Grops	Total.	with frigation more than once.	net irrigate area.
-	.1	3	,	4	- 4	6_	7	8	9	10	, 11	13	18	14	19	16	17	18
-	ABOMBAY PRESIDENCY PROPER-continued.	Acres.	<u>.</u>					Acres.		7.			7-		Ą	Acres.	Acres.	Acres.
	II.—Deccan—continued.	1,584,042	37,958	5, <u>593</u>	86,602	3,878	4,149	105,106	20,978	1,990	65,359	6,184	17,820	19,107	1,817	128,700	21,596 2,429	105,1 17,2
۱ (ا	Poons on Other Government	201,781	3,267 41,225	1,189 6,781	10,437	1,858	6,435	17,234	4,538 25,511	2,250	6,828 72,187	7,886	22,131	1,728	1,568	19,683	.24,025	17,2
	Total Revetweri Other overnment		9,569	3704.4++ +	89,445	espitis Tebbyo d	2,369	101,876	89,082 1,840	8,626	47,874 4,085	1,363	9,631 654	17,244	821 ****** 56	181,641 7,561	80,265 1,880	101,3 5,7
1	(Allegated Total	9 213 001	9,835	passer essies	5,418 94,858	****	2,384	107,077	33,922	3,816	71,939	1,431	9,28 5	17,949	877	139,2-2	32,145	107,0
	Satara { Rayatwari Other Government }	1,299,139 223,804	8,004 828	,	52,056 8,408	uha rue pue tha uha dua	89,939 11,779	99,909 31,108	24,249 5.839	8,421 8,100	88,461 6,044	11,117 2,208	10,828	28,113 -5,615	964 158	122,147 24,396	22,148 8,293	99,5
	Total	1,522,943	8,830	207484	60,554	******	51,718	121,102	29,586	11,521	44,505	13,320	12,561	33,928	1,122	146,543	25,441	121,10
	III.—Karnátak	2,414,3 <u>1</u> 4	3,069	7 100 to 1	21,856	8,964	8,016	89,905	2,974	11,876	21,594 ************************************	7,044	5,886 1,914	0,617	230	45,721	5,916 1,406	30 ,0
	Belgaum Other Government	\$13,500 1,727,874	1,43a	·Rangilla (7,839 29,695	9,079	6,899	10,275 50,180	4,269	391 12,267	14,900	9,817	7,500	2,374 8,791	358	57,402	7,222	50,1
,	Bijápur Ravatwári Other Government	2,497,397 290,093	 0	1,056	11,418	437	255 104	18,170	8,410 359	1,378	2,542 282	675	9,658 	3,096 514	287	16,186	2,016	13,1
	(Alienated	2,757,225	, 6	1,180	12,636	- 437	859	14,618	3,769	1,495	2,774	710	4,380	3,350	3 37	16,815	2,197	14,6 85,
; 	Dhárwá: Rayatwári Other Government	1,973,598 108,761	4,703	aperada apresa apresa	2,309	74,617 8,022	8,620 632	85,449 9,338	796	76,601 8,539	379 `=== 71	1,878	192	2,558 319	1	9,350	42	94,7
-[Total	2,082,359	4,893	*****	2,773	82,839	4,252	94,757	796	85,130	350	2,125	4,194	2,868	5	95,468	711	. 29,1
	IV.—Konkan. Rayntwiri Other Government	437,845 5,840	generê 2002-rê	States States	2,008 8	GS entrast	1,829	8,709 8	dagi We Beldatu	garan garan	910 SSE	1,263	4,100 8 88	836 marter 41444	34	5,788 8 46	800487	8,
	(Allenated Total	14,778 457,958	****	******	2,874	65	2,829	5,768	4410) 74400	461.00 400.00	, therts.	1,262	4,232	326	34	5,854	86	5,7
6	Kolába « Rayatwári Other Government. Alienated	1	######################################	 	1,739	24 1 2	494 11 14	2,235 16 16	ero ppi manife month	gober- webste seefvo	0-2-070 	25	3,206 - 14 16	11	1000 dies 1000 des 1000 des	3,340 18 - 16		3.3

	•											, 7	ar .							
17	Ratnegiri	*** Bavatwäri Other Government Alienated	116,968 3,463 3,328	digera Algera	405-05 1005-08 800-08	2,461 197 64	. 115	3,129 94 108	8,457 291 287	Thysesia Service - dispuss	3,237 36 147	1,166 33 35	197 15	2,955 208 64	996 21 26	igorug Varrus Wab-re	9,450 291 267	28 1	8,457 291 387	
l		Total	123,66 6		*****	2,722	982	5,331	9,035	estas.	3,408	1,238	151	8, 221	1,042	eri er	9,058	23	9,035	
18	Kenara	Rayatwári	286,746	1 195700	2,767	1,810	8,466	13,678	21,641	1 224 - 170 1 400-110	18,404	438	2,601	8,123	5,063	3	3 1,650	9	. 21,641	
	**************************************	Alienated us se	med stag. gurrette.		**************************************	41410	endige defined	7M-114	*****	150-44	menta esta e	erisdag	, quinga ,	, paren	493799	ggp-tq	*****	F341++	****** .	
		Total	233,746		2,787	1,810	8,466	13,578	21,641	*****	13,404	438	2 ,601	3,123	2,008	2	21,650	9	21,641	
	Total A	Revetwiri Other Government Alignated	\$1,290,59\$ 813,411 1,098,118	106,473 184 7,801	10,112	407.955 14 516 43,006	101.533 3,221 8,34	111.041 1,697 18,219	829,714 19,710 , 84,895	205.785 5.499 19,353	145,444 3,543 13,847	293,881 4,897 26,076	_40,969 856 7,444	96,299 1,613 1,2268	141.186 216 14,049	13,817 3,699 1,023	943,274 19,712 96,054	118,560 2 11,359	829,714 19,710 84,695	
	٠,	Total	28,962,157	116,548	11,705	\$61,251	118,058	131,557	934,119	230,626	162,834	325,814	57,169	110,175	155,551	16,848	1,059,040	124 921	934,119	
	,	•																		
-	1	B.—Sind.					ar.		•			,		•	1			-	ł	
19	Karwohi	Rayatwiri Other Government	363 960 42,043 8,140	100,633 - 1,791 3,986	120,560 7,0.5 1,347	2,375 6	**************************************	34,388 20,343 • 986	823,896 19,093 6,387	23,396 946 944	198,922 15,426 2,753	90,788 1,968 1,861	1,266 7	6,306 206 103	16.901 1,9 0 919	145	344,645 20612 6,403	90,748 1,519 116	325,596 19.095 6.297	
	,	Total	401,033	172,409	129,910	2,380	410177	45,577	849,276	34,236	217,100	91,582	1,286	4,702	19,610	143	871,619	22,383	349,276	
İ			700,736	803,753	** mi-m	11,365	2011-10	97,980	703,057	36,300	181,604	944,388	596	13,983	125,023	13,949	712,751	9,694	708,067	
20	Hyderabad	on Other Government.	108,530	96,348	Titungs 900 1000	3,204	******	6,969	103,513	8,049	23,957	44,006	19	1,500	17,539	4,294	104,109	501	108,518	
		Total	807,252	759,098		14,589	*****	32,888	806,575	39,343	214,561	389,086	725	15,292	139,611	18,242	816,860	10,285	800,575	
	Shird-	Ravatelei	722,111	604,373	.075/60	27,106	400,000	12.108	658,594	144,573	277,138	801,904 739	, 539	15,322 24	74,135 28	610	\$13,920 1 475	186,386 6	'658,594 1,460	
21	Slikarpur	Alienated	15.233 6,377	27,138	\$100 HB	· #5]		1,416 505	1 469 34,690	645 7,281	6,787	18, 46	•	643	4,770	MITT.	97 A19	2,763	34,660	
	į	Total	789,723	667,895	*****	12,757	******	14,081	694,733	152,238	283,925	320,785	549	15,794	78,928	610	852 828	158,095	694,733	
29	Upper 8	Sind Ravetwari	206.217 20.03 7,000	314 514 25 400 7,960	jirovan * sausis	703	and and	1,000	200 556 22 4:0 7,950	18,154 1::3	24,864 690 342	204,971 13,438 4,979	25 maren maren	1,676 15 779	82,931 9,340 3,184	- 100 mb 	332 409 23,006 8,367	\$2,911 1,237 266	\$09,558 \$2,429 7,979	
•		17-i-1	989 009	338,692	******	191		1,063	839,916	18,281	25,886	223,388	23	2,401	94,463		364,392	24,446	339,945	٠
	Thomas	म् । विकास क्षेत्र । । स्टब्स	200 755	200.457					200 406	22,304	163,415	63.44 5	4	1,797	24,399	6.213	206,665 1 5/46	30,167	296, 406	
23	int.	Other Gorgement.	201 437 4,018	1,300		ATTEMPS.			1,4/2	lant	73 1,860	5:3 1,266		#1 #9	759 1,749	137	4,763	316	1,408 4,568	
		Total	686,840	294,521		. 45	and.	*****	291,566	32,465	155,077	54,261	42	1,847	56,929	4,349	304,971	10,403	294,566	
		•		·																
	Total, B.	un (Raystwiff m Other G veryment Alienated	2,617 773 659 516 169,670	2,000,518 26,616 246,611	;330,560 9,010 3,367	37,036 13 2,134		76 467 31 768 6,360	3,265 501 44,246 167,118	953,496 1,946 31,178	205 965 16.140 44,427	994,561 36,748 70,846	2,446 7 141	36,959 341 2,763	250,367 13 051 27,118	10,913	\$,579,448 47,579 180,448	237,667 2116 8,971	9,541,501 44,366 7357,125	
			 		<u> </u>															
İ		Total	3,056,756	2,231,615	129,910	29,962	*****	93,609	2,435,096	276,564	896,549	1,092,003	2,624	40,036	369,541	23,344	2,710,710	225,614	2,485,098	
	}											,,,,,,,		120,221	#1,559	81.730	8,445,723	262,417	8,311,976	
	Grand Tota	A.,. (Remirch Or her dovernment Alimated	20 (50 3%) 1,20 776 2,007,785	25,676 25,676 252,373	330 673 7, 438 3, 447	24,619 51,613	301,630 3,730 8,336	107,136 13 440 34,679	8,173 376 66 168 261,847	466 171 7,365 30,665	981.407 30,714 65,274	1,367,3:2 21 673 30,001	62,319 843 7,845	1,976 18,016	12 377 41_148	3,109 6,463	\$6,0;1 267,037	3.498 35,200	64,108 541,207	
	,	Total	27,018,913	2,340,163	141,415	591,213	113,058	225,166	3,419,215	507,190	1,059,383	1,407,896	59,786	150,211	545,092	40,192	3,769,750	350,\$15	3,419,315	
-	I		<u> </u>	1		<u> </u>														

AXXA

V — Agricultural Stock, 1898-99.

<i>'</i>	1	1			•		CATTL		· ·	· - ·		·	 	OTHER	QUADRUPEDS.			PLOT		CAE	
∜ o.	District.	Plougl	a Cattle.	Bulls for I		Oxen and H	e-Buffaloes ourposes.	Milch	Cattle.	Young	Stock.	<u> </u>	Нотяел				Mules				
		Oxen.	Ho- Buffaloss.	Bulls.	Bull- Buffa- locs.	Oxen.	He. Buffaloes.	Cows.	She- Buffaloes.	Calves.	Buffalo Calves	Total Catcle.	and Poules.	Sheep.	Goats.	Camels.	and Don- keys,	Small.	Large, f. s., over two Bullocks.	For riding.	For carrying loads.
 1	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	BOMBAY PRESIDENCY PROPER.					i	,					!	,								
	I.—Gujarát.							•													
1	Ahmadabad Rayatwari Other Government Alienated	75 981 45,7 4 227	72 130	509 465	401 202 1	4 ,083 906	222 126	59.149 41,878 17	67,762 28,478 300	44 539 16,199 76	39,571 11,188 246	290,308 145,276 867	3,644 1,930 1	11,027 19,727	27,183 19,776 65	337 196 	5,792 1,954 8	35,957 21,229 124		2,139 187 3	12,749 5,960 31
.	Total	121,912	202	974	604	4,989	348	100,043	96,560	- 60,814	50,005	436,451	5,575	31,654	47,014	533	7,754	57,310		2,328	18,739
2	Kaira ••• {Rayatwári Other Government Alionated	107,511 319 798	20	168 	547 2 2	1,056 1 7	8s	40,049 <u>-</u> 206 57	121,639 281 1,130	48,964 203 244	93,655 247 944	413,647 1,319 3,182	1,978 5 6	7,878 45	81,140 160 238	1	5,497 18 39	61,870 181 4:9	******	1,709 8 8	26,191 50 189
	Total	108,628	20	168	551	1,064	38	40,372	123,050	49,411	94,816	418,148	1,991	7,923	31,538	100	5,544	62,4 60		1,720	26,430
3	Panch Mahals (Rayatwari Other Government	79,802 27,049 13,028	6 4 11	179 83 75	258 68 43	974 495 52	39 25 14	53,961 20,691 10,442	17,843 7,263 3,221	49,078 16,729 8,494	10,893 6,290 1,938	267,031 78,697 37,318	2,095 838 246	2,255 2,956 298	23,998 9,179 3,807	10 11 	1,533 378 72	35,672 13,669 6,438	•••••	141 106 11	6,561 2,698 1,216
	Total	113,879	21	337	369	1,521	77	85.094	28,327	74 ,301	19,120	323,046	3,169	5,509	36,975	21	1,978	55,779		258	10,465
4	Broach Rayatwári Other Government Alienat-d	50,682	2	77	130	1,329	63	12,822	30,313	17,290	20,835	133,543	2,449	18,190	22,746	104	1,603	. 24,434		3,434	14,537
	Total	50,682	2	77	130	1,329	63	12,822	30,313	17,290	20,835	133,543	2,448	16,190	22,746	104	1,603	24,434		3,434	14,537
5	Surat {Rayatwari Other Covernment Alienated	97,963 803 591	3,874 71 12	233 2	223	8,461 29 39	205 4	66,925 654 366	46,543 317 320	75,243 731 312	33,786 207 102	333,456 2,821 1,746	1,703 1 5	26,059 150 50	71,277 181 13 5	1 	368 	47,669 392 273	851 8 1	9,339 49 72	29,251 239 207
	Total	99,362	3,957	235	225	8,529	209	67,945	47,180	76,286	34,095	338,023	1,709	26,259	71,593	1	368	48,334	860	9,458	29,697
	II.—Deccan.					_		.								-]		}
6	Khandesh Rayatwari Other Government	310,345 9,256	1,554 55	3,084 51	567 	19,591 830	1,660 43	151,544 4,200	101,350 2,544	142,766 3,484	71,000 1,549	803,461 22,023	20,994 562	33,825 1,491	234,768 7,464		7,523 271	65,919 1,973	16,374 921	40,612 979	
	Total	319,601	1,609	3,135	.578	20,421	1,703	155,741	103,894	146,250	72,549	825,481	21,546	35,316	242,230	4	7,794	87,892	17,295	41,491	68.596
7	Násik Rayatwari (ther Government Alienated	192,220 12,397	18,788	2,167 227	180	11,327 - 590	408	137,371 7,412	28,142 1,540	96,000 4,959	16,085 1,024	592,688 29,212	14,176 784	98,513 3,715	130,935 6,647		8,127 240	50,767 2,836	21,475	9,138 475	J
i	Total	201,617	19,801	2,394	187	11,917	421	144,813	29,682	100,959	17,109	531,900	14,960	102,228	137,582		3,367	53,603	23,099	9,611	28,332
8	Ahmednagar Rayatwari Other Government Alienated	223,014 26,498	3,295 	516 63	102	6,285 818	599 70	119,931 12,476	24,461 2,260	94,953 9,515	13,761 1,196	486,917 52,923	17,678 2,116	177,528 26,477	214,042 25,921	4	6,528 1,062	7,369	35,117 3,898	11,157 1,159	19,553
	Total	249,512	3,312	579	112	7,103	669	132,407	26,721	104,468	14.957	539,840	19,793	204,005	239,963	4	7,590	8,267	39,015	12,316	i -

		•																						
9	Poona		***	187,038	[6,08g	399	145	5,691 555	467	111,984	35,926	86,638 13,788	17,464	· · · · · · · · · · · · · · · · · · ·	10,789	167,967	108,874	10	3,096 785	25,080	21,417	8,501	19,200	
		TO a tab	2	225,192	5,388	498	164	6,246	570	31,067 133,051	42, 086	94,421	3,120 20,597	528,215	1,748 12,531	193,161	15,249 118,623	10	765 5,881	28,263	26, 097	1	1'	•
10	Sholápu	Rayatwiri	***	383,844	3,086	559	138	4 607	1,251	66,596	94 700	4 00 000	17,608	882,078	8,551	165,096	198,767	56	8,703	1,937	19,887	3,864 616	22,336	
		(AUMENIAL	•••	10,100	161	34	1	165	61	4,048	1,414		982	21,340	. 809	14,787	12,536	£	180	178	909	17	765	
	•	Total (Rayatwári	***	175,540	2,267 8,695	577 247	140	4,772 8,404	1,312	71,244	26,212	64,524	18,540	853,322	9,060	180,482	199,295	36	8,882	2,115	14,246	633	13,659	
11	Setára	on Other Government	***	30,614	2,061		80	379	******	102,136	63,578 13,978	81,069 14,873	41,286 - 8,183	476,577 87,321	9,919 1,819	259,309 81,626	97,548	***	3,180	17,468 4,606	19,345 8,268	790 106	20,044	
	•	- Total	S	806,081	10,726	802	168	8,783	£83	120,851	75,956	95,925	49,421	563,798	11,288	290,837	114,153	· •••	2,420	22,161	22,619	896	\$,555 23,599	
,	•.	III.—Karnátuk.		-						• .										•		•		
12	Belgaun	Rayatwiri Other Government		144,407	22,304	343	113	5,349	505	79,800	72,243	74,096	50,967	450,830	5,018	140,254	86,261	12	2,834	55,325	7,712	- 370	27,367	
		(Alienated Total]	30,425 174,8 2 9	2,861 26,165	30) 372	.134	1,000 6,343	192 697	14,679	14,876	14,464	10,509	68,994	1,980		20,126	9	454	7,877	2,362	67	4,708	
18	Bijápuz	. C Dans tourist		143,860	1,743	263	98	8,020	1.047	94,479 65,499	87,058 48,067	88,472 60,595	61,376 23,972	539,824 841,681	6,296 6,180	193,087 128,886	105,387	2 0 66	2,788	63,202	10,074	437	32,070	
	Dilabas	/ washinged ***	=	19,924	237		17	\$86	147	8,014	5,940	6,87B	5,250	48,734	777	24,340	236,606 84,535	****	4,174	88,798 6,087		139 	14,451	
		Total (Remoted of	1	163,474	1,998	291	109	4,211	1,204	63,43 6	48,007	69,463	39,222	390,415	6,927	148,237	271,140	91	4,836	44,880	7,222	167	16, 212 .	
14	Dhárwá	Rayatwiri Other Government Aliensted	**	14,457	14,719	525 y	953	9,866 	496 17	96,991 6,382	81,104 5,630	124,90s 10,609	08,961 4,808	869,897 46,667	4,303	116,233 3,615	96,7 08 5,717	*	6,105	7,084	4,374	736	40,161	XXX
	}	Total		207,885	16,776	529	260	9,449	713	105,278	86,743	185,677	73,759	636,564	4,532	119,845	102,425	4	5.407	92,792	270 4,544	783	8,016 52,197	•¤u
		IV.—Konkan.		j	•								, = -,		-,		,		,,	0.5,1.1.		,,,,	02,207	5
*15	Thina	*** Other Government	_	116,000 1,5: 2	49.184 577	444		4,271	31S	97,022	23,660	. 87,408	9 17,443	398,139	1,630	8,747	40,797		25	73,746	*****	4,411	25,343	•
*		(Alienated		2,764	1.064			261 167	15 4	1,66] 3,5 06	349 6 77	1,900 - 3,469	8/ 0 0/ 4	5,613 10,4,4	104 19	. 64	847 847	=	=	949 2,231	944	156	294 840	
		Total Reveluiri	<u> </u>	192,160	41,815	444	65	4,669	234	101,871	23 ,875	91,186	18,100	401,425	1,659	8,80 3	41,462	4.0-	35	75,945	•••	4,666	26,496	
16	Kolaba	an Other florerament	=	23, 196 214	13,: 10	10	14	8,087 176 37	251 77	45,634 26,518	34,917 6,761 201	44,325 26,914	11,379 6,466 137	196,944 112,738 1,5 66	: 80E	6 00 6.6	91,769 11,790 873			37,234 21,015 514	****	1,479	7,498 739 35	
٠			•••	83,390	89,678	246	51	3,279	\$48	74,783	21,996		1	311,428	606	748	33,884		24	57,706		1,715	8,252	•
17	Ratusgi	Payentwiri Other Government Associed		45,745 1,249 2,163	9,638 170	11	16	1,900	110	33,03 0	8,534 42	28,119 702	6,000 297	118 197	뼺	1,73	20,540	=	=	30,52.		100	967 23	
•		Total		49,157	10,492	14	16	1,272	112	47a 24,8t 5	206	40 0	_ 161	4,300	1		318		=	ودائرا		4	#	
18	Kanara	Ravatwári Other Government	=	N.E	34,505	. 641		4,02	1,179	24,00 b	9,160 24,833	24,411	6,548	126,04	93	173	11,069	1		81,447		110	1,025	
		belanutal	-	***		-		= ,	=	==.	-		==			· ===	=	~	=			=	-	
,	•,	e Barrelandek	<u> </u>	76 209 3,416,661	159,74	541	62	4,627	1,178	69,885	24,92	62,901	12,206	276 87	231	1,358	4,611	1	80	64,039		110	6,489	
	Grand To	otal (Wher Gurerament	=	110 197	15,58 10,591	33	20 20 44	- 90,018 1.00* 7 6,630	9,531 /99	1,300,665 84.441 	839 912 43 960 80,844	61 679	. 575 T 4 .1 23 974 .0 440	6,7% 271 3 0 160 54 ,904	313,744 2,917 9,701	1,300,305 - 2: 104 175,443	3,639.6 9 41,977 340,874	977 2-7	55, 69, 2 345 4,334	947.414 35 (46) 46,674	146,200 16,718	90 re4 6 s 8,436	8-4-710 9-922 26,427	
•	,	Total	2,7	738,897	208,489	.	3,915	105,513	10,178	1,598,976	931,746	1,427,492	640,214	7,677,345	124,364		1,831,690	929	62,351	871,509			20,529	رسا دری
				!		*						•	<u> </u>			I		-						6

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xxxviii

Accompaniment A to Agricultural Return No. II.

Details of " Current Fallow," 1898-99.

	·	1	Jetanis of	Current Fac	000, 1000				
No.	. Dietrict.		True fallow, i.e., Customary fallow in rotation	Grass lands, i.a., number or parts of number set apart for grass and never sown.	Grass bound or prickly- psar bound lands.	Shindád or Ráb land,	Land unsown owing to unseasomble or deficient rainfall.	Land left unsown for miscellaneous reasons.	Total fallow (Column 6 of Agricultural Return No. 11).
1	9	_	8	4	8	6	7	8	9
	BOMBAY PRESIDENCY PROPER.	ر 							Acres,
•	I.—Gujarat.	1							_
1	Ahmadabad {Rayatwari Other Government Alienated		2,293 700 10	17,932 86,696 138	538 503	******	23,491 44,205 91	61,538 165,594 183	105,783 297,998 423
	Total .		3,003	104,766	1,041		67,777	227,615	404,202
2	Kaira Rayatwarl Other Government		4,026	\$2,358 46	3,069	61	6,598 453	32,943 602 74	79,632 1,101 120
	Total .		4,072	32,404	3,669	51	7,039	33,618	80,853
3	Panch Maháls. Rayatwari Other Government		1,597	860 (3,120 [1,680	101 13,569 345	9	1,005 7,680 1,023	37,164 83,511 48,009	40,748 110,899
	Total	•••	1,929	5,669	14,015	, 9	9,708	171,684	51,350 203,014
4	Broach Rayatwari		3 6,089 <i>9</i> 1	40,364 110	77	******	4,209	8,543	89,2% 201
i	(Alienated) Total	**	36,180	40,474	. 77	***	4,209	8,546	89,486
· 5 ˈ	Surat (Rayatwari Other Government		134,027 2,968	115,337 1,646	733	63	1,629	10,615	262,403
	(Alienated		151	1,222	 720	60	1,629	8	4,637 1,361
	II.—Deccan.	•••	137,146	118,205	732	68	1,0 <i>00</i> ∀	10,646	268,426
	(Rayatwári		5,970	46,,223	4,957	32	4,282	£ 169,307	229,771
6	Khandesh Other Government		97	892	1,875	******	619	9,965	13,445
*	Total .		6,067	47,115	6,832	32	4,901	178,272	243,219
7	Násik Other Government		148,278	74,692	4,992 ••••··· 789	5,314 793	31,759 { 1,560 }	145,308	410,343 31,459
	Total .		163,930	• 77,343	5,781	6,107	33,319	155,323	441,802
8.	Ahmednagar . (Rayatwari Other Government		82,278	52,060	9,902	689	27,368	244,892	417,179
. :	(Alienated Total		5,589 · 87,867	12,630 64,690	3,470 13,372	· 705	2,677 30,045	44,086 288,968	68,468 485,647
9	Poons (Ravatwári O'her Government		193,948	134,528	19,131	10,806	21,068	136,647	522,128
	(Alienated Total		30,699 224,647	37,749 172,277	2,058 21,189	1,544 18,350	5,928 26,896	19,976 15 6,623	97,854
10	Sholapur Rayatwari Other Government		115,982	82,491	63,076	1,142	20,025	1 15,869	619,982 418,584
	(Alienated		10,276 126,258	8,894	2,327	1.140	544	16,093	33,124
11	(Rayatwári		120,233	86,375 217,083	85,403 15,683	1,142	20,569 7,095	131,961 52,032	451,708 482,802
• • •	(Alienated	::-	65,385	43,600	3,093	707	752	11,541	125,078
- 1		•	254,363	260,683	18,776	2,638	7,847	63,573	607,830
	III.—Karnátak.	1	89 F41	(60,000			A 404		
12	Belgaum Other Government		\$8,561 21,687	69,829 44,155	23,900 17,853	6	9,531 2,165	84,410 31,118	276,237
	, •	•••	109,648	113,984	41,753	6	11,697	115,528	392,616
13	Bijapur Rayatwari Other Government		4,817 688	65,109	116,013	201744 201744	23,222	109,940	318,101
	Total.		5,505	7,300 72,409	22,767 138,780	*****	4,371 26,593	21,642 131,582	274,869
14	Dharwar Rayatwari (ther Government	::	187	96,900	12,264	******	9,627	108,043	237,021
	(Alienated Total		100 287	18,201 115,101	1,810 14,074	*****	1,917 11,544	11,967 120,010	33,995 261,016
	IVKonkan.				* #JU1 74	***		220,010	202,020
35	Thána Sayatwári Other Government		66,678	74,176	35,685	203,494	2,800	26,889	431,713
- •	(Alienated		1,722 1,715	1,767 20,639	621 672	2,418 4,200	± . 1 5	332 391	6,891 27,633
10	(Rayatwari	••	92,115 60,635	96,582 47.034	36,978 5,549	210,132 56,826	2,806 366	27,612	466,225 177,678
- 16	AGIEDS Other Government		96,119 1,247	7,698 807	2,156	30,265 765	197	6,736 2	143,191 2,821
	Rayatwari	•	158,051 92,961	55,539	7,704	87,876	563	14,157	323,890
17	Ratnægiri (Other Government Alienated		92,981 4,765 1,223	5,848 132	3,425 12	29,569 580 270	492 3	14,355 234 175	114 649 5,720 1,663
	Total .	•••{	. 98,949	5,978	3,437	30,419	495	14,764	154,042
18	Kanara Rayatwari Other Government		777	35,394	3,092	4	972	57,721	97,960
	Total		777	35,394	3,092	4	972	57,721	97,960
	Total (Rayatwari Other Government Allonated		1,250,132 106,365	1,208,225 101,215	342,785 16,861	315,931 53,313	184,517 52,539	1,422,938 260,332	4,735,216 570,625
	Grand Wat-1		1,510,794	195,648	67,059	8,295	21,553	225,241	66.,990
	1		±,0±0,104	1,504,988	416,705	357,539	268,609	1,908,302	5,963,837

Note-Details for Sind are not available.

ACCOMPANIMENT A TO AGRICULTURAL RETURN No. III.

Number of Principal Fruit-bearing Trees, 1838-93.

No.	District.		Mango.	Tamarind.	Jack.	Coconnut	Toddy-palm.	Date-palm.
1	2		3	4	5	6	7	8
	A.—Bombay Pri dency.	ESI-	,					
	I.—Gujarát.				į			
1 2 3 4	Ahmadabad Kaira Panch Maháls Broach	 	72,405 230,587 44,130 25,452	21,328 26,121 6,702 6,086	5 3	96 116	60 4 91,585 84,413	2,391 1,299
5	Surat	•••	191,350	64,874	3,912	7,235	79,181	499,839
	Total	•••	563,924	125,111	3,920	7,417	205,243	503,529
	II.—Deccan.							
6 7 8 9 10 11	Khándesh Násik Ahmednagar Poona Sholápur Sátára		231,803 203,317 97,236 159,976 51,203 187,381	16,293 9,939 13,969 11,145 9,888 12,814	21 365 38 1,129 10 11,032	215 228 463 3,445 307 8,190	307 16 121 3	2,693 5,095 2,730 39,805 109,340
	Total	•••	930,916	74,048	12,595	12,848	448	159,880
	, III.—Karnáta	k.						
12 13 14	Belgaum Bijápur Dhárwár	•••	131,725 81,103 180,049	27,665 25,689 59,806	14,681 44 7,974	2,959 2,548 67,423	107	163,211 281,061 505,651
	Total	•••	392,877	113,160	22,699	72,930	109	950,920
	IV.—Konkan.	,						
15 16 17 18	Thána Kolába Ratnágiri Kánara	•••	194,323 96,717 101,299 169,102	17,254 6,069 4,832 16,631	3,259 6,855 52,57 4 115,452	64,475 67,399 587,794 1,115,439	79,593 16,383 2	11,074 30 95 1,381
	Total	**-	561,441	44,786	178,140	1,835,107	95,978	12,583
•	Total, A.		2,449,158	357,105	217,311	1,928,332	301,778	1,626,927
	B.—Sin d.		•	•				•
19 20 21 22 23	Karáchi Hyderabad Shikárpur Upper Sind Frontier Thár and Párkar		45,456 94,777 66,505 4,058 11,493	31 50 63 5	*** *** ***	1,460	•••	1,311 2,291 156,263 1,028
	Total, B.	•••	222,289	149	•••	1,461		161,938
	GRAND TOTAL	•••	2,671,417	357,254	217,351	1,929,793	301,778	1,789,565

Accompaniment B to Return No. III.

Details of Kharif and Rabi under Cereals and Pulses, 1818-93.

			•	•				CLASS I	.—Cereals.		•	<u></u>	•			
No.	District.	Jowári, Sorghum Volgare.	Bájri, Pennisetum typhoideum.	Rice, Oryza stiva.	Wheat, Triticum Æstivum.	Barley, Hordcum Vulgara,	Maize, Zea mays.	Kodra, Paspalum serobicu- lalum.	Rági, Eleusine coracana.	Rála, Panicum Italicum.	Varai, P. miliare.	Panti, P. flavidum.	Bhádil, P. pilosum.	Rajgira, Amaran- thus fru. mentaccus,	Others.	Total Cereals.
	1	2	3	4	6	6	7	8	9	10	11	12	. 13	14	15	18
^	I.—Gujarát.					•	,		.·.		•					Acres.
1	Ahmadabad { Kharif Rabi	198 269 11,351	149,250	72,808	- 180,860	20,187	3,480 847	21,414	~6,723 •	2 499	6,336 229	18,766	***	37		477,043 214,010
	Total .	209,620	149,250	72,808	180,860	20,187	4,327	21,414	6,723	501	6,565	18,766		37		691,058
2	Kaira Kharif	54,911 1,837	173,559 44	115,976 5	24,550	4,576	1,131 47	114,327	53,176	14 131	109 779	1,845	***	63 114	366	515,481 32,086
	Total	56,748	173,603	115,981	24,554	4,576	1,178	114,327	5 3,176	148	888	1,845		177	366	547,567
3	Panch Maháls . { Kharif Rabi	5,631 2,023	50,872 	81,765	18,758	2,127	129,630	27,318	18,371	166	2,908	21,271	292	12	2,534 	339 823 2-,908
	Total	7,654	50,872	81,765	18,758	2,127	128,630	27,318	18,371	166	2,908	21,274	292	12	2,581	362,731
4	Broach { Kharif Rabi	12,850 144,142	13,303	18,388	76,194	• •••	6	9,675	231	87	49	1	,	11	•••	- 54 601 220,336
	Total	156,992	13,303	18,388	76,194	•••	- 6	9,675	231_	87	49	1		Į į	•••	274,937
5	Surat { Kharif Rabi	134,637 1,226	7,708	109,592	28,506	***	4	35,065	14,042	28.	34	687	48	. 7	164	302.016 29,732
. }	Total	135,863	7,708	109,592	28,506	•••	4	35,065	14,042	28	34	687	48	7	164	331,748
.	II.—Deccan.	Ì	•	-			•					•				
8	Khandesh { Kharif Rabi	438,101 25	593,027	18,454	196,897	100	3,567	2,446	7,498	1,030	3,807	2,266	1,455	355	168	1,072, ¹ 74 197,022
	Total	438,126	593,027	18,454	196,897	100	3,567	2,446	7,498	1,030	3,807	2,266	1,455	355	168	1,269,196
7	Násik Kharif Rabi	37,4 96 90,754	702,466	58,943	288,638	***	2,198		124,258	653	31,250	61	2,903	256	151	960,541 379,392
	Total	128,250	702,466	58,848	288,638		2,198	1	124,258	653	31,250	61	2,903	256	151	1,339,933
8	Ahmednagar $\left\{ egin{matrix} \operatorname{Kharif} & \dots \\ \operatorname{Rabi} & \dots \end{array} \right.$	4,216 997,80 <u>4</u>	7i1,676	13,976	261,486	 365	1,258 832	339	23,186	8,854	12,968	84	2,798	224 .82	395 359	809,974 1,260,428
•	Total	1,002,020	741,676	13,976	261,486	365	1,590	339	23,186	8,854	12,968	84	2,798	306	754	2,070,402
8	Poona {Kharif Rabi	618,674	604,797	70,796	90,348	1,175	1,430	89	43,833	1,753	25,576	- 81 	3,911	93	2,783 1,012	849,393 711,209
	PT . 7	1 710 000	604707	30706	90.348	1.175	1.430	l 89	43,833	1.753	OF EAC	^*				

	•	•		,			•			, 🕹 🗀			• •		:			
10	Sholápur	Kbarif Rabi	9,628 1,282,699	247,013	21,292	51,140	3,017	14,714	143	94	3,006	4,156	23	992	122	6	301,189 -1,336,856	
w	-	, ,	1,292,327	247,013	21,292	51,140	3,017	14,714	143	94	3,006	4,1 56	23	992	122	6	1,638,015	
2190	Sátára	Kharif	276,486 208,190	453,335	49,507	59,441	4,547	7,96 2 1,283	28	42,618	26,576	49,970	.96	***	690	5,185	912,453 273,561	
-11 ap		Total	484,676	453,335	49,507	59,441	4,547	9,345	28	42,618`	26,576	49,970	96	•••	690	5,185	1,1 86,014	
Ф	III.—	Karnátak.											• •		·			
12	Belgaum	(Wheel?	476,446	145,141	117,438	42	20	6,908	44	43,104	66,336 4,993	32,051	848 - 800	***	2	223	887,755 358,059	
12	Deigaum	Rabi	239,078 715,524	1,545 146,696	845	107,845 107,887	169 189	3,535 10,443	44	43,143	71,329	32,051	***	•••	2	223	1,245,814	
13	Bijápu r	l Kharif	422,448	300,029	13,268		3	1,200	18	192	21,598 62	9,568	***	***	***	6	768,324 1,288,866	
•	20 Juput	Total	1,103,316 1,525,764	300,029	13,268	185,361 185,361	11 14	1,310	18	192	21,660	9,568		•••		6	2,057,190	
14	Dhárwár	C. Thereigh	522.918	5,519	158,444	*****	5	49	34	46,083	69,964 3,521	38,306 10	7			;; -	841,329 433,694	
••		Total	150,459 673,37 7	5,519	158,444	279,704 279,704	5	49	34	46,083	73,485	38,316	7		•••	•••	1,275,023	
	, ,,,,	–Konkas.	010,011	, 0,515	100,112	210,102		1.0								•		XİI
	ļ		42	*****	308,987	041000		2	12,221	6 8,960	•••	23,126	***		•••	***	403,338 113	_
15	Thána	"(Kabi	******	******	******	113	***	******	*****	58,960	***	23,126	***	•••	•••	***	403,451	
	F-1/1-	Total	42	400 bayens	308,987 247,680	113	***	2	12,221 16,725	61,281	***	48,873			***	1	374,761	
16	Kolába	••• } Kabi •••	*****	******	*****	*****	***	******	*****	******	***	48,873	•••	•••	***	1	 374,761	
		Total	***	•••	247,880 49,620	1	***	•••	16,725 17,426	61,281 21,878	1	10,726	000		•••		99,651	
17	Ratnágiri	ideal	*****	• • • • • • • • • • • • • • • • • • •	2,914	*******	***	2	*****	468	18 19	10,732	200		•••	400	3,403 103,054	
		Total	••• 1,970	5	52,531 181,866	•••	•••	. 2	17,426	22,336 5 .96 3	13 56	286				•••	190,490	
18	Kánara	··· [Rabi		******	13,328	101.000 541.000	000 000	1	******	₩****	• 56	286	944		***	•••	13,319 203,819	
		Total	1,970	4 107 505	195,194		•••	350	057717	5,963 671,491	200,124	300,093	45,191	12,399	1,835	12,028	10,160,316	
	Total	{ Kharif	2,690, 3 05 4,851,578	4,187,635 1,604	1,703,905	47 1,819,841	28 36,274	172,888 6 ,257	257,313	497	9,227	1,624	***	•••	233	1,377	6,775,004	
	Gı	rand Total	7,541, SS3	4,159,299	1,725,997	1,849,888	3 6, 3 02	179,145	257,313	571,983	209,351	301,123	45,191	12,399	2,068	13,403	16,935,350	

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ACCOMPANIMENT B TO RETURN No. III—continued. Details of Kharif and Rabi under Cereals and Pulses, 1898-99.

				-			CLA	as II.—Pu	LSE .						
No.	District.	Tur, Cajanus Indicus.	Gram, Cicer arietinum.	Mug. Phascolus mungo.	Udid, P. radiatus.	Math, P. aconitifolius.	Vál, Dolichos lablab.	Chavli, D. catiang.	Kulith, D. unifloorus.	Vátáne, Pisum sativum.	Masur, Ervum lens.	Lákh (Láng), Lathyrus sativus.,	Guvár, Cyamopsis psoraliodes.	Others.	Total, Pulses.
	. 1	17	18	19	20	21	22	23	21	25	26	27	28	29	30
	I.—Gujarát.							,				 		· ·	Acres.
1	Ahmadabad Kharif	I FO:	18,874	22,902	9,308	51,571	198	1,438	5,283	• • • • •	4#4 4#4	*****	10,128	*** * ***	108,705 19,399
	Total		18,874	22,902	9,308	51,571	198	1,438	5,283	***	•••	 	10,128	•••	128,101
· 2	Kaira {Kbarif	24,191 87	257 15,386	4,011	1,828	24,682	1,909 ° 343	4,300	*****	***	***	*****	8,970	***	70,143 15,818
	Total	24,278	15,643	4,011	1,828	24,682	2,252	4,300	•••	•••	•••		8,972	•••	85,966
3	Panch Mahals. Kharif		64,182	3,753	7,284	4,427	39 126	634	32	1,105	***		1,064	***	26,060 65,414
	Total	8,827	64,182	3,753	7,284	4,427	165	631	32	1,105	•••	1	1,064	•••	91,474
4	Broach Kharif	3,461 8,953	2,578	648	, 7	2,808	810 . 125	309	* *****	 1,293		53,019	384	***	8,430 65,968
	Total	19417	2,578	648	7	2,808	935	309		1,293	•••	53,019	384	•••	74,398
5	Surat Kharif	24,57 6 1,508	1,258	3 ,629 127	4,091	290	544 37,903	1,023	******	3,143	16	2,978	1,538	***	35,691 46,933
.	Total	26,084	1,258	3,756	4,091	290	38,447	1,023	•••	3,143	16	2,978	1,538		82,624
ł	II.—Deccan.													• • • • • • • • • • • • • • • • • • • •	
6	Khándesh { Kharif	70,261	51,635	25,840	108,460	19,739	292	2,940	96,067	2,505	411	78	*****		323,599 54,649
ĺ	Total	70,261	51,655	25,840	108,460	19,739	292	2,940	96,067	2,505	411	78	•••		378,248
7	Násik { Kharif Rabi	27,754	77,616	7,787	24,139	10,739	73 99	143	91,979	3,146	9,471	5,5 52		7 es	162,614 95,884
ļ	Total	27,754	77,616	7,787	24,139	10,739	172	143	91,979	3,146	9,471	5,552	•••		258,498
8	Ahmednagar { Kharif Rabi	57,388	118,389	22,335	3, 295	39,780	····500 80	635	72,312	8 712		38	******	•••	195,286 119,610
}	Total	57,388	118,389	22,335	3,295	38,780	5 Ṣ0	635	72,342	720	394	38	•••	•••	314,896
9	Poona{Kharif Rabi	30,331	73,905	8,669	6,494	2 ⁸ ,088	1,719 722	730	39,154	1,818	1,069	1	*****	1	115,185 77,516
	Total	30.331	73.905	8.669	6,494	28,088	2,441	730	39,154	1,848	1,069	1		1	192,731

				•								•						
10	Sholápur	· · · { Kharif Rabi	-	69,561	64,294	5,986	1,345	25,607	271	88 ***	12,419	122	88	352	******	:::	115,277 64,856	
		Total	••	69,561	64,294	5,986	1,345	25,607	271	88	12,419	122	88	352	•••	•••	180,133	
11	Sátára	{ Kharif Rabi	•••	52,613	74,754	15,337	42,397	55,975	2,808 730	494	56,943	2,006	753	****** .	******	103	233,670 78,243	
		Total		59,613	74,754	15,337	42,397	55,975	3,53 8	494	56,943	2,006	753	***	•••	103	311,913	
	III.—	-Karnátak.				: :		: ;	: "		•		:					
12	Belgaum	$\dots \begin{cases} ext{Kharif} \\ ext{Rabi} \end{cases}$	-	69,333 608	810 57,272	11,922 13	15,231	8,172	2,708 5,998	2,326 20	52,645 2,669	5,705	6,208	141 qua	##1748 1217 88	\$14 144	163,147 78,493	
		Total	•••	69,941	58,082	11,935	15,231	8,172	8,706	2,346	55,314	5,705	6,208	* ***		•••	241,640	
13	Bijápur	$\cdots \begin{cases} ext{Kharif} \\ ext{Rabi} \end{cases}$		77,857 20	69,080	22,018	*****	4,617	4,273 527	3,660	21,516	••• 76	•••	*****	*****	***	133,940 69,703	
		Total	•••	77,877	69,080	22,018	•••	4,617	4,739	3,660	21,516	76	***	•••	•••	•••	203,643	
14	Dhárwár	Kharif Rabi	•••	65,092	3,208 62,123	44,853 3.096	5,864 . 292	12,180	2,915 1,774	1,073	52,660 5,794		·	******	******		187.847 73,279	
		Total	•••	65,002	65,331	47,951	6,156	12,180	4,689	1,081	58,454	189	3	•••		•••	261,126	
	11	-Konkan.	l	•	·								,					zlii
15	Thána	···{Kharif Rabi	•	4,857 126	83.5 1,050	28 269	15,574	*6.400	546 1,892	3,550 174	779	 83	•••	69			26,199 3, 669	
	ļ	Total		5,013	1,885	297	15,574-	•••	2,433	3,724	779	: 89	•••	69	•••	•••	23,863	
16	Kolába	{ Kharif Rabi	-	600 2,213	1,583	35 1,785	3,098 4,442		9,110	1 81] 15	•••	•••	******	******	•••	3,735 19,231	
		Total	•	2,815	1,583	1,820	7,540	•••	9,110	85	16		•••	•••	•••	•••	22,969	
17	Ratusgiri	Kharif Rabi	•••	198 100	•••••• 3 6	152 106	2,062 486	******	1,02 4 910	49 64	6.969 1,631	***		******	******	•••	10,151 3,363	
	ļ	Total	•••	208	36	258	2,548	•••	1,931	133	8,500	•••	•••		•••	•••	13,501	
18	Kánara	{ Klatif Rabi	-	183	216	87 1,176	416 1,297	******	257	5 931	1,522 336	2 82	1	*****	202 F00	***	2 213 4,52 6	
		Total	•••	193	213	1,263	1,713	•••	257	936	1,858	282	1	•••			6,739	
	Total	Ebarif	•••	601,901	5,110 ~4.834	189,994	250,803	257,675	20,628	2 3 ,393	510,310	8	3	£9.659	22,054	103	1,922,107 956,577	
]	Rali	**	14,112	754,281	6,572	6,517	*****	60,598	1,221	10,415	22,221	18,411	62 ,65 3	2		(30),37	۲.۰
		Grand Total	•••	615,133	759,301	200,560	257,110	287,675	81,221	21,690	520,755	<u>52,559</u>	18,414	62,053	22,050	101	2,575,774	ر. م

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Annual Return of Retail Prices of staple Food-grains and other important Articles

Note.—The prices represent the annual average prices calculated from the

	_																									Pr	ices	(in]	Ra, s	а. р.) pe	In	diat	Ma	ınd
Ņo.	Station.		Jo		i.]	Bájr	i.	w	hea	·-		ice i			an r		N	áchni		G	ram			ar-dá d so		L	inse	a.		roun nut hue			Til,	
			Rs.	, <u>a</u> ,	p .	Rs	. a.	- р.	Rs.	a,	p.	Rs.	8.	p.	Rs	, a.	p.	Rs.	. s .	p.	Rs.	a -	p.	Rs.	B.	p.	$\mathbf{R}\mathbf{s}$. a.	p.	\mathbb{R}_{8}	. a,	p.	R_8	٠ ۵.	p.
1	Bombay	•••	3	0	4	3	2	1	5	5	11	2	11	3	4	1	7	3	13	10	3	8	4	4	7	10	5	5	٤	7	1	11	8	8	4
2	Ahmadabad		2	4	5	2	7	Ş	4	0	8	2	15	10	4	10	10		•••	ı	3	3	5	3	5	5	4	15	7	6	3	4	4	10	0
3	Kaira		2	9	4	2	8	3	3	9	9	2	12	6	4	10	11	2	2 .	. 8	3	5	8	3	7	0	4	13	4		***		5	1	8
4	Godhra	•••		•••		2	7	2	4	3	Б	2	1	9	3	12	4	1	15	1	2	12	8	3	13	7		•••	1	4	11	3	4	0	0
5	Broach	•••	2	5	7	2	12	10	4	0	2	2	7	9	4	0	6		•••		3	7	4	3	6	7	7	2	1	6	0	3	5	6	9
6	Surat	•••	2	6	3	2	12	1	4	6	1		•••		5	0	0		•••.		3	15	6	3	11	2	6	0	2	6	4	9	6	8	0
7	Dhulia	•••	1	12	0	1	14	11	3	13	0		•••		4	3	10		•••		3	10	3	3	10	9	3	13	3	2	10	6	5	2	3
8	Násik	•••		•••		2	7	5	3	12	7		•••		4	2	3	2	٠4	8	3	2	6	3	14	3		•••		2	9	4	4	13	7
´9	Málegaon	•••	1	14	8	2	2	1	4	0	10		•••		4	10	4		•••		3	13	11	4	3	9	3	13	11	3	6	4	5	6	5
10	Ahmednagar		2	11	1	2	9	4	4	7	5				4	15	2		•••		3	8	11	•4	13	11	3	14	6	4	2	8	4	10	4
11	Poona	•••	2	9	11	2	14	4	4	6	10	2	11	4	4	3	5	3	1	10	3	9	1	4	12	10	5	5	8	4	•1	2	9	0	4
12	Sirur	•••	2	7	10	2	13	8	4	1	7		•••		4	13	4		•••		3	8	6	4	12	0	4	14	9		•••			•••	Ì
13	Purandhar	•••	2	10	8	2	12	8	4	1	5		•••		3	13	8		•••		3	4	3	4	2	5		•••	i	3	0	· 7		•••	l
14	Sholápar	•••	2	4	6	2	3	8	3	14	0		•••		3	13	11		•••		3	3	0	3	12	5	3	8	4	k.,	•••		4	12	7
15	Sátára	•••	2	14	0	3	1	6	3	13	5		•••		4	11	11		***		3	8	3	4	3	7		•••		5	4	7	8	11	3
16	Belgaum	•••	2	5	8	2	7	4	4	5	9	2	5	9	3	7	5	2	3	4	3	12	2	4	6	9	4	. 1	7		•••		4	0	4
17	Bijápur	•••	1	13	10	2	2	9	3	9	11		•••		3	15	6		•••		3	5	6	4	2	7	4	2	9		•••		4	14	11
18	Dhárwár		2	1	1	2	` 4	2	3	11	2	1	15	11	3	2	8		•••		3	9	2	4	0	6	3	14	11		•••		4	12	4
19	Thána	•••		•••		2	13	4	4	4	9	2	3	11	3	8	7		•••		3	6	2	4	2	8		•••			***		6	12	4
20	Alibág			•••	ļ	3	12	10	5	12	11				3	11	8		***	į	4	3	1	5	11	0				6	8	2	9	4	2
21	Ratnágiri	•••	3	5	5	3	4	0	5	15	9	2	4	2	3	10	5	3	3	7	4	3	7	5	2	3		•••		,	***			•••	
22	Kárwár	•••	3	4	1	3	4	6	5	5	ð		•••		4	2	1	2	11	3	4	5	4	5	0	7	15	5	0	7	10	6	7	6	6
23	Karáchi	***	2	6	2	2	11	10	3	12	0		•••		4	9	0				3	2	2	4	13	11	6	14	3	6	8	9	6	12	1
24	Hyderabad	•••	2	8			4		1			i i	•••		4	4	1		•••		3	4	2	5	7	9	6	7	9	6	15	0	6	2	4
25	Sukkur	111	1	11	8	2	0	1	3	. 1	10		•••		4	7	4		•••		2	9	3	4	6	10	i	15	10				6	10	5
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